



Aboriginal Affairs and Northern Development Canada

Internal Audit Report

Audit of the Northern Contaminated Sites Program (excluding Giant and Faro mines)

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Audit and Assurance Services Branch

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ACRONYMS

AANDC	Aboriginal Affairs and Northern Development Canada
ADM	Assistant Deputy Minister
CPM	Corporate Procedures Manual
FCSAP	Federal Contaminated Sites Action Plan
FCSI	Federal Contaminated Sites Inventory
HQ	Headquarters
HR	Human Resources
MCF	Management Control Framework
MPO	Major Project Office
NAO	Northern Affairs Organization
NCSP	Northern Contaminated Sites Program
PCRA	Project Complexity and Risk Assessment
PWGSC	Public Works and Government Services Canada
TBS	Treasury Board of Canada Secretariat

EXECUTIVE SUMMARY

Background

An Audit of the Northern Contaminated Sites Program (NCSP) was included in Aboriginal Affairs and Northern Development Canada's ("AANDC's" or "the Department's") 2014-2015 to 2016-2017 Risk-Based Audit Plan, approved by the Deputy Minister on February 6, 2014. The audit was identified as a high priority because of the significant environmental impact and health hazards that contaminated sites pose, and because of the significant amount of funding required by the government to implement the Northern Contaminated Sites Program.

Through its policies and programs, the Government of Canada aims to reduce environmental and human health risks from known federal contaminated sites and reduce associated federal financial liabilities. For all such sites, the Crown has identified departments, agencies and consolidated Crown corporations as custodians with responsibility to manage the sites on behalf of the Crown.

Many contaminated sites exist north of the 60th parallel, where the contamination was often the result of private sector mining and oil and gas activities, or government military activity that occurred over a half a century ago, when environmental impacts were not fully understood. AANDC is the federal department with custodial responsibility for these sites in Canada's North. The Department also has responsibility under the Indian Act for land and environmental management, which includes management of contaminated sites, on reserve south of the 60th parallel.

In 2005, to support the activities of departments responsible for the management and remediation of contaminated sites, the Government of Canada established the Federal Contaminated Sites Action Plan (FCSAP). The FCSAP fiscal framework is jointly administered by Environment Canada through the FCSAP Secretariat and the Treasury Board Secretariat.

Audit Objective and Scope

The overall objective of this audit was to assess management's controls, risk management and governance processes established in relation to the objectives of the Department in regard to northern contaminated sites.

Specifically, the objectives of the audit were to assess the northern contaminated sites portfolio¹, in relation to:

- i. The design and operating effectiveness of program governance reporting structures and practices to support risk-based planning/decision-making and oversight;
- ii. The design of program controls for supporting the alignment of resource capacity and capability, both internal and contracted, with program objectives; and,

¹ As noted in the scope, for purposes of this audit, the portfolio of sites excluded both Giant and Faro Mines.

- iii. The design and operating effectiveness of program controls to support effective and efficient identification, assessment, remediation, tracking and reporting of contaminated sites in a manner that supports compliance with legislation, regulations, guidelines and policies.

The design of program controls, risk management and governance was assessed as of the conduct phase of this audit (August to October 2014), while testing covered the period of April 1, 2013 through to March 31, 2014. In addressing each of the audit objectives, the scope included an assessment of the following:

- **Program objectives** – including considerations for stakeholder engagement (internal and contracted) and socio-economic objectives, including adherence with land claim agreement requirements;
- **Financial management** – including planning and budgeting practices, information for decision making, monitoring and reporting; and,
- **Compliance** – including relevant legislation, regulations, guidelines and policies.

The following assessments were specifically excluded from the scope of this audit:

- The appropriateness of decisions relating to specific contaminated sites;
- Controls, risk management or governance specifically related to Giant or Faro Mines;
- The appropriateness, reliability or accuracy of financial reporting practices and calculations pertaining to the Department's financial liability for northern contaminated sites; and,
- Controls, risk management or governance related to Environment, Health and Safety² objectives.

Statement of Conformance

This audit conforms with the *Internal Auditing Standards for the Government of Canada*, as supported by the results of the quality assurance and improvement program.

Conclusion

Overall, the audit found management's control, risk management and governance processes in place to support the objectives of the Department in regard to northern contaminated sites to be adequate and operating effectively. The audit did, however, identify opportunities for improvement in the following areas: strategic planning, specifically improving senior level oversight and addressing the linkage with Human Resource planning; and, documentation of a Departmental Control Framework for the management of contaminated sites.

² An internal audit of Occupational Health and Safety across the Department was underway commensurate with the timing of this audit.

Recommendations

The audit team identified areas where management control practices and processes could be improved, resulting in the following three recommendations:

1. The Assistant Deputy Minister, Northern Affairs Organization should address the need for a senior-level oversight body with a mandate that includes a role in the development, oversight and monitoring of the Program's new Strategic Plan. This new Plan should include the establishment of timelines, and a clearly established strategic direction and related objectives, including those following the expiry of FCSAP. It should also support linkages among regional and project-level plans, performance measurement strategies and risk management plans.
2. The Assistant Deputy Minister, Northern Affairs Organization should review the current status of the Program's Human Resources (HR) Plan with a view to assessing the strategic implications of staffing scenarios and options. Further, as part of the update of the Program's Strategic Plan, she should take steps to ensure the Program's HR Plan remains appropriate, achievable and aligned with the strategic direction and related objectives.
3. The Assistant Deputy Minister, Northern Affairs Organization should take steps to review, update and organize the policies and procedures associated with the management of contaminated sites, including related procurement practices, into a Control Framework for the management of contaminated sites. This initiative should be undertaken with input from the South of 60⁰ Program and would serve to address identified gaps, streamline content, and support better alignment with current practices and requirements. It will also establish a foundation for the development of a Department-wide control framework for the management of contaminated sites.

Management Response

Management is in agreement with the findings, has accepted the recommendations included in the report, and has developed a management action plan to address them. The management action plan has been integrated in this report.

1. BACKGROUND

An Audit of the Northern Contaminated Sites Program (NCSP) was included in Aboriginal Affairs and Northern Development Canada's ("AANDC's" or "the Department's") 2014-2015 to 2016-2017 Risk-Based Audit Plan, approved by the Deputy Minister on February 6, 2014. The audit was identified as a high priority because of the significant environmental impact and health hazards that contaminated sites pose, and because of the significant amount of funding required by the government to implement the Northern Contaminated Sites Program.

Program Overview

Contaminated sites are properties where introduced substances occur at concentrations that are likely to pose an immediate or long-term hazard to human health or the environment. They also include properties where such concentrations exceed levels specified in policies and regulations. Contaminated sites exist throughout Canada, including on land for which the Crown is responsible.

Through its policies and programs, the Government of Canada aims to reduce environmental and human health risks from known federal contaminated sites and reduce associated federal financial liabilities. For all such sites, the Crown has identified departments, agencies and consolidated Crown corporations as custodians with responsibility to manage the sites on behalf of the Crown.

Many contaminated sites exist north of the 60th parallel, where the contamination was often the result of private sector mining and oil and gas activities, or government military activity that occurred over a half a century ago, when environmental impacts were not fully understood. AANDC is the federal department with custodial responsibility for the majority of these sites in Canada's North. The Department also has responsibility under the Indian Act for land and environmental management, which includes management of contaminated sites, on reserve south of the 60th parallel. The management of northern contaminated sites is more complex and involves longer time frames than what is required for the sites in the south, where sites are mostly related to abandoned dump sites and fuel spills. To support the discharge of its responsibilities for contaminated sites, the Department has developed a Contaminated Sites Management Policy to provide guidance for the management of contaminated sites located on reserve lands, on federal lands in the North, and on any other lands under the Department's custodial responsibility.

The information in the table below was taken from the Federal Contaminated Sites Inventory (FCSI), which is a listing of all known Federal Contaminated Sites under the custodianship of departments, agencies and consolidated Crown corporations. Per the FCSI, a breakdown of the number of contaminated sites as at March 31, 2014 that are North of 60° and South of 60° for which AANDC is the custodian is as follows:

Reporting Organization	Number of Contaminated Sites			
	Suspected	Active	Closed	Total
AANDC (Total)	1,031	1,369	2,732	5,132
South of 60°	898	1,169	2,045	4,112
North of 60°	133	200	687	1,020

The number of North of 60° sites in the inventory, by classification type, was as follows as at March 31, 2014:

Classification ³ Type	Active	Closed	Total
High Priority for Action	80	14	94
Medium Priority for Action	68	9	77
Low Priority for Action	10	2	12
Insufficient Information	2	1	3
Not a Priority for Action	7	78	85
Site(s) not yet classified	33	583	749
Total	200	687	1,020

Within AANDC, the Northern Affairs Organization (NAO) is responsible for the programs and activities that comprise the Department's northern strategic outcome. One of NAO's key responsibilities is the management of contaminated sites located north of the 60th parallel through the Northern Contaminated Sites Program (NCSP or "the Program"). The objective of the NCSP is to effectively manage and remediate northern (i.e. north of the 60th parallel) contaminated sites which fall under AANDC custodial responsibility. In line with Government of Canada objectives, the NCSP aims to reduce and eliminate, where possible, risks to human and environmental health, and liability associated with contaminated sites in the North. It is also important for the Program that contaminated sites are managed in a manner that is cost-effective and consistent throughout the North.

The NCSP has recently undergone organizational change and is its own branch within NAO since April 1, 2014. The Branch consists of four directorates including: Major Projects Office, Contaminated Sites Program Management, Faro Mine and Giant Mine. Giant Mine, considered a mega project, is managed at AANDC Headquarters (HQ), where the majority of staff dedicated to its management are located. Faro Mine, due to devolution, is managed by the Yukon Government but is still funded by AANDC. The Faro Mine directorate is responsible for ensuring all work plans are assessed, independent reviews are conducted and that the appropriate funds are allocated to the Yukon Government for managing the Faro Mine. The Major Project Office is responsible for the development of AANDC policies and procedures and the independent reviews associated with major projects; it provides a quality assurance role within the Branch. The Contaminated Sites Program Management directorate supports all activities that are not covered by the other directorates. They are responsible for program guidance, performance reporting, Treasury Board Submissions and any corporate level tasks.

³ Classification as per the Canadian Council of Ministers of the Environment National Classification System for Contaminated Sites

Devolution of federal responsibilities to territorial governments has impacted both the organizational structure and responsibilities of the NCSP. Since the enactment of the Yukon Devolution Transfer Agreement in 2003, AANDC has retained financial responsibility but has devolved the management of the contaminated sites to the Yukon Government. Over time, the Department has identified some challenges when financial responsibility is not connected to management authority. Leveraging lessons learned in the Yukon, the 2014 Northwest Territories Devolution Agreement had AANDC retain control (financial and operational) over all contaminated sites recorded prior to April 1, 2014. Once these sites have been remediated, land management responsibilities will be transferred to the Government of the Northwest Territories. As devolution discussions with Nunavut continue, the program expects to leverage lessons learned and best practices from the Yukon and Northwest Territories experience to help facilitate an effective and efficient outcome.

Federal Contaminated Sites Action Plan

In 2005, to support the activities of departments responsible for the management and remediation of contaminated sites, the Government of Canada established the Federal Contaminated Sites Action Plan (FCSAP). The FCSAP fiscal framework, which committed \$3.5 billion over a 15-year period, is jointly administered by Environment Canada through the FCSAP Secretariat and the Treasury Board Secretariat (TBS), and has the primary objective of addressing the risks that contaminated sites pose to human health and the environment, and to reduce the associated financial liability. The FCSAP uses a cost-share model under which 85% of the costs to assess, manage and remediate sites are funded by the FCSAP, while the remaining 15% of the costs are covered by the custodial department. Under Canada's Economic Action Plan, and for the largest and most complex sites in the federal inventory, such as Faro, United Keno Hill, and Giant Mines, the FCSAP covers 100% of costs.

FCSAP is currently nearing the end of Phase II⁴, will be entering into Phase III⁵ on April 1, - 2016, and ending in the year 2020. It is the responsibility of FCSAP Secretariat, with agreement from the FCSAP ADM Steering Committee, to determine how much funding will be provided to each department. AANDC's involvement with FCSAP is comprised of two representatives (one for the NCSP and one for the South of 60 Contaminated Sites Program) that attend committee meetings and provide input; however, the authority for funding decisions remains with Environment Canada and TBS.

Financial Considerations

Contaminated sites in the North account for a total estimated environmental liability of \$2.369 billion as of fiscal year-end 2013-2014. The two most significant sites contributing to this liability are Giant Mine and Faro Mine (excluded from the scope of this audit). Based on the 2013-2014 Year-end Liability Report, the breakdown of liabilities across the North, by region, is as follows:

⁴ During Phase II of FCSAP (which runs from 2011 through 2016), the focus is on remediating the highest priority sites.

⁵ The specific objective and criteria associated with Phase III are still in development.

Liability Estimates by Region							
Region	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Total Liability	\$1.399B	\$1.429B	\$1.590B	\$1.742B	\$2.105B	\$2.281B	\$2.369B
Yukon (excluding Faro Mine)	\$85.0M	\$82.9M	\$82.2M	\$111.6M	\$151.6M	\$177.3M	\$162.1M
Northwest Territories (excluding Giant Mine)	\$159.6M	\$163.0M	\$237.3M	\$187.6M	\$216.6M	\$208.7M	\$233.3M
Nunavut	\$163.9M	\$192.3M	\$212.9M	\$191.1M	\$341.7M	\$324.5M	\$315.8M

Key Challenges Faced by the Program

i. FCSAP Renewal and Expiry

As noted above, FCSAP is nearing the end of Phase II and will be entering into its final phase, Phase III, at April 1, 2016. The FCSAP fiscal framework is scheduled to expire in 2020.

The Department is responsible for managing the full liability associated with the contaminated sites under their custodial responsibility beyond the expiry of FCSAP program funding. The NCSP has developed plans to reduce the liability as much as possible while FCSAP funding is available. If the federal government continues to be responsible for the program beyond 2020, a stable source of funding that does not require renewal should be sought.

ii. Human and Financial Resources Planning

The scale of the contaminated sites liability and the complexity of the projects within the North of 60° portfolio represent longstanding risks facing the Department in its management of the NCSP. More specifically, there is a range of inherent risks associated with the management of contaminated sites, some of which are unique to the context of delivering programs in Canada's North. One of the more significant risks is the Program's ability to recruit and retain qualified and skilled workers. The NCSP program requires a specialized skill set and technical experience to manage and remediate their contaminated sites. Combined with the unique challenges of recruiting and retaining personnel in the North, the overall market for highly skilled and experienced engineers, geologists and project managers is relatively small and highly competitive.

From a financial planning perspective, the Program is impacted by its significant reliance on contracted service providers. Unlike the South of 60° Program, with Grant and Contribution based funding, NCSP objectives are funded with Operations and Maintenance funding. As such, the Program relies on Public Works and Government Services Canada (PWGSC) to contract the vast majority of its activities. Program Management must work closely with PWGSC to

ensure that contracts are processed in a timely and efficient manner to meet the needs of the Program during the short field season in the North, or face significant cost and time delays as a result. This context and risk is relatively unique within AANDC, and the Program has had to develop internal capacity and capabilities to mitigate the related risks where possible.

2. AUDIT OBJECTIVES AND SCOPE

2.1 Audit Objective

The overall objective of this audit was to assess management's controls, risk management and governance processes established in relation to the objectives of the Department in regard to northern contaminated sites.

Specifically, the objectives of the audit were to assess the northern contaminated sites portfolio⁶, in relation to:

- i. The design and operating effectiveness of program governance reporting structures and practices to support risk-based planning/decision-making and oversight;
- ii. The design of program controls for supporting the alignment of resource capacity and capability, both internal and contracted, with program objectives; and,
- iii. The design and operating effectiveness of program controls to support effective and efficient identification, assessment, remediation, tracking and reporting of contaminated sites in a manner that supports compliance with legislation, regulations, guidelines and policies.

2.2 Audit Scope

The design of program controls, risk management and governance was assessed as of the conduct phase of this audit (August to October 2014), while testing covered the period of April 1, 2013 through to March 31, 2014. In addressing each of the audit objectives, the scope included an assessment of the following:

- **Program objectives** – including considerations for stakeholder engagement (internal⁷ and contracted) and socio-economic objectives, including adherence with land claim agreement requirements;
- **Financial management** – including planning and budgeting practices, information for decision making, monitoring and reporting; and,
- **Compliance** – including relevant legislation, regulations, guidelines and policies.

The following assessments were specifically excluded from the scope of this audit:

- The appropriateness of decisions relating to specific contaminated sites;

⁶ As noted in Section 2.2, for purposes of this audit, the portfolio of sites excluded both Giant and Faro Mines.

⁷ The assessment of internal stakeholder engagement included collaboration between NCSP and the South of 60⁰ Contaminated Sites Program.

- Controls, risk management or governance specifically related to Giant or Faro Mines;
- The appropriateness, reliability or accuracy of financial reporting practices and calculations pertaining to the Department's financial liability for northern contaminated sites; and,
- Controls, risk management or governance related to Environment, Health and Safety⁸ objectives.

3. APPROACH AND METHODOLOGY

The audit was conducted in accordance with the requirements of the Treasury Board *Policy on Internal Audit* and followed the *Internal Auditing Standards for the Government of Canada*. The audit examined sufficient, relevant evidence and obtained sufficient information to provide a reasonable level of assurance in support of the audit conclusion.

The principal audit techniques used included:

- Interviews with Program management and staff at AANDC HQ as well as in regions (specifically NWT and Nunavut);
- A review of relevant documentation such as policies, procedures, reports and presentations; and,
- Examination of a sample of Contaminated Site Project files.

The approach used to address the audit objective included the development of audit criteria against which observations and conclusions were drawn. The audit criteria developed for this audit are included in Appendix A.

4. CONCLUSION

Overall, the audit found management's control, risk management and governance processes in place to support the objectives of the Department in regard to northern contaminated sites to be adequate and operating effectively. The audit did, however, identify opportunities for improvement in the following areas: strategic planning, specifically improving senior level oversight and addressing the linkage with Human Resource planning; and, documentation of a Departmental Control Framework for the management of contaminated sites.

⁸ An internal audit of Occupational Health and Safety across the Department was underway commensurate with the timing of this audit.

5. FINDINGS AND RECOMMENDATIONS

Based on the evidence gathered through examination of documentation, interviews and analysis, each of the three lines of enquiry (and related audit criteria), as detailed in Appendix A was assessed during this audit. Where a difference between the audit criterion and the observed practice was found, the risk of the gap was evaluated and used to develop the conclusion and corresponding recommendations for improvement.

This section is organized around the three lines of enquiry associated with this audit as follows:

- i. Program Governance, Planning, Decision-Making and Monitoring
- ii. Program Capacity and Capability
- iii. Management of Contaminated Sites

5.1 Program Governance, Planning, Decision-Making and Monitoring

To help ensure the effective oversight, support, and integration of risk-based planning as well as strategic and operational decision making, the audit team expected the NCSP to have a clearly defined and effective governance infrastructure including formal bodies with aligned and appropriate mandates. There was also an expectation that the Program demonstrate the existence of practices that effectively support the flow of appropriate financial and non-financial information pertaining to Program operations, risk management, and planning. Further, the audit team expected to find evidence whereby analysis and monitoring activities generated the routine reporting to effectively support the timely monitoring of Program compliance, financial status and progress against priorities.

Overview of the Program's Governance Structure, Authorities and Responsibilities

Since becoming a separate Branch within the Northern Affairs Organization on April 1, 2014, the Executive Director of the Northern Contaminated Sites Program Branch has reported directly to the Assistant Deputy Minister ("the ADM") of the Northern Affairs Organization within AANDC.

NCSP is a decentralized program with HQ focusing on communications, strategic planning, policymaking, securing resources and oversight. While HQ also takes the lead in directing major projects, such as the Giant Mine Remediation Project, the three (3) northern regions are responsible for direct implementation of the Program at contaminated sites under their jurisdiction. At the project level, the governance structure includes two (2) formal committees as well as representation from PWGSC as depicted in Figure 1 below.

Figure 1: Typical Contaminated Site Project Organization⁹



The figure above includes reference to the Director's Committee. The audit identified that, while the Project Management and Technical Advisory Committee is currently convened on an ad hoc basis, the Director's Committee serves as the primary governance body supporting the management¹⁰ of northern contaminated sites. This Committee is comprised of representatives from HQ, each of the three northern regions, as well as a representative of PWGSC's Northern Contaminated Sites Directorate. The mandate of this Committee was found to be clearly defined and comprising of the responsibility to facilitate communication and coordination within the program and to provide proactive oversight and management attention to the program.

The Director's Committee is chaired by the Program Director for NCSP and meets on a monthly basis by teleconference and periodically in-person. Interviews and analysis of meeting agendas and records of decision support the assertion that the Director's Committee provides an effective and clearly understood forum in the establishment of policies and procedures to guide the management of projects, and the timely review of program performance. Information requirements, both financial and non-financial, were found to be well-established and supportive of the timely monitoring of Program compliance (including legislative requirements), financial status and progress against priorities. Reporting to senior management and oversight bodies including the Director's Committee, was found to be in place.

⁹ Adapted from the Contaminated Sites Program *Corporate Procedures Manual*, March 2013, page 18.

¹⁰ Note: the Program also has an active Environment Health and Safety Working Group which meets monthly, however, this was not within the scope of this audit.

Documentation of the Program's Governance Structure

Interviews and a review of documentation (reports, guides, intranet site, etc.) describing the Program's governance structure indicated that the structure has evolved over time. Compared to previous years, the current governance structure is relatively simplified with fewer active committees/working groups. While this evolution reflects an increase in the overall maturity of the Program over time, it was noted that documentation of the Program's governance structure had not been updated to reflect the prevailing structure. Up-to-date and accurate documentation of the Program's governance structure will help ensure clarity and consistency of decision-making and oversight while reducing the risk of a gap or duplication in such responsibilities. With the recent creation of the Northern Contaminated Sites Branch, the audit identified Management's plans to conduct a thorough review of Branch governance. This structural change along with potential governance implications associated with the ending of FCSAP funding in 2020, means that additional changes to the governance structure are expected over the next several years. As these changes are made, it will be important that documentation of the structure be updated accordingly.

Planning and Decision-Making

The Program's current governance structure, particularly the Director's Committee, was found to provide effective oversight and monitoring around the management of projects and program performance. Interviews with members of the Director's Committee noted that they felt that they are well supported in their role with timely and accurate information and analysis provided by the program. In reviewing the records of decision, it was noted that financial and non-financial information and analysis, including budget scenario analysis and performance reports, were being provided to the committee at the meetings in support of their risk-based planning and decision-making responsibilities.

While the Director's Committee was found to be engaged in strategic planning activities, including development of the Program's new 2015-2020 Strategic Plan, the current governance structure does not include a body that is formally charged with providing oversight and monitoring of progress toward the Program's strategic direction and related objectives¹¹. Given the significant implications associated with the end of FCSAP funding in 2020, it will be important that strategic planning and decision-making is well supported by senior-level oversight and monitoring. Oversight from a senior-level body will reduce the risk that strategic planning and decision-making will fail to align with Departmental priorities.

Further, in updating the Strategic Plan, NCSP will need to ensure consideration of its ongoing responsibilities for the portfolio of sites in the North after the end of FCSAP. While the precise nature of AANDC's contaminated sites responsibilities after 2019-2020 is unknown, and may not be within the Program's ability to significantly influence, the new Strategic Plan can serve to support a proactive approach to position the Program in the years following 2020. Specifically,

¹¹ Note: NCSP topics and presentations, including joint presentations with the South of 60 Program, are addressed at senior management committees including the Departmental Operations Committee and Director General Implementation and Operations Committee and the Director General Policy Committee, however, the Program is not a standing item at senior management meetings.

the Plan can serve to identify and consider options and scenarios around the Program's strategic positioning and also serve to support the linkage and alignment of strategy with the Program's operational governance structure, regional- and project-level plans, performance measurement strategies and risk management plans. Based on review of documentation and discussions with Management, the Program has begun the process to develop a new Strategic Plan, but there has yet to be a formal timeline established for its completion. In the absence of an updated Strategic Plan, there is an increased risk of misaligned priorities and plans which may lead to inefficiencies or gaps in achieving Program objectives.

Collaboration with the South of 60° Program

The audit team also looked at the extent to which the Program was leveraging opportunities for collaboration to harmonize the management of contaminated sites within the Department. Interviews and document review revealed evidence of ongoing collaboration between the Programs which focused on areas of shared interest, including those related to the FCSAP Program. On operational matters, the interaction was largely informal/ad hoc with the South of 60° Program routinely seeking input and advice from NCSP representatives. The opportunity for more formal collaboration between the programs is addressed in Section 5.3 of this Report.

Recommendation:

1. The Assistant Deputy Minister, Northern Affairs Organization should address the need for a senior-level oversight body with a mandate that includes a role in the development, oversight and monitoring of the Program's new Strategic Plan. This new Plan should include the establishment of timelines, and a clearly established strategic direction and related objectives, including those following the expiry of FCSAP. It should also support linkages among regional and project-level plans, performance measurement strategies and risk management plans.

5.2 Program Capacity and Capability

The scale, scope, complexity and geography of the Program's inventory of contaminated sites pose some unique challenges. As such, achievement of program objectives requires access to specialized capabilities and competencies in disciplines related to project management, financial and cost accounting and procurement as well as engineering and environmental science. As such, the audit team expected effective planning, implementation and monitoring of capacity, whether delivered via Program personnel or via contracted third-party service providers. The expectation is that plans and processes would support effective management of program capacity and capability as well as their alignment with Program objectives, and finally, that policies and procedures governing the management of agreements with service providers would reflect relevant requirements and organizational values.

Human Resource Planning and Management

The audit found evidence of Human Resource Planning in support of the management of contaminated sites at the sector, program and regional levels. While the Program has enjoyed a relatively stable team of experienced personnel, there has been a number of recent changes which indicate this is an area of increasing risk. For example, the redesign of the Program as a

separate Branch, recent staff departures in regions as a result of devolution, the relocation of the Giant Mine Project Office from the Northwest Territories region to HQ, and the potential repatriation of the Faro Mine Project Office from the Yukon Government back to AANDC were found to have contributed to the already challenging objective of implementing the Program's Human Resources Plan. In response to this challenge, the audit identified that senior management have made progress in staffing vacant positions and have taken steps to evolve the Program's organizational structure to better support achievement of Program objectives. For example, HQ-based project management resources were being provided to regions where local positions were not filled.

Notwithstanding the progress and steps taken by management, there is a continued risk that the Program will not be able to recruit and retain a core team of skilled and experienced personnel to both manage the portfolio of projects but also serve to inform decision makers regarding strategy and options following the end of FCSAP funding. Without this core capability, there is an increased risk that the Program's complement of personnel will not be sufficient to optimally leverage Phase III FCSAP funding and/or may not align with the longer-term strategic direction and related objectives.

Procurement and Contracting

The audit team identified that the vast majority of contracting activity is managed through PWGSC's Northern Contaminated Sites Directorate, which is based in Edmonton Alberta. AANDC works with PWGSC to establish contracting vehicles, such as Standing Offer Agreements, and resulting call-ups to secure access to resources and/or services. The terms and conditions associated with these arrangements were found to be aligned with Program objectives on such matters as socio-economic benefits and stakeholder consultations. Interviews with management and document review also revealed that the program has taken steps to establish positive relationships with PWGSC. There was also evidence that NCSP had demonstrated engagement with PWGSC in support of achieving Program objectives and to promote reflection of organizational values in agreements with contracted service providers. Moreover, there was evidence of recent collaboration and planning within the Program whereby regions and HQ have worked with PWGSC to establish a Standing Offer which is accessible to both the Northwest Territories and Nunavut regions and has led to the realization of efficiencies.

The audit also examined processes and practices for monitoring the performance of third-party contractors and found that various measures, including field inspections, had been developed. While the Program has a limited ability to remove a contractor from a Standing Offer for non-performance, the audit identified evidence of a punitive/incentive assessment program that was designed to help ensure that contractors met their commitments and targets.

The audit also found that, while there is a limited volume of procurement activity outside of PWGSC, the Program does engage in procurement within the Department. These are generally for lower dollar value amounts in connection with goods and services required in the normal course of operations. The Program has developed documentation to support and guide these procurement activities, including support for compliance with requirements and organizational values. However, this documentation was found to be out-of-date insofar as it did not reflect

current procurement practices and requirements within the Department (also see recommendation #3). For example, the documentation did not address AANDC's transition to a procurement hub structure. To the extent documentation is not up-to-date, there is an increased risk that practices are not consistently applied or understood or otherwise do not reflect Departmental, Program or external requirements.

Recommendation:

2. The Assistant Deputy Minister, Northern Affairs Organization should review the current status of the Program's Human Resources (HR) Plan with a view to assessing the strategic implications of staffing scenarios and options. Further, as part of the update of the Program's Strategic Plan, she should take steps to ensure the Program's HR Plan remains appropriate, achievable and aligned with the strategic direction and related objectives.

5.3 Management of Contaminated Sites

At the foundation of the Program's *raison d'être* are objectives which are dependent on the effective and efficient management of contaminated sites. This results in a very high expectation for management controls that support the effective and efficient identification, assessment, remediation, tracking and reporting of contaminated sites. In addition, these controls are expected to not only support compliance with a myriad of requirements but also demonstrate prudent and effective financial management.

Adequacy of the Project Management Approach/Methodology

The audit found that the Program had established comprehensive project management policies and procedures, which include detailed requirements on the management of contaminated sites. These requirements were found to align with and support relevant activities and requirements associated with FCSAP (e.g. the Decision Making Framework) and TBS (e.g. the Treasury Board Standard on Real Property); a full listing of these requirements can be found in Appendix B. Further, interviews with regional Management indicated confidence and support for the process for developing and updating project management guidance. They also indicated satisfaction with the support available from HQ management in interpreting or applying the requirements.

A key source of project management requirements is the *Corporate Procedures Manual* (CPM), a 167-page document that addresses roles and responsibilities, program procedures (e.g. planning approval and reporting) and project management procedures. It also provides an overview of NCSP's *Program Management Framework* which, among other things, describes the annual planning and reporting cycle, the 10-Step FCSAP Decision-Making Framework and ongoing requirements. The CPM also provides insight on how the Program categorizes contaminated site projects. Projects may be categorized as either *standard* projects or *major* projects, based on the dollar value, risk and complexity. If a project is categorized as *major* based on its PCRA (Project Complexity and Risk Assessment) score, it is also subject to the requirements as set out in the Program's Major Projects Office (MPO) *Standards and Guidance Manual*. All projects with a total estimated cost of \$100 million or more are also reviewed by the

Director's Committee, which can decide to have a project managed as a *major* project with all or a portion of the MPO *Standards and Guidance Manual* to be followed.

While the audit identified the existence of appropriately designed controls, document review and interviews also revealed some evidence of outdated project management guidance. Examples include the *Project Management Guide*, which had not been updated since 2006, and was found to include references and links to the now outdated TBS Project Management Policy, as well as references to the procurement process in place before the establishment of procurement hubs. Additionally, the CPM had not yet been updated to reflect recent developments including the redesign of the Program as a separate Branch and updates to the current governance structure as noted in Section 5.1. While audit examination did not reveal inappropriate practices, the audit did identify a few relatively isolated examples where the guidance was not as clear as expected. Specifically, opportunities for further clarity were noted in respect of when approvals were required for certain projects and the requirements for establishing project steering committees. To the extent that guidance is not up to date or if guidance is otherwise not fully clear, there is an increased risk of inconsistent or inappropriate project management activities or approaches which may have implications on the Program's effectiveness, efficiency or compliance objectives.

As referenced above, the audit identified a comprehensive regime of policies and guidance which was comprised of a considerable volume of documents (e.g. the CPM, Project Management Guide, Contaminated Sites Cost Estimating Guide, Procurement Strategy Procedure and Procurement Strategy Desk Guide, Project Closure Guide, and the Project Level Risk Management Background and Guidance) in addition to relevant TBS Policies and Guidelines (e.g. Policy on the Management of Real Property, Policy on the Management of Projects, and the Policy on Investment Planning). Document review conducted during the audit indicated some instances where separate guidance documents contain similar information on topics such as approval requirements and consultations. The existence of potentially duplicative or contrary guidance increases the risk of inappropriate or inconsistent activities.

While the Program has developed a comprehensive regime of guidance, it is inherently challenging both to keep it current and organized. Review of the guidance indicated that the Program has an opportunity to organize the various components of the Program's guidance regime into a format which aligns with the Departmental approach to documenting Management Control Frameworks (MCF) at the program level. Given the shared responsibility for contaminated sites and history of collaboration with the South of 60⁰ Program, there is a further opportunity to explore options for more formal collaboration with that program, on matters such as strategic planning and decision-making, including development of a Departmental MCF.

Effectiveness of the Project Management Approach/Methodology

The audit found that key project management tools were operating effectively. Specifically, the audit team selected a sample of eighteen (18) contaminated sites in the North representing a

range of classifications¹², at varying stages against the FCSAP 10 Step Approach, and that demonstrated a significant financial liability or recent history of remediation related expenditures.

Documentation evidencing the following elements was examined:

- Clarity of roles and responsibilities
- Timely and effective monitoring of projects
- Financial and Risk Management
- Stakeholder consultations
- Adherence to the Corporate Procedure Manual
- Adherence to FCSAP, TBS and other external requirements

The testing completed on the sample of eighteen contaminated sites included examination of the detailed work plans, remediation action plans, quarterly reports, project closure reports, change orders, financial reporting, consultation logs and other related project documents to determine if projects were being managed effectively and in compliance to relevant requirements. This included comparing these key project elements against the NCSP requirements (e.g. the Corporate Procedures Manual), FCSAP (e.g. the Decision-making Framework) and other Government of Canada requirements (e.g. TB Reporting Standard on Real Property).

Overall, testing of site files revealed evidence that the management of contaminated sites reflected compliance with NCSP key project management principles and information management requirements, compliance with internal and external reporting requirements and consistent delivery of program management as outlined in the FCSAP 10 step process.

Recommendation:

3. The Assistant Deputy Minister, Northern Affairs Organization should take steps to review, update and organize the policies and procedures associated with the management of contaminated sites, including related procurement practices, into a Control Framework for the management of contaminated sites. This initiative should be undertaken with input from the South of 60⁰ Program and would serve to address identified gaps, streamline content, and support better alignment with current practices and requirements. It will also establish a foundation for the development of a Department-wide control framework for the management of contaminated sites.

¹² Sites are classified using the Canadian Council of Ministers of the Environment (CCME) National Classification System (NCS) for Contaminated Sites.

6. MANAGEMENT ACTION PLAN

Recommendations	Management Response / Actions	Responsible Manager (Title)	Planned Implementation Date
<p>1. The Assistant Deputy Minister, Northern Affairs Organization should address the need for a senior-level oversight body with a mandate that includes a role in the development, oversight and monitoring of the Program's new Strategic Plan. This new Plan should include the establishment of timelines, and a clearly established strategic direction and related objectives, including those following the expiry of FCSAP. It should also support linkages among regional and project-level plans, performance measurement strategies and risk management plans.</p>	<p>A Terms of Reference (TOR) will be developed to establish the Northern Contaminated Sites Program (NCSP) Steering Committee. The TOR will include the elements described in the recommendation. Directors will brief and seek input from the Steering Committee on a regular basis to deal with HQ/regional specific issues. The Steering Committee will meet twice a year (or more often if required) to be briefed on key issues.</p>	<p>Assistant Deputy Minister, Northern Affairs Organization</p>	<p>Terms of Reference approved by Steering Committee by March 31, 2015</p>
<p>2. The Assistant Deputy Minister, Northern Affairs Organization should review the current status of the Program's Human Resources (HR) Plan with a view to assessing the strategic implications of staffing scenarios and options. Further, as part of the update of the Program's Strategic Plan, she should take steps to ensure the Program's HR Plan remains appropriate, achievable and aligned with</p>	<p>The Northern Contaminated Sites Branch (NCSB) updates its HR Plan annually and will continue to do so in the future. In light of the Strategic Plan being developed concurrently, NCSB will ensure that the HR Plan aligns with the Strategic Plan for the Branch. Any adjustments resulting from the Strategic Plan will further be reflected in future HR Plan updates.</p>	<p>Assistant Deputy Minister, Northern Affairs Organization</p>	<p>HR Plan updated by January 31, 2015.</p> <p>Strategic Plan (2015-2020) to be completed by March 31, 2015</p>

the strategic direction and related objectives.			
3. The Assistant Deputy Minister Northern Affairs Organization should take steps to review, update and organize the policies and procedures associated with the management of contaminated sites, including related procurement practices, into a Control Framework for the management of contaminated sites. This initiative should be undertaken with input from the South of 60° Program and would serve to address identified gaps, streamline content, and support better alignment with current practices and requirements. It will also establish a foundation for the development of a Department-wide control framework for the management of contaminated sites.	A NCSB management control framework will be developed and implemented in order to ensure an effective system of control over the management of contaminated sites North of 60°. The framework will be designed in accordance with Treasury Board Secretariat (TBS) guidance and relevant good practice/standards. The NCSB will include input from LED's South of 60° Program.	Assistant Deputy Minister, Northern Affairs Organization	March 31, 2016

Appendix A: Audit Criteria

To ensure an appropriate level of assurance to meet the audit objective, criteria were developed to address each of the assertions included within the scope of the audit (as provided in Section 2 of this Report). The audit criteria were drawn from the Management Accountability Framework, Treasury Board Policies, FCSAP Requirements as well as AANDC's internal policies and procedures. The criteria for the audit were as follows:

Audit Criteria	
Program Governance, Planning, Decision-Making and Monitoring	
1.1	The Program's governance structure, authorities and responsibilities are clearly defined and communicated.
1.2	Risk-based planning and decision-making is supported by appropriate information and analysis.
1.3	Mechanisms are in place to establish and monitor compliance (including compliance with legislative and policy requirements), financial status and progress against Program priorities.
Program Capacity and Capability	
2.1	HR plans and strategies which link to Program objectives have been established.
2.2	Procurement processes have been established and communicated to support the achievement of program objectives.
2.3	Policies and procedures to support the effective management of agreements and third-party agreements have been established in alignment with relevant legislative and regulatory requirements, organizational values and Treasury Board policies.
Management of Contaminated Sites	
3.1	Well-designed Project management approach/methodology has been established and communicated.
3.2	Key Project Management controls are operating effectively.

Appendix B: Relevant Legislation, Regulations, Agreements, Directives and Guidance

Relevant Federal Legislation and Associated Regulations:

- Canadian Environmental Protection Act
- Fisheries Act
- Canadian Environmental Assessment Act
- Species at Risk Act
- Migratory Birds Convention Act
- Arctic Waters Pollution Prevention Act
- Mackenzie Valley Resource Management Act
- Yukon Environmental and Socio-economic Assessment Act
- Nunavut Planning and Project Assessment Act
- Yukon Act

Relevant Agreements:

- Nunavut Land Claims Agreement (NU)
- Inuvialuit Final Agreement (NWT)
- The Gwich'in Comprehensive Land Claim Agreement (NWT)
- Tlicho Agreement (NWT)
- Sahtu Dene and Metis Comprehensive Land Claim Agreement (NWT)
- Yukon Northern Affairs Program Devolution Transfer Agreement (Yukon)
- Carcross/Tagish First Nation Final Agreement (Yukon)
- Kluane First Nation Agreement (Yukon)
- Kwanlin Dun First Nation Final Agreement (Yukon)
- Little Salmon/Carmacks First Nation Final Agreement (Yukon)
- Selkirk First Nation Final Agreement (Yukon)
- Ta'an Kwach'an Council Final Agreement (Yukon)
- Teslin Tlingit Final Agreement (Yukon)
- Tr'ondek Hwech'in Final Agreement (Yukon)
- Vuntut Gwitchin First Nation Final Agreement (Yukon)

Relevant Directives and Guidance:

- Policy on Management of Real Property
- Treasury Board Reporting Standard on Real Property
- Guide to the Management of Real Property
- Treasury Board Directive on Contingencies
- Remediation Liabilities Related to Contaminated Sites
- FCSAP Decision Making Framework
- FCSAP National Classification System for Contaminated Sites
- AANDC Contaminated Sites Management Policy

Appendix C: Glossary and Context of Terms used in this Report

Agreement: An instrument, such as a memorandum of understanding, a memorandum of agreement, or an occupancy instrument, that, while not legally binding, creates a custodian-tenant relationship by conferring certain real property rights of use or benefits and obligations on the part of the two parties as if it were a truly enforceable instrument.

Approach: The philosophy and procedures used by a regulatory agency to establish environmental quality criteria. The components of the approach can include the types of information considered, the management goal underlying the criteria, relative priorities assigned to various types of information and the ways that information is combined to set the criteria.

Canada's Northern Strategy: The Government has established a comprehensive Northern Strategy and is taking concrete action in four priority areas (Exercising our Arctic sovereignty, Protecting our environmental heritage, Promoting social and economic development, Improving and devolving Northern governance.) World-leading Arctic science and technology underpin the Northern Strategy and help ensure sound decision making. The Government is committed to helping the North realize its true potential as a healthy, prosperous and secure region with a strong and sovereign Canada.

Contaminated site: A site at which substances occur at concentrations: (1) above background levels and pose, or are likely to pose an immediate or long-term hazard to human health and the environment or (2) exceed levels specified in policies and regulations.

Control: Any action taken by management, the deputy head, and other parties to manage risk and increase the likelihood that established objectives and goals will be achieved. Management plans, organizes, and directs the performance of sufficient actions to provide reasonable assurance that objectives and goals will be achieved.

Corporate Procedures Manual (CPM): Is an AANDC document which addresses roles and responsibilities, program procedures (e.g. planning approval and reporting) and project management procedures.

Criteria: Numerical standards that are established for the concentrations of chemical substances in soil, groundwater, surface water, and sediments that relate to the suitability of a site for specific land uses and land use categories. Criteria are also often referred to as guidelines.

Devolution: Refers to a transfer of responsibility from the federal government to a provincial or territorial government.

Federal Contaminated Sites Inventory: The Federal Contaminated Sites Inventory includes information on all known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government.

FCSAP: The Federal Contaminated Sites Action Plan (FCSAP), approved in 2005 included governance and oversight roles for the Federal Contaminated Sites Assistant Deputy Ministers Steering Committee (FCS ADM SC), an interdepartmental steering committee of senior officials. The FCSAP program, which committed \$3.5 billion over a 15-year period, is jointly administered by Environment Canada through the FCSAP Secretariat and the Treasury Board Secretariat, and has the primary objective of addressing the risks that contaminated sites pose to human health and the environment, and to reduce the associated financial liability. The FCSAP uses a cost-share model under which 85% of the costs to assess, manage and remediate sites are funded by the FCSAP, while the remaining 15% of the costs are covered by the custodial department.

FCSAP 10 Step Approach – also known as the *Federal Approach to Contaminated Sites* was developed to provide a common federal approach to managing contaminated sites under federal custody. It helps to ensure necessary steps are taken to characterize, classify and prioritize contaminated sites and to ensure environmental site management initiatives are implemented in a timely and cost-effective manner.

FCSAP Phase II – This Phase of FCSAP commenced April 1, 2011 and ends March 31, 2016. During this phase, the emphasis is on remediating the highest priority contaminated sites.

FCSAP Phase III – At the time of the audit, the specific objective and criteria associated with Phase III were still in development.

Financial Management: The planning, directing, monitoring, organizing, and controlling of the monetary resources of an organization.

Governance: Establishment of policies, and continuous monitoring of their proper implementation, by the members of the governing body of an organization. It includes the mechanisms required to balance the powers of the members, and their primary duty of enhancing the prosperity and viability of the organization.

Hazard: The adverse impact on health or property which results from the presence of or exposure to a substance. The significance of the adverse effect depends on the nature and severity of the hazard and the degree to which the effect is reversible.

Human Resources Planning: The process that links the human resources needs of an organization to its strategic plan to ensure that staffing is sufficient, qualified, and competent enough to achieve the organization's objectives. HR planning is becoming a vital organizational element for maintaining a competitive advantage and reducing employee turnover.

Internal Auditing Standards for the Government of Canada: Purpose is to define the internal auditing standards to be met by all departments subject to the Policy on Internal Audit.

Liability: obligations arising from past transactions or events, the settlement of which may result in the transfer or use of assets, or the provision of services or other economic benefits in the future.

Management Control Framework: A recognized system of categories that cover all internal controls expected in organizations. These controls are designed to ensure that risks are contained within the risk tolerances established by the risk management process.

Management of Contaminated Sites: Refers to the spectrum of approaches for dealing with a known contaminated site. Management includes, but is not limited to, one or more of the following: monitored natural attenuation, warnings, restrictions to site access, change in land

usage, isolation of contaminants from human and ecological receptors (contaminant stabilization, barrier walls, capping), interim remediation, partial remediation, phased remediation, full remediation, remediation in any of the previous approaches to varying standards (industrial, commercial, agricultural, residential, parkland), and postponement of action until contamination stops. Management also includes risk management.

Monitoring: Observing the change in geophysical, hydrogeological or geochemical measurement with time.

Objective: A numerical limit or narrative statement that has been established to protect and maintain a specified use of soil or water at a particular site by taking into account site-specific conditions. The numerical limits or narrative statements that are established to protect and maintain the specified uses of water, sediment or soil at a particular site. Objectives may be adopted from generic criteria or formulated to account for site-specific conditions.

Performance Measurement Strategy: A results-based management tool that is used to guide the selection, development and ongoing use of performance measures. Its purpose is to assist program managers and deputy heads to: continuously monitor and assess the results of programs as well as the economy and efficiency of their management; make informed decisions and take appropriate, timely action with respect to programs; provide effective and relevant departmental reporting on programs; and ensure that credible and reliable performance data are being collected to effectively support evaluation.

Procurement: The act of obtaining or buying goods and services. The process includes preparation and processing of a demand as well as the end receipt and approval of payment.

Remediation: The improvement of a contaminated site to prevent, minimize or mitigate damage to human health or the environment. Remediation involves the development and application of a planned approach that removes, destroys, contains or otherwise reduces the availability of contaminants to receptors of concern.

Risk: The expected magnitude of an event occurring that will have an impact on the achievement of objectives. Risk is measured as a function of the extent of the event's impact and the likelihood of its occurrence.

Site Management/Remediation Strategy: The implementation of a strategy or measures to control or reduce the level of risk estimated by the risk assessment.

Standing Offer Agreement: A standing offer is an offer from a potential supplier to provide goods and/or services at pre-arranged prices, under set terms and conditions, when and if required. It is not a contract until the government issues a "call-up" against the standing offer. The Government of Canada is under no actual obligation to purchase until that time.