NORTHERN AFFAIRS PROGRAM

CONTAMINATED SITES PROGRAM

PERFORMANCE REPORT

2001 – 02

November 2002

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Management Statement

I am pleased to present the first annual Performance Report of the Northern Affairs Program (NAP), Contaminated Sites Program (CSP). This document reports progress on managing contaminated sites from former military sites and abandoned mines in Canada's three territories north of 60° latitude for the fiscal year 2001 - 02.

CSP is committed to managing contaminated sites in a cost-effective and consistent manner, to reduce and eliminate, where possible, risk to human and environmental health and liability associated with these sites.

It has achieved a number of results at priority sites over the last year, including:

- site assessment work at 13 different sites;
- remediation work at 6 sites;
- ongoing care and maintenance at 6 sites; and
- site monitoring at 5 sites.

Overall, the pace of progress has been steady: the CPS has fully completed three of the four Sustainable Development Strategy 2001 commitments directed at contaminated sites management and has partially achieved the fourth. Major achievements include: consolidating CSP's inventory database; calculating liabilities and contingencies; drafting a contaminated sites management policy; and developing a detailed Contaminated Sites Management Framework to guide the CSP in the future.

That is not to say there have not been challenges in securing sufficient funding to support the increased level of responsibilities of the CSP continues to be a major concern. The rapid increase in liabilities from inherited abandoned mines, as well as ongoing liabilities from former military sites poses a challenge from both a financial and a human resources perspective.

Nevertheless, staff will continue to work towards effectively managing CSP's responsibilities. Issues that are priorities and next steps for the Program include:

- seeking approval of the contaminated sites policy;
- obtaining approval for the Contaminated Sites Management Framework from the Contaminated Sites Management Steering Committee;
- fully integrating the Contaminated Sites Management Framework into operations; and
- addressing significant environmental and human health issues at sites designated as priority.

This Performance Report gives readers an in-depth perspective on CSP's achievements over the past year, as well as on its goals for the years to come. To ensure continued improvement, I invite readers to provide comments and feedback on this report. Thank you for your interest in our Program.

James R. Moore
Assistant Deputy Minister
Northern Affairs Program
Indian and Northern Affairs Canada

Executive Summary

The Contaminated Sites Program (CSP) has been working to effectively manage its environmental and socio-economic responsibilities. This report details the CSP's achievements, successes and challenges to date. Its purpose is to apprise senior management of significant environmental and human health issues associated with contaminated sites in the North, to report on progress and to facilitate management decisions on issues of importance.

Over the past few years, the CSP has been making a concerted effort to manage its key impacts and improve its performance. There has been a major effort to develop a Contaminated Sites Policy and a Management Framework, which both currently awaiting approval. The basic element of the framework, has been developed, and over the next year the CSP will be moving to complete implementation of the core elements of the framework.

Significant work also went into information management in the past year, including developing the detailed CSP inventory database that includes pertinent information on each site under the CSP's responsibility, as well as calculating INAC's liabilities and contingencies by site. An important element to build into information management systems in the coming year is the systematic monitoring of social and economic benefits derived from the operations and activities of the CSP in the Regions.

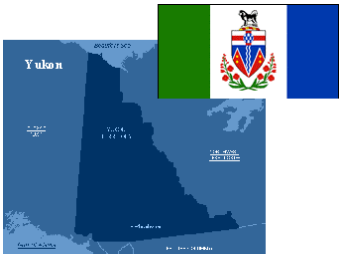
Program committees, such as the Contaminated Sites Management Steering Committee (CSMSC) and the Contaminated Sites Management Working Team (CSMWT) have been established and met five times during the reporting period. These committees provide overall direction and are instrumental to the successful implementation of the CSP. Information management systems have been established to facilitate the flow of Regional information into the Performance Report process. This report represents the first full cycle of this newly established reporting process.

The report is divided into four major sections. The introductory section includes the executive summary, report coverage and a profile of the CSP's scale of operations. The management section describes the vision and strategy for the future, the importance of incorporating sustainable development into decision making processes and operations, the governance structure and program development. Then third section of the report focuses on specific objectives and progress achieved. Finally, the last section of the report addresses the future direction of the CSP in managing its liabilities.

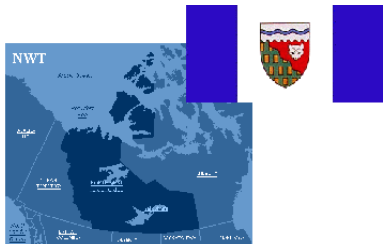
Report Coverage

This report presents the results and outcomes of CSP's management of contaminated sites in Canada's three territories for the period ending March 31, 2002. This is the CSP's first annual Performance Report and therefore it also contains historical/contextual information that will not be included in future reports.

Profile of NAP Contaminated Sites Program

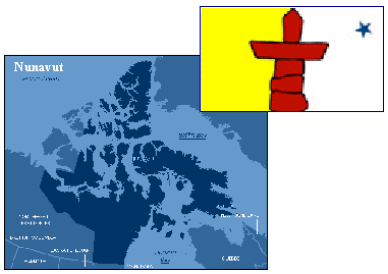


The NAP CSP has responsibilities and obligations for managing contaminated sites in Canada's three territories – the Northwest Territories (NWT), Nunavut and the Yukon. Most contaminated sites in the North are located in remote areas, and result from former military sites, and abandoned and insolvent mines. Because most public lands in the three territories are federal Crown lands managed and administered by Indian and Northern Affairs Canada (INAC), land administration associated with some former military sites and abandoned mines reverts to INAC.



In general, the transfer of administration of former military sites to INAC control occurred at a time when environmental regulations were non-existent or inadequate by current standards. The sites contained many contaminants unrecognized at that time, such as PCBs, hydrocarbons, lead and mercury. Some sites have contaminants at levels that may pose a risk to human health and safety, and/or the environment.

From 1997 to 2000, economic conditions caused major mines in Canada's territories to become insolvent, for example, Giant and Colomac Mines in the NWT and the Faro Mine in the Yukon, reverted to federal government responsibility through bankruptcy proceedings by their parent companies. Most of the bigger mine sites have become the responsibility of INAC as a result of insolvency of owners.



INAC is now responsible for 1,818 sites. Of these, 63 sites are known to contain contamination accounting for a total liability of $723 million; most of the liability is associated with 37 sites, which have accordingly been designated as high priority sites. **Figure 1** illustrates the locations of priority sites in Canada's North.

NAP has been managing northern federal contaminated sites since 1991. Since 1999, however, when it inherited a number of large abandoned mines, that expanded the scope of the Program's activities and responsibilities has expanded considerably. Over $131 million has been directed to environmental site assessment, risk management and remediation over the last 11 years. As of March 31, 2002:

- 54 percent of sites have been assessed and either require no further action or remediation is complete;
- 27 percent of sites require assessment and may require action;
- 18 percent of sites have been assessed and require some action.

The CSP operates under one of INAC's key operating principles, which emphasizes:

A long-term focus seeking to preserve and enhance economic, social and natural capital in order to improve the quality of people's lives and to contribute a legacy for the future.

Consequently, priority is assigned to sites with:

- human health and safety concerns;
- legal and Aboriginal land claims obligations;
- significant impacts on the environment; and
- other concerns expressed by First Nations, Inuit, Northerners and other stakeholders.

CSP employs a team of 19 staff members, located at INAC in Gatineau, Quebec (2) and in three Regional offices, including NWT (12.5), Nunavut (1.5) and the Yukon (3).

Vision and Strategy

Canada's vision for the North includes:

Fostering self-sufficient and prosperous regions in which Northerners manage their own affairs and make strong contributions to the federation.

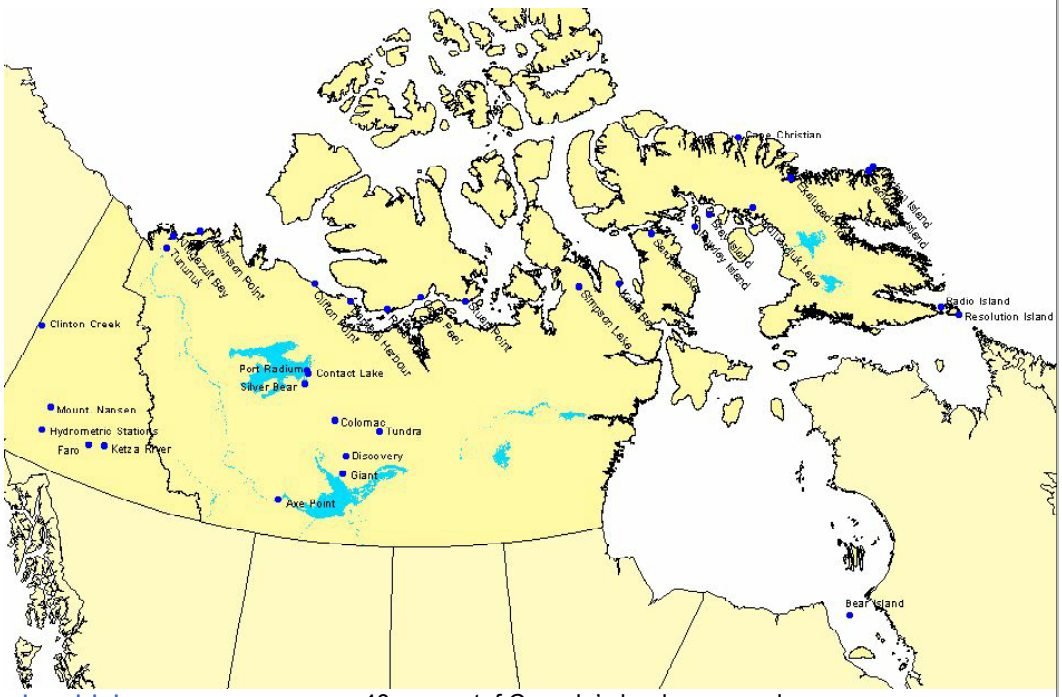


Figure 1: Map of Priority Sites[1]

In addition, the Governor General's 2001 Speech from the Throne committed the government to strengthening its relationship with Aboriginal people and to strengthening Aboriginal entrepreneurial and business expertise to ensuring a clean, healthy environment for Canadians; and to building strong and safe communities.[2]

INAC is the principal federal department responsible for carrying out the federal government's vision and meeting its constitutional, political and legal responsibilities in the North, including responsibility for most of the North's natural resources. Accordingly, NAP is the custodian and resource manager for an area occupying 40 percentof Canada's land mass and 10 percent of its freshwater supply. INAC's role in the North is extremely broad and includes settling and implementing land claims, negotiating self-government agreements, advancing political evolution, managing natural resources, protecting the environment and fostering leadership in sustainable development both domestically and among circumpolar nations.

INAC's approach in managing these responsibilities is based on partnership and the principles of sustainable development. In 2001, INAC's second Sustainable

[1] Priority sites map developed from CSP database inventory.
[2] Governor General's Speech from the Throne to open the first session of the 37th Parliament of Canada, January 30, 2001, Ottawa.

Development Strategy (SDS)[3] was tabled in Parliament and included four specific commitments related to contaminated sites as follows:

- to create a prioritization system for all northern contaminated sites by December 2001;
- to conduct Phase II/III environmental assessments for at least five sites by 2002;
- to initiate containment of PCB-contaminated soils at Resolution Island by 2003; and
- to develop a contaminated sites management program by December 31, 2001.

The CSP has fully completed three of these commitments and partially achieved the fourth. The prioritization system for contaminated sites was updated within the set time frame. In both July of 2000 and July of 2001, the CSP submitted comprehensive proposals to the Federal Contaminated Sites Assessment Initiative (FCSAI) to conduct Phase II/III environmental assessments. These requests were funded in the amount just over $2.9 million. Using this money, 16 sites were assessed, (10 in 2000, and 6 in 2001). The PCB-contaminated soils project at Resolution Island has also been established. The only SDS commitment that has not been fully achieved is development of a Contaminated Sites Management Framework. However, a framework has been developed for submission for approval late in the Fall of 2002.

Consistent with the longer-term vision of NAP ─ to provide a safer and cleaner northern environment within the principles and practices of sustainable development is CSP's vision which states:

The CSP is committed to managing contaminated sites in a cost-effective and consistent manner, to reduce and eliminate, where possible, risk to human and environmental health and liability associated with these sites.

This vision statement also supports the mission of INAC: "To make Canada a better place for First Nations and Northerners."

To support the CSP vision five principles have provided the foundation for all policies, processes and activities, as following:

Consistent, transparent processes based on risk and priority

Sites will be managed and addressed on a priority basis using efficient, effective and established procedures including: the National Classification System (NCS) and the Northern Environmental Risk Assessment Strategy (NERAS) as appropriate.

Effective governance and accountability

Based on the three governance cornerstones ─ transparency, alignment of policy and accountability ─ governance and accountability will be clear, straightforward and comprehensive.

Capacity enhancement

The CSP will, whenever possible, support and enhance the development of healthy, sustainable communities by leveraging local skills and knowledge in addressing contaminated sites. Through this principle, core competencies will be maximized and deployed.

[3] See INAC's SDS at http://www.ainc-inac.gc.ca/pr/sus/sds_e.html.

Northern Solutions

Whenever possible, the CSP will adopt solutions tailored to the northern environment and peoples. This includes leveraging local knowledge and incorporating the unique needs of Northerners and the environment they live in into the development and implementation of policies and procedures.

Teamwork and Partnership

The successful implementation and management of the CSP is based on respect and sharing of knowledge, experience and resources with clients and partners.

The intent of the CSP is to mitigate immediate and long-term hazards to human health and the environment in the North. Specifically, the strategic intent of the CSP is:

- to be a recognized leader in managing and remediating contaminated sites;
- to be stable in terms of its policy and strategy framework, its resource base and its skills and capacities;
- to improve ecological integrity over time;
- to establish accurate criteria for charting progress against plans and objectives; and
- to maximize capabilities to address contaminated sites in the most efficient and effective manner possible.

NAP staff are involved in interdepartmental forums such as the Contaminated Sites Management Working Group (CSMWG) that have an ongoing role in the development of the policies and the tools needed to support contaminated sites management.[4]

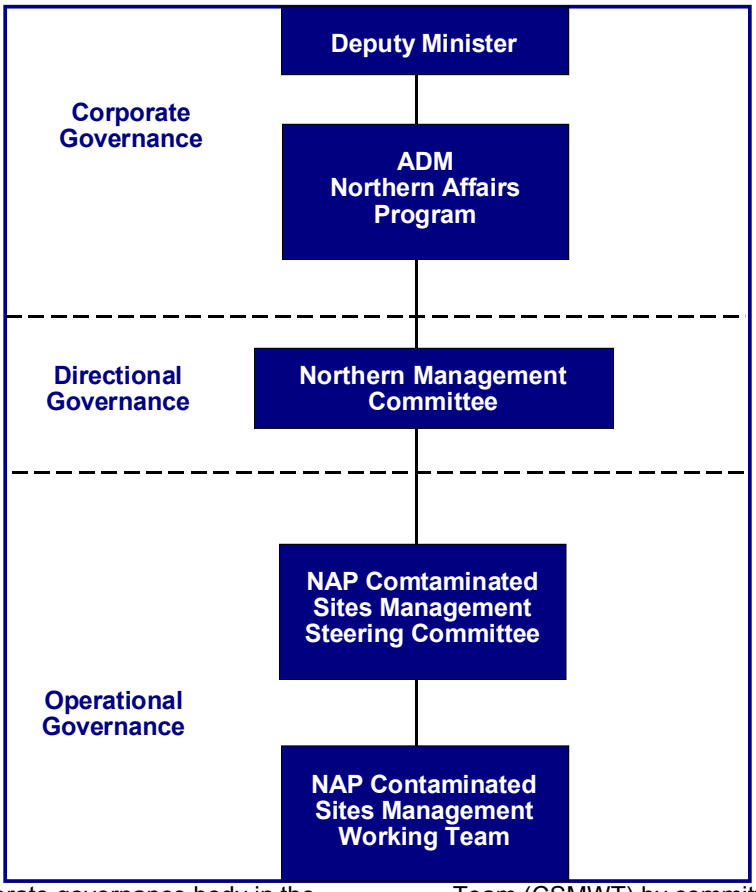
NAP Contaminated Sites Management

Program Governance Structure

The CSP is a decentralized program, with each Region responsible for implementing program policy through operational activities in their respective regions. By comparison, Headquarters provides policy direction and communications support, a performance management framework and standardized reporting systems. Overall responsibility for the CSP rests with the Deputy Minister, and decision making is conducted through a committee process in three key decision-making bodies. **Figure 2** on the following page illustrates the roles and relationships of the principle governing bodies.

[4] Information on the CSMWG is available at http://www.ec.gc.ca/etad/csmwg/index_e.html.

Figure 2: CSP Governance Structure



The key corporate governance body in the CSP is the Northern Management Committee (NMC). Chaired by the Assistant Deputy Minister (ADM) of Northern Affairs and comprising regional and sector Directors General and Directors, this committee brings together senior operational and financial executives. These executives are responsible for NAP, as well as for establishing and reviewing CSP policies and standards, and identifying and approving new policies and processes where required.

The NMC approves and funds plans which are then executed under the overall direction of the NAP Contaminated Sites Management Steering Committee (CSMSC) and the NAP Contaminated Sites Management Working Team (CSMWT) by committee members in their respective regions. During the 2001-02 reporting period, the CSMSC and the CSMWT met five times.

The CSP is implemented in the Regions, and primary line responsibility rests there, while Headquarters provides regional support and strategic direction. Headquarters is responsible for the CSP being implemented and managed in accordance with policy and program objectives, and for the CSP supporting departmental goals and horizontal initiatives where possible. Headquarters will also provide regular progress reports on implementation and management, monitor optimal delivery and management of the CSP and participate in regular audits and evaluations.

Regional headquarters are responsible for implementing the plans and policies approved by the CSMSC and NMC, and for achieving CSP site-specific objectives at the actual contaminated sites. The management framework does not dictate how the CSP is delivered in the Regions: at this time, CSP management structure is different in each Region. In the Yukon, historically, the Waste Management Program focused on the assessment and remediation of contaminated sites, while the Water Resources Branch took a lead role in managing major abandoned mines. However, as responsibility for abandoned mines has expanded and as the Region has prepared for devolution, the management of abandoned mines has been shared by the Waste Management Program, Water Resources and Mineral Resources. (The Faro Mine is unique in that it is being operated by a court-appointed trustee, Deloitte and Touche Inc.) In the NWT, the regional CSP manages assessment and remediation of all contaminated sites, with the exception of Giant Mine, which has a dedicated Project Office. A significant amount of the assessment and remediation work in the NWT is outsourced to Public Works and Government Services Canada (PWGSC). In Nunavut, the Region's CSP is just getting established and is in the process of taking over the management of sites previously managed by the NWT Region of NAP.

To provide for timely and inclusive decision-making, the CSP governance structure stresses stakeholder involvement at every level in the planning and implementation process. These stakeholders include INAC executives, program senior executives and management, and regional Directors, managers and staff.

Program Development

The CSP evolved out of the Arctic Environmental Strategy and the Action on Waste Management Program of the early 1990s. Program Offices were established in both the Yukon and NWT regions, with a Program Manager in Gatineau, Quebec. The Nunavut CS office was established in 2001. The original mandate of the program involved addressing "waste sites" in the North, focusing on sites with visible signs of pollution or debris. Over time, the program's focus shifted to addressing "contaminated sites" as federal government policy evolved.

Federal policy was influenced by the 1996 comprehensive review of contaminated sites management in the federal government by the Office of the Auditor General of Canada's (OAG). The review identified a number of significant findings and recommendations for improving the management of contaminated sites.

In the Yukon, the Water Resources Office took on responsibility for managing abandoned mines, but as the workload became excessive the Waste Management Division became involved in managing a number of sites. In the NWT, the Royal Oak Project Office was established to represent INAC's interests during bankruptcy proceedings and evolved to including overall responsibility for both the Giant and Colomac Mines. In 2000, responsibility for Colomac was turned over to the Contaminated Sites Office. As the number and complexity of sites increased, there was an increasing need for a management structure with clear roles and responsibilities and appropriate competencies and capacities.

The CSP has been implementing more formal management systems over the last several years (see "Framework" sub-section under "Performance Measurements").

The scope of environmental and health impacts as a result of abandoned contaminated sites in the North, is potentially significant. Abandoned defence / radar sites have left hazardous chemicals; abandoned mines have potentially contaminated surface and ground water and contaminants could reach into the food chain if not managed appropriately. In addition to health and safety concerns, the liabilities associated with these sites are significant. Since INAC is the primary federal department responsible for meeting the Government of Canada's responsibilities in the North, INAC shoulders all of the liabilities for the majority of the health and safety risks identified which have been calculated to date, if these issues are not addressed.

The CSP faces a number of

challenges; for instance, many large sites have structures that contain contaminated tailings (e.g., heavy metals), some of which are in poor condition and continue to deteriorate. The proximity of these sites to major water systems that supply water and food consumed by Northerners, and the presence of discontinuous permafrost and extreme climatic conditions, increase the risk of human and environmental impacts if a failure were to occur.

Land claims and devolution commitments legally bind the government to remediate sites, and the fact that INAC's liabilities account for 40 percent of the total federal liability will bring increased focus on what the government is doing to manage contaminated sites.

The human resources capacity to manage the CSP is also no longer adequate to support the increased level of responsibilities. The biggest challenge for NAP, however, is securing sufficient resources for:

- site assessment and remediation at priority sites;
- long-term monitoring, regulatory permits, enforcement and compliance, and audits;
- assessment of remaining potential sites and contingent liabilities; and
- emergency situations.

Despite the rapid increase in liabilities, the level of funding has not kept pace. Current levels of funding cannot address the substantial increase in liabilities that resulted from the inheritance of abandoned mines or provide for effective management of former military sites. INAC is unable to continue internal reallocation to support contaminated sites management; therefore, new sources of funding will be required to address these challenges. The OAG is currently conducting two audits: Abandoned Mines in the North and INAC Contaminated Sites. The results of these audits, to be released in October 2002, will focus further attention on INAC's contaminated sites management, but may also result in a new injection of resources to address these pressing issues in the North.

Performance Measurement

Objectives

The CSP has established the following strategic objectives to guide its activities. These objectives relate to the broad direction for contaminated sites management provided by Treasury Board (see "Policy and Regulations" sub-section). The CSP's strategic objectives are:

- to meet federal and departmental policy requirements and legal obligations regarding the management of contaminated sites;
- to require that, where a suspected contaminated site has been identified, the site be assessed in a timely, consistent and cost effective manner;
- to provide a scientifically valid risk management framework for setting priorities, planning, implementing and reporting on the management of contaminated sites;
- to remediate, depending on available resources, all National Classification System (NCS) Class 1 contaminated sites in the North by 2027, unless it can be demonstrated that for a specific site an alternative form of management is appropriate;
- to promote the social and economic benefits that may accrue to First Nations, Inuit and northern communities when carrying out activities required by this policy; and
- to promote the federal "polluter pays" principle.

All CSP planning is carried out in conformity with these strategic objectives and targets, including the long-term (25-year) management plan, annual work plans and project level plans. This performance report assesses the extent to which these objectives and targets are being met.

Progress Achieved

Several factors influence the CSP's progress. The following factors have the greatest impact on the CSP in terms of establishing future direction and initiatives:

Environment, health and safety
The risk to health, safety and the environment 9s a major consideration; for example, contamination may migrate into the food chain or a community's water supply.

Legislative framework
While there is no comprehensive regulatory framework for contaminated sites at the federal level, there are a number of pieces of legislation that apply.

Policy framework
There is an evolving Treasury Board and departmental policy framework related to contaminated sites that requires specific approaches and deliverables.

Financial
Site contamination is not only costly to address, it has a significant effect on the value of an asset, from both a land value and development perspective.

Public awareness and confidence
A significant factor for dealing with contaminated sites is the concern of affected individuals and the general public, as well as the impact on the reputation of the Government of Canada if it does not handle contaminated sites in an appropriate manner.

Land use and claim obligations
The regime for determining the degree to which a site is "contaminated" is related to its land use; as a result, this factor often determines the approach taken, i.e., the standards of clean-up levels. Land claim agreements also contain specific commitments to remediate contaminated sites; if these commitments are not met, Aboriginal organizations may seek arbitration or court action.

Devolution
The Yukon Devolution Transfer Agreement (DTA) stipulates federal funding commitments to address territorial contaminated sites, which if not honoured, could also result in court action and negatively influence future development negotiations. Similar commitments are likely with other jurisdictional devolution agreements.

Threat to future economic development
Poor management of contaminated sites could impede future economic development in the North.

Any strategy for managing contaminated sites must take all of these factors into consideration. Because there are limited resources, decision making must balance the relative risks of these different considerations as they apply to a particular case.

The CSP employs a risk-based environmental

management approach to contaminated sites. The objectives are to assess risks to human health and the natural environment under the current and intended land use scenarios and to implement risk management solutions considered to be protective of those risks. To accomplish these objectives, the CSP uses processes developed from various policies and regulations.

Policy and Regulations

The context in which the CSP must operate consists of applicable regulations, policies, and technical guidelines and standards. These have been evolving rapidly as the scale of the contaminated sites issue has become apparent, and as expertise and capacity have improved.

The *Canadian Environmental Protection Act* (CEPA), the *Fisheries Act* (FA), and the *Canadian Environmental Assessment Act* (CEAA) are the most applicable pieces of federal environmental legislation related to contaminated sites.

The CSP is also influenced by important jurisdictional legislation such as the *Northwest Territories and Yukon Waters Acts and Regulations*, and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, to name just a few. Under the Territorial Water Acts, Water Boards are responsible for granting water licences to companies operating in the North. These licences can set environmental conditions and establish financial security requirements. Water licences prepared by territorial Water Boards must be approved by INAC and are an important mechanism to control pollution from mining or other operations. Similarly, the power to enter and take over operations of a site under Section 39 of the NWT and Yukon Waters Acts carries with it significant risk and liability and raises questions about how these such should be managed.

A comprehensive contaminated sites policy framework is also emerging supported by guidance documents. The CSP applies key requirements from sources such as the Treasury Board Secretariat (TBS) *Federal Contaminated Sites and Solid Waste Landfills Inventory Policy* (July 1, 2000); the draft *Policy on Accounting for Costs and Liabilities Related to Contaminated Sites*; and Contaminated Sites Management Working Group's *Federal Approach to Contaminated Sites* (November 1999), and its recommended guidelines and standards, including those of the Canadian Council of Ministers of the Environment (CCME) and the Canadian Standards Association (CSA). In determining priority sites, two key processes are used: The National Classification System of the CCME and the Northern Environmental Risk Assessment Strategy developed in 1995. All contaminated sites in the INAC NAP inventory are classified according to the CCME NCS and fall into the following classes:

Class 1: Action Required;
Class 2: Action Likely Required;
Class 3: Action May be Required;
Class N: Action Not Likely Required; and
Class I: Insufficient Information.

All sites will be further described in accordance with the following site status categories established by the TBS:

1. Under assessment;
2. Under remediation;
3. Remediated and under risk management;
4. Under risk management;
5. Remediation complete;
6. Remediation by third party; and
7. Assessed – no action required.

The sub-section, "Priority Sites," details the current status of NAP's contaminated sites.

Although TBS has developed policies and guidance on contaminated sites management, departments are requested to develop their own policies and management approaches consistent with the TBS guidelines.

Towards the end of fiscal year 2001−02, INAC drafted a contaminated sites policy that is awaiting approval. The objective of the policy is to contribute to a safer, healthier, sustainable environment for Aboriginal peoples and northern residents, and to preserve and enhance the ecological integrity of the environment by managing contaminated sites in a cost-effective and consistent manner to reduce and eliminate, where possible, risk and liability associated with contaminated sites.

The draft INAC policy:

- reflects directions to departments in draft Treasury Board Secretariat policy and various other guidelines;
- places an emphasis on prevention;
- promotes managing sites through scientifically based risk management procedures; and
- commits to a strong program management and governance system.

The CSP has developed its own contaminated sites policy for which it will seek approval once the INAC policy has been approved.

Also in fiscal year 2001-02, INAC was in the process of developing mine reclamation policies for the three northern territories. These policies aim to protect the environment and human health in northern communities by effectively addressing the disposition of liability relating to mine closures.

Framework

The NAP Contaminated Sites Management Framework is a results-based management and accountability framework with established goals, objectives and targets.

Originally responsible for operational management of a smaller number of sites, the CSP was able to manage them with limited financial allocations and few human resources. However, as the number of contaminated sites have increased, so have the responsibilities and expectations of the CSP. High risk sites demand significant resources, both human and financial. As a result, it is extremely difficult for the CSP to effectively respond to what is becoming a serious situation in Canada's North. With 37

Figure 3: Overview of Contaminated Sites Management Framework

Colomac Mine

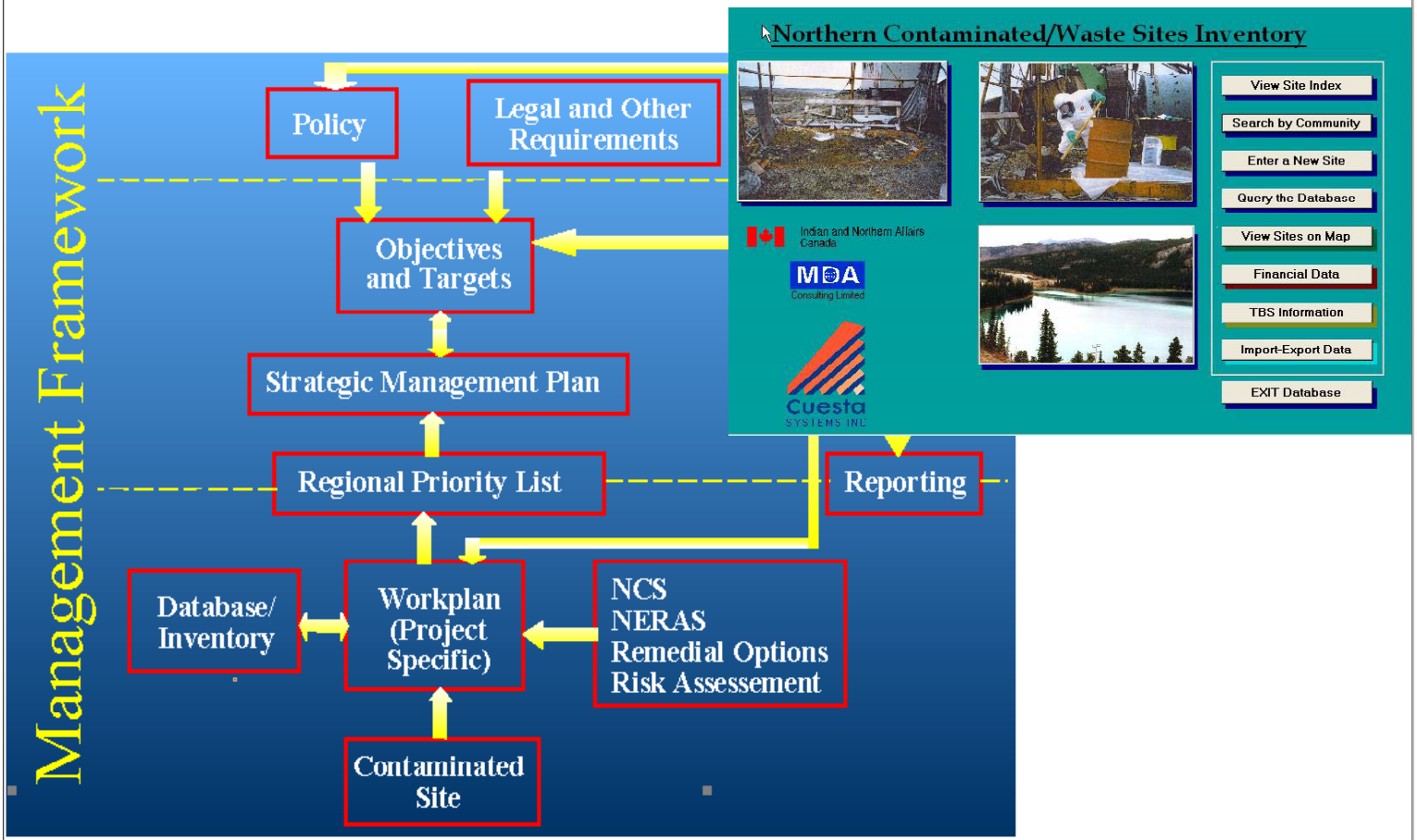
Colomac Mine is an abandoned gold mine located northwest of Yellowknife in the Northwest Territories. INAC has been operating the mine in care and maintenance mode since 1999 when Royal Oak Mines became insolvent. The most significant issues at the mine are related to the tailings containment area (TCA). Since the mine shut down in 1997, the TCA, which was designed not to discharge to the environment, has been filling up with natural run-off and precipitation. Activities over the past two years have focused on avoiding an overflow of tailings water contaminated with cyanide, ammonia and metals. Care and maintenance costs over the last two years have been approximately $3 million per year.

Accomplishments achieved at Colomac during the reporting period cover a range of work, such as:

- conducting baseline studies;
- developing (with PWGSC) a detailed cost estimate for care and maintenance and remediation activities;
- holding public hearings (February and May 2001) regarding the Colomac Water Licence; as well as regular consultation meetings with the Dogrib First Nation;
- evaluating long-term water management options, e.g., capital and operating cost estimates have been developed for five water treatment alternatives;
- facilitating a technical workshop in December 2001 to examine all of the alternatives for water management at the Colomac Mine. (The workshop led to detailed work plans for the investigations needed to arrive at a defensible selection of water management measures);
- conducting investigations to support selection of water management measures;
- Water Licence approval received November 2001;
- construction of three ditches to divert clean water away from the tailings area;
- general clean-up of reagents (lime, acid, etc.) and debris;
- construction of berms around pits;
- decontamination of 24 ATCO trailers and removal of Wayco buildings;
- landfill cleaned and sorted;
- established Surveillance Network Program (as part of the Water Licence) to take water quality samples from 38 stations, analyse and report results to the Water Board in an Annual Report; and
- INAC has developed a strong partnership with the Dogrib community, who have been heavily involved in developing a remediation plan for the site.

known high-risk sites requiring remediation and nearly 500 sites requiring assessment, the CSP requires stable funding, dedicated resources and a program structure that meets departmental objectives and legal obligations to Canada's Northerners.

Recognizing the need to have a sound management and accountability framework, the CSP has developed a framework based on the key management elements of policy, planning, operational controls or procedures (including for example training and information management), monitoring and reporting, and management review. **Figure 3** below presents an overview of the relationships between some of these elements.



The draft CSP policy provides direction and outlines important requirements, as well as roles and responsibilities. The policy requires that specific program-wide objectives and targets be set on an annual basis. This requirement ensures contaminated sites activities are linked to specific outcomes and results. Objectives and targets are set through a planning process involving the development of project and management plans and the prioritization of financial allocations.

The CSP has also developed a number of operational procedures to ensure a consistent approach to the identification of contaminated sites, information management, communications and consultations, etc. For example, in relation to information management requirements of the TBS's *Federal Contaminated Sites and Solid Waste Landfills Inventory Policy*, the CSP has collected information on "all known contaminated sites for which they are the custodians" and has a database of its inventory that will be downloadable to the TBS

central Federal Contaminated Sites Inventory within the Directory of Federal Real Property. NAP's download of updated contaminated site liabilities was completed on March 29, 2002 for the Northwest Territories, Nunavut and the Yukon.

NAP's inventory database evolved from a database being used in the Yukon Region. During the reporting period, all Regional databases were merged into one, which has now become the CSP's inventory database. Information contained in the inventory database includes the location, current site assessment, liability, management overview of site, and current and future expenditures. The CSP has developed an *Inventory Database Guidance* procedure to assist Regional staff in recording, tracking and analysing information in the national inventory in a consistent manner. Future Regional training in the use of the inventory database is also planned in the coming fiscal year.

The Federal Contaminated Sites Inventory containing NAP's contaminated sites information is scheduled to be available to the public on the TBS web site in May 2002.

Another key element of the CSP Management Framework involves utilizing the information that is collected to periodically report on risks, costs, liabilities and progress. Reports on work plans and whether or not objectives or targets are being met are essential to ensure the CSP is meeting desired outcomes. The CSP Management Framework has successfully established regular reporting requirements for the Regions. Regional information feeds into the annual performance report process managed by Headquarters. This report represents the first full cycle of this newly established reporting process.

The frame work has also established evaluation and audit cycles, as well as annual management review requirements. The Management Framework ensures effective management of NAP's contaminated sites, assuming appropriate resources are dedicated to match the expanded scale of the CSP's responsibilities.

Port Radium Mine

The abandoned Port Radium mine site is located on a peninsula on the eastern shore of Great Bear Lake in the Northwest Territories. Mining operations took place at Port Radium almost continuously between 1932 and 1982. Radium, uranium and silver ores were mined and milled at various times at this site. Past mining operations have raised community concerns about potential contamination of the environment and about Déline residents' exposure to radiation, both as traditional land users in the area and as labourers who handled the ore and concentrate bags at the site and at a portage along the Bear River. A three-year Action Plan was developed to describe the scope of activities and recommend studies that, when completed, will provide the information necessary to enable the Canada/Déline Uranium Table (CDUT) to make informed decisions about the long-term management of the Port Radium mine site. For example, a screening-level human health and ecological risk assessment was undertaken in 2001−02, along with ongoing community consultations to ensure community concerns are being addressed in an appropriate manner. The cost of the assessment and consultations amounted to over $1.7 million in the 2001−02 fiscal year.

Priority Sites

As of March 31, 2002, there were a total of 1,818 sites in Northern Canada under Program management. Of these 1,818 sites:

- 976 have been assessed and either no further action is required or remediation is complete;
- 498 sites require assessment, and may require action;
- 328 assessed and require some action;
- 37 of these sites are known to have human and environmental hazards and legal obligations.

The CSP has identified 63 sites as being contaminated. The 37 highest priority sites include abandoned mines (14), former military installations (22) and one other. The 63 priority sites are classified in **Figure 4** below

according to the CCME classification mentioned earlier:

Class 1: Action Required;
Class 2: Action Likely Required;
Class 3: Action May be Required;
Class N: Action Not Likely Required; and
Class I: Insufficient Information.

Figure 4: CCME Classification of Sites

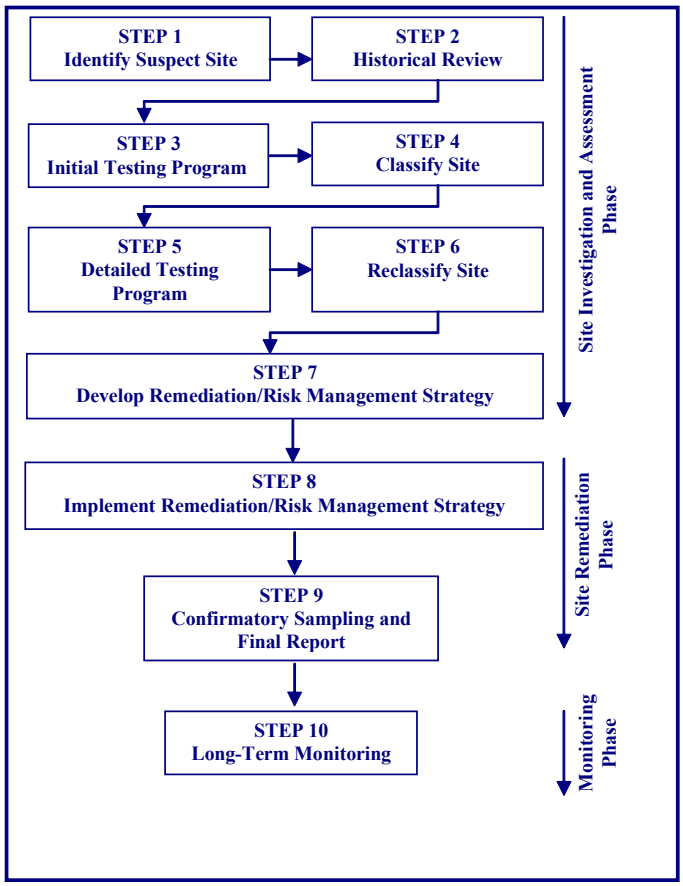
Class	Major Mines			Mines	DEW Line	Military non-DEW Line	Other
	Colomac	Giant	Faro				
1	X	X	X	15	16	5	5
2				9	3	0	2
3				5	0	0	0
N				0	0	0	0
I				0	0	0	0
TOTAL				**29**	**19**	**5**	**7**

In setting priorities under the CCME system, the CSP's Management Framework employs the Northern Environmental Risk Assessment Strategy (NERAS), an internal NAP tool used to prioritize sites.

Based on the NERAS assessment of each site, plans, in the form of project planning and approval documents (PP&As), are developed and updated annually. These plans allows INAC to develop and approve options for each site, allocate and track resource expenditures per site on an annual and ongoing basis, and maintain a current inventory of funding requirements.

The Draft NAP Contaminated Sites Policy requires program and project managers to follow the ten-step process of the *Federal Approach to Contaminated Sites* developed by the CSMWG (see **Figure 5**).

Figure 5: CSP Ten-Step Flow Diagram



However, a number of factors distinguish NAP's CSP from most other contaminated sites management programs in the federal government. Two of the most notable are: the need to have an ongoing presence at these sites to operate critical systems and monitor conditions and controls; and the need to obtain regulatory approvals with major environmental impact assessment and public consultation requirements to proceed with proposed remediation activities. To reflect these differences, NAP's PP&A for contaminated sites has integrated these additional activities into the ten-step process and requires program managers to describe completed and planned activities for all NCS 1 sites according to the following six components:

Care and Maintenance/Urgent Works — required at sites, primarily abandoned mines, where continual water treatment and maintenance work is essential to prevent migration of pollutants offsite, or to prevent structural failure, to protect human health and the environment, and to keep the liability from exponentially increasing. At times urgent work is required to immediately address an environmental risk.

Investigation and Assessment (CSMWG Steps 1 to 7) — necessary to determine and quantify risk, develop management options and produce cost estimates for management options.

Regulatory Approvals — obtaining permits and licences required to implement care and maintenance and longer-term management options, including remediation or risk management, at sites where it is known that action is needed. Public communication is a requirement of most regulatory activity.

Consultation — informing Northerners about site remediation options and integrating their views and concerns into options.

Remediation (CSMWG Step 8 and 9) – clean-up activities that contribute to the reduction of both liability and risk.

Monitoring (CSMWG Step 10) – monitoring activities to verify that contaminants are not migrating off site and that management options, whether temporary or longer term, are working.

Figure 6 below illustrates the status of priority - NCS Class 1 - contaminated sites according to the CSMWG ten-step process.

Figure 6: Current Status of Priority Class 1 Sites

Site	10 Step Management Process									
	1	2	3	4	5	6	7	8	9	10
	Identify Site	Historical Review	Initial Testing	Classify Site	Detailed Testing	Reclassify Site	Develop Remediation Risk Mgt. Strategy	Implement Strategy	Confirmatory Sampling & Final Report	Long-Term Monitoring
Faro Mine										
Mount Nansen										
Ketza River										
Clinton Creek										
Hydrometric Stations										
Giant Mine										
Colomac Mine										
Port Radium										
Tundra - Taurcanis										
Silver Bear Mines (4)										
Kittigazuit Bay										
Contact Lake Mine										
Discovery Mine										
Atkinson Point										
Tununuk										
Axe Point										
Radio Island										
Resolution Island										
Bear Island										
Padloping Island										
Ekalugad Fjord										
Durban Island										
Cape Christian										
Nadluardjuk Lake										
Bray Island										
Keith Bay										
Simpson Lake										
Rowley Island										
Stuart Point										
Cape Peel										
Ross Point										
Bernard Harbour										
Clifton Point										
Sarcpa Lake										
	: Completed									
	: In Progress									

Current activities vary slightly depending on regional and site-specific conditions. In the Yukon, the focus is on addressing the major mining properties that pose an imminent risk to human health and the environment. In Nunavut, the focus is on addressing military sites, particularly DEW Line sites. In the NWT, the major activities address both mines and military sites.

Care and maintenance projects are ongoing at three Class 1 sites in the Yukon and three sites in the NWT. Urgent works projects were necessary at one site in the Yukon and three in the NWT. Regulatory approvals have successfully been obtained for necessary work at Faro Mine and Mount Nansen (Yukon), as well as the Giant Mine and Port Radium (NWT). To date consultations have taken place at four Class 1 sites – Faro Mine, Giant Mine, Port Radium and Resolution Island. At present there is no standard approach to regulatory approvals and consultations between or within Regions. NAP initiated action at a number of the major mines on an emergency basis under the authority of the respective Water Acts. The status of the INAC from a regulatory perspective under these situations is complex, and CSP staff have sought legal advice to establish guidelines for moving sites from this status to one more suited to ongoing management.

Faro Mine

The Faro Mine consists of waste rock dumps, ore processing facilities, water treatment plants, tailings disposal facilities, and offices, shops and miscellaneous buildings. The Faro Mine began operations in 1969 and was one of the largest open-pit lead and zinc mines of its day. It was later mined underground. Mining continued, with interruptions, until 1998 when the operator, Anvil Range Mining Corporation, declared bankruptcy. Currently a receiver, Deloitte and Touche Inc., is managing the site with funding from INAC. Legal challenges by creditors are preventing the receiver from selling off remaining assets and declaring the site abandoned.

Significant care and maintenance activities took place in the last year at Faro to prevent the discharge of contaminated water. These activities include pumping and treating water from the pit mines, environmental monitoring programs (physical stability, biological activity, water quality), site management and reporting, maintenance to physical structures, and all related activities. Performance of these activities provides environmental protection to the surrounding environment and follows the terms of the water licences. Over $3.2 million was spent during the reporting period on care and maintenance activities. Site remediation activities also took place, including a Phase 1 assessment of the site and a number of projects that gathered and contributed information related to final closure / abandonment plans as well as a risk-based priority list for future activities. The cost of these activities amounted to $1.6 million.

Giant Mine

The Giant Mine is situated five kilometres north of Yellowknife, within city limits, adjacent to Great Slave Lake along the western shore of Yellowknife Bay. The mine has operated nearly continuously since 1948 and included underground, as well as open pit mining operations. Miramar Giant Mine Ltd (MGML) is currently operating at the site, however, due to historical issues, the federal government retains responsibility for pre-existing environmental liabilities on the property prior to MGML operations.

Previous ore processing at the site resulted in the production of over two million tonnes of tailings. Tailings from the first years of operations were discharged in an uncontrolled area and/or into Yellowknife Bay, where they remain. Subsequently, most of the tailings were stored on the surface in four ponds covering approximately 150 hectares. Arsenic trioxide dust was another by-product of the ore processing and approximately 237,000 tonnes of the dust is stored underground.

Screening level risk assessments evaluating the human health risks associated with the underground arsenic trioxide dust and the contaminated soils have taken place at the Giant Mine site. A number of consultations have also taken place, including: three major arsenic management technical sessions (1997, 1999, 2001); a number of open houses and public sessions (with special attention to the aboriginal community in the Yellowknife area); as well as the publication of a number of both technical and public information packages. During the 2001-2002 fiscal year a variety of work has been conducted at the Giant Mine site, including:

- Care and maintenance - **$1.2 million** spent;
- Regulatory approvals - **$100,000** spent;
- Public consultations - **$100,000** spent;
- Site investigation and assessment - **$1.7 million** spent;
- Site remediation - **$600,000** spent; and
- Monitoring - **$50,000** spent.

Financial Report

Since 1991, INAC has been systematically identifying, assessing and managing contaminated sites north of 60° latitude. From 1991−96, the majority of funds were obtained from the Arctic Environmental Strategy and devoted to developing an inventory of contaminated and waste sites across the North, as well as to addressing a large number of the unsightly waste sites near communities. A number of environmental site assessments were carried out, primarily at former military installations, such as the DEW Line sites.

Initially, INAC's concerns related mainly to DEW Line sites. However, INAC was only able to fund assessments and two site remediations for DEW Line sites. The focus has, therefore, continued to be on maintenance activities.

In fiscal year 1996−97 the focus began to shift from assessment to remediation of the most contaminated military sites. External circumstances also caused a shift in the focus from DEW Line sites to mine sites. **Figure 7** below illustrates how, over time, expenditures have shifted significantly to mines, which have become the highest proportion of CSP expenditures. The shift in resource allocations to mine sites has meant that the DEW Line sites are deteriorating further.

Since fiscal year 1991−92, over $130 million has been spent on contaminated sites; almost $70 million of this amount has been spent since 1998−99 when responsibility for large insolvent mines began to revert to INAC. The major mines, including Giant, Colomac and Faro, have more than tripled the resource requirements of the CSP over the past three years. The insolvency of the mine owners precludes further action to recover costs of remediation. In addition to the significant costs of final remediation, each of these sites requires ongoing expenditures for maintenance activities. Figures on the following pages illustrate expenditures by Region (see **Figure 8**), as well as by the proportion of expenditures for large mines (see **Figure 9**), and a breakdown of expenditures by site (see **Figure 10**).

Figure 7: Historical Expenditure by Type of Site, 1998−02

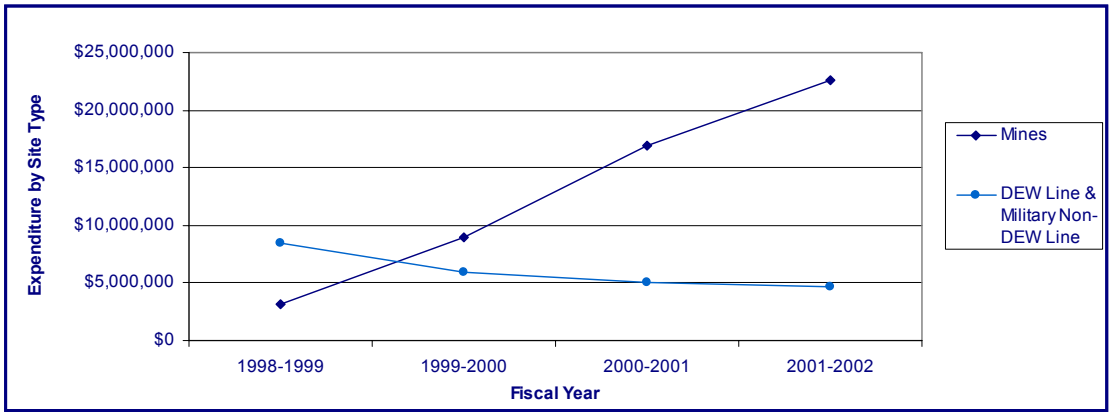


Figure 8: CSP Management Expenditures by Region, 1991−02

Fiscal Year	NWT	Yukon	Nunavut	Total
1991 to 1992	$3,074,000	$560,000		$3,634,000
1992 to 1993	$2,911,000	$1,871,000		$4,782,000
1993 to 1994	$8,050,000	$2,948,000		$10,998,000
1994 to 1995	$9,138,000	$2,320,000		$11,458,000
1995 to 1996	$7,283,000	$2,329,000		$9,612,000
1996 to 1997	$9,265,000	$4,770,000		$14,035,000
1997 to 1998	$6,162,000	$1,403,000		$7,565,000
1998 to 1999	$9,027,000	$1,255,000		$10,282,000
1999 to 2000	$7,328,747	$2,540,000		$9,868,747
2000 to 2001	$7,235,700	$10,018,000	$4,885,907	$22,139,607
2001 to 2002	$14,226,298	$8,419,695	$4,574,607	$27,220,600
Total	**$83,700,745**	**$38,433,695**	**$9,460,514**	**$131,594,954**

Figure 9: Share of Total Expenditures by Type of Site, 1998−02

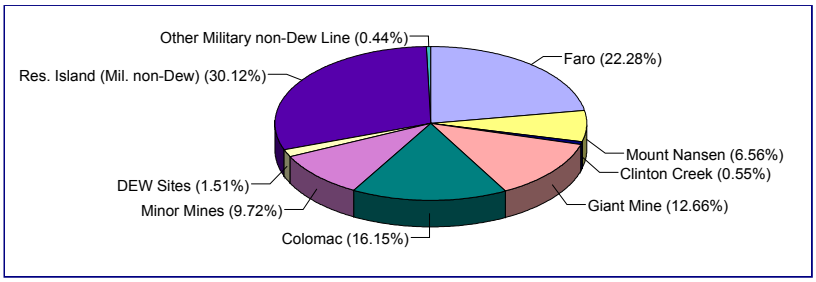


Figure 10: Management Expenditures by Site, 2001−02

Site Name	Spent	Type of Activity
Faro Mine	$8,263,000	C&M*, UW**, Assessment, Remediation
Giant Mine	$5,218,000	C&M, UW, Assessment, Remediation
Colomac	$5,382,455	C&M, Assessment, Remediation
Mount Nansen	$2,050,000	C&M, UW, Assessment
Port Radium	$1,775,000	Assessment
UKHM	$850,000	C&M
Resolution Island	$4,235,202	Remediation
Ketza River	$125,000	Assessment
Clinton Creek	$140,000	Assessment
Cape Christian	$91,905	Assessment
Radio Island	$83,000	Assessment
Padloping Island	$91,500	Assessment
Bear Island	$73,000	Assessment
Axe Point	$152,694	Assessment
Rayrock Mine	$206,000	Monitoring
Contact Lake	$11,043	C&M
Arctic Gold & Silver	$24,000	Monitoring
Peel River	$986,000	Remediation
Brooks Brook	$77,000	Remediation
Snag	$5,000	Monitoring
Venus Tailings	$2,000	Monitoring
Cat & Grainger Camp	$464,374	Assessment
Tundra Mine	$135,000	UW
Discovery	$90,000	Monitoring
Total	**$30,531,173**	**6 C&M; 4 UW; 13 Assessment; 6 Remediation; 5 Monitoring**

* C&M = care and maintenance

** UW = urgent works

INAC has never received resources sufficient to deal with all remediation costs related to its full portfolio of contaminated sites. The current liability of the department for maintenance and remediation of all known contaminated sites stands at approximately $723 million; for contingent liability estimates stand at approximately $79 million (March 2002). **Figure 11** illustrates liability and contingency costs by Region. For all 63 known contaminated sites for which INAC is responsible, most of the total liability of $723 million is associated with 37 high-priority sites: five sites in particular — Faro Mine (Yukon); Giant, Colomac, Port Radium (NWT), and Resolution Island (Nunavut) — account for over 70 percent of the total liability.

Region	Estimated Cost of Evaluation and Remediation	
	Liability	Contingency
Yukon	$226,851,400	$55,042,000
NWT	$341,730,000	$24,350,000
Nunavut	$154,653,000	$0
Total	**$723,234,400**	**$79,392,000**

Of necessity, the majority of CSP funds are spent on maintenance, even as new liabilities occur from new site assessments, and new mine sites are also added to the inventory. **Figure 12** illustrates the budget forecast for the 2002−03 fiscal year, which shows that maintenance absorbs a higher percentage of the budget than remediation.

Figure 12: Budget Forecast by Activity 2002-2003

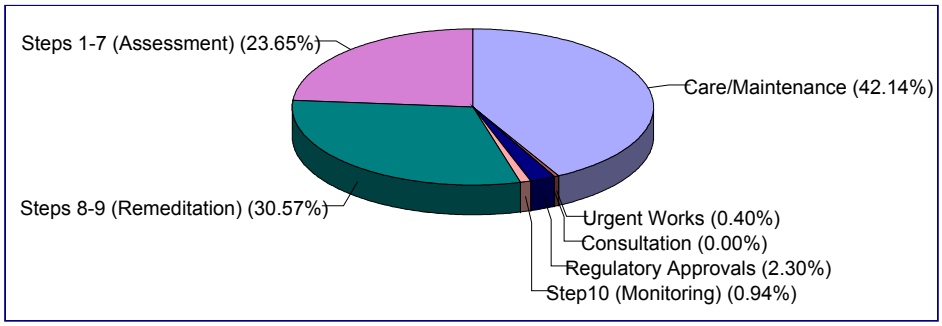


Figure 11: Liability and Contingency by Region

Sources of funds for CSP activities between 1999 and 2002 are shown in **Figure 13** below. A-Base funding was not provided after the end of the Artic Environmental Strategy, therefore, INAC has had to reallocate much of the CSP's funding from its Indian and Inuit Affairs Program to deal with the environmental and human health risks posed by contaminated sites. TBS's Federal Contaminated Sites Assessment Initiative (FCSAI) did provide an injection of funds over the 2000−02 fiscal years. However, in fiscal year 2002−03, it is estimated that the majority of funding will have to come from internal allocations. Yearly internal negotiations and concerns about the impact on other programs limit INAC's ability to fully fund the CSP. The funding that is available leads to minimal efforts that address only the highest priorities and most urgent situations. Developing an effective risk-based approach to program delivery requires a predictable and programmed level of funding.

Historically, funding has been allocated to the CSP based on need, either by annual funding requests to TBS or internal reallocations within INAC. Annual negotiations and the uncertain access to funding have created concerns about the cost-effectiveness of program delivery.

Figure 13: Source of Funds 1999−02

Source	1999-2000	2000-2001	2001-2002	Total
FMC (Internal Reallocation)	$9,868,747	$21,139,607	$8,621,000	$65,047,454
Program Integrity	$0	$0	$19,023,435	$24,262,000
FCSAI	$0	$1,000,000	$1,925,000	$2,925,000
TOTAL	**$9,868,747**	**$22,139,607**	**$29,569,435**	**$92,234,454**

Resolution Island

Resolution Island is located at the southeastern tip of Baffin Island, approximately 310 kilometres southeast of Iqaluit, in Nunavut. It was originally part of the Pole Vault Line, used to transmit intercepted northern signals to southern military stations. The site was operated from 1953 to 1972, when the U.S. Air Force vacated the site. Over 20 buildings, eight dump sites, 4,000 barrels and large amounts of visible debris were left on site. A series of environmental assessments conducted from 1985 to 1997 identified and delineated significant contamination on the site. Included in the types of contamination were polychlorinated biphenyls (PCBs), asbestos, hydrocarbons, lead, cobalt, mercury and copper.

The Contaminated Sites Program has initiated an extensive remediation project at Resolution Island. Working with its partners, the various types of remediation activities being undertaken include:

- excavation, containerization and temporary storage of soil contaminated by heavy metals and PCBs;
- construction and monitoring of barriers to prevent PCB migration;
- demolition of buildings that are unsafe, contain asbestos or are contaminated with PCBs; and
- collection and removal off-site of PCB liquids and other contaminated materials.

Community consultations have been an important part of the project and will continue to be an important forum for informing the communities closest to Resolution Island of INAC's progress and developments at the island.

The implementation of contaminated sites management projects in northern Canada has a substantial impact on the economic well-being of the territories. INAC's CSP operates with the intent of ensuring that the social and economic benefits from project activities accrue to northern and Aboriginal communities.

All contaminated sites projects have three general stages of development as follows:

- planning;
- implementation; and
- ongoing monitoring.

The planning stage is heavily focused on detailed engineering design and scientific analysis, which is primarily contracted out to environmental and engineering companies across Canada since this expertise is limited not only in the North but across the country. Many of INAC's major sites, such as the Faro, Giant and Colomac Mines are currently in the planning phase; however, care and maintenance activities at these sites are having positive economic impacts in nearby communities.

The implementation stage, as the stage involving most of the physical work is the stage of a project with the most potential for northern participation. INAC has been successful in efforts to secure the majority of employment and services within the North. As the level of activity increases with the implementation of remediation plans, the revenue for local supply and service contractors, as well as full-time and seasonal employees, can also be expected to increase.

The information compiled at major projects over the last few years supports the assumption that remediation projects will have a positive influence on local economies. Although this kind of information has not been systematically monitored in the past, formal monitoring of socio-economic benefits is part of the CSP's future Management Framework. Key socio-economic findings at five high-priority projects are highlighted below.

Faro Mine

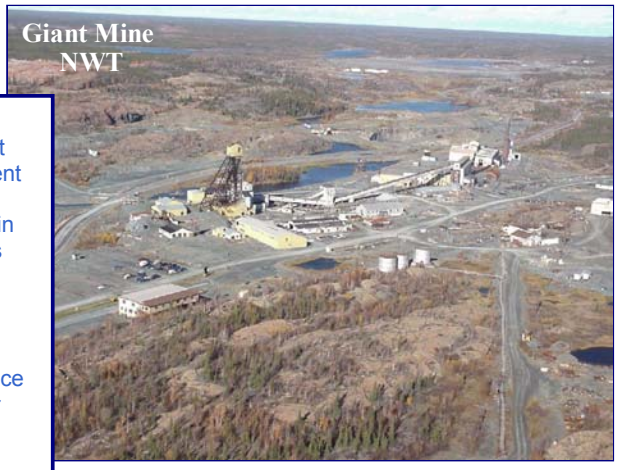
An Interim Receiver, funded by INAC, since 1998, has managed the Faro Mine. While the site is primarily in care and maintenance, with limited levels of assessment and remediation planning occurring, services associated with the project have made significant economic contributions to the local communities and the Yukon. Sixty-five percent of the Faro expenditures for 2001-2002 have directly benefited the territorial economy, with $1.6 million allocated to local labour (8 full time and 30 seasonal employees) and $3.8 million spent on local services and supplies. These inputs are critical to an area where the economy has been severely depressed since the closure of not only the Faro Mine, but also other mining properties in the past decade.

RESOLUTION ISLAND

Resolution Island is located in Nunavut and is a former military site that INAC began remediating in 1997. On an annual basis, about 95 percent of the Resolution Island expenditures are spent in the territory. The primary contractor for the project is an Inuit-owned and -operated company that employs approximately 50 staff on a seasonal basis, 90 percent of which are local Inuit. The staff have benefited financially, as well as through various on-site training programs. These programs have fostered the development of marketable skills that are suited to other environmental work in the territory, including work by the private sector mining companies and other federal departments like the Department of National Defence.

Colomac Mine

Colomac is a former mine operation in the Northwest Territories. Services for the care and maintenance activities are provided by a Dogrib owned and operated company. Limited amounts of engineering services have also been contracted to local contractors that employ Northerners in their operations.

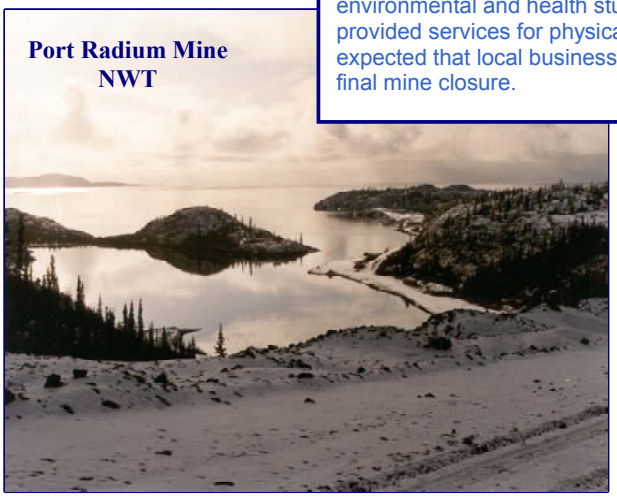


Giant Mine

To date most of the economic benefit from the Giant Mine has come as a result of an economic agreement that INAC put in place with Miramar Corporation (Miramar) after the bankruptcy of Royal Oak Mines in 1999. While INAC conducts assessments and plans the long-term management plan for the Giant Mine, Miramar has carried out the essential care and maintenance at the mine and continued to mine ore reserves. This arrangement has allowed at least 50 workers to continue to be employed at the mine. Once INAC implements a long-term management plan for the site, it is expected that the Northwest Territories will continue to benefit in terms of employment and supply and service opportunities.

Port Radium Mine

A federal Crown corporation mined uranium at the Port Radium Mine on Great Bear Lake from 1942 to 1960. Since 1999, INAC has been working in partnership with the community of Deline (population approximately 600) to assess human health and environmental risks associated with the mine operation and closure. While engineering, health and other experts from outside the region are retained from time to time, the project is based in Deline. Approximately $1 million per year (over 50 percent of total expenditures to date) have been spent in the community over the past two years. The First Nation has a project office in Deline that employs four people full-time and approximately four people part-time. In addition, nine community field workers have been trained to assist the experts in their environmental and health studies. The First Nation and community contractors have provided services for physical works in assessing the mine site and it can be expected that local business involvement will increase as the project moves towards final mine closure.



Future Directions

This is the Contaminated Sites Program's first annual Performance Report. It provides an overview of the CSP's evolution, as well as the progress the CSP has made in managing contaminated sites responsibilities. Approving and integrating the Contaminated Sites Management Framework into the existing structure of the CSP will be a significant challenge in the next year. It is also imperative that appropriate resources are allocated to ensure that the CSP responsibilities are met.

The CSP will be concentrating its future efforts in the following areas::

- seeking approval of the contaminated sites policy;
- addressing the uncompleted action from SDS 2001 by obtaining approval of the Contaminated Sites Management Framework;
- fully integrating the Contaminated Sites Management Framework into operations;
- continued care and maintenance at high-priority contaminated sites;
- addressing any issues identified from the OAG audits;
- delivering training to increase the consistent use of the inventory database; and
- continuing to make progress at priority sites through the ten-step process established by CSMWG.

The CSP has developed a strong Management Framework that will providing the systems to minimize the environmental and health effects from the contaminated sites that are the INAC's responsibility. However, to

continually improve performance and maintain effective management, the CSP will need to ensure the efficient and effective use of resources to adequately address the issues identified in this report.

If you have any questions about this report or require further information, please contact Joanna Ankersmit, Manager, Contaminated Sites Program at (819) 997-7247 or ankersmitj@inac.gc.ca.