



Northern Affairs Organization Contaminated Sites Program

PERFORMANCE REPORT

2006 – 2007

PHOTOS:

Cover/watermark: Top: United Keno Hill Mines (UKHM)
Middle: Resolution Island
Bottom: Faro

Page #8: Clinton Creek

Page #10: Faro

Page #13: Clinton Creek

Page #17: FOX C

Page #24: Johnson Point

Page #25: Port Radium

Page #27: Faro

Page #28: Mount Nansen

Page #30: Cape Christian

Page #31: Roberts Bay

Page #37: UKHM

Table of Contents

MANAGEMENT STATEMENT.....	1
INTRODUCTION	2
Report Coverage	2
Profile of NAO Contaminated Sites Program	2
CONTAMINATED SITES PROGRAM MANAGEMENT	5
Project Management.....	5
Regional Reports	23
Program Management.....	32
FUTURE DIRECTIONS	38
APPENDIX 1 – List of Acronyms	39
APPENDIX 2 – Expenditures by Site, 2002-2007	40
APPENDIX 3 – Project Management Component Definitions	43

List of Figures

Figure 1: Map of Priority NCS 1 Sites	3
Figure 2: Status of Sites in the CSP Database.....	5
Figure 3: Contaminated Sites Expenditures, 1996-2007	7
Figure 4: Program Expenditures by Activity, 2005-2006 and 2006-2007	14
Figure 5: Program Expenditures by Site, 2006-2007.....	15
Figure 6: Budget Forecast by Activity, 2007-2008	15
Figure 7: Trends in Liability, 2003-2007.....	16

List of Tables

Table 1: CSP Employment, 2006-2007	4
Table 2: CSP Sites in CCME Classifications, 2002-2007	6
Table 3: Source of Funds, 1999-2007	6
Table 4: Current Status of Priority Class 1 Sites, 2007	9
Table 5: Activities Undertaken at Sites, 2001-2007.....	14
Table 6: Sites with the Most Significant Changes in Liability Estimates, 2006-2007.....	17
Table 7: Liability by Region, 2001-2007	18
Table 8: Regional Proportion of Liability, 2001-2007	18
Table 9: Safety and Incidents, Inspections and Audits, 2006-2007	19
Table 10: EH&S Training, 2006-2007	20
Table 11: Employment and Workforce Training, 2006-2007	21
Table 12: Purchase of Goods and Services, 2006-2007	22
Table 13: Consultation Performance Measures, 2006-2007	22



MANAGEMENT STATEMENT



I am pleased to present the Northern Contaminated Sites Program's sixth annual Performance Report for the 2006-2007 fiscal year. The report provides a synopsis of the results achieved by the Department of Indian and Northern Affairs, Northern Affairs Organization in the management of contaminated sites in the Canadian Arctic, including environmental and socio-economic benefits.

As custodian of most federal lands in the North, Indian and Northern Affairs Canada is responsible for the remediation of northern contaminated sites. Mines were abandoned by the private sector in the late 1990s when the price of metals and minerals significantly dropped and the owners fell into insolvency. Several military sites reverted to INAC in the 1960s when the sites were no longer of use to the military.

The objective of the CSP is to manage contaminated sites in a cost-effective and consistent manner and to reduce and eliminate, where possible, risks to human and environmental health, and liability associated with contaminated sites in the North. Priority is given to those sites posing the highest risks. Federal liability for northern contaminated sites is currently estimated at \$1.2 billion. From a risk and liability perspective, therefore, the Contaminated Sites Program is one of the Northern Affairs Organization's most significant environmental programs.

Progress was made across the program as a whole in order to ensure continuous improvement. The CSP underwent an independent program review to assess the degree to which the program has established the necessary structures and procedures to eventually achieve the objectives and expected results associated with the program, and to assess and determine NAO's progress in implementing the 2002 INAC Contaminated Sites Management Policy. The conclusion was positive in that the CSP has evolved significantly and has achieved significant

improvements in terms of management processes, project management, governance structures and focus on remediation objectives. If the CSP continues to progress at its pace, it is likely to meet its objectives of remediating all Class 1 sites by 2027.

The CSP strives to ensure that the practice of addressing negative environmental legacies brings positive social and economic benefits to current generations. In 2006-2007, over 40 sites benefited from federal investments and local socio-economic benefits resulting in the employment of over 1,000 employees, 42% of these were Northern Aboriginal.

I would like to thank our employees and partners for making 2006-2007 a success, and encourage them to persist with their efforts and dedication to managing northern contaminated sites.

I invite you to read this year's Performance Report for a greater understanding of CSP's activities and progress in 2006-2007. To ensure that we continue to meet the needs of our stakeholders, I also invite you to provide comments and feedback on this report.¹

Patrick Borbey
Assistant Deputy Minister
Northern Affairs Organization
Indian and Northern Affairs Canada

¹ Please see page 38 for relevant contact information.

INTRODUCTION



Report Coverage

This Performance Report presents the results of Indian and Northern Affairs Canada's (INAC) Contaminated Sites Program (CSP) performance against the CSP's program objectives from April 1, 2006 to March 31, 2007. This is CSP's sixth performance report and it outlines activities related to project and program management, and provides regional reports that highlight site-level activities as well as regional performance data. A glossary of acronyms is included in **APPENDIX 1**.

Please see our website for additional information on CSP activities and for previous annual performance reports (www.ainc-inac.gc.ca/ps/nap/consit/).

Profile of NAO Contaminated Sites Program

INAC is the custodian of most federal lands in the North. Through the INAC Contaminated Sites Management Policy (2002) and its goal of "*managing contaminated sites in a cost-effective and consistent manner, to reduce and eliminate, where possible, risks to human and environmental health, and liability associated with contaminated sites in the North*", INAC has committed the CSP to make a direct contribution to the Northern Affairs Organization's Strategic Outcomes, including:

- **The Land** – ensuring the protection of human health and safety and the environment by remediating contaminated sites while supporting employment and training of Northerners;
- **The Economy** – providing northern regional economic development programming; and
- **The Government** – working with territorial governments to transfer our province-like responsibilities for the management of land and resources.

Overall responsibility for the CSP rests with the Deputy Minister, INAC, and the Assistant Deputy Minister, Northern Affairs Organization (NAO). A decentralized delivery model is promoted with primary responsibility for CSP implementation resting with the three Regions – Yukon, Northwest Territories (NWT), and Nunavut. Headquarters (HQ) plays the lead directional role around strategic planning, policy making, and securing resources, while playing a supporting role to the Regions' responsibilities for direct implementation of the program at contaminated sites under their jurisdiction. Key aspects of the CSP management and governance structure can be found at www.ainc-inac.gc.ca/ps/nap/consit/gover/mangov_e.html.



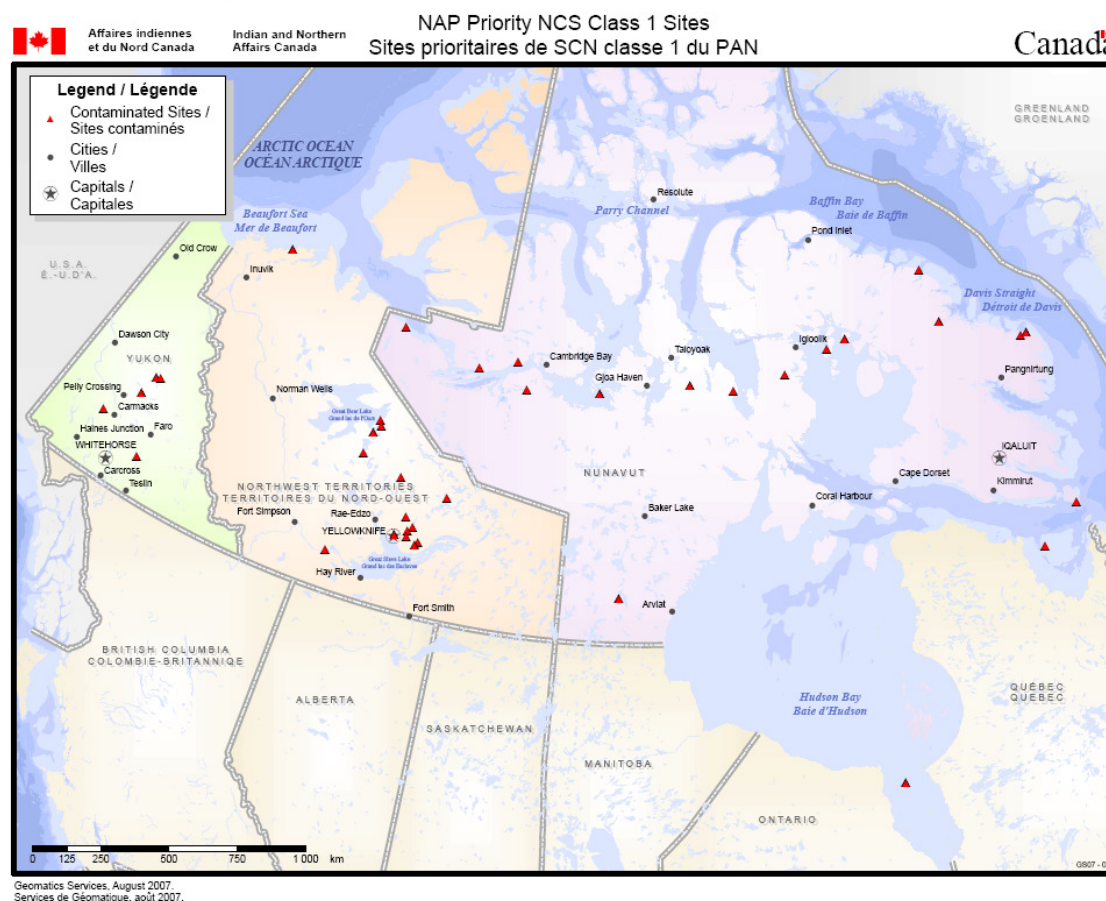


In the NWT and Nunavut, NAO holds direct responsibilities for care and maintenance, assessment, and remediation of identified contaminated sites. Within the Yukon, the program's activities are guided by the requirements of the Devolution Transfer Agreement between the federal and Yukon governments. This transfer agreement sets out the terms and conditions for transferring the administration and control over lands and resources from the Government of Canada to the Yukon Government.

CSP maintains an electronic inventory of contaminated sites that is updated regularly to provide an accurate record of the extent and nature of contaminated sites in the North. As of March 31, 2007, 328 contaminated sites (assessed and suspected) in the North require action, such as assessment, remediation or risk management. Of these 328 sites, 41 are considered "priority sites"² (up from 37 last year) and are the focus of many of CSP's activities (see **Figure 1**).

² Priority sites are defined as those with a National Classification System (NCS) 1 classification, but do not include sites under risk management/monitoring or contingent liabilities.

Figure 1: Map of Priority NCS 1 Sites





Almost 50 staff (48.75) contributed to the success of the CSP in 2006-2007, an increase from 42 staff in 2005-2006. Regional changes in 2006-2007 employment are summarized in **Table 1**.

Table 1: CSP Employment, 2006-2007

	Change in Employment (2005-2006 to 2006-2007)	Total Employment
Yukon	+1.5	7.5
NWT	+3	29
Nunavut	-0.25	4.75
HQ	2.5	7.5
TOTAL EMPLOYMENT		48.75

Staff increases in the Yukon, NWT and HQ are a result of a general increase in activity levels. Nunavut experiences a high degree of staff turnover, hence the slight decrease in employment in that region. HQ staff was reorganized during the fiscal year around a number of focus areas to provide greater clarity around their perspective roles. This reorganization has enhanced the ability of HQ staff to manage the CSP and respond to regional issues.

Public Works and Government Services Canada (PWGSC) provides professional/technical and procurement resources to satisfy the operational needs of INAC under the CSP. PWGSC had ten professional/technical and five procurement staff dedicated to the program with offices in Edmonton and Yellowknife. Additional resources were pulled in from other areas within PWGSC as required.



CONTAMINATED SITES PROGRAM MANAGEMENT



This report presents CSP's performance in two key management areas:

- Project management: activities undertaken at the site-level to manage contaminated sites; and
- Program management: activities undertaken to ensure the program itself runs effectively and efficiently.

Project Management

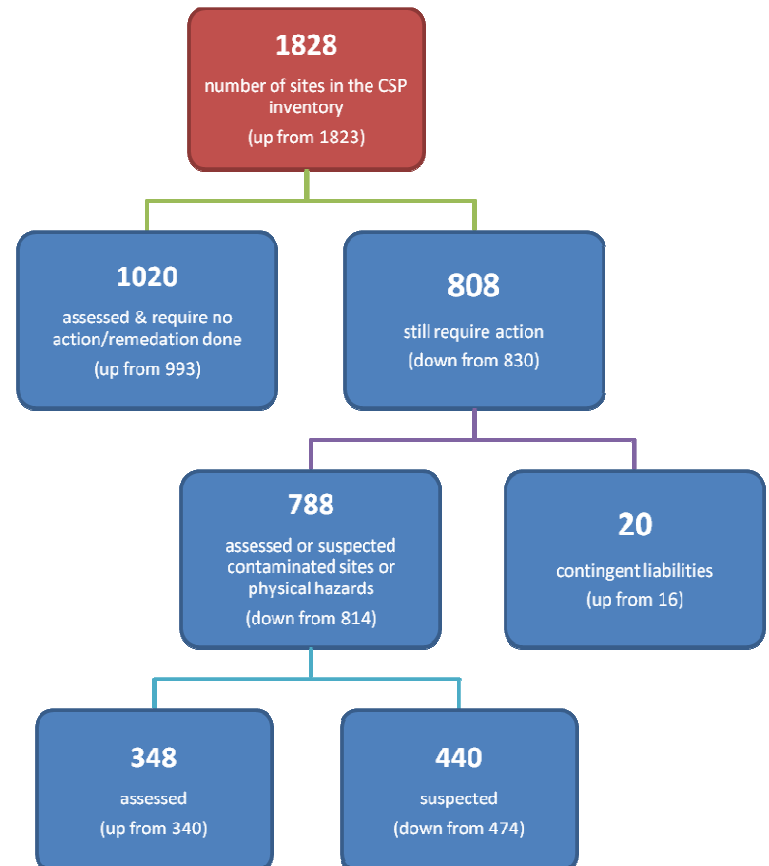
This section provides a progress update on the contaminated sites for which CSP is responsible, including:

- Changes in the number and classification of contaminated sites;
- Overall spending;
- Status of priority sites;
- Highlights of site-level progress;
- Contaminated sites liability; and
- Social, economic and environmental performance data.

CSP Contaminated Sites

CSP's Contaminated Sites Database includes an inventory of contaminated sites and other sites with physical hazards. As of March 31, 2007, there were 1,828 sites in the inventory, up five from last year. These five sites are old contaminated sites that have been newly discovered. **Figure 2** illustrates the status of these sites.

Figure 2: Status of Sites in the CSP Database





Overall Spending

The CSP budget was \$110.9 million in 2006-2007, 83% of which was received from the Federal Contaminated Sites Action Plan (FCSAP) (see **Table 3**). CSP spent \$99.4 million on the sites in its inventory during the reporting period, representing an increase of \$19.0 million from the previous year.³ **Figure 3** identifies the program's expenditures over time, illustrating a continued trend of increasing expenditures over time as more extensive site remediation is undertaken, and the program conducts additional site assessment work. **APPENDIX 2** illustrates detailed expenditures by site.

Table 2 identifies the NCS classification of sites from 2002-2003 to 2006-2007. The number of classified sites has increased by eight from the previous year (five additional NCS 1's and three additional NCS 2's), demonstrating an increase in assessment activity.

Table 2: CSP Sites in CCME Classifications, 2002-2007

CLASS	2002-03	2003-04	2004-05	2005-06	2006-07
1	42	43	44	44	49
2	15	14	19	19	22
3	5	9	5	0	0
N	1	0	0	0	0
I	0	0	0	0	0
TOTAL	63	66	68	63	71

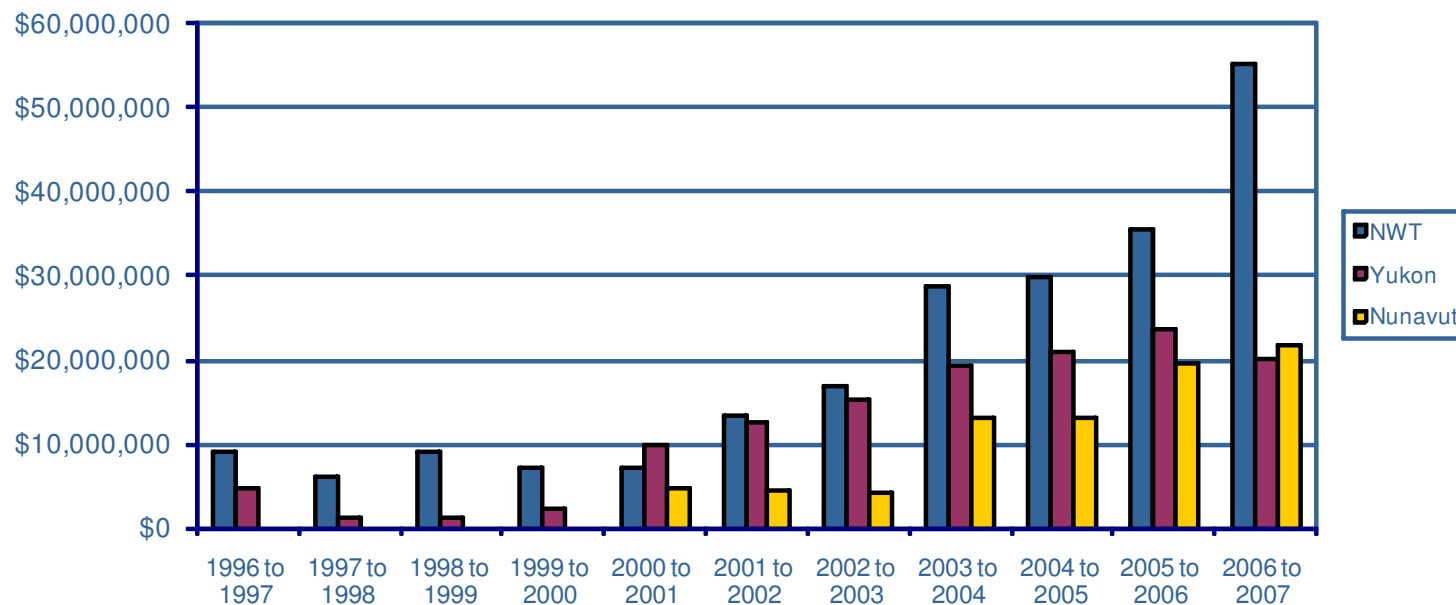
Table 3: Source of Funds, 1999-2007

SOURCE OF FUNDS	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
INAC	\$9,868,747	\$21,139,607	\$8,621,000	\$27,843,503	\$22,468,514	\$22,000,000	\$18,499,924	\$18,500,000
Program Integrity	\$0	\$0	\$19,023,435	\$9,262,000	\$0	\$0	\$0	\$0
FCSAI / FCSAP *	\$0	\$1,000,000	\$1,925,000	\$0	\$39,439,200	\$45,331,784	\$72,073,651	\$92,441,194
TOTAL	\$9,868,747	\$22,139,607	\$29,569,435	\$37,105,503	\$61,907,714	\$67,331,784	\$90,573,575	\$110,941,194

* Federal Contaminated Sites Assessment Initiative (FCSAI) funds were received from Treasury Board in 2000-2002 to conduct site assessment work. The Federal Contaminated Sites Action Plan (FCSAP) program was designed to address the significant financial and environmental liabilities associated with federal contaminated sites and began its first year of operation in 2003-2004.

³ Of the initial surplus of \$11.5 million, \$5.0 million of INAC-contributed funds were returned to the department for other work. Of the remaining amount (\$6.5 million), CSP was allowed to carry over \$1.7 million to the 2007-2008 fiscal year and \$1.5 million was re-profiled; however, \$3.4 million was considered surplus or lapsed funds that CSP did not use due to challenges in estimating contingencies within projects and across the program. This represents 3.4% of the total expenditures in 2006-2007, a slight increase from the 3.2% of total expenditures lapsed in 2005-2006.

Figure 3: Contaminated Sites Expenditures, 1996-2007



Site expenditures in NWT and Nunavut increased by 55% and 11%, respectively. In NWT, site remediation accounted for the most significant change in expenditures, which increased 98% over last year. A large portion of this increase was a result of activities at Colomac. Overall spending at Colomac increased 116%, a large portion of which is attributable to additional expenditures on regulatory approvals, site investigation and assessment, and site remediation. Site expenditures at Giant Mine also increased 50%, largely due to unexpected care and maintenance expenditures (described on page 10). Care and maintenance and regulatory approval activities in Nunavut decreased, but there were corresponding increases in consultation (340% - only two sites reported consultation in 2005-2006, whereas five sites reported consultation in 2006-2007), site assessments (17%), and site remediation (12%).

More money was also spent on program administration. In the Yukon, overall expenditures decreased by 15%. A factor in this decrease was that the agreement for sale of UKHM was not finalized until almost June 2006, which cut into the field season. A moderate increase in expenditures was incurred for consultation (19%), and remediation expenditures also increased very slightly (just over 1%), but spending on all other activities decreased. Overall spending at Faro in the Yukon decreased 10%. While spending on care and maintenance at Faro remained largely unchanged, spending on site remediation and assessment both decreased (48% and 41%, respectively), and spending on regulatory approvals increased from zero last year to \$425,000 in 2006-2007.

Priority Sites

The INAC Contaminated Sites Management Policy requires program and project managers to follow the Government of Canada's Contaminated Sites Management Working Group's ten-step process.⁴ **Table 4** illustrates the status of priority sites according to this process. Eleven sites are now in steps 8-10 of the ten-step process, up from seven last year. Thirteen sites moved up in the process and 20 remained unchanged. Clinton Creek is a unique site and is actively involved in both Step 7 and 8 simultaneously. Clinton Creek is a risk management site, hence it is in the risk management phase (step 8), but a long-term solution is also being considered by studying different alternatives (step 7). Clinton Creek is represented in the figure below as being in progress on Step 7 (though it was represented as being in Step 8 last year). Six new sites in the NWT were added to the priority list (El Bonanza, Hidden Lake Mine, West Bay Mine, Ruth Mine, Bullmoose Mine, and Liten/Old Parr #3 Mine) and no sites were removed.



⁴ Contaminated Sites Management Working Group:
http://www.ec.gc.ca/etad/csmwg/en/index_e.htm



Table 4: Current Status of Priority Class 1 Sites, 2007

REGION	SITE	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 and Final Report	Long-term Monitoring
YK	Faro										
YK	Mount Nansen										
YK	United Keno Hill										
YK	Clinton Creek										
YK	Yukon Devolution										
NWT	Giant										
NWT	Colomac										
NWT	Silver Bear										
NWT	Tundra-Taurcanis										
NWT	Discovery										
NWT	Port Radium										
NWT	BAR D - Atkinson Point										
NWT	Contact Lake										
NWT	Axe Point										
NWT	Indore/Hottah Lake										
NWT	Hidden Lake Mine										
NWT	West Bay Mine										
NWT	Ruth Mine										
NWT	Bullmoose Mine										
NWT	Liten/Old Parr # 2 Mine										
NU	FOX C - Ekalugad Fiord										
NU	CAM F - Sarcpa Lake										
NU	Radio Island										
NU	Padloping Island										
NU	Bear Island										
NU	FOX E - Durbai Island										
NU	Cape Christian										
NU	FOX A - Bray Island										
NU	CAM E - Keith Bay										
NU	Roberts Bay Mine										
NU	PIN D- Ross Point										
NU	CAM B - Hat Island										
NU	PIN B - Clifton Point										
NU	FOX 1 - Rowley Island										
NU	PIN E - Cape Peel										
NU	CAM D - Simpson Lake										
NU	Akpatok Island										
NU	Henik Lake										

: Step completed
 : Step in progress



Site-Level Progress

There are seven project management activities that take place as a site progresses along the ten-step process. This section of the report has been organized along these activities, and highlights trends in total spending as well as site-specific expenditures and progress.⁵

Care and Maintenance

Total spending on care and maintenance activities in 2006-2007 was over \$31 million, up 25% from 2005-2006. Part of the reason for the increase in care and maintenance is a result of risk management measures undertaken at the sites.⁶ Care and maintenance spending doubled at Giant Mine, and also increased significantly at Johnson Point, resulting in an overall increase of 50% in care and maintenance spending in the NWT. However, overall care and maintenance spending decreased in both Nunavut and the Yukon. As with last year, the largest proportion of care and maintenance spending still occurs at Faro, Giant Mine, and Colomac, which in 2006-2007 accounted for 87% of these expenditures (up from 80% in 2005-2006). Care and maintenance activities underway at Faro, Giant Mine, Colomac, and Johnson Point in 2006-2007 included:

- FARO – design and installation of a new water collection system in the Emergency Tailings Area (ETA); a new intermediate pond barge and pumping system; mill modifications to treat water from the intermediate pond, including ETA-collected water.

⁵ Definitions of project management components are included in APPENDIX 3.

⁶ Please see the section on Implementation of the Risk Management Procedure for additional information on risk management.





UNIQUENESS OF MANAGING CONTAMINATED SITES IN THE NORTH

There are a number of factors that make the contaminated sites problem in the North unique compared to other sites in Canada and which in particular contribute to the significant resources required to run the CSP, including:

- Uniqueness of the northern environment including its ecology, extreme temperatures, and the existence of permafrost soils and groundwater;
- Brief assessment and construction season due to the short summer season, and the limited time period in which winter roads can be used;
- Increasingly unpredictable northern climate, which affects both the summer season and winter roads and increases weather-related risks (climate change);
- Significant logistical challenges in accessing remote locations - typical mobilization and demobilization costs are in the order of millions of dollars;
- Large scope and scale of some contaminated sites, in particular abandoned mines;
- Difficulty of finding and retaining skilled labour in the North;
- Extremely high cost of materials, labour and logistics due to the long distances involved and a rapidly changing economy;
- Dynamic and evolving jurisdictional landscape (land claim interim measures, Approvals-in-Principle and final agreements that may have overlapping interests; devolution; split surface/subsurface responsibilities);
- Reliance of northerners on traditional/country foods and the real and perceived risks of contaminated sites to human and environmental health;
- Socio-economic challenges, including limited capacity of northern partners (knowledge, experience and resources) to participate in assessment and remediation activities;
- Equipment often having to be leased or contracted for an entire year even if it is only needed for a few months; and
- Requirement for an ongoing presence at large sites to operate critical systems and monitor conditions and controls.

These factors, as well as others, contribute to the challenges of managing contaminated sites in the north and demonstrate the need to address these sites in a tailor-made approach for northern realities.

- **GIANT** – In early December 2006, it was observed that water was flowing from Baker Creek through the B-2 dam into B-2 Pit. On an emergency basis, flow was diverted and a project to install a liner was initiated and successfully executed. Other care and maintenance activities undertaken include routine mine water management; finalization of the Operations, Maintenance and Surveillance (OMS) manual that will be implemented in May 2007; preparations to allow the lower levels of the mine to flood; arsenic distribution pipe removal; regular inspections; upgrade of the Supercrest underground mine dewatering system.
- **JOHNSON POINT** – award of an incineration contract and completion of related contract work (e.g. incineration of waste fuel, cleaning of fuel tanks and fuel lines, barrel crushing, etc.)
- **COLOMAC** – operation of the camp (kitchen, dormitories, water and sewer, power generation and distribution, fuel management, medic services); warehouse and vehicle and equipment repair shop; airstrip and road maintenance; routine observations (EHS, wildlife, temperature gauges); and winter road construction, operation and bulk resupply (fuel, equipment and parts). The camp was used for up to 100 people at a time during peak construction periods in 2006-2007 (dam construction and tailings covers).

Regulatory Approvals

Total spending on regulatory approvals decreased 41% from \$1.6 million in 2005-2006 to \$922,572 in 2006-2007. More sites have completed the significant portions of their regulatory approvals and are moving into remediation. Nevertheless, five sites experienced an increase in spending on regulatory approvals: Faro and Mount Nansen in the Yukon; Bray Island and Radio Island in Nunavut; and Colomac in the NWT.



Consultation

Consultation expenditures decreased marginally from \$869,664 in 2005-2006 to \$821,179 in 2006-2007 (6%). At the regional level, consultation spending increased in the Yukon and Nunavut but decreased in the NWT. For example, consultation expenditures at Port Radium have decreased as the site has moved into remediation.

The increases in the Yukon and Nunavut are largely attributable to five sites: Faro, United Keno Hill Mine (UKHM), Ekalugad Fjord, Cape Christian, and Simpson Lake. The Faro Mine closure planning team completed a first round of public consultations in May 2006 to people in the communities of Pelly Crossing, Ross River, Faro and Whitehorse. These consultations were designed to introduce people to the technical assessment of the 12 alternatives – a range of methods that have been developed by the technical team to address the outstanding environmental issues at the Faro Mine complex. Additional public consultation is expected to be held throughout 2007-2008.

Over the fall and winter of 2006, an Independent Peer Review Panel (IPRP) was asked to give an independent technical assessment of the 12 alternatives for closure of the Faro mine site that were presented to the community in the Spring of 2006. The IPRP was made up of a group of nine experts from a variety of technical fields and presented its report in March 2007. The IPRP report concluded that the technical studies and the range of alternatives provide enough information to move into the process to develop a closure and remediation plan for the Faro Mine site. These findings echoed much of the feedback heard from earlier community meetings.

Almost \$200,000 of consultation expenditures was accrued at three sites in the NWT for which no consultation expenditures were recorded last year: El Bonanza, Johnson Point, and Contact Lake. Activities at Johnson Point ranged from community meetings and site tours of Johnson Point to a community survey/traditional knowledge study to determine traditional uses for the site. El Bonanza held two community meetings/tours and one site visit, and Contact Lake held two community meetings/tours and two site tours.

CSP is also working to make its consultation procedures line up with Crown consultation requirements.

Site Investigation and Assessment

Site investigation and assessment expenditures increased 5% to \$8.9 million in 2006-2007. Assessment activities were carried out at 12 more sites in 2006-2007 than in 2005-2006 (42 sites vs. 30 sites). Assessment expenditures increased most significantly at Bray Island, Colomac, UKHM and the Yukon Devolution sites.

Eleven new sites were assessed in NWT, and six new sites were assessed in Nunavut. Though the total expenditures on assessment for these sites is relatively low (with the exception of three), the magnitude of the number of new sites undergoing assessment activities is an improvement from the previous years' performance.



Site Remediation

Spending on site remediation increased significantly again in 2006-2007 (41%). Since 2004-2005, site remediation expenditures have increased over 100%, reflecting the trend towards conducting more remediation as assessments are completed. Thirty-five percent of the total site remediation expenditures in 2006-2007 were incurred at Colomac. This project is now in full remediation / implementation mode, which will take place over the three year period from 2006-2007 to 2008-2009. Major civil works, including a tailings cover and construction of Dam 1, were completed in 2006-2007. Major hydrocarbon remediation will take place in 2007-2008 with demolitions and final site demobilization occurring in the 2008-2009 fiscal year. Site remediation also increased at Port Radium, where all equipment was mobilized to Déline for barging in spring 2007.

Site remediation expenditures also increased significantly at Sarcpa Lake, Ekalugad Fjord, and Radio Island, which together account for 84% of remediation expenditures in Nunavut, and 39% of remediation expenditures overall. Mount Nansen, Clinton Creek, and Yukon Devolution remediation expenditures also increased and account for 59% of remediation expenditures in the Yukon.

Site remediation expenditures decreased most substantially at Resolution Island, Tundra-Taurcanis, and Discovery Mine. All remediation activities at Resolution Island have been completed, and remediation at Discovery Mine is 98% complete. Remediation at Tundra-Taurcanis is behind schedule by approximately one year due to the failure of the 2006 winter



road season and the resulting inability to access the site with necessary equipment and supplies. The feasibility of integrating site activities from different phases of the remediation plan is being considered to get the remediation process back on track.

Monitoring

Monitoring expenditures remained fairly consistent in 2006-2007, experiencing only a slight (3%) increase over 2005-2006 expenditures. The majority of monitoring expenses (89%) were incurred in NWT, most notably at Tundra-Taurcanis, Silver Bear, Axe Point, Discovery Mine, Colomac, and Giant Mine. Various monitoring activities were undertaken at these sites, including water quality and hydrology

monitoring, geotechnical monitoring, permafrost monitoring and snow surveys, and other environmental sampling.

Project Management and Program Administration

Project management expenditures increased 18% in 2006-2007, but program administration expenses decreased 12%. At the regional level, program administration expenses decreased 48% in the Yukon and 71% in NWT, but increased 33% in Nunavut. With the increase in staff at the CSP and a limited program administration budget, the salaries for some program staff members were covered under project budgets.

Table 5 provides a summary of activities undertaken at CSP sites over the last five years. There has been an increase in all types of activities except ongoing care and maintenance, which decreased from 16 to 13 sites, and site monitoring, which remained at 13 sites. The amount of site assessment work has increased most significantly.



Table 5: Activities Undertaken at Sites, 2001-2007

TYPE OF ACTIVITY	NUMBER OF SITES					
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
Care and maintenance	6	5	6	9	16	13
Site investigation and assessment	13	9	13	20	30	42
Consultation	4	4	14	13	18	20
Remediation	6	6	9	14	19	20
Monitoring	5	19	22	19	13	13

Figure 4 highlights the proportion of expenditures associated with these activities. For the second year in a row, site remediation has exceeded care and maintenance expenditures at 41% of total expenditures, compared to 31% for care and

maintenance. Site investigation and assessment expenditures have decreased by two percent as a proportion of overall spending compared to the previous year. **Figure 5** identifies the proportion of expenditures by site, and illustrates that Faro, Giant, and Colomac represent the largest proportion of expenditures.

Figure 4: Program Expenditures by Activity, 2005-2006 and 2006-2007

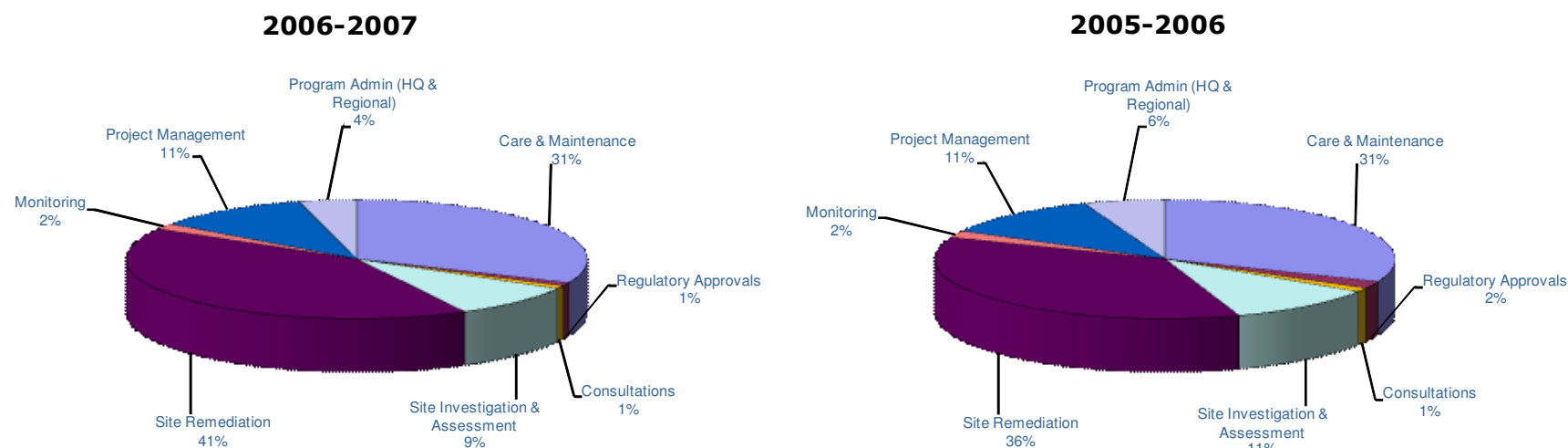
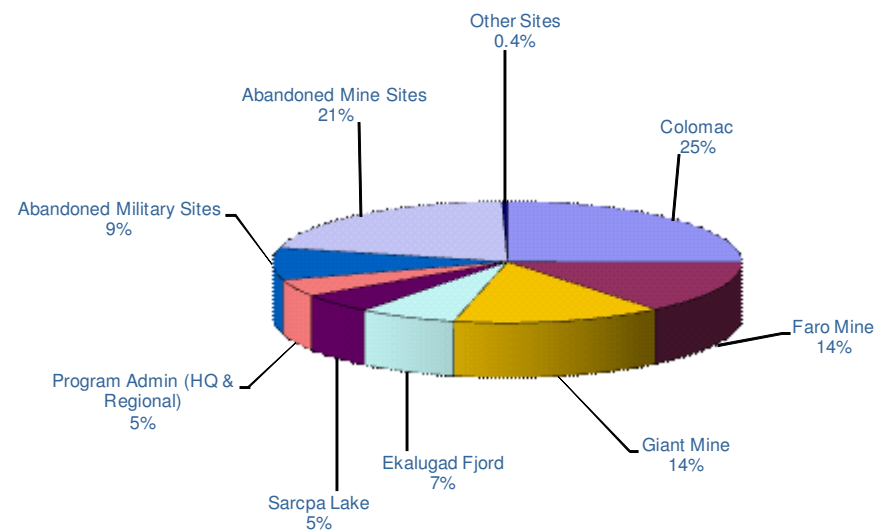
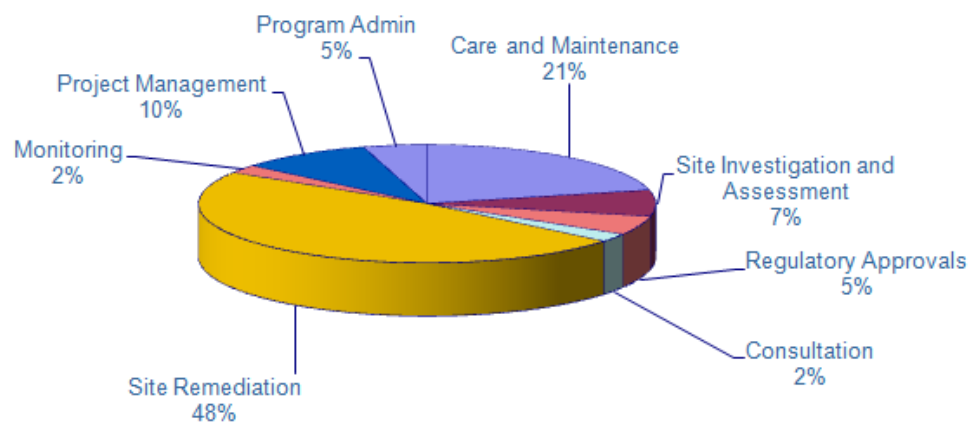


Figure 5: Program Expenditures by Site, 2006-2007



Projected costs for the program in 2007-2008 are expected to be \$111 million (see **Figure 6**). The majority of these expenditures will continue to be on remediation, which is projected to increase from 46% in 2006-2007 to 48% in 2007-2008 of the total budget.

Figure 6: Budget Forecast by Activity, 2007-2008



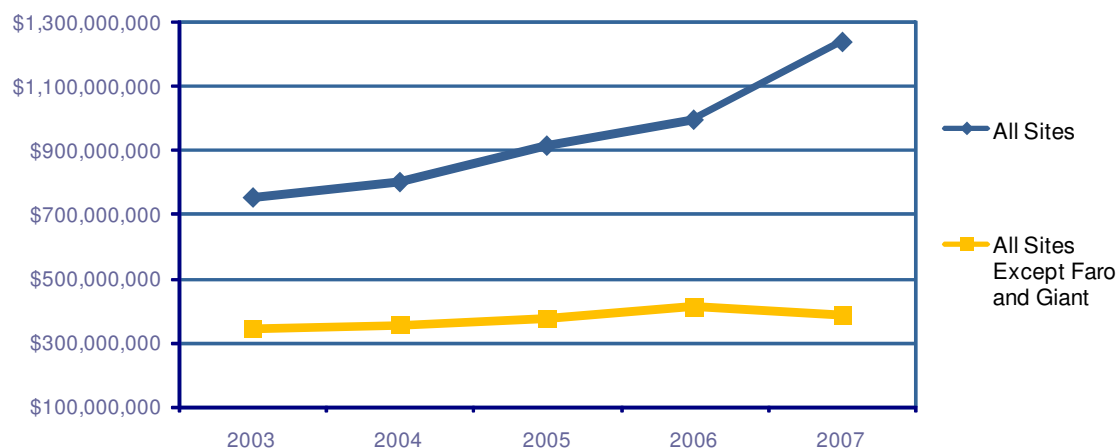


Contaminated Sites Liability

The CSP maintains up-to-date liability estimates for contaminated sites that the department is responsible for to ensure that all potential and known costs related to the management and remediation of these sites are accounted for and reported in accordance with Treasury Board guidelines. Accounting practices state that the lowest cost alternative is to be reported as the liability and the highest cost minus the lowest cost becomes the contingent liability.

In 2006-2007, overall liability estimates increased 25% to \$1.2 billion. Most of the liability is associated with two of the 41 priority sites: Faro in Yukon and Giant Mine in NWT. **Figure 7** illustrates the liability values over the past five years, for all sites and for all sites except Faro and Giant.

Figure 7: Trends in Liability, 2003-2007



At the regional level, liabilities increased significantly in the Yukon (61%), to a smaller degree in NWT (4%), and decreased in Nunavut (-6%) between 2005-2006 and 2006-2007.

In general, liability estimates increased due to the increasing costs of operating in the North, as well as the improved quality of estimates resulting from more detailed assessment work. As more and better site assessments are conducted, liability estimates may continue to increase. Decreases in liability estimates are most frequently the result of completed remediation work.

In the Yukon, most of the increase in liability estimates was attributable to Faro, for which the liability estimate increased 82%. Following a technical evaluation at Faro, the lowest cost alternative that was reported last year can no longer be considered, and the next lowest cost alternative needed to be reported. Liability estimates for UKHM and Clinton Creek also increased.

In the NWT, liability estimates for Tundra-Taurcanis increased by 85% due to higher quality estimates and more knowledge about the site. Giant Mine experienced a slight increase in liability estimates, while estimates for Discovery Mine and Colomac decreased by 53% and 46%, respectively, as part of the remediation work was completed. Liability has been estimated for four new sites in the NWT.



In Nunavut, the liability associated with Resolution Island is now zero since site remediation is complete. Liabilities associated with Ekalugad Fjord and Radio Island decreased 46% and 36%, respectively. The most significant increases were experienced at Cape Christian (75%) and Bray Island (38%) due to revisions in older estimates. Liability has been estimated for three new sites in Nunavut.

Liability estimates are based on engineering and site inspection reports and can be either substantive or indicative, the former considered more reliable than the latter. As of March 31, 2007, 20 project liability estimates (of the 71 NCS classified sites) were substantive, as compared to nineteen liability estimates were substantive last year.

Table 6 lists the top two sites by region with the most significant changes in liability estimates between 2005-2006 and 2006-2007. **Table 7** identifies the estimated liability by region, and **Table 8** identifies the regional proportion of CSP's contaminated sites liability.

Table 6: Sites with the Most Significant Changes in Liability Estimates, 2006-2007

	Increasing Liability Estimates	Decreasing Liability Estimates
Yukon	Faro (82%) Clinton Creek (6%)	Mount Nansen (-7%) Yukon Devolution (-4%)
NWT	Tundra-Taurcanis (85%)* Giant Mine (13%)	Discovery Mine (-53%) Colomac Mine (-46%)
Nunavut	Cape Christian (75%) Bray Island (38%)	Resolution Island (-100%) Ekalugad Fjord (-46%)

*Crestaurum Mine had a larger percent increase in liability than Tundra-Taurcanis, but the total value of the liability estimate is minor compared to that of Tundra-Taurcanis.





Table 7: Liability by Region, 2001-2007

REGION	Estimated Cost of Assessment and Remediation						
	LIABILITY						% Change 2001-2007
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	
Yukon	\$226,851,400	\$283,781,000	\$323,386,000	\$322,407,675	\$386,520,128	\$621,644,970	174%
NWT	\$341,730,000	\$316,227,505	\$321,720,643	\$431,822,348	\$461,698,801	\$482,079,746	41%
Nunavut	\$154,653,000	\$153,853,000	\$158,840,110	\$159,976,145	\$148,876,718	\$139,314,007	-10%
TOTAL	\$723,234,400	\$753,861,505	\$803,946,753	\$914,206,168	\$997,095,647	\$1,243,038,723	72%

Table 8: Regional Proportion of Liability, 2001-2007

REGION	Regional Proportion of Estimated Cost of Assessment and Remediation						
	LIABILITY						
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	
Yukon	31%	38%	40%	35%	39%	50%	
NWT	47%	42%	40%	47%	46%	39%	
Nunavut	21%	20%	20%	17%	15%	11%	
TOTAL	100%	100%	100%	100%	100%	100%	

Note: Percentages may not add up due to rounding.



Social, Economic and Environmental Performance

One of the CSP's policy objectives is to promote socio-economic benefits, whereby the skills of the local labour force are enhanced, capacity in the North to contribute to contaminated sites projects is increased, and environmental and human health benefits are realized. CSP has been increasingly trying to systematically collect social, economic and environmental performance data from sites under its management. These data are presented below.⁷

Environment, Health and Safety⁸

Maintaining a high standard of environment, health and safety (EH&S) performance is important when managing contaminated sites, and those in the North are no exception. Most northern contaminated sites inhabit a remote and fragile Arctic landscape, and potential exposures to wildlife, weather and hazardous materials make EH&S a critical priority. A summary of 2006-2007 EH&S performance measures is discussed below, including safety performance; incidents, inspections and audits; and training.

Safety Performance

Nineteen lost-time accidents were reported in 2006-2007. In addition, there were 82 near-misses reported in 2006-2007, 77 of which were reported at three sites.

⁷ Please note that more sites provided data this year than last year, and many sites have improved their data collection and reporting systems. As a result, the data for 2005-2006 and 2006-2007 are not comparable.

⁸ Twenty-three out of 30 sites submitted 2006-2007 EH&S performance data (14 NWT, three Nunavut, six Yukon).

Incidents, Inspections and Audits

There were five significant environmental incidents in 2006-2007, including a leaking fuel tank, the accidental dropping of seven closed drums of jet fuel into Hudson Strait while being slung from a helicopter, the accidental destruction of an archaeological site, a bear kill, and a small fuel spill (~40 litres).

A total of 29 inspections were conducted at seven sites, resulting in only one non-compliance. This non-compliance resulted from attempted use of a winter road at a portage without the minimum four inches of packed snow and ice. The land use inspectors wrote a note reminding INAC of that requirement, and INAC voluntarily shut down the road pending the build-up of the ice layer on the portage. Nine safety audits were performed at five sites, resulting in 20 non-compliances related to an EHS inspection at one of the sites, the majority of which were minor.

Table 9: Safety and Incidents, Inspections and Audits, 2006-2007

Safety		2006-2007
Lost-time accidents (LTA)	Number	19
	Time lost (person-h)	331
Near misses	Number	82
Incidents, Inspections and Audits		2006-2007
Significant environment incidents	Number	5
	Volume spilled or released (L)	1,442
Outstanding compliance issues[1]	Number	0
Inspections	Number performed	29
	Number of non-compliances	1
Audits	Number performed	9
	Number of non-compliances	20

[1] Violation notices by regulatory agencies



Training

EH&S policy and procedure training was the most commonly reported training in 2006-2007, with 16 sites reporting 619 hours of training. However, more training hours were reported on first aid and wildlife safety training, with 12 sites reporting 930 hours of first aid training, and 13 sites reporting 600 hours of wildlife safety training. Three sites reported 1,000 hours of HAZWOPER training, nine sites reported almost 700 hours of water safety training and five sites reported almost 130 hours of spills response training. Six sites reported fire response training and six sites reported Workplace Hazardous Materials Information System (WHMIS) training.

Table 10: EH&S Training, 2006-2007

EH&S Training		2006-2007
Awareness training	EH&S policy and procedures (person-h)	619
H&S training	HAZWOPER (person-h)	1,000
	WHMIS (person-h)	444
	First Aid (person-h)	930
	Wildlife safety (person-h)	599
	Water safety (person-h)	686
	Fire response (person-h)	182
	Other (person-h)	775
	Spills response (person-h)	127
Environmental training	Other (person-h)	316
	New procedures	13
Other corrective actions	Other initiatives	0



Socio-Economic Performance⁹

Throughout its operations in the North, CSP strives to create positive social and economic impacts for the people in nearby communities. The range of benefits can include direct employment, support to local businesses through the procurement of goods and services, and training programs that help build the capacity of locals and provide opportunities to obtain future work based on the new skills developed. A summary of 2006-2007 socio-economic performance measures is discussed below, including employment; workforce training; and the purchase of goods and services from Northern and Northern Aboriginal businesses.

Employment

Total reported employment in 2006-2007 was 1,055 people. Of these 1,055 employees, 65% were from the North and 42% were Northern Aboriginal people.

Workforce Training

Eighteen sites reported providing training to over 400 employees in 2006-2007. Of these 400 employees who received training, 80% were Northerners and 65% were Northern Aboriginal people. A number of significant training initiatives were undertaken. Colomac was part of a Mine Training Society project that involved training several people on trades. Port Radium set aside over \$100,000 to train Déline people so that they could participate in the remediation of the site this year. Silver Bear has been hiring several people from Déline and gradually improving their skills through on-the-job training so that they can take on more responsibility for camp operations, sampling, maintenance, etc.

⁹ Twenty-six out of 30 sites submitted 2006-2007 socio-economic performance data (16 NWT, four Nunavut, six Yukon).

Table 11: Employment and Workforce Training, 2006-2007

Employment		2006-2007
Total employment	Number	1,055
	person-d	73,317
Northern employment (includes Aboriginal)	Number	691
	person-d	61,721
Northern Aboriginal[1] employment	Number	441
	person-d	41,495
Southern Aboriginal employment	Number	4
	person-d	165

[1] First Nation, Inuit and Métis

Workforce Training		2006-2007
Total training	Number of persons	414
	Duration (h)	9,242
Northern training	Number of persons	332
	Duration (h)	8,292
Northern Aboriginal training	Number of persons	271
	Duration (h)	4,219

TRAINING AT COLOMAC

Through its partnerships with the Tli Cho Government and the Mine Training Society, Colomac offered apprenticeship positions to 12 Aboriginal people. Five are training to become welders, four to become heavy-duty mechanics, two to become electricians, and one to become a millwright. Four of the apprentices have been placed at Colomac, and the remainder will be placed at other Tli Cho Logistics operational sites. Colomac has also instituted a youth training program in environmental science in partnership with the Chief Jimmy Bruno High School in Rae and Taiga Labs in Yellowknife. Funding was provided to transport students daily to Yellowknife to receive five days of training, which included visits to the Taiga labs, sampling techniques and equipment, classroom instruction, and a day trip to Colomac. Nine students participated in the program, and Colomac plans to discuss future student training opportunities with Tli Cho Executives and Community Chiefs.



Stakeholder Consultation¹¹

CSP is committed to engaging and communicating with local stakeholders regarding the management of contaminated sites in the North, and promotes Aboriginal and Northern participation and partnership in the identification, assessment, decision-making and remediation risk management processes related to contaminated sites.

Seventeen sites reported holding a total of 44 community tours and meetings in 2006-2007. Six of the 44 meetings were held at Mount Nansen to help explain possible alternatives for the site closure plan. Discovery Mine held two meetings with the Tli Cho to discuss how they wish to be involved in the contaminated sites project under the new government.

Thirty-one site tours were held across the regions. Nine of these were held at Giant Mine, and included tours for Aboriginal groups, INAC HQ individuals, the Environment Minister, and the Office of the Auditor General.

Table 13: Consultation Performance Measures, 2006-2007

Consultation Performance Measures		2006-2007
Community tours and meeting	Number	44
	Audience (number of persons)	453
Workshops	Number	6
	Audience (number of persons)	63
Site tours	Number	31
	Visitors (number of persons)	225
Media (TV, radio) events	Number	28
Press reports	Number	15

Purchase of Goods and Services

Twenty-four sites reported doing business with a total of 689 Northern suppliers in 2006-2007, 198 of which were Northern Aboriginal suppliers. The total value of business from Northern suppliers was over \$42 million, 63% of which was from Northern Aboriginal suppliers. Ekalugad Fjord held 36 contracts with Northern Aboriginal suppliers. Goods and services provided by the three Northern Aboriginal suppliers at Colomac totalled over \$19 million.

In 2006, a Procurement Strategy was developed by the CSP in support of INAC's Contaminated Sites Management Policy. One of CSP's objectives for its procurement activities is maximizing Northern and Aboriginal community, business, and individual participation and economic development opportunities. A Socio-Economic Benefits Strategy is also being developed to support this objective. In addition, INAC's Economic Development Programs Directorate (EDPD) has developed an Aboriginal Benefits Strategy, which includes an Aboriginal Benefits Plan as part of the overall competitive procurement process. All CSP Requests For Proposals (RFPs) issued under Comprehensive Land Claim Agreements (CLCAs) must contain an Aboriginal Benefits Package component.

Table 12: Purchase of Goods and Services, 2006-2007¹⁰

Purchase of Goods and Services		2006-2007
Northern suppliers (includes Aboriginal)	Number	689
	Value (\$)	\$42,344,739
Northern Aboriginal suppliers	Number	198
	Value (\$)	\$26,684,363

¹⁰ Commonly purchased goods and services include: professional services (i.e. consulting, trades, remediation, construction, laboratory, etc.); winter roads; transportation services; air charters; equipment rentals; fuel; etc.

¹¹ Twenty-one out of 30 sites submitted 2006-2007 stakeholder performance data (14 NWT, 5 Nunavut, two Yukon).

Regional Reports

Northwest Territories



NWT KEY PERFORMANCE MEASURES			2005-2006	2006-2007
FINANCIAL				
Total Liability	\$		\$461,698,801	\$482,079,746
Contingent Liability	\$		\$41,996,767	\$41,808,749
Expenditures	\$		\$35,563,781	\$55,105,427
CLASSIFICATIONS				
NCS 1	#		15	20
NCS 2	#		10	10
Risk Management/Monitoring	#		3	3
Contingent Liabilities	#		15	15
ENVIRONMENT, HEALTH & SAFETY				
Safety				
Lost-time Accidents (LTAs)	total		1	10
LTA Time Lost (person-h)	person-h		15	75
Incidents, Inspections and Audits				
Inspections	# performed		5	16
	non-compliances		22	1
Audits	# performed		2	7
	non-compliances		20	20
EHS Training				
Awareness Training (EHS Policies & Procedures)	person-h		240	299
HAZWOPER	person-h			400
WHMIS	person-h			335
First Aid	person-h		262	604
Wildlife Safety	person-h		162	546
Water Safety	person-h			648
Fire Response	person-h			133
SOCIO-ECONOMIC				
Employment				
Total employment	#		147	710
	person-d		18,662	35,989
Northern employment (includes Aboriginal)	#		92	382
	person-d		14,175	25,689
Northern Aboriginal employment	#		40	216
	person-d		9,941	14,964
Southern Aboriginal employment	#		1	2
	person-d		215	88
Workforce Training				
Total training	# persons		26	126
	Duration (h)		644	3,265
Northern training	# persons		17	112
	Duration (h)		286	2,957
Northern Aboriginal training	# persons		16	86
	Duration (h)		7,351	2,041
Purchase of Goods and Services				
Northern suppliers (includes Aboriginal)	#		84	459
	\$		\$17,541,773	\$32,483,506
Northern Aboriginal suppliers	#		26	79
	\$		\$14,702,548	\$21,518,720
CONSULTATION				
Community tours and meeting	#		23	32
	Audience (#)		189	288
Workshops	#		5	5
	Audience (#)		354	63
Site tours	#		16	26
	Audience (#)		129	177



JOHNSON POINT

Johnson Point is an abandoned oil and gas exploration support and staging area located approximately 270 km northeast of Sachs Harbour on Banks Island, along the Prince of Wales Strait. The site was used by several exploration companies from the early 1960s until the early 1980s, when responsibility for the facilities reverted to the Crown. It continues to be used as a base for mineral exploration, a fuel cache location and an alternate airstrip for traveling farther north.

What are the concerns at the site?

Following a Phase I and II environmental site assessment, completed in October 2005, a number of issues were identified at the site. These include the presence of hydrocarbons in soils, as well as waste oil and other liquid wastes. Several buildings on the site were also found to contain asbestos, polychlorinated biphenyls (PCBs) and/or lead-based paints. General debris and waste metal that is scattered around the area could also pose a safety risk to people or wildlife.

Remediating the site

A detailed Phase I/II environmental site assessment was completed in October 2005, which included soil and water sampling, a geophysical survey of the site, and a complete site inventory.

In 2006-2007, activities included a traditional knowledge / community survey, community site visits, incineration of approximately 100,000 litres of waste fuel from 19 fuel storage tanks, and cleaning and crushing of waste barrels that are now ready for removal. A Phase III environmental assessment also took place, which included a hazardous materials inventory, delineation of hydrocarbon-impacted soils, further geotechnical and geophysical surveys, and surface water and groundwater sampling.

Social, economic and/or environmental highlights

A strong relationship has been developed with the Sachs Harbour community and their support has been garnered in moving this project ahead. Activities ranged from community meetings and site tours of Johnson Point to a community survey/traditional knowledge study to determine traditional uses for the site.

Future plans

A remediation plan for the site will be developed in 2007-2008, with extensive consultation with the Inuvialuit at Sachs Harbour and Ulukhaktok. Permits will be applied for and a detailed procurement strategy will also be developed.

Current timelines anticipate moving equipment to the site in 2008 with the majority of the remediation work taking place in 2009, including demolition of the fuel tank farm, addressing the soil contamination, and both non-hazardous and hazardous wastes.





PORT RADIUM MINE

Port Radium Mine is located on a peninsula along the eastern shore of Great Bear Lake, 440 km north of Yellowknife and 265 km east of the Dene community of Déline within the Sahtu Dene and Métis traditional lands. Beginning in 1932, the site was mined for radium used in medical research. In the early 1940s to 1960s the site was mined for uranium used to make nuclear weapons and for nuclear power. The site was mined for silver until 1982 when it was decommissioned. Tailings were covered, mine openings were blocked, infrastructure was destroyed and all valuable equipment was removed. The site has been reassessed and further studied since 2000 due to concerns raised by the community of Déline. All studies and recommendations on how to address the site are conducted jointly by INAC and Déline.

What are the concerns at the site?

As a result of mining over more than 40 years, silver, copper and uranium are present in soils and surface water, localized to the immediate site. The site also has elevated gamma radiation associated with the waste rock. There are also small amounts of hydrocarbons and asbestos residue present at the site.

Remediating the site

Studies carried out over the past five years were summarized in a Final Report on Action Plan Activities. Released in early September 2005, the report contained many recommendations, including those for the remediation of the site. The Port Radium Remediation Plan was compiled by a joint process between Canada and Déline under the Canada-Déline Uranium Table and finalized in the fall of 2005. The decision was made to complete the remediation work during the 2007 summer season.

During 2006-2007, the water quality and state of the environment monitoring program continued, a land use permit and Waste Nuclear Substance Licence were obtained, a capacity-building plan was developed, basic training took place with Déline community members, and a contract was awarded for the remediation work.

Social, economic and/or environmental highlights

A target for the Port Radium project is to increase the economic capacity of the Déline. Within the first few months of the remediation contract, <1% of funds were going to Déline suppliers, 3.5% to Northern Aboriginal suppliers, and the remainder to northern suppliers. The percentage to Déline is expected to increase as the amount of work onsite increases.

Future plans

Site remediation started in the winter of 2007, with the mobilization to Déline on the winter road in January – March 2007. Mobilization to Déline will occur by barge in July 2007. The majority of work will be carried out from July to September 2007, including sealing mine openings, covering areas of elevated radiation levels, stabilizing tailings areas, as well as, demolition and hazardous waste disposal. Monitoring will also begin at that time.





Yukon



YUKON KEY PERFORMANCE MEASURES			2005-2006	2006-2007
FINANCIAL				
Total Liability	\$		\$386,520,128	\$621,644,970
Contingent Liability	\$		\$580,440,157	\$468,640,871
Expenditures	\$		\$23,632,934	\$20,156,992
CLASSIFICATIONS				
NCS 1	#		8	8
NCS 2	#		1	1
Risk Management/Monitoring	#		4	4
Contingent Liabilities	#		1	1
ENVIRONMENT, HEALTH & SAFETY				
Safety				
Lost-time Accidents (LTAs)	total			3
LTA Time Lost (person-h)	person-h			170
Incidents, Inspections and Audits				
Inspections	# performed		4	3
	non-compliances			
Audits	# performed			1
	non-compliances			
EHS Training				
Awareness Training (EHS Policy & Procedures)	person-h			104
HAZWOPER	person-h			
WHMIS	person-h			
First Aid	person-h			
Wildlife Safety	person-h			
Water Safety	person-h			
Fire Response	person-h			
SOCIO-ECONOMIC				
Employment				
Total employment	#		124	116
	person-d		1,038	10,936
Northern employment (includes Aboriginal)	#		124	119
	person-d		1,038	11,176
Northern Aboriginal employment	#		40	37
	person-d			2,815
Southern Aboriginal employment	#			
	person-d			
Workforce Training				
Total training	# persons		5	54
	Duration (h)			3,546
Northern training	# persons		3	44
	Duration (h)			3,411
Northern Aboriginal training	# persons		4	10
	Duration (h)			258
Purchase of Goods and Services				
Northern suppliers (includes Aboriginal)	#		20	55
	\$		\$11,803,000	\$5,929,337
Northern Aboriginal suppliers	#		2	7
	\$		\$1,260,000	\$1,558,150
CONSULTATION				
Community tours and meeting	#		33	6
	Audience (#)			
Workshops	#			1
	Audience (#)			
Site tours	#		2	2
	Audience (#)			18



FARO

The Faro Mine Complex is located in south-central Yukon, 15 km north of the Town of Faro and almost 200 km northeast of Whitehorse. About 65 km east of the mine complex is the town of Ross River, which is home to the Ross River Dena, a member of the Kaska First Nation. The mine complex is located in the traditional territory of the Kaska First Nation. The traditional territory of the Selkirk First Nation is located downstream of the complex, centered on the community of Pelly Crossing. Faro was an open-pit lead-zinc mine. The mine started production in 1969 and operated under numerous owners until the mine went into interim receivership in 1998. While in production, approximately 70 million tonnes of lead-zinc ore were extracted from the Faro Mine.

What are the concerns at the site?

Major environmental concerns at Faro focus on acid rock drainage from the tailings impoundment, waste rock dumps and effluent discharges from the open pits. Of immediate and long-term concern are heavy metals in surface and groundwater leaving the site. Zinc concentrations require continuous treatment with lime prior to discharge in order to prevent fish mortality and damage to fish habitat. Given the volumes of potential acid mine drainage, perpetual effluent discharge treatment will be required in both the Rose and Vangorda Creek basins.

Remediating the site

In December 2005, as part of an assessment of remediation options, a Tier II Human Health and Ecological Risk Assessment was conducted on the "existing site conditions". A systematic risk assessment of the technical aspects of the current suite of closure alternatives was carried out in February 2006. This work was conducted by representatives of the Yukon Government, Government of Canada, Selkirk First Nation, and Ross River Dena Council (on behalf of the Kaska Nation). The technical risk management process informed both the design and associated costs of the example closure alternatives, and formed a critical piece of the evaluation of example closure alternatives that took place in the spring of 2007. An Independent Peer Review Panel conducted the evaluation and recommended that only a subset of the original example alternatives be pursued further. The IPRP's conclusions were presented at the end of March 2007.

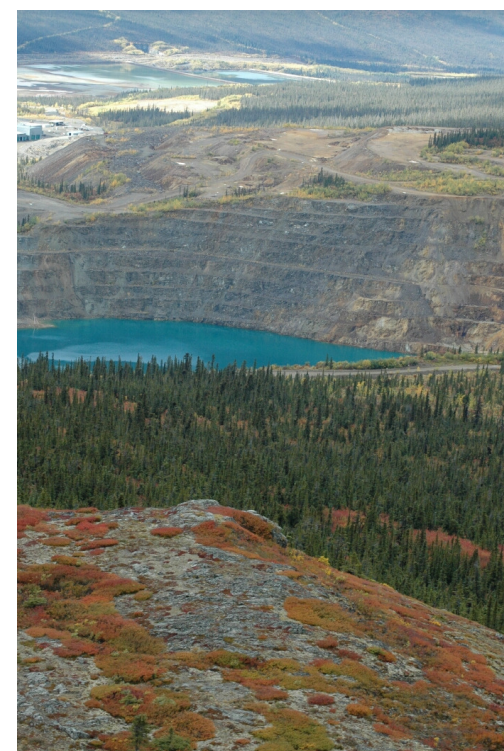
In order to complete a comprehensive risk assessment of example closure alternatives, a further assessment stage has been planned and will be completed in 2007-2008.

Social, economic and/or environmental highlights

An Independent Peer Review Panel (IPRP), comprised of nine members with expertise in various areas related to mine closure, was created in 2006-2007 and tasked with assessing the engineering adequacy of the reclamation alternatives; determining whether all rational and viable measures had been identified; and identifying any information gaps and the need for any additional work. The IPRP presented its report at a March 2007 meeting and concluded that the technical studies and the range of alternatives provide enough information to move into the process to develop a closure and remediation plan for the Faro Mine site. These findings echoed much of the feedback heard from earlier community meetings.

Future plans

The current overall project schedule predicts a final closure and remediation plan for regulatory approval being completed by the fall 2008. The evaluation of closure alternatives is scheduled for spring 2008, with development of the business case required to secure preliminary project approval occurring concurrently. However, there is some uncertainty surrounding the duration of many of these stages, particularly the government approval processes and the amount of tri-government negotiations required.





MOUNT NANSEN

The Mount Nansen Mine is an abandoned gold and silver mine located 60 km west of Carmacks and 180 km north of Whitehorse. The property is located in the Little Salmon Carmacks First Nation traditional territory and covers 5,300 hectares. Intermittent exploration of the site occurred between 1917-1984, and more rigorous exploration occurred after 1985. Mining and milling was not initiated until October 1996, and was suspended three years later in 1999.

What are the concerns at the site?

The primary concern at the site is the tailings and tailings dam. For several years, tailings pond water had to be pumped up to the mill site for treatment prior to discharge. In 2005 it was determined that the cyanide concentration in the tailings pond water had reached safe discharge levels. With the onset of discharge, a more rigorous sampling program was instituted and will be maintained until direct discharge ceases or until there is no risk of contamination.

Two additional risk areas include the mill complex and low-grade ore deposit and the Brown-McDade workings. Buildings, machinery, and miscellaneous hazardous chemicals in and around the mill pose a risk to the environment as well as to unauthorized visitors. The Brown-McDade pit contains water with zinc concentrations in excess of safe discharge standard limits. Both the pit and adit could pose a risk to unauthorized visitors.

Remediating the site

Site investigations were initiated at this site in 1999 when the site was abandoned and INAC took responsibility for the site. INAC commenced care and maintenance, including treatment of tailings pond water in 1999, and this was continued under Government of Yukon management in 2003-2006 inclusive. A detailed risk management examination of the property was conducted in March 2005, updated in October 2005, and 2006. This assessment did not bring forward any major new issues. Current remediation activities have satisfactorily reduced risks in the short and medium term.

A Terrestrial and Aquatic Effects Study was completed in 2006-2007, and a presentation of the findings was given to a local community. A small remediation project was also carried out in 2006-2007 to remove hazardous materials and drums from the site.

Formal closure objectives for the project were identified in conjunction with federal and territorial governments, Little Salmon Carmacks First Nation, Village of Carmacks, and other stakeholders as part of the closure planning process in the 2006-2007 fiscal year.

Social, economic and/or environmental highlights

Over the course of 2006-2007, 31 people were employed at the site, all of whom were northerners and over half of whom were Northern Aboriginal.

Future plans

Assessment work for Mount Nansen will be completed in 2007-2008, and a closure plan developed.





Nunavut



NUNAVUT KEY PERFORMANCE MEASURES			2005-2006	2006-2007
FINANCIAL				
Total Liability	\$		\$148,876,718	\$139,314,007
Contingent Liability	\$			\$55,500
Expenditures	\$		\$19,613,301	\$21,703,310
CLASSIFICATIONS				
NCS 1	#		21	21
NCS 2	#		8	11
Risk Management/Monitoring	#		2	3
Contingent Liabilities	#			4
ENVIRONMENT, HEALTH & SAFETY				
Safety				
Lost-time Accidents (LTAs)	total			6
LTA Time Lost (person-h)	person-h			86
Incidents, Inspections and Audits				
Inspections	# performed			10
	non-compliances			
Audits	# performed			1
	non-compliances			
EHS Training				
Awareness Training (EHS Policy & Procedures)	person-h		120	216
HAZWOPER	person-h		440	600
WHMIS	person-h		120	109
First Aid	person-h		120	326
Wildlife Safety	person-h		120	53
Water Safety	person-h			38
Fire Response	person-h		120	49
SOCIO-ECONOMIC				
Employment				
Total employment	#		104	229
	person-d		6,663	26,393
Northern employment (includes Aboriginal)	#		60	190
	person-d		4,020	24,856
Northern Aboriginal employment	#		90	188
	person-d		6,013	23,717
Southern Aboriginal employment	#			2
	person-d			77
Workforce Training				
Total training	# persons		62	234
	Duration (h)		935	2,431
Northern training	# persons		60	176
	Duration (h)		905	1,924
Northern Aboriginal training	# persons		59	175
	Duration (h)		890	1,920
Purchase of Goods and Services				
Northern suppliers (includes Aboriginal)	#		30	175
	\$		\$1,981,000	\$3,931,896
Northern Aboriginal suppliers	#			112
	\$			\$3,607,493
CONSULTATION				
Community tours and meeting	#		5	6
	Audience (#)		188	165
Workshops	#		1	
	Audience (#)		18	
Site tours	#		3	3
	Audience (#)		21	30



CAPE CHRISTIAN

The Cape Christian site is located at the mouth of the Clyde River, on the northeast coast of Baffin Island, in Nunavut. The nearest community is the Hamlet of Clyde River, located approximately 15km southwest of the site. From 1954 to 1974, the US Coast Guard operated a long range navigation system (LORAN) communications station at the site. The site has been abandoned since 1974 and consists of five buildings: the Main Station, Garage, Hazmat Building, Terminal Building, and Survival Hut. Cape Christian is a joint liability site with shared responsibility between the Crown and the Government of Nunavut. INAC, as agent of the Crown, has taken the lead role on this project and is currently developing a cost-share agreement for the remediation of this site.

What are the concerns at the site?

Buildings on the Cape Christian site are in poor physical condition and contaminated with PCB, lead-amended paint, and asbestos, ultimately posing a risk to human and environmental health. Extensive hazardous and non-hazardous debris have also been identified at the site. Finally, soil contaminated with PCB's, heavy metals and petroleum hydrocarbons have also been discovered.

Social, economic and/or environmental highlights

Over \$400,000 was spent in 2006/07 to further assess and determine the extent of the contamination at the site. A community consultation session was held in Clyde River in which the input of local residents was sought to develop the final Remedial Action Plan. It is anticipated that the remediation work will employ between 30 and 40 people, mostly from the community of Clyde River.

Future plans

Regulatory submissions for the Land Use Permit and Water Licence were made to the Government of Nunavut (GN) and the Nunavut Water Board (NWB), respectively. The project plan is currently undergoing Environmental Impact Assessment (Screening) by the Nunavut Impact Review Board (NIRB). Permits and licences are expected to be issued by mid-2007. Mobilization to site is expected in 2007 with remediation work expected to take two field seasons, 2008 and 2009.





ROBERT'S BAY MINE and IDA BAY MINE

The Robert's Bay abandoned silver mine is located approximately 1 kilometre north of Robert's Lake. The Ida Bay mine site is located on the north shore of Ida Bay about 6 kilometres north of the Robert's Bay site. These two sites are collectively referred to as Robert's Lake area.

The Robert's Lake area was first staked by the Robert's Mining Company Ltd. in 1964. The silver deposit at Robert's Bay was subsequently discovered in 1965. The following year, a gold showing at Ida Point, as well as a silver showing at Ida Bay, were discovered and staked. Explorations of the Ida Bay and Robert's Bay silver showings were conducted by the Hope Bay Silver Syndicate from 1967 until 1972. Exploration activities included mapping, drilling, trenching, as well as air and ground geophysical surveys.

What are the concerns at the site?

The Robert's Bay mine site has been abandoned for nearly 30 years and has a considerable volume of residual infrastructure and waste materials scattered all over the site (tailings pond; waste rock; non-hazardous waste/debris; hazardous waste; petroleum and metals impacted soil; and mine openings). Some limited closure activities have been historically carried out at the site but numerous site hazards are still present. An adit and vent raise are flooded at the Ida Bay site, and the potential of waste rock piles to generate acid rock drainage is uncertain.

Remediating the site

A Phase I/II site investigation was undertaken at both Robert's Bay and Ida Bay in 2003-2004. During the same year, a human health screening level risk assessment was also conducted for both sites. The 2005-2006 work plan consisted of evaluating the existing site information available on the Robert's Bay Silver Mine and Ida Bay Silver deposit. The gap analysis indicated that additional geotechnical, geochemical and environmental site assessment activities were required to be able to develop a remedial action plan (RAP). These activities were conducted in 2005-2006, and a RAP was developed and finalized in 2006-2007. The 2006-2007 work plan also included consultations with community members and other stakeholders (completed); obtaining all regulatory permits and licences (undergoing NWB review); development of the tender documents for site remediation (completed); and commencement of the bidding process for the contract for remediation, which began in 2006-2007 and will be completed in 2007-2008.

Social, economic and/or environmental highlights

An environmental impact assessment was conducted on the project during 2006-2007. There were also public meetings held in Cambridge Bay, Nunavut during which the RAP was presented to the community members and to stakeholders. Comments and contributions from the public and other stakeholders were incorporated into the final RAP.

Future plans

Site remediation is planned to begin. A bidder's conference was conducted in March 2007, and the contract will be awarded in summer 2007. Equipment will be mobilized to the site in 2008.



Program Management

NAO's Contaminated Sites Program Management Framework, in place since 2002, includes four key elements to facilitate effective and efficient management of the CSP:

- INAC Contaminated Sites Management Policy;
- Contaminated Sites Management Plan, as per FCSAP requirements;
- CSP Results-Based Management and Accountability Framework (RMAF) that outlines the Program's relationship to departmental and Government of Canada objectives, and presents a program profile, logic model, performance measurement and reporting strategy, evaluation strategy, and audit strategy; and
- CSP Corporate Procedures that document processes and procedures to promote the consistent application of the program across all regions.

CSP also produces annual work plans to further guide its program management activities. This section of the report outlines CSP's performance against the specific components of the 2006-2007 program management work plan listed below:

1. Program Meetings;
2. Update of CSP's RMAF;
3. Yukon Contribution Agreement RMAF;
4. Implementation of the Risk Management Procedure;
5. Information Management;
6. Update of Corporate Procedures;
7. Program Review;
8. Environment, Health and Safety Management;
9. Polluter Pays Activities;
10. Advisory Review Board; and
11. Audit and Review.

Program Meetings

The Technical Advisory Committee (TAC) met twice in 2006-2007. Key tasks included reviewing the TAC terms of reference, updating and reviewing the terms of reference for a Mine Site Guidance Document, providing updates on the Subcommittee on Abandoned Military Sites, and identifying issues requiring TAC guidance (e.g. tailings cover performance, petroleum hydrocarbon standards at military sites, and pilot testing of treatment systems). The TAC intends to convene more frequently in 2007-2008 via conference call, and to adopt a more moderate work plan that can be managed given the increase site remediation work.

The TAC Subcommittee on Abandoned Military Sites met in May 2006 and identified key technical risks for abandoned military sites, prioritized these risks, and formulated a work plan to develop guidance to address these risks. A TAC Subcommittee on Abandoned Mine Sites will be formed in 2007-2008.

An Operations Committee was also established in 2006-2007 with representation from the three regions and HQ. The Operations Committee was created as a result of concerns from the CSP Directors that numerous operational matters were being added to their agendas and taking up time they need to devote to more strategic matters. It was also formed to assist Directors and Project Managers resolve program and project issues, and act as a forum for sharing lessons learned among Project Managers. In addition, the Operations Committee will advise the CSP Directors on the CSP management system, help the CSP Directors coordinate the annual cycle, and help the CSP Directors monitor and improve performance of the CSP. In 2006-2007 the Operations Committee met eight times by conference call and once in person.





Update of CSP's Results-based Management and Accountability Framework

Recognizing the ongoing need to implement a sound management and accountability framework, the CSP reviewed and updated the program RMAF (first developed in 2002), focussing on the next phase of program delivery over the period 2006-2010. In doing so, the program has articulated a clearly defined goal to increase the number of priority Northern contaminated sites in remediation phase or completed by March 31st, 2010. The revised RMAF was completed in November 2006.

Yukon Contribution Agreement RMAF

Under the Devolution Transfer Agreement between the Government of Canada and the Yukon Government, the clean-up of Type II Mines in Yukon is carried out by the Yukon Government and funded through a "Comprehensive Funding Agreement" with the Federal Government. This agreement requires a comprehensive and explicit accountability framework to support the transfer of funds. An RMAF for the agreement was developed in 2006-2007 that:

- Provides a more strategic understanding of the Yukon Government's core functions with respect to Type II sites;
- Provides a framework for ensuring that program activities are delivering on key federal policy objectives related to federal contaminated sites;
- Supports the CSP and related reporting activities;
- Clarifies roles and responsibilities and ensures effective governance structures are enacted;

- Contributes to an enhanced performance measurement and management framework for the program;
- Clarifies processes, timelines and responsibilities for financial audits of transferred funds;
- Enables the effective evaluation of program delivery; and
- Provides for a mechanism to meet Treasury Board Secretariat expectations with respect to the transfer of federal resources to the Yukon Government.

A workshop was held with CSP management, Yukon regional staff, and Yukon Region Type II personnel to inform the RMAF. Additional interviews were conducted with Yukon Region Type II personnel and managers of the Environment Directorate, and a draft RMAF was prepared, revised, and finalized.





Implementation of the Risk Management Procedure

CSP's risk management procedure was first implemented in 2004-2005, the objectives of which are to provide a consistent methodology for developing an inventory and evaluating the many different types of risk at CSP contaminated sites; a process to ensure that no high risks are missed; and a basis for prioritizing risk mitigation or control activities within and among sites.

A central component of the procedure is establishing a risk register for each site. All current projects in the CSP now have a risk register. The risk register informs the Detailed Work Plan (DWP) for the project and is updated on an annual basis based on work completed and on new information or circumstances. The CSP risk management procedure is supported by a web-based application called the Risk Management Tool (RM tool) that serves as the data entry platform and risk register (database) for all sites in the CSP inventory.

Overall Risk Results

Legacy Risks

Legacy risks are all risks directly associated with the impacts, materials, and infrastructure left behind by a former mining or military operation. The major themes of legacy risks include the following:

Mine Sites	Military Sites
<ul style="list-style-type: none">• Tailings Impacts• Health and Safety Risks due to Public Access• Waste Rock• Petroleum Hydrocarbons	<ul style="list-style-type: none">• Hazardous Materials• Soil Contamination• Barrels and Debris• Public Access

These themes have not shifted significantly since last year. Most new risk events are program activity risks, especially for sites in the remediation phase. However, a significant number of new legacy risks have also been identified for certain sites due to evolving conditions at the site or new assessment information. Legacy risks are decreasing for sites undergoing remediation.

Program Activity Risks

Program activity risks are all risks associated with CSP project activities. These risks have been mostly categorized in terms of the major stages of CSP projects and are summarized as follows:

Mine and Military Sites

Care and maintenance - including failures of systems that mitigate legacy risks due to a lack of maintenance, human error, fire, or other causes.

Remediation - including accidents and difficulties encountered during the implementation of the remediation plan, as well the failure of the selected remedial option (e.g. erosion of landfill covers, degradation of tailings covers).

Project Management - including a wide range of project risks associated with: tenure and mineral claims; understanding and satisfying land claim requirements; mobilization to remote sites; procurement, scarcity of labour and contractors, and materials; and lack of closure plans.

Occupational health and safety - including occupational health and safety risks (excludes public and third parties) that apply to all stages of site work (care and maintenance, assessment, remediation, and monitoring).



Risk Management Activities in 2006-2007

The following illustrates some of the risk management activities that occurred in 2006-2007:

- Modifications were made to the RM Tool to improve usability and the RM Tool User Guide was updated to reflect these changes.
- The risk management procedure was modified to strengthen and clarify the following aspects of the procedure: the link between the procedure and detailed work planning, the link to the EHS management system, and implementation of risk management at the program level.
- The risk management guidance document was revised.
- A meeting of the INAC CSP Risk Management Advisory Team was held in March 2007 to provide comments on the 2006-2007 risk summary report and develop recommendations for risk management in 2007-2008.

Information Management

CSP conducted a user needs analysis of the contaminated sites database in 2006-2007. Users of the database at HQ and in the Regions were interviewed about their information management requirements. Based on the results of the user needs analysis and with the input of a design review committee, a functional specifications guide for a redesigned central contaminated sites database was developed. The decision was made to move ahead with redesigning the database based on the functional specifications guide, and an internal business opportunity proposal¹² and project charter¹³ were drafted. These documents will be finalized and the database redesigned in 2007-2008.

¹² Business opportunity proposal: an internal document used to demonstrate the relevance of and need for a particular project, used to get buy-in and approval.

¹³ Project charter: A document issued by the project initiator or sponsor that formally authorizes the existence of a project, and provides the

The program is revising its quarterly reporting mechanisms. CSP is assessing the quality of its quarterly reporting and annual detailed work planning, and will be revising guidance to project managers. CSP has also developed a performance “dashboard” to facilitate monitoring and reporting of site-level progress across the regions. The rollout of these new tools will take place in 2007-2008.

Update of Corporate Procedures

Some corporate procedures were reorganized in 2006-2007 and new procedures were developed. The final Corporate Procedures Manual and the Project Manager’s Guide will be posted on the CSP Intranet site in 2007-2008. The Corporate Procedures and Project Manager’s Guide will be modified as required to reflect ongoing program developments.

Two specific corporate procedures that were updated in 2006-2007 were the Cost Estimating Guide and the Procurement Guide. The Cost Estimating Guide describes various techniques that can be used to estimate the costs of remediation projects, varying in accuracy depending on the information available. In addition, the Guide describes the way that costs should be classified (direct and indirect, etc.), the basis of estimates documented, and the estimate reviewed and approved. The Procurement Guide was developed taking into account decisions made at an Ottawa workshop on procurement, attended by several departments, and experience gained by PWGSC in doing open and competitive contracting within land claim areas. The key aspect of the procedure is the use of Aboriginal Benefits Packages that promote socioeconomic benefits to Aboriginal peoples. Both guides were described and distributed to project managers at a program meeting in 2006-2007.

project manager with the authority to apply organizational resources to project activities.





CSP Program Review

An independent review of the CSP was conducted in 2006-2007. The key objectives of the review were to assess the degree to which the program has established the necessary structures and procedures to eventually achieve the objectives and expected results associated with the program, and to assess and determine NAO's progress in implementing the 2002 INAC Contaminated Sites Management Policy.

The review was intended to help managers improve performance by looking at the effectiveness of management processes (controls), governance, skill-sets and progress towards meeting outcomes. The review identified a number of key strengths as well as areas for improvement and specific recommendations, which are highlighted at the right.

The review concluded that in the past four years, the CSP has evolved significantly and has achieved significant improvements in terms of management processes, project management, governance structures / roles and responsibilities, and focus on remediation objectives. If the CSP continues to progress at its current pace, it is likely to meet its objective of remediating all Class 1 sites by 2027 but is unlikely to meet its 2012 target to assess all suspected contaminated sites. The program will be developing an action plan to address the findings of the review in 2007-2008.¹⁴

¹⁴ The final CSP program review report was submitted on March 31, 2007, the end of the fiscal year for which this performance report has been prepared. As a result, this report cannot assess progress made on addressing the issues identified in the review. Progress will be discussed in future performance reports.

Environment, Health & Safety Management

CSP's EH&S Policy was approved in 2006-2007, and full roll-out of the EH&S Management System was implemented in 2006-2007. The EH&S Management System consists of an EH&S Management System Manual, Standard Operating Procedures Manual, and an audit program that will be initiated in 2007-2008 in Nunavut and the NWT. A draft Audit Program guide was prepared in 2006-2007. EH&S training sessions were provided to staff in NWT region in May 2006; to project managers and others at the Whitehorse program meeting in June 2006; and to Nunavut project managers, who were unable to attend the June meeting, in the fall in Ottawa. A management system review was carried out at the December 2006 program meeting.



Polluter Pays Activities at UKHM

United Keno Hill Mines Ltd. (UKHM) was forced to cease production at its Elsa silver mines in 1989 because of low silver prices. After trying for several decades to raise funds for further exploration, the company abandoned the Elsa property in January 2001, and INAC took over environmental management of the property. After several attempts to sell the property fell through, INAC and the Yukon Government decided to seek the court appointment of an Interim Receiver, with the aim of selling the property to a private sector operator. The Elsa properties had significant mineral reserves and attractive exploration potential. The objective was to realize the value in these mineral assets by limiting the exposure of a purchaser to the existing environmental liabilities at the site.

The Yukon court appointed an Interim Receiver for UKHM in April 2004 and approved a marketing plan for the property in November 2004. By the April 2005 deadline, the Interim Receiver received nine bids for the property, and Alexco Resources Corp. was selected as the preferred bidder. The agreement with Alexco was finalized in February 2006 and approved by the Yukon court in April 2006. While it is difficult to precisely estimate the ultimate value of this arrangement to the Crown, the savings to what it would cost INAC to remediate this site will likely exceed \$15-20 million.

Advisory and Review Board

A new Advisory and Review Board (ARB), made up of external independent senior people and INAC and PWGSC representatives, was constituted in 2006-2007 to fulfill a dual role: i) review and advise project managers on their detailed work plans; and ii) carry out project reviews as appropriate (e.g., at project completion). The ARB met in November 2006 with each of the regions, prior to the deadline for submission of the draft detailed work plans.

Audits

The Office of the Auditor General (OAG) initiated an audit of contaminated sites in the Federal House in 2006-2007. Four CSP sites were included in this audit: Colomac, Giant, Mount Nansen, and Faro. This audit is a follow-up from a 2002 audit, and these four mines continue to be selected. A liability audit was also conducted at Clinton Creek. The results of the audits are to be tabled by the OAG in February 2008.



FUTURE DIRECTIONS



CSP's capacity to tackle the major challenge of remediating INAC's northern contaminated sites continues to improve, with consistent funding from FCSAP as well as process and system improvements such as the new Operations Committee, an EHS management system, and efforts to improve project-level reporting to facilitate efficient and effective decision-making. The CSP program review conducted during the reporting period also identified key issues that the CSP will address in the coming year to further improve its efficacy.

Future directions for the program include:


- Development of an integrated risk management (IRM) program for the CSP;
- Refining the socio-economic indicators and reporting on performance;
- Conducting a training needs analysis to obtain a better understanding of the training needs of Project Managers and developing specific training initiatives to meet these needs; and.
- Continued management system implementation.

Thank you for your interest in INAC's Northern Contaminated Sites Program. If you have any questions about this report or require additional information, please contact Joanna Ankersmit, Director of the Contaminated Sites Program, at (819) 997-7247 or ankersmitj@ainc-inac.gc.ca.



APPENDICES

APPENDIX 1 – List of Acronyms



CCME – Canadian Council of Ministers of the Environment
CSP – Contaminated Sites Program
DEW – Distant Early Warning
DWP – Detailed Work Plan
EH&S – Environment, Health and Safety
ESA – Environmental Site Assessment
ETA – Emergency Tailings Area
FCSAP – Federal Contaminated Sites Action Plan
HQ – Headquarters
HAZWOPER – Hazardous Waste Operations and Emergency Response
INAC – Indian and Northern Affairs Canada
IPRP – Independent Peer Review Panel
NAO – Northern Affairs Organization
NCS – National Classification System
NWT – Northwest Territories
OMS – Operation, Maintenance, and Surveillance
PCB – Polychlorinated Biphenyl
PWGSC – Public Works and Government Services Canada
RAP – Remedial Action Plan
RMAF – Result-based Management and Accountability Framework
SRR – Short Range Radar
TAC – Technical Advisory Committee
UKHM – United Keno Hill Mine
WHMIS – Workplace Hazardous Materials Information System



APPENDIX 2 – Expenditures by Site, 2002-2007

Site Name	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
NORTHWEST TERRITORIES					
Atkinson Point				\$306,821	\$1,942,120
Axe Point		\$32,500	\$3,056	\$396,477	\$510,991
Beaverlodge Lake		\$8,142			
Bullmoose				\$38,691	\$13,065
Colomac	\$8,157,833	\$16,534,508	\$10,846,117	\$11,561,704	\$24,953,965
Consolidated Beta Gama			\$30,814		
Contact Lake	\$4,820	\$7,200			\$657,671
Discovery	\$398,247	\$405,922	\$3,647,465	\$4,883,733	\$899,663
El Bonanza			\$33,666	\$1,500	\$566,152
Giant Mine	\$5,751,500	\$8,268,349	\$9,696,288	\$9,606,995	\$14,385,594
Hidden Lake Mine				\$35,446	\$146,051
Horton River	\$20,000	\$41,000	\$22,528		
Jackson Islands				\$28,492	
Jean Marie River	\$28,155	\$14,000			\$17,693
Johnson Point				\$258,064	\$1,962,397
Kittigazuit Bay	\$800,000	\$836,000	\$763,563	\$46,870	
North Inca Mine				\$48,324	\$158,395
Outpost Island				\$42,446	\$10,486
Port Radium	\$1,500,000	\$2,126,000	\$1,859,413	\$1,860,255	\$3,626,773
Rayrock	\$140,000	\$105,000	\$111,362	\$63,291	
Ruth Gold Mine				\$39,819	\$13,759
Silver Bear	\$103,086	\$38,800	\$1,130,342	\$1,448,979	\$1,375,966
Sour Gas Wells				\$47,715	\$45,000
Tundra	\$71,868	\$166,451	\$1,775,778	\$3,069,708	\$2,165,224
Indore					\$415,422
West Bay					\$33,451
Crestaurem					\$23,629
American Yellowknife					\$27,505
Cat and Grainger					\$87,485
Old Parr #1					\$31,541
Liten					\$35,041
Thomson - Lundmark					\$46,907
Victoria Island Assessments					\$78,954
Water Monitoring					\$25,153
Monitoring				\$125,876	\$253,469
NWT Admin			\$6,617	\$0	\$119,909
Sub-Total	\$16,975,509	\$28,583,872	\$29,927,009	\$33,911,206	\$54,629,431





APPENDIX 2 – Expenditures by Site, 2002-2007 (cont.)

Site Name	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
YUKON					
Arctic Gold & Silver	\$2,500	\$7,000	\$439		
Brook's Brook	\$2,000	\$8,000	\$3,803		
Clinton Creek	\$500,000	\$863,235	\$1,142,797	\$428,000	\$501,796
Faro	\$13,124,750	\$14,068,369	\$14,244,758	\$15,644,007	\$14,008,526
Hydrometric Stations		\$113,000	\$6,172		
Ketza River Mine			\$8,415		
Mount Nansen	\$1,665,000	\$953,088	\$1,331,686	\$1,319,400	\$1,565,288
Peel River	\$2,000	\$14,000			
Snag	\$3,500	\$8,000	\$2,615		
UKHM			\$3,766,471	\$4,281,261	\$2,844,694
Venus Tailings	\$1,500	\$6,000	\$551		
Yukon Devolution*		\$982,000	\$536,367	\$1,005,120	\$725,581
Monitoring					\$11,724
Yukon Admin			\$1,059	\$2,855	\$1,232
Sub-Total	\$15,301,250	\$17,022,692	\$21,045,133	\$22,680,643	\$19,658,841

* Expenditures under Yukon Devolution relate to hundreds of small waste sites in the Yukon that have been grouped under one name. As part of the devolution transfer agreement, \$2 million/year has been earmarked for the next seven years to cleanup these sites.





APPENDIX 2 – Expenditures by Site, 2002-2007 (cont.)

Site Name	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
NUNAVUT					
Akpatok Island		\$2,500			
BAF 3 - Beevort	\$11,300				
Bernard Harbour	\$22,280				
Brag Island				\$11,500	\$573,519
Cape Christian	\$27,900	\$29,760			\$336,853
Cape Peel	\$22,280				
Clifton Point	\$22,280				
Cullaton Lake				\$84,512	
Durban Island	\$27,900	\$29,400			
Ekalugad Fiord	\$27,900	\$29,610	\$1,502,659	\$3,365,680	\$6,686,801
Fat Lake				\$71,410	
Iqaluit Hospital 541				\$862,864	
North Rankin Inlet				\$2,225	
Otter and Montgomery Lake				\$69,264	
Padloping Island	\$27,900	\$28,550			
Radio Island				\$136,124	\$4,608,267
Resolution Island	\$4,015,000	\$12,766,714	\$10,220,563	\$9,939,585	\$2,984,507
Roberts Bay		\$75,000		\$568,710	\$264,929
Ross Point	\$22,280				
Sarcpa Lake	\$2,000	\$104,247	\$1,303,185	\$3,611,508	\$5,242,630
Simpson Lake				\$396,717	\$104,266
Flagler					\$48,483
Borup Fiord					\$48,483
Eureka Sound North #2					\$48,483
Stratheona Fiord					\$48,483
Lincoln Bay					\$48,546
Site Assessment**			\$225,000		
Water Monitoring					\$42,061
Monitoring				\$30,268	
Nunavut Program Development		\$32,566			
Sub-Total	\$4,229,020	\$13,065,781	\$13,251,407	\$19,150,366	\$21,086,310
HQ Admin				\$27,726	
Program Admin (HQ & Regional)	\$599,724	\$885,843	\$2,203,184	\$4,594,167	\$4,023,195
Total	\$37,105,503	\$59,558,188	\$66,426,733	\$80,364,108	\$99,397,776

** Site assessment includes: Hope Lake, McGregor Lake, Spears Lake, Regan Lake, Rusty Lake, Nose Lake, Fingers Lake, Mara River Area #1, Mara River Area #2, Contwoyto Lake Area. 2005-06 site assessment expenditures have been allocated to specific sites rather than grouped together.



APPENDIX 3 – Project Management Component Definitions

Care and Maintenance

Care and maintenance activities at the high-risk sites generally include, but are not limited to:

- Collection, pumping and treatment of contaminated water from temporary holding areas;
- Monitoring of pump systems to ensure transfer volume flow rates are as required;
- Carrying out various inspections, water sampling, shipping and reporting to comply with maintain regulatory compliance;
- Maintaining site security;
- Supplying sufficient hydro, diesel and gasoline to operate facilities;
- Maintaining roads and airstrips for supply and personnel access;
- Activities to maintain, repair and/or construct physical infrastructure integral to preventing an event that will lead to an uncontrolled release of contaminants; and
- Inspection and repair of facilities critical to water treatment and site compliance (i.e. pumps, generators, furnaces, electrical systems, etc.)

Monitoring

Conditions of water and land-use permits associated with work being carried out at sites in the northern territories, INAC is required to carry out monitoring activities. These monitoring activities are non-discretionary and must absolutely continue to maintain legal compliance.

Regulatory Approvals

Regulatory approvals are essential to carrying out care and maintenance. The discharge of water for instance at Faro, Colomac and Giant are subject to water licencing processes. This component includes costs associated with the process of obtaining water licenses, land-use permits, etc.

Consultations

This component includes any costs associated with organizing workshops, meetings, printing information sheets, etc.

Site Investigation and Assessment

This includes any environmental studies (including ecological and human health risk assessments) that need to be completed to advance the understanding of the conditions of the site and to be able to put together a closure plan.

Site Remediation

Any activity that is deemed as part of the cleanup of a site. This includes many types of activities, such as removal of contaminated soil and hazardous material, destruction of buildings, etc.

Project Management

The project organization and systems required to manage the work including planning, estimating, reporting, contracts, resources, financial, quality and risk.

