Northern Affairs Program
Contaminated Sites Program

PERFORMANCE REPORT

2005 – 2006

PHOTOS:	
Cover / watermark:	Top: United Keno Hill Mines (UKHM) Middle: Resolution Island Bottom: Faro
Page 6:	Resolution Island
Page 15:	Clinton Creek
Page 18:	Colomac
Page 19:	Resolution Island
Page 20:	Colomac
Page 22:	Silver Bear
Page 23:	Colomac
Page 24:	UKHM
Page 25:	Resolution Island
Page 27:	Ekalugad Fjord
Page 31:	Sarcpa Lake

Table of Contents

List of Figures

List of Tables

Report Coverage

This Performance Report presents the results of Indian and Northern Affairs Canada's (INAC) Northern Contaminated Sites Program (CSP) for the period April 1, 2005 to March 31, 2006. Additional information on CSP activities can be found on our website and in previous annual performance reports (www.ainc-inac.gc.ca/ps/nap/consit/).

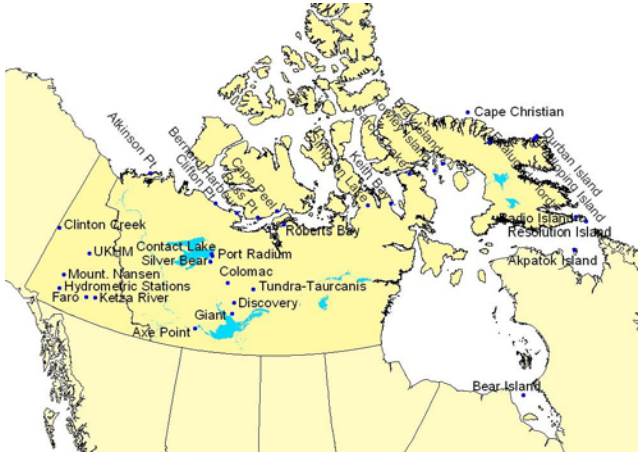
This report outlines CSP's activities related to project and program management, and provides regional reports that illustrate key case studies and performance data for each of the three regions in which CSP operates. For your convenience a glossary of acronyms is included in **Appendix 1**.

Profile of NAP Contaminated Sites Program

INAC is the custodian of most federal lands in the North, and CSP is responsible for managing contaminated sites in the Northwest Territories (NWT) and Nunavut and for funding the cleanup of sites in the Yukon. Overall responsibility for the CSP rests with the Deputy Minister, INAC, and the Assistant Deputy Minister, Northern Affairs Program (NAP). 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.

As of March 31, 2006, 354 contaminated sites (assessed and suspected) in the North require action including assessment, remediation or risk management. Of these 354 sites, 37 are considered "priority sites". These sites have higher associated risks than other sites, and are the focus of many of CSP activities. **Figure 1** identifies where these priority sites are located in the Yukon, NWT and Nunavut.

Figure 1: Map of Priority Sites



A dedicated team of 42 CSP staff manages these sites. This is an increase from 37.5[1] staff in 2004-2005. New CSP positions created in this fiscal year include:

- Yukon: -1
- NWT: 2
- Nunavut: 2
- Headquarters: 1.5

This increase in staff has allowed the program to run more efficiently and brought us closer to reaching our objectives. A Memorandum of Understanding was also signed in the 2005-2006 fiscal year with Public Works and Government Services Canada (PWGSC) to act as a strategic partner to CSP, providing services in project management and contracting.

[1] The number of staff quoted in the 2004-2005 (34) Performance Report was incorrectly stated.

Within the Yukon Territory, the CSP's activities are guided by the requirements of the Devolution Transfer Agreement between the federal and territorial governments. Under that agreement, the program has direct responsibility for care and maintenance, assessment and remediation of a large number of identified, generally small waste sites, which, once remediated, become the full responsibility of the territorial government. For seven identified major abandoned mines (Type II sites), the Devolution Transfer Agreement assigns direct responsibility for care and maintenance, assessment, and remediation to the Yukon Territory, while obligating the CSP to secure the necessary funding and provide support and expertise as necessary to reduce the risks and eliminate the liabilities associated with these sites.

Management Statement

I am pleased to present the Northern Affairs Program, Contaminated Sites Program fifth annual Performance Report, for the 2005-2006 fiscal year. We have continued our efforts in reaching our overall goal of reducing the risk to human and environmental health associated with the sites that we manage in Canada's north. During the 2005-2006 fiscal year, CSP spent $80.4 million. The majority of this money went to addressing contaminated sites issues at our 63 priority sites. Strong efforts from our staff and partners at the site level have resulted in a number of important project-level accomplishments. The table below illustrates some of the types of activities that occurred at these major sites. The number of sites where these different activities are being undertaken has increased from the previous year for most activities. Our activity level has increased and we are making progress in moving our sites through the ten steps of the federal approach to managing contaminated sites.

TYPE OF ACTIVITY	NUMBER OF SITES	
	2004-2005	2005-2006
Ongoing care and maintenance	9	16
Site assessment work	20	30
Consultations	13	18
Remediation work	14	19
Site monitoring	19	13

There were a number of program management accomplishments during the year that I would like to highlight. For example, internal guidance documents such as the Corporate Procedures Manual, Project Manager's Guide and an improved detailed work plan and reporting template were developed. We have also made advancements in our health and safety program, including conducting health and safety audits and developing a new environment, health and safety (EH&S) management system. We have established a Technical Advisory Committee consisting of internal and external experts to provide advice to the program and ensure that it continues to meet its objectives. We also embarked on developing the plan and framework for the program's first formal evaluation, which will help shape the program's future.

I would like to thank the hard work of our employees and partners in making the 2005-2006 fiscal year a success. I invite you to read this year's Performance Report for a greater understanding of CSP's progress.

To ensure we continue to meet the needs of our stakeholders, I also invite you to provide comments and feedback on this report.[2]

Mary Quinn
Acting Assistant Deputy Minister
Northern Affairs Program
Indian and Northern Affairs Canada

[2] Please see page 31 for relevant contact information.

CSP's activities can be divided into those related to project management – undertaken at the site-level to manage contaminated sites – and program management – undertaken to ensure the program itself runs effectively and efficiently. Performance in these two areas is presented below.

Project Management

This section presents the status of the contaminated sites for which CSP is responsible, and provides a progress update of the activities undertaken to manage these sites.

CSP Contaminated Sites

CSP maintains an inventory of contaminated sites and other sites with physical hazards in the Contaminated Sites Database. As of March 31, 2006, there were 1,823 sites in the inventory, down three from last year because three sites in Nunavut were determined not to be the responsibility of CSP. Of these 1,823 sites:

- 993 (54%) have been assessed and require no further action or have been remediated, reducing the risk to human and environmental health and associated site liability.
- 830 (46%) still require action including assessment, remediation or risk management; and
  - 814 (45%) are assessed or suspected contaminated sites or sites with physical hazards; and
  - 16 (1%) are contingent liabilities.

Of the 830 sites that still require action, 340 (down five from last year) have been assessed and 474 (down 11 from last year) still need assessment or site inspections to determine the level of contamination, if present.

Table 1 identifies the number of assessed and suspected contaminated sites and sites with physical hazards by region.

Table 2 identifies the NCS classification of sites compared to the previous four years. The number of classified sites has decreased by five from the previous year since all NCS 3's are now considered contingent liabilities in light of new Treasury Board guidance on accounting for costs and liabilities.

The Canadian Council of Ministers of the Environment (CCME) National Classification System (NCS) is used to classify the level of concern with contamination at a particular site. Sites are classified according to the following categories:

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

Table 1: Number of Contaminated Sites (C.S.) and Sites with Physical Hazards (P.H.) Sites, 2006

Region	C.S.	P.H.		C.S.	P.H.		
	Assessed		Sub-Total	Suspected		Sub-Total	Total
Yukon	9	43	52	14	61	75	127
NWT	25	127	152	177	77	254	406
Nunavut	29	107	136	100	45	145	281
TOTAL	**63**	**277**	**340**	**291**	**183**	**474**	**814**

Table 2: CSP Sites in CCME Classifications, 2002-2006

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

Overall Spending

In total, $90.6 million was sourced to the program to support its work, the majority of which was received from the Federal Contaminated Sites Action Plan (FCSAP) (see **Table 3**). CSP spent $80.4 million on the sites in its inventory during the 2005-2006 reporting period.[3] This represents an increase of $14 million from the previous year. **Figure 2** identifies the program's expenditures over time, clearly illustrating a continuous increase in expenditures based on the number of sites funded and increased access to funds to conduct assessment and remediation activities. **Appendix 2** illustrates expenditures by site.

Figure 2: Contaminated Sites Expenditures

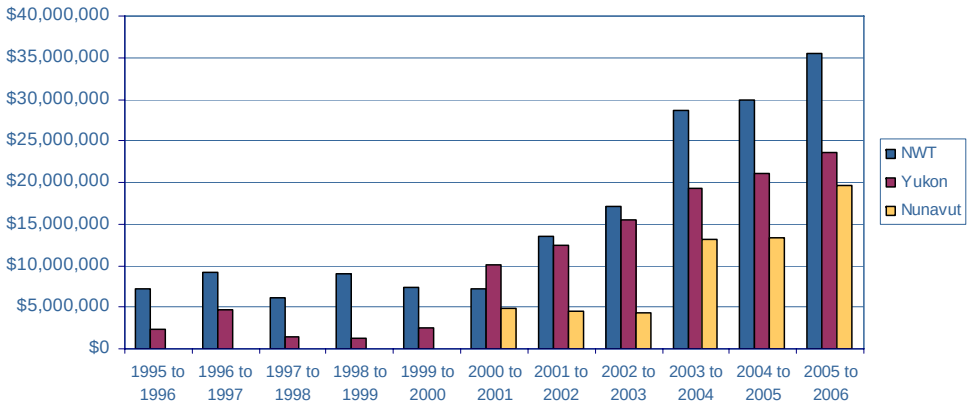


Table 3: Source of Funds, 1999-2006

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

* Federal Contaminated Sites Assessment Initiative (FCSAI) funds were received from Treasury Board in 2000-2002 to conduct site assessment work. The Federal Contaminated Sites Accelerated Action Plan (FCSAAP) 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.

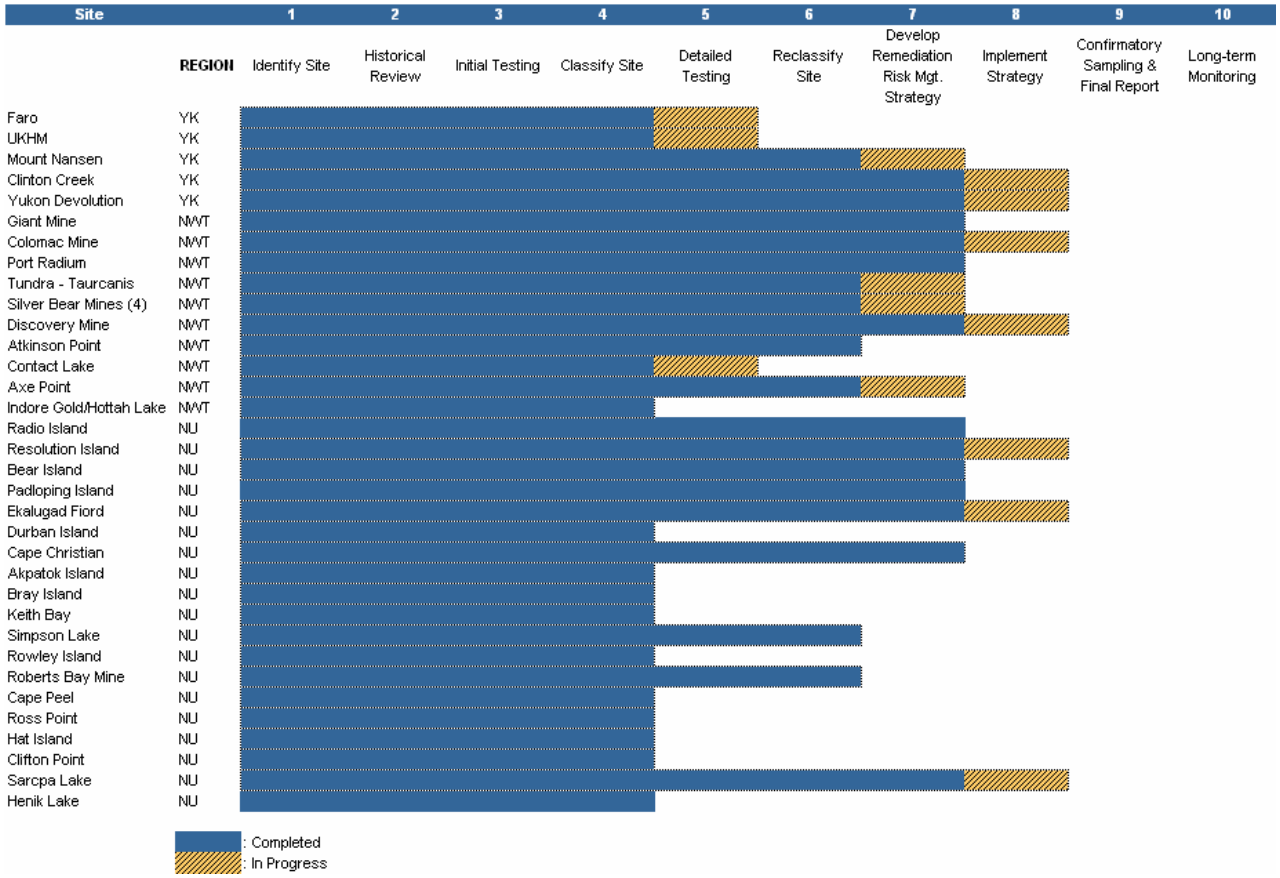
[3] As a result of changes to the Treasury Board's cost-sharing structure, CSP received more funds than expected from FCSAP, allowing the department to return some of the INAC-contributed funds ($6.6 million) to the department for other work. Of the remaining amount ($3.6 million), the program was allowed to carry over $1.1 million to the 2006-2007 fiscal year; however, $2.6 million was considered surplus, or lapsed funds that the program did not use.

Priority Sites

The 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 – those that receive an NCS Class 1 rating – according to the ten-step process. Seven sites are now in steps 8-10 of the ten-step process, up from five the previous year. A total of six sites moved up in the process, and the status of the remaining sites is unchanged. Compared to 2005, Ketza River, Yukon was removed and is now recorded as a contingent liability, and Henik Lake, Nunavut was added to this priority list.

Table 4: Current Status of Priority Class 1 Sites, 2006



[4] Contaminated Sites Management Working Group: http://199.212.18.76/etad/csmwg/

Site-Level Progress

As sites progress along the ten-step process, different activities take place to meet the site's objectives. This section of the report has been organized along these activities.[5]

Care and Maintenance

Total spending on care and maintenance activities in 2005-2006 was $25.1 million, up slightly from $24.3 million in 2004-2005. While care and maintenance spending decreased at a few sites (e.g. Faro, Mount Nansen, UKHM, Tundra-Taurcanis, Axe Point), spending at most sites increased. The largest proportion of care and maintenance spending occurs at Faro, Giant, and Colomac, which combined account for over 80% of these expenditures. Care and maintenance activities underway at these sites in 2005-2006 included:

- FARO – enhancements to the water treatment system, electrical infrastructure rehabilitation and further enhancement to ground water and surface water collection systems.
- GIANT – developed a draft Operations, Maintenance and Surveillance manual that will be implemented in 2006-2007; preparations to allow the lower levels of the mine to flood; regular inspections; evaluation of the water supply and heating requirements.
- COLOMAC – camp re-supply, site service, and routine operations.

Regulatory Approvals

Total expenditures on regulatory approvals decreased 13.5%, from $1.8 million in 2004-2005 to $1.6 million in 2005-2006. Despite a drop in regulatory approvals expenditures at Colomac and Discovery Mines, a few important milestones were achieved. At Colomac, an Environment, Health and Safety Management System was approved for use by the PWGSC Health and Safety Management Group. At Discovery Mine, a final remediation report was completed and submitted to the Mackenzie Valley Land and Water Board. Presentations were also made to the Mackenzie Valley Environmental Impact Review Board, and letters written to the Mackenzie Valley Land and Water Board regarding third party plans to develop the adjacent property and use Discovery Mine's infrastructure.

A considerable increase in spending on regulatory approvals occurred at Giant Mine with the completion of the remediation plan. Ekalugad Fjord and Port Radium also experienced moderate increases in spending in this area due to submission of applications for licensing and permitting.

Consultation

Consultation expenditures dropped 60% in 2005-2006, largely as a result of decreases at Giant Mine and Port Radium, both of which have finalized their remediation plans and completed much of their consultation requirements. Decreases were also experienced at Ekalugad Fjord and Sarcpa Lake.

Mount Nansen and UKHM experienced the most significant increase in consultation spending. UKHM held three meetings with Nacho Nyak Dun Chief and Council, as well as one community meeting and one site tour. Mount Nansen held one community tour/meeting.

Site Investigation and Assessment

Overall, site investigation and assessment expenditures also fell, from $10.5 million in 2004-2005 to $8.5 million in 2005-2006. Despite this overall decrease, assessment activities were conducted at a number of new sites in NWT and Nunavut, and assessment expenditures increased at other sites in Yukon and NWT (e.g. Mount Nansen, UKHM, Port Radium, Silver Bear Mines, Axe Point, and Atkinson Point).

[5] Definitions of project management components are included in Appendix 3.

Site Remediation

Spending on site remediation increased 37% in 2005-2006. This increase, and the corresponding decrease in spending on assessment, is reflective of the fact that sites have had their assessments completed and are now moving into the remediation phase.

Thirty-four percent of the total site remediation expenditures were incurred at Resolution Island – as of the end of the 2005 field season, all remediation activities (except the demolition of the existing camp facilities) have been completed at this site. Tundra-Taurcanis, Colomac, Discovery, Sarcpa Lake and Ekalugad Fjord together account for 54% of remediation expenditures. At Tundra-Taurcanis, 5% of remediation work has been completed to date but unfortunately the project suffered a setback of one year as a result of inability to access the 2006 winter road with the necessary equipment and supplies. Remediation at Discovery is 95% complete.

Monitoring

While fewer sites reported monitoring expenditures in 2005-2006, total monitoring expenditures increased 22%. The most significant increases occurred at Mount Nansen and UKHM. Monitoring expenditures were also higher at Giant Mine, Tundra, Silver Bear, Colomac, and Discovery. Colomac accounts for 40% of total monitoring expenditures, and monitoring activities at the site included enhanced natural remediation, a baseline conditions study, and a dust-monitoring program.

Project Management and Program Administration

Both project management and program administration expenditures more than doubled in 2005-2006. Project management expenditures have been understated in previous years and have increased due to refinements made to the classification of costs. Part of the increase in program administrative expenditures are related to increased staffing across the program and further enhancement of management systems and procedures, including risk management training as well as the new Technical Advisory Committee and implementation of the procurement strategy (see Program Management section beginning on page 26 for a further discussion of these initiatives).

Table 5 provides a summary over the last five years of CSP site activities. There has been an increase in all types of activities, other than site monitoring.

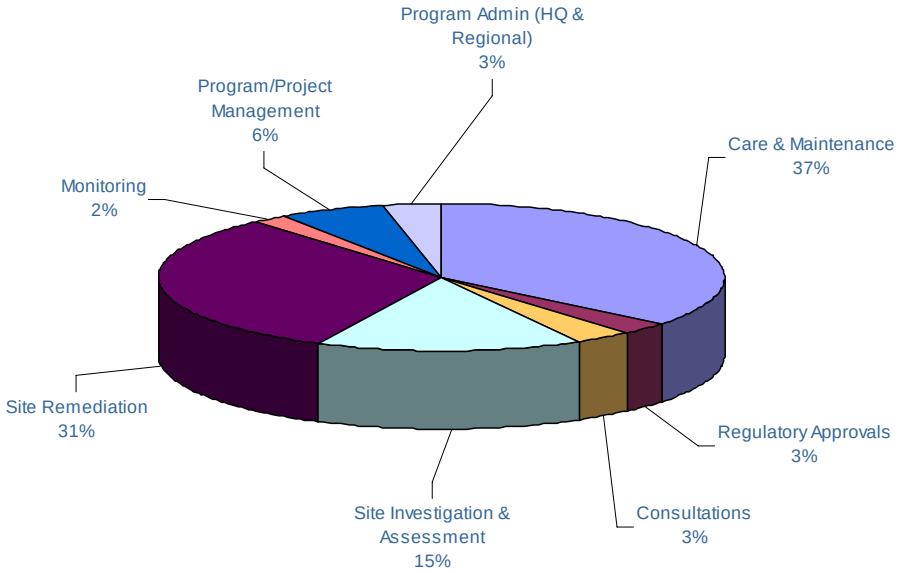
Table 5: Activities Undertaken at Sites, 2001-2006

TYPE OF ACTIVITY	NUMBER OF SITES				
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Ongoing care and maintenance	6	5	6	9	16
Site assessment work	13	9	13	20	30
Consultations	4	4	14	13	18
Remediation work	6	6	9	14	19
Site monitoring	5	19	22	19	13

Figure 3 highlights the costs associated with these activities. Site remediation at 36% of expenditures has now exceeded care and maintenance expenditures for the first year of the program. **Figure 4** on the following page identifies the proportion of expenditures by site. Faro, Giant, Colomac and Resolution Island represent the largest proportion of expenditures.

Figure 3: Program Expenditures by Activity, 2004-2006

2004-2005



2005-2006

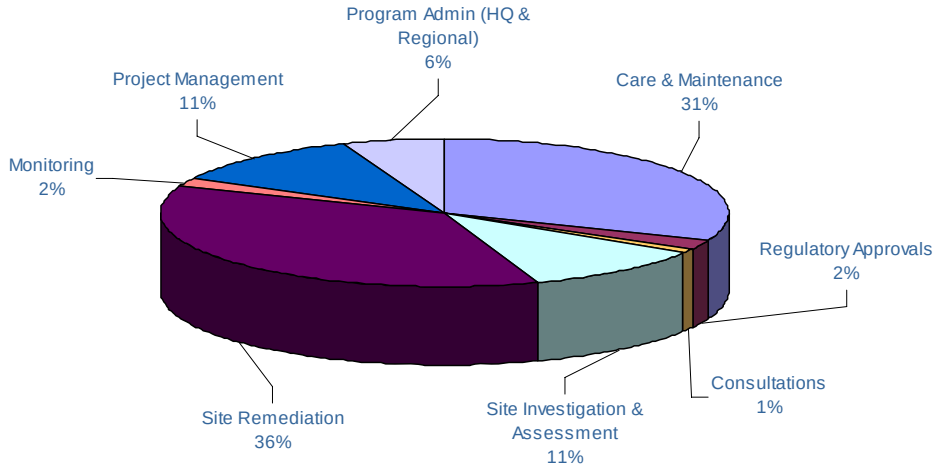
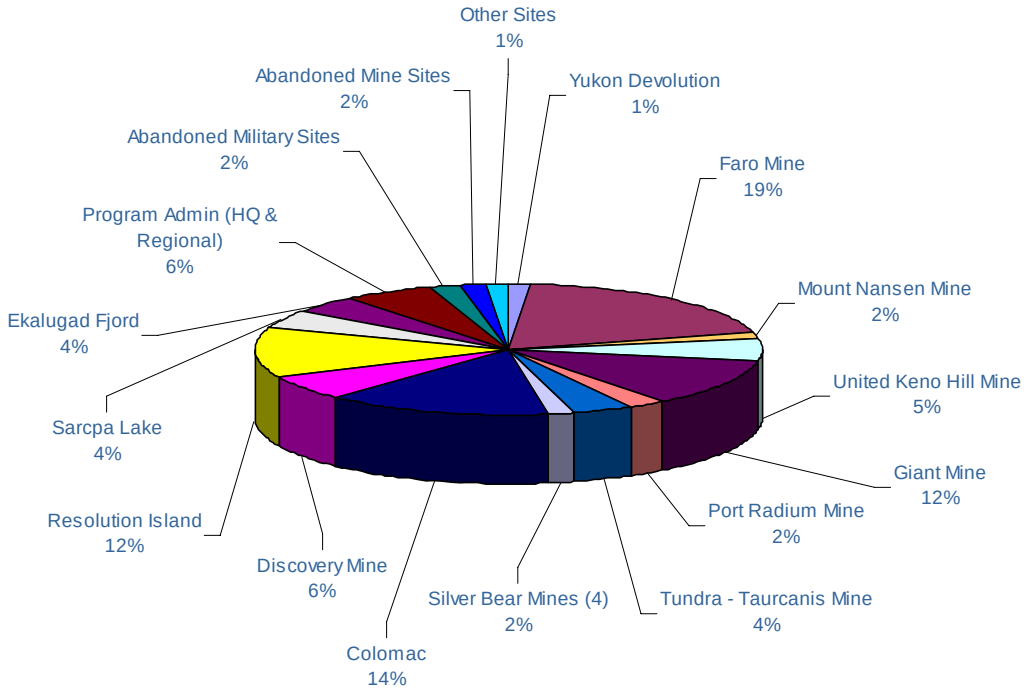
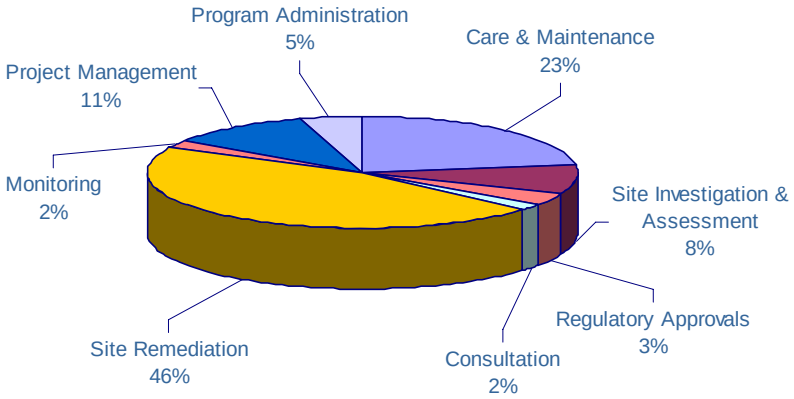


Figure 4: Program Expenditures by Site, 2005-2006



Projected costs for the program in 2006-2007 are expected to be $104 million (see **Figure 5**). The majority of these expenditures will be on remediation, which is projected to increase from 36% in 2005-2006 to 46% in 2006-2007. Expenditures on care and maintenance activities are expected to decrease from 31% in 2005-2006 to 23% in 2006-2007. Expenditures on the remaining activities will constitute a relatively stable proportion of the total expenditures.

Figure 5: Budget Forecast by Activity, 2006-2007



Contaminated Sites Liability

The liability associated with the contaminated sites in the North that the department is responsible for increased nine percent to $997 million in 2005-2006. Liability estimates are based on engineering and site inspection reports. Most of the liability is associated with 37 priority sites and continues to grow as more comprehensive assessments are undertaken and as the cost of operating in the North continues to increase. New guidance from the Treasury Board on accounting for liabilities has also helped to clarify liability estimates. The quality of our estimates improved this year. Substantive liability estimates are considered to have higher reliability, and as of March 31, 2006, 30% of liabilities associated with 63 NCS classified sites were considered substantive.

Table 6: Liability by Region, 2001-2006

REGION	Estimated Cost of Assessment and Remediation					
	LIABILITY					
	2001-02	2002-03	2003-04	2004-05	2005-06	% Change 2001-06
Yukon	$226,851,400	$283,781,000	$323,386,000	$322,407,675	$386,520,128	70%
NWT	$341,730,000	$316,227,505	$321,720,643	$431,822,348	$461,698,801	35%
Nunavut	$154,653,000	$153,853,000	$158,840,110	$159,976,145	$148,876,718	-4%
TOTAL	**$723,234,400**	**$753,861,505**	**$803,946,753**	**$914,206,168**	**$997,095,647**	**38%**

From a regional perspective, liabilities have increased substantially in the Yukon (20%), to a smaller degree in NWT (7%), and have decreased in Nunavut (-7%). The large increases in the Yukon are associated with increased liability estimates for Faro and UKHM, and in NWT with Colomac and Silver Bear sites. Other sites in NWT recorded a reduction in liability estimates (e.g. Discovery) based on remediation work completed at the sites. Nunavut's liability decreased this fiscal year with a large reduction ($16.5 million in 2004-2005 to $3.3 million in 2005-2006) associated with the Resolution Island site. Other sites, such as Ekalugad Fiord, Simpson Lake and Roberts Bay Mine reported liability increases. **Table 6** identifies the estimated liability by region, and **Table 7** identifies the regional proportion of CSP's contaminated sites liability. Liability estimates have increased due to the improved quality of estimates resulting from more detailed assessments, as well as the increasing costs of labour, fuel and supplies.

Table 7: Regional Proportion of Liability, 2001-2006

REGION	Regional Proportion of Estimated Cost of Evaluation and Remediation				
	LIABILITY				
	2001-02	2002-03	2003-04	2004-05	2005-06
Yukon	31%	38%	40%	35%	39%
NWT	47%	42%	40%	47%	46%
Nunavut	21%	20%	20%	17%	15%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**

Note: Percentages may not add up due to rounding.

Social, Economic and Environmental Performance

Environment, Health and Safety[6]

Environment, health and safety are key concerns in the management of contaminated sites. The majority of sites are in remote locations on fragile Arctic landscapes. Potential confrontations with wildlife, challenging working conditions, and the presence of hazardous materials all pose health and safety risks. Special precautions must be taken to ensure that human health and the environment are protected as sites are remediated. A summary of 2005-2006 EH&S performance measures is discussed below.

[6] Nine out of 28 sites submitted EH&S performance data (five NWT, one Nunavut, three Yukon).

Safety Performance

The only lost-time accident reported for 2005-2006 was a slip-and-fall accident – medical evacuation was required due to the nature of the injury, but this was not as a medical emergency. A few near misses were also reported.

Incidents, Inspections and Audits

There were no known significant environment incidents reported in the program. A total of nine inspections were conducted at five sites, resulting in 22 non-compliances at two of these sites. Nineteen of these non-compliances were incurred by a single site through a series of three inspections conducted by the Worker's Compensation Board. Two safety audits were also performed at the same site, resulting in 20 non-compliances. Most issues were related to proper documentation, availability of safety plans, and employee training, and were addressed immediately.

Safety		2005-2006
Lost-time accidents (LTA)	Number	1
	Time lost (person-h)	15
Days since last LTA	(days)	528
Near misses	Number	3

Incidents, Inspections and Audits		2005-2006
Significant environment incidents	Number	-
	Volume spilled or released (L)	-
Outstanding compliance issues[1]	Number	1
Inspections	Number performed	9
	Number of non-compliances	22
Audits	Number performed	2
	Number of non-compliances	20

[1] Violation notices by regulatory agencies

- Data not available at this time.

Training

First aid and wildlife safety are the most commonly provided types of health and safety (H&S) training, with four sites providing a total of 382 hours of first aid training, and the same four sites providing 282 hours of wildlife safety training. Two sites provided 360 hours of EH&S policy and procedures awareness training. One site provided hazardous waste and emergency response (HAZWOPER), Workplace Hazardous Materials Information System (WHMIS), and fire response training. Resolution Island in Nunavut is one site that engaged in a lot of training. A total of 935 person days (22%) was dedicated to EH&S training in 2005-2006. Since the project began, in 1997, approximately 25% of time has been dedicated to training. Other training in the areas of electrician, plumber, carpentry, welding, heavy equipment operation, project management and finance were also provided to employees to further their job skills.

EH&S Training		2005-2006
Awareness training	EH&S policy and procedures (person-h)	360
H&S training	HAZWOPER (person-h)	440
	WHMIS (person-h)	120
	First Aid (person-h)	382
	Wildlife safety (person-h)	282
	Water safety (person-h)	-
	Fire response (person-h)	120
	Other (person-h)	8
Environmental training	Spills response (person-h)	-
	Other (person-h)	-
Other corrective actions	New procedures	-
	Other initiatives	-

- Data not available at this time.

Socio-Economic Performance[7]

CSP strives to provide local Aboriginal employment and workforce training, as well as to contribute to local economies via the procurement of local goods and services from Aboriginal and northern businesses. These efforts create positive social and economic impacts for people in nearby communities, strengthening local economies and fostering a growing workforce with new skills and competencies.

[7] Fifteen out of 28 sites submitted socio-economic performance data (nine NWT, three Nunavut, three Yukon).

Employment

Fifteen sites reported employing 375 people, with almost 75% from the North and over 40% Northern Aboriginals. At Resolution Island, 95% of project staff is Inuit.

Workforce Training

Six sites reported providing training to 93 employees – 86% of whom were Northerners and 85% of whom were Northern Aboriginals.

Colomac has entered into a partnership with the Tli Cho Government and the Mine Training Society to train up to 12 people to the apprenticeship level for heavy equipment operation and/or skilled mining trades. The Colomac Remediation Project will participate in the training program via an in-kind contribution for transportation, food and accommodation at the Colomac site for 12 apprentices and an adult educator. The program will last for four years, and the apprentices will gain two to three years experience at Colomac and complete their program of study at one of Tli Cho Logistics commercial sites.

Employment		2005-2006
Total employment	Number	375
	person-d	26,363
Northern employment (includes Aboriginal)	Number	276
	person-d	19,233
Northern Aboriginal[1] employment	Number	170
	person-d	15,954
Southern Aboriginal employment	Number	1
	person-d	215

[1] First Nation, Inuit and Métis

Workforce Training		2005-2006
Total training	Number of persons	93
	Duration (h)	1,579
Northern training	Number of persons	80
	Duration (h)	1,191
Northern Aboriginal training	Number of persons	79
	Duration (h)	8,241

Two of the Aboriginal people employed at Mount Nansen received on the job training to carry out a Terrestrial and Aquatic Effects Study – training included plant sampling and identification, GPS (Global Positioning System) and map interpretation. Two First Nations workers at Clinton Creek were trained as reclamation technicians.

Purchase of Goods and Services

Eleven sites reported doing business with a total of 134 Northern suppliers, 28 of which were Northern Aboriginal suppliers. The total value of business from Northern suppliers was over $31 million, 50% of which was from Northern Aboriginal suppliers. At Faro, over $7 million (70%) of the total expenditures were directed to Yukon businesses. Three Northern companies, one of which was a First Nation company, were contracted to do work at the Clinton Creek site. A First Nation company received two of six contracts with a value of $101,000. Giant Mine holds four contracts with Northern Aboriginal suppliers with a value of $6,347,005.

Purchase of Goods and Services		2005-2006
Northern suppliers (includes Aboriginal)	Number	134
	Value ($)	$31,325,773
Northern Aboriginal suppliers	Number	28
	Value ($)	$15,962,548

Aboriginal Employment at Colomac

Two major contracts underway at Colomac provide opportunities for Aboriginal employment. Tli Cho Logistics, a Dogrib Trustco company owned by the Tli Cho Government, is currently operating under a Care and Maintenance contract at the Colomac site. Tli Cho Logistics is required to adhere to the minimum 33% Aboriginal employment as required by the Procurement Strategy for Aboriginal Business, and has committed to an Aboriginal training program.

This work will create or maintain approximately 40 full time employees (FTE) positions, 50% of which will be held by Aboriginals in the North over the three-year contract period (http://nwt-tno.inac-ainc.gc.ca/pdf/contaminants/Colomac_NwsltrSum05.pdf)

Metrow Construction, a Hay River Metis Development Corporation, is performing a Major Civil Works contract. Metrow Construction has committed to a minimum Aboriginal employment level of greater than 51%, and has also committed to an on the job training program that will involve four Aboriginal people in blasting, surveying, and equipment operation.

Giant Mine and the Deton'Cho/Nuna Joint Venture

The Deton'Cho/Nuna joint venture was the successful bidder on the proposal to conduct ongoing care and maintenance at Giant Mine. Deton'Cho is the business arm of the local Yellowknife Dene First Nation, and Nuna is a partly Inuit-owned northern company. Deton'Cho/Nuna has proved a very capable contractor and has been able to cope with the many issues involved with the ongoing care and maintenance of this site.

This joint venture provides its employees with various training opportunities, such as:

- Safe work procedures for asbestos removal;
- In-service security training for security personnel; and
- Mine Rescue training for NWT Mine Rescue teams.

Resolution Island – Contributing to Nunavut

Since the Resolution Island Remediation project was initiated in 1997, an average of 70 workers have been employed for up to 13 weeks every summer. Of these workers, the project has been able to sustain an 85% Inuit employment rate. These employees have historically come from the nearby communities of Iqaluit, Kimmirut and Pangnirtung. This represents over $15 million worth of business opportunities in Nunavut, with an estimated 30 organizations directly benefiting from the project. The historically high turn over rate (50%) throughout this project has shown that the skills that have been acquired while working on site have been used at other projects and/or companies across Nunavut.

Stakeholder Consultation[8]

A Guiding Principle of the Contaminated Sites Management Policy is to promote Aboriginal and northern participation and partnership in the identification, assessment, decision-making and remediation risk management processes related to contaminated sites. This requires an organized approach for communication, as well as a clear understanding of requirements for project level consultations. CSP's commitment to keeping local stakeholders well informed and involved is entrenched in this guiding principle and is also reflected in formal legislative or land claim agreement (LCA) requirements.

Consultation Performance Measures		2005-2006
Community tours and meeting	Number	61
	Audience (number of persons)	377
Workshops	Number	6
	Audience (number of persons)	372
Site tours	Number	21
	Visitors (number of persons)	150
Media (TV, radio) events	Number	15
Press reports	Number	23

Fourteen sites reported holding a total of 61 community tours and meetings. Faro held 28 of these meetings, covering several different topics with various groups over the year. At Resolution Island, three community consultation sessions – in Iqaluit, Kimmirut and Pangnirtung – were held to provide an update on the status of the project and present the proposed schedule and employment opportunities for the 2005-2006 season.

[8] Fifteen out of 28 sites submitted stakeholder consultation performance data (nine NWT, three Nunavut, three Yukon).

Regional Reports

Northwest Territories

GIANT MINE

The Giant Mine Remediation Plan was completed in 2005-2006. The plan integrates the project description for the long-term management of the arsenic trioxide dust with the surface abandonment and reclamation plan. After a number of reviews by the Independent Peer Review Panel (IPRP)), the Government of the Northwest Territories (GNWT), the Department of Resources, Wildlife and Economic Development (RWED), the Department of Municipal and Community Affairs (MACA), and FCSAP expert departments (Environment Canada, Fisheries and Oceans and Health Canada), certain details of the Plan were modified and improved as necessary to take into account comments and recommendations and the resulting Giant Mine Remediation Plan was finalized. The completed Plan has undergone final review by GNWT, which has indicated agreement in principle with the plan.

In July 2005, the Deton'Cho/Nuna, an Aboriginal and Northern company joint venture contractor, assumed full responsibility for care and maintenance of the Giant Mine site, including security.

The GNWT and INAC have signed a Cooperation Agreement where both governments agreed to work together on the site's Remediation Plan, and to coordinate their efforts in all aspects of the environmental assessment proceedings.

Other activities conducted at the site in 2005-2006 include:

- Care and maintenance: Draft operation, maintenance and surveillance (OMS) manual, preparations to allow the lower levels of the mine to flood, and regular inspections of arsenic storage chamber bulkheads and other mine components.
- Consultation: Ongoing communication activities through the Giant Mine Community Alliance, a mine tour by Minister Dion on the same day he made the announcement on the annual funding for contaminated sites cleanup, and general information newsletters.
- Assessments: Draft report on the sediment surveys completed in Baker Creek as part of the engineering studies to assess long-term water treatment.
- Remediation: Approximately 30 above-ground storage tanks (ASTs) were drained and cleaned prior to demolition and recycling. The 'leave-it-in' remediation option, where the arsenic trioxide will be frozen in-situ, was selected and a remediation plan was finalized in January 2006.
- Monitoring: Ongoing water monitoring.

For more information on the Giant Mine Site, visit: http://nwt-tno.inac-ainc.gc.ca/giant/

NWT KEY PERFORMANCE MEASURES			2005-2006
FINANCIAL			
	Total Liability	$	$461,698,801
	Contingent Liability	$	$41,996,767
	Expenditures	$	$35,563,781
CLASSIFICATIONS			
	NCS 1	#	15
	NCS 2	#	10
	Risk Management/Monitoring	#	3
	Contingent Liabilities	#	15
ENVIRONMENT, HEALTH & SAFETY			
Safety			
	Lost-time Accidents (LTAs)	total	1
	LTA Time Lost (person-h)	person-h	15
	Days Since Last LTA	total	528
Incidents, Inspections and Audits			
	Inspections	# performed	5
		non-complianes	22
	Audits	# performed	2
		non-complianes	20
EHS Training			
	Awareness Training (EHS Policy & Procedures)	person-h	240
	HAZWOPER	person-h	
	WHMIS	person-h	
	First Aid	person-h	262
	Wildlife Safety	person-h	162
	Water Safety	person-h	
	Fire Response	person-h	
SOCIO-ECONOMIC			
Employment			
	Total employment	#	147
		person-d	18,662
	Northern employment (includes Aboriginal)	#	92
		person-d	14,175
	Northern Aboriginal employment	#	40
		person-d	9,941
	Southern Aboriginal employment	#	1
		person-d	215
Workforce Training			
	Total training	# persons	26
		Duration (h)	644
	Northern training	# persons	17
		Duration (h)	286
	Northern Aboriginal training	# persons	16
		Duration (h)	7,351
Purchase of Goods and Services			
	Northern suppliers (includes Aboriginal)	#	84
		$	$17,541,773
	Northern Aboriginal suppliers	#	26
		$	$14,702,548
CONSULTATION			
	Community tours and meeting	#	23
		Audience (#)	189
	Workshops	#	5
		Audience (#)	354
	Site tours	#	16
		Audience (#)	129

SILVER BEAR

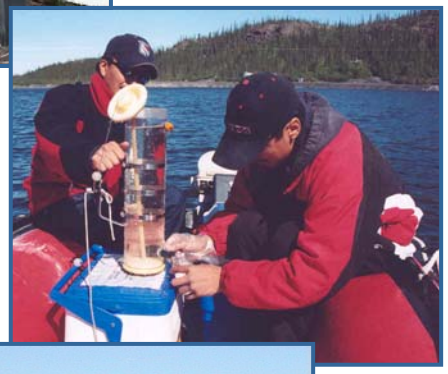
A number of assessments were conducted at Silver Bear Mines in 2005-2006 to define remediation requirements and develop options for remediation, including:

- Water quality sampling and identification and scoping of treatment options for contaminated water;
- Tailings solids sampling;
- Assessment of waste rock piles for acid rock drainage and metal leaching;
- Determination of geotechnical closure options for mine workings, landfills and dams;
- Completion of a hazardous waste inventory and measurements of hazardous and non-hazardous waste volumes;
- Classification and delineation of hydrocarbon and metal contaminated soils;
- Identification of borrow sources as well as the location for potential hazardous and non-hazardous landfills.

An environmental and human health risk assessment using the information gathered in the above studies is being conducted, and a remedial Action Plan for Silver Bear Mines will be completed in 2006-2007.

Remediation and monitoring activities conducted in 2005-2006 include the removal of PCBs and chemicals from the site, sampling and characterization of over 1000 barrels of waste oils and fuels, aquatic studies to determine baseline conditions and site risks, and ongoing water monitoring.

Twice a year for the past four years, the Project Manager of the Silver Bear project has met with the Leadership of Deline to discuss the work that has been completed on site and the plans for the upcoming season. Additionally, a community liaison, working in Deline, has been hired to keep the community informed about the Silver Bear project. The community of Gameti has also been visited to present the results of the work conducted at Silver Bear to the community and leadership.



COLOMAC

This past year saw significant progress being made at the Colomac Mine site, a former gold mine located 222 kilometres northwest of Yellowknife. Following the approval of the Colomac Remediation Plan and the new water license in 2004-2005, the Mackenzie Valley Land and Water Board approved the final design reports for the major civil works in January 2006. In addition, an Environment, Health and Safety Management System has been approved and implemented, and is expected to be complete during the second quarter of 2006-2007.

Care and maintenance at Colomac transitioned from a contribution agreement funding system to a competitive contract. This transition created some slip in the 2005-2006 work schedule as staffing levels and task authorization procedures were worked out. However, the overall remediation schedule is still on track and remediation is expected to be completed by 2010, followed by ongoing monitoring at the site.

The Colomac Mine is situated within traditional Tli Cho lands. Two Elders tours were conducted in 2005-2006, and the Tli Cho were instrumental in identifying ways in which caribou and other wildlife interact with the land. Some suggestions by Elders significantly influenced the remediation options for the site, which in some cases resulted in lower remediation costs. Examples include:

- The tailings containment area was cordoned off with a fence to protect the Bathurst caribou.
- With advice from the Elders, the use of natural barriers (forested areas and lakes) is sufficient to obstruct caribou migration through the open pit areas. The existing berms around the open pits, with minor upgrades, would protect the caribou (and humans).
- Elders helped assess and rank the level of risk associated with the onsite quarries to determine which quarries would require remediation.
- Waste rock piles extend onto traditional caribou migration paths. Rather than relocating the rock, the Elders recommended that alternative paths be cleared through the bush.

A number of remediation and monitoring activities also took place in 2005-2006, including:

- Clearing migration pathways around waste rock piles;
- Completion of the Land Treatment Unit (LTU), which was operated until early October 2005 to bioremediate hydrocarbon-contaminated soil excavated from the fuel tank farm area;
- Backhaul of hazardous materials generated and/or segregated onsite;
- Routine water sampling requirements under the surveillance network program (SNP) and enhanced natural remediation (ENR), as well as a baseline conditions study of the discharge environment; and
- Initiation of the dust monitoring program.

Yukon

UNITED KENO HILL MINE (UKHM)

Silver and lead deposits were first discovered in 1903 at the site of the United Keno Hill Mine (UKHM), about 350 km north of Whitehorse, Yukon. The mine operated until 1989, when it closed due to low silver prices and high operating costs. A number of underground workings discharge water that is high in zinc and other metals. These waters need to be treated prior to release to the environment. Conventional lime treatment is carried out on a year round basis at four adits as well as in the tailings impoundment during spring freshet.

In April 2004, the Government of Yukon and INAC put UKHM into receivership. In 2005-2006, the courts approved the sale of UKHM, and the final sale is expected to occur in 2007. The purchaser initiated a baseline environmental study in September 2005 as part of the purchase and sales agreement, and will have to conduct site assessments that will aid in the closure plan as part of its final closure plan obligations. Site remediation under the Final Closure Plan will take place in 2010-2011.

Care and maintenance activities are ongoing at a large tailings impoundment containing approximately five million tonnes of zinc bearing tailings. Remediation activities undertaken in 2005-2006 include the removal and disposal of all PCBs and hazardous chemicals, power-line remediation (removal of abandoned poles and wires), and addressing safety issues. Water treatment and monitoring are also ongoing.

YUKON KEY PERFORMANCE MEASURES			2005-2006
FINANCIAL			
	Total Liability	$	$386,520,128
	Contingent Liability	$	$580,440,157
	Expenditures	$	$23,632,934
CLASSIFICATIONS			
	NCS 1	#	8
	NCS 2	#	1
	Risk Management/Monitoring	#	4
	Contingent Liabilities	#	1
ENVIRONMENT, HEALTH & SAFETY			
Safety			
	Lost-time Accidents (LTAs)	total	
	LTA Time Lost (person-h)	person-h	
	Days Since Last LTA	total	
Incidents, Inspections and Audits			
	Inspections	# performed	4
		non-complianes	
	Audits	# performed	
		non-complianes	
EHS Training			
	Awareness Training (EHS Policy & Procedures)	person-h	
	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
		person-d	1,038
	Northern employment (includes Aboriginal)	#	124
		person-d	1,038
	Northern Aboriginal employment	#	40
		person-d	
	Southern Aboriginal employment	#	
		person-d	
Workforce Training			
	Total training	# persons	5
		Duration (h)	
	Northern training	# persons	3
		Duration (h)	
	Northern Aboriginal training	# persons	4
		Duration (h)	
Purchase of Goods and Services			
	Northern suppliers (includes Aboriginal)	#	20
		$	$11,803,000
	Northern Aboriginal suppliers	#	2
		$	$1,260,000
CONSULTATION			
	Community tours and meeting	#	33
		Audience (#)	
	Workshops	#	
		Audience (#)	
	Site tours	#	2
		Audience (#)	

Nunavut

RESOLUTION ISLAND

As of March 2006, the majority of the remediation activities have been completed on Resolution Island, located at the southeastern tip of Baffin Island. Over 5,000 m^3 of soil contaminated with PCB's over 50 parts per million has been excavated, containerized, shipped and successfully destroyed, and approximately 10,000 m^3 of "Tier II" contaminated soil (PCB levels of 5-50 ppm) have been excavated and placed within the newly constructed Tier II landfill. In addition, over 5,000 m^3 of "Tier I" soil (PCB levels of 1-5 ppm) have also been excavated and placed as intermediate fill within the Tier II landfill. Close to 1,000 m^3 of soil contaminated with hydrocarbons has been successfully remediated on-site through the use of land farming. All existing dumps have been remediated as per the INAC abandoned military sites remediation protocol, and numerous buildings, hazardous and non-hazardous waste have been managed and removed from exposure to the arctic ecosystem.

The remaining work consists of the demolition of the camp facilities and demobilization of all equipment from the site. It is anticipated that these activities will occur in July and August 2006. Following the demobilization of the remaining equipment, remediation of the site will be completed and the 25-Year Long-Term Monitoring Plan will be implemented.

NUNAVUT KEY PERFORMANCE MEASURES			2005-2006
FINANCIAL			
	Total Liability	$	$148,876,718
	Contingent Liability	$	
	Expenditures	$	$19,613,301
CLASSIFICATIONS			
	NCS 1	#	21
	NCS 2	#	8
	Risk Management/Monitoring	#	2
	Contingent Liabilities	#	
ENVIRONMENT, HEALTH & SAFETY			
Safety			
	Lost-time Accidents (LTAs)	total	
	LTA Time Lost (person-h)	person-h	
	Days Since Last LTA	total	
Incidents, Inspections and Audits			
	Inspections	# performed	
		non-complianes	
	Audits	# performed	
		non-complianes	
EHS Training			
	Awareness Training (EHS Policy & Procedures)	person-h	120
	HAZWOPER	person-h	440
	WHMIS	person-h	120
	First Aid	person-h	120
	Wildlife Safety	person-h	120
	Water Safety	person-h	
	Fire Response	person-h	120
SOCIO-ECONOMIC			
Employment			
	Total employment	#	104
		person-d	6,663
	Northern employment (includes Aboriginal)	#	60
		person-d	4,020
	Northern Aboriginal employment	#	90
		person-d	6,013
	Southern Aboriginal employment	#	
		person-d	
Workforce Training			
	Total training	# persons	62
		Duration (h)	935
	Northern training	# persons	60
		Duration (h)	905
	Northern Aboriginal training	# persons	59
		Duration (h)	890
Purchase of Goods and Services			
	Northern suppliers (includes Aboriginal)	#	30
		$	$1,981,000
	Northern Aboriginal suppliers	#	
		$	
CONSULTATION			
	Community tours and meeting	#	5
		Audience (#)	188
	Workshops	#	1
		Audience (#)	18
	Site tours	#	3
		Audience (#)	21

Program Management

Since 2002, CSP has developed and implemented a comprehensive Contaminated Sites Program Management Framework that includes a Contaminated Sites Management Policy, a long-term plan, the NAP Contaminated Sites Results-based Management and Accountability Framework (RMAF), and a set of corporate procedures that document all program processes and procedures to promote the consistent application of the management framework across all regions. In addition to these program management tools, CSP produces annual work plans to further guide its program management activities. This subsection of the report outlines CSP's performance against the components of the 2005-2006 program management work plan listed below:

1. Project Management;
2. Risk Management;
3. Program Evaluation;
4. Environment, Health and Safety Program;
5. Technical Advisory Committee;
6. Procurement Strategy;
7. Modifications to Database and Other Web-based Tools;
8. Tenure Related to Contaminated sites;
9. Update Contaminated Sites Management Plan; and
10. Fall and Winter Program Meetings.

Project Management Tools

Corporate procedures for effectively managing the CSP are available to staff on the CSP intranet. To further enhance these procedures, CSP developed a draft project management guide to provide guidance and clarification for project managers on corporate requirements and the role of the project manager in the CSP. The guide is in draft format and will be finalized in 2006-2007. A detailed guidance document on project management best practices will be included as an annex to the guide. The guide is intended as a companion document to the CSP corporate procedures.

CSP reviewed its approach to project management and work planning, and as a result, improvements were made to the detailed work plan template, a key planning and reporting tool for contaminated sites project managers. Specific improvements made to the detailed work plan template include clearer guidance on its use and additional guidance on socio-economic requirements and reporting. These improvements have led to better integration with other project management tools. CSP also developed a draft procedure for the development and submissions of the detailed work plan and associated project-reporting requirements, including a draft quarterly reporting template.

Headquarters provided support to NWT and Yukon regions in rolling out the new work planning and reporting procedures. Additional project management training will be provided in 2006-2007 at the summer project managers' meeting.

Revisions to the INAC corporate procedures manual, which is posted on the INAC intranet site, were initiated at the end of 2005-2006. Revisions included updates to certain procedures, such as risk management, as well as new procedures, such as project review and approval. The revisions will be finalized and implemented on the intranet site in 2006-2007.

Risk Management

A new risk management procedure was implemented across the program in 2004-2005, and was updated in 2005-2006 to reflect experience in the first round of applications. The objectives of the risk management procedure 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.

Program Evaluation

An evaluation plan and framework was developed in 2005-2006 describing the steps required to complete a formative evaluation of the INAC Contaminated Sites Program and the implementation of the CSP Management Framework. The evaluation will be conducted in 2006-2007, and will assess and determine INAC's progress in implementing the 2002 Contaminated Sites Management Policy, and the degree to which the department has established the necessary structures and procedures to eventually achieve the objectives and expected results associated with the program. An independent contractor has been selected to undertake the evaluation and results are expected in March 2007.

Environment, Health & Safety Program

Implementation of the risk management procedure and subsequent discussions in the risk management workshops identified health and safety of INAC employees, contractors and members of the public as one of the risks facing the program. At the June 2005 Program Meeting, a decision was made to conduct a high-level occupational heath and safety management system audit against Occupational Health and Safety Assessment Series (OHSAS) 18001, an international occupational health and safety management system specification, to identify gaps in the current health and safety framework and to provide recommendations for addressing any gaps in program health and safety management.

The audit was conducted in August 2005 in two regions, with site visits to Colomac and Resolution Island. Based on recommendations arising from the audit, CSP decided to implement an EH&S management system. A first version of an EH&S policy statement was drafted and underwent a series of consultations. A draft EH&S Management System Manual and draft standard operational procedures were also created and were distributed internally for feedback. Full rollout of the EH&S Management System will occur in 2006-2007, including approval of the policy, completion of the manual and standard operating procedures, as well as EH&S training.

Technical Advisory Committee

In 2003-2004, CSP initiated a gap analysis of program and project management practices. A finding of the gap analysis was that a wide range of practices and standards for setting remediation objectives were being applied. In response to this finding, the gap analysis recommended that the program clarify requirements and develop and implement quality assurance/quality control and peer review procedures to encourage a more consistent approach to remediation standards and remediation approaches across the program.

At the June 2005 Program Meeting, Program and Project Managers agreed that a Technical Advisory Committee (TAC) of internal and external experts be established to advise on crosscutting program technical issues, and on project-specific issues as required.

The goals of the TAC are to:

- Ensure that a coherent and consistent technical approach to assessment and remediation is applied across sites and regions;
- Provide program-wide guidance on technical standards and principles, corporate policies related to technical and project management issues, and the Federal Contaminated Sites Action Plan requirements; and
- Provide transparency and clarity on the rationale for technical approaches applied at contaminated sites.

The Committee, which reports to the CSP Directors Committee, held it's first meeting in December 2005.

Procurement Strategy

CSP has been implementing a new procurement strategy in NWT and Nunavut over the last few years (the strategy is not applicable in the Yukon because of devolution). There is a single Comprehensive Land Claims Agreement in Nunavut, and there have been meetings between Nunavut Tunngavik Incorporated and INAC to work out an agreement on procurement.

Workshops addressing procurement were held in Yellowknife in February and Ottawa in March 2006. The workshop in Yellowknife was an opportunity to introduce participants to procurement practices and opportunities for the remediation of federal contaminated sites in the NWT. The Ottawa workshop was held to resolve issues regarding procurement within settled land claim areas, and both NWT and Nunavut regions participated in this workshop, along with representatives from Treasury Board, Claims Implementation, Economic Development, Corporate Services, and PWGSC.

A draft procurement procedure and Desk Guide have also been developed. The Desk Guide is a companion document to the procurement procedure and identifies the major procurement decision points in developing a compliant and effective procurement strategy for CSP site project requirements, from the definition of the work requirements, through the competitive procurement process, to contract award and management.

Modifications to Database & Other Web-based Tools

Based on an analysis of new Treasury Board reporting requirements applicable to the program, physical adjustments were made to the Contaminated Sites Database. Approximately 40 new or redefined fields were added to the database and information was gathered to populate these fields, including information for existing contaminated sites, as well as sites in the CSP inventory that are suspected of contamination.

For those 23 CSP sites that are funded through the Federal Contaminated Sites Action Plan, updated information was entered into Environment Canada's Inter-departmental Exchange Application (IDEA) database, which is used to manage the FCSAP program. Information on new sites for which FCSAP funding will be requested was also entered into the IDEA database.

CSP also began improving the organization and presentation of corporate procedures on the CSP Intranet site in response to results of a questionnaire on how the corporate procedures are being used. The revised corporate procedures manual will be implemented in PDF format in 2006-2007.

Tenure Related to Contaminated Sites

The CSP Gap Analysis and the implementation of the Risk Management Procedure identified issues that have collectively come to be known as “tenure” issues. These issues include: abandoned sites with an absentee owner, shared liability sites, sites with an ongoing interest in mineral resources, and sites with infrastructure (e.g. shelters, runways, etc.) that are of interest to other parties.

At the June 2005 Program Meeting, Program and Project Managers identified tenure as a priority issue. It was agreed that Headquarters would prepare a discussion document on issues related to property, land and mineral tenure and water licensing at abandoned mines and contaminated sites in the north, and that Headquarters would convene a meeting to work with Regional Program Managers (and technical experts as required) to develop policies to address the issues identified in the discussion document. A discussion paper was prepared and a meeting is planned for 2006-2007.

Update Contaminated Sites Management Plan

The Contaminated Sites Management Plan was updated and submitted to Treasury Board in September 2005 as required. It outlines CSP’s approach for achieving program objectives over the next ten years, and outlines plans for an $850 million investment to address 45 sites, of which 32 will be remediated and 13 will be advanced to a stage of active remediation in the next ten years.

Program Meetings

CSP held two program meetings in June and December 2005, and a Director’s meeting in October 2005. These meetings are used as a forum to share information on progress and to make decisions on program direction.

FUTURE DIRECTIONS

In the past two years, with the increased funding made available through FCSAP, CSP has been improving the capacity of the organization to tackle the major challenge of remediating INAC's northern contaminated sites. Many of the organizational and capacity issues have been addressed and the group will continue to strive to achieve results for Canadians from this significant investment.

To further strengthen the Program's ability to deliver results, a number of processes and systems have been developed or improved and rolled out. Primary examples are: i) implementation of two committees (Directors and Technical Advisory) to set direction and coordinate CSP activities; ii) the project detailed work planning (including risk assessment), review, approval and reporting requirements; iii) corporate procedures and project management guide; iv) procurement procedures under Comprehensive Land Claims Agreements; and v) the Environment, Health and Safety management system. A third Committee (Operations) will be implemented and a guideline on cost estimation will be developed. This completes the development of the CSP management system and priority over the next year or two will shift to continual improvement as lessons are learned through use and practice.

The Contaminated Sites Management Plan and detailed work plans for priority sites continue to be annual and long-term guide posts for the program. The documents together lay out an aggressive program, summarized in part in **Figure 6**, amounting to about $100 million per year. During the coming five years, 15 large sites will be remediated and 8 other sites will move from assessment and planning to remediation. There is a lot of momentum behind these plans and, as long as funding continues, significant progress will be made in reducing risk and liabilities and providing benefits and opportunities to Aboriginals and other Northerners.

Figure 6: Planned Activities at Priority Sites

Site	2006-07	2007-08	2008-09	2009-10	2010-11
Faro	Assessment	Regulatory Approvals	Regulatory Approvals	Remediation	Remediation
Mount Nansen	Assessment	Regulatory Approvals	Regulatory Approvals	Remediation	Remediation
UKHM	Assessment	Regulatory Approvals	Regulatory Approvals	Regulatory Approvals	Remediation
Clinton Creek	Assessment	Assessment	Regulatory Approvals	Regulatory Approvals	Remediation
Discovery	Remediation	Monitoring	Monitoring	Monitoring	Monitoring
Colomac	Remediation	Remediation	Remediation	Monitoring	Monitoring
Port Radium	Regulatory Approvals	Remediation	Monitoring	Monitoring	Monitoring
Silver Bear	Regulatory Approvals	Remediation	Remediation	Monitoring	Monitoring
Atkinson Point	Regulatory Approvals	Remediation	Remediation	Monitoring	Monitoring
Tundra	Regulatory Approvals	Remediation	Remediation	Remediation	Monitoring
Giant	Regulatory Approvals	Regulatory Approvals	Regulatory Approvals	Remediation	Remediation
Johnson Point	Assessment	Regulatory Approvals	Remediation	Remediation	Monitoring
El Bonanza	Assessment	Regulatory Approvals	Regulatory Approvals	Remediation	Remediation
Contact Lake	Assessment	Assessment	Regulatory Approvals	Regulatory Approvals	Remediation
Indore and Hottah	Assessment	Assessment	Regulatory Approvals	Regulatory Approvals	Remediation
Axe Point	Regulatory Approvals	Remediation	Remediation	Monitoring	Monitoring
Resolution Island	Remediation	Monitoring	Monitoring	Monitoring	Monitoring
Radio Island	Remediation				
Ekalugad Fjord	Remediation	Remediation	Remediation	Monitoring	Monitoring
Sarcpa Lake	Remediation	Remediation	Remediation	Monitoring	Monitoring
Simpson Lake	Assessment	Regulatory Approvals	Remediation	Remediation	Remediation
Roberts Bay	Regulatory Approvals	Remediation	Remediation	Remediation	Monitoring
Bray Island	Assessment	Regulatory Approvals	Remediation	Remediation	Monitoring

LEGEND

	Assessment
	Regulatory Approvals
	Remediation
	Monitoring

CSP management attention is focused on two pressing challenges: i) management of the site inventory; and ii) management of the rising costs of site remediation. The site inventory contains known and suspected contaminated sites, waste sites and sites with physical hazards. The information on some of the sites is very incomplete. This situation will be remedied as a priority so that a more accurate and stable inventory can be established and used to develop longer-term plans and targets (e.g. date by which assessments will be completed) and to measure progress.

Remediation of northern sites is expensive at the best of times and the costs have been increasing due to competition for people and equipment from the oil and gas, and mining sectors, and unfavourable weather conditions which have cut short the ice road season and increased mobilization costs. Options for managing costs, particularly those associated with logistics, will be examined. For example, it may be possible to reduce costs by grouping several sites in a given geographical/land claim area and contracting the required services over several years. This and other delivery approaches will be considered.

There are a number of other initiatives at both the site and program level that we will be undertaking in 2006-2007 to ensure we effectively manage contaminated sites in the North that are under our responsibility.

Thank you for your interest in our program and if you have any questions about this report or require additional information, please contact Joanna Ankersmit, Director, 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
EH&S – Environment, Health and Safety
ENR – Enhanced Natural Remediation
FCSAP – Federal Contaminated Sites Action Plan
FTE – Full Time Employee
GNWT – Government of Northwest Territories
GPS – Global Positioning System
H&S – Health and Safety
HAZWOPER – Hazardous Waste Operations and Emergency Response
IDEA – Inter-departmental Exchange Application
INAC – Indian and Northern Affairs
IPRP – Independent Peer Review Panel
LCA – Land Claim Agreement
LTA – Lost Time Accidents
LTU – Land Treatment Unit
MACA – Department of Municipal Community Affairs
MC – Memorandum to Cabinet
NAP – Northern Affairs Program
NCS – National Classification System
NTI – Nunavut Tunngavik Incorporated
NWT – Northwest Territories
OHSAS – Occupational Health and Safety Assessment Series
OMS – Operation, Maintenance, and Surveillance
PCB – Polychlorinated Biphenyl
PDF – Portable Document Format
PWGSC – Public Works and Government Services
RMAF – Result-based Management and Accountability Framework
RWED – Department of Resources, Wildlife and Economic Development
SNP – Surveillance Network Program
TAC – Technical Advisory Committee
UKHM – United Keno Hill Mine
WHMIS – Workplace Hazardous Materials Information System

APPENDIX 2 – Expenditures by Site, 2002-2006

Site Name	2002-2003	2003-2004	2004-2005	2005-2006
NORTHWEST TERRITORIES				
Atkinson Point				$306,821
Axe Point		$32,500	$3,056	$396,477
Beaverlodge Lake		$8,142		
Bullmoose				$38,691
Colomac	$8,157,833	$16,534,508	$10,846,117	$11,561,704
Consolidated Beta Gama			$30,814	
Contact Lake	$4,820	$7,200		
Discovery	$398,247	$405,922	$3,647,465	$4,883,733
El Bonanza			$33,666	$1,500
Giant Mine	$5,751,500	$8,268,349	$9,696,288	$9,606,995
Hidden Lake Mine				$35,446
Horton River	$20,000	$41,000	$22,528	
Jackson Islands				$28,492
Jean Marie River	$28,155	$14,000		
Johnson Point				$258,064
Kittigazuit Bay	$800,000	$836,000	$763,563	$46,870
North Inca Mine				$48,324
Outpost Island				$42,446
Port Radium	$1,500,000	$2,126,000	$1,859,413	$1,860,255
Rayrock	$140,000	$105,000	$111,362	$63,291
Ruth Gold Mine				$39,819
Silver Bear	$103,086	$38,800	$1,130,342	$1,448,979
Sour Gas Wells				$47,715
Tundra	$71,868	$166,451	$1,775,778	$3,069,708
Monitoring				$125,876
NWT Admin			$6,617	$0
Sub-Total	**$16,975,509**	**$28,583,872**	**$29,927,009**	**$33,911,206**

APPENDIX 2 – Expenditures by Site, 2002-2006 (cont.)

Site Name	2002-2003	2003-2004	2004-2005	2005-2006
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
Faro	$13,124,750	$14,068,369	$14,244,758	$15,644,007
Hydrometric Stations		$113,000	$6,172	
Ketza River Mine			$8,415	
Mount Nansen	$1,665,000	$953,088	$1,331,686	$1,319,400
Peel River	$2,000	$14,000		
Snag	$3,500	$8,000	$2,615	
UKHM			$3,766,471	$4,281,261
Venus Tailings	$1,500	$6,000	$551	
*Yukon Devolution		$982,000	$536,367	$1,005,120
Yukon Admin			$1,059	$2,855
Sub-Total	**$15,301,250**	**$17,022,692**	**$21,045,133**	**$22,680,643**

APPENDIX 2 – Expenditures by Site, 2002-2006 (cont.)

Site Name	2002-2003	2003-2004	2004-2005	2005-2006
NUNAVUT				
Akpatok Island		$2,500		
BAF 3 - Beevort	$11,300			
Bernard Harbour	$22,280			
Bray Island				$11,500
Cape Christian	$27,900	$29,760		
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
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
Resolution Island	$4,015,000	$12,766,714	$10,220,563	$9,939,585
Roberts Bay		$75,000		$568,710
Ross Point	$22,280			
Sarcpa Lake	$2,000	$104,247	$1,303,185	$3,611,508
Simpson Lake				$396,717
Site Assessment**			$225,000	
Monitoring				$30,268
Nunavut Program Development		$32,566		
Sub-Total	**$4,229,020**	**$13,065,781**	**$13,251,407**	**$19,150,366**
HQ Admin				**$27,726**
Program Admin (HQ & Regional)	**$599,724**	**$885,843**	**$2,203,184**	**$4,594,167**
Total	**$37,105,503**	**$59,558,188**	**$66,426,733**	**$80,364,108**

APPENDIX 3 – Project Management Component Definitions

Care and Maintenance

Care and maintenance activities at the high-risk sites generally include:

- 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.