Contaminated Sites Management Working Group

ANNUAL REPORT 1997 - 1998 This document has been reviewed by the members of the federal interdepartmental Contaminated Sites Management Working Group (CSMWG), and approved for publication. Any reference to trade names or commercial products does not constitute recommendation or endorsement for use.

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Or visit our CSMWG web site at: www.publiservice.gc.ca/committees/fcems/english/consites.htm

Ce rapport est aussi disponible en français sous le titre: Rapport annuel 1997 - 1998 du Groupe de Travail sur la Gestion des Lieux Contaminés

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Contaminated sites likely represent the single most expensive environmental issue for the Canadian federal government. The Office of the Auditor General estimates the cost of dealing with these sites at over \$2 billion. In fact, the actual costs are unknown: we don't know how many contaminated sites there are; how many need to be cleaned up; nor, exactly how to clean them up. The costs therefore could easily be much more or much less than \$2 billion. As in many other countries, the legal, financial, environmental and health aspects of contaminated sites are not fully understood in Canada.

The Contaminated Sites Management Working Group is trying to resolve these issues by working together, so that collectively, we can do what is best for the environment, our departments and ultimately, all Canadians. This report represents a summary of our collaborations and the results of individual work in 1997-98.

We welcome your comments, criticisms and suggestions in helping us achieve our goals. Please feel free to contact me or Ginger Stones (Co-Chair) at our addresses below.

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1.0 INTRODUCTION

In April of 1995, the Government of Canada approved a coordinated approach to greening of government operations, building on the requirements of the Federal Stewardship initiative of 1992. Documents such as *A Guide to Green Government* and *Directions on Greening of Government Operations* committed federal organizations to address a number of specific issues in their sustainable development strategies (SDS) and environmental management systems (EMS). The federal contaminated lands issue is a priority under these initiatives, and it has been identified as one of the key issues facing the federal government today. In response to these commitments, the Contaminated Sites Management Working Group was created.

1.1 The Contaminated Sites Management Working Group

The Contaminated Sites Management Working Group (CSMWG) is an interdepartmental committee established in the summer of 1995, under the auspices of the Federal Committee on Environmental Management Systems (FCEMS). The CSMWG was created to develop a common federal approach to the management of contaminated sites under federal custody, as well as provide expert advice to the contaminated sites sub-committee of the Environmental Accountability Partnership (EAP) Steering Committee.

Historically, the CSMWG was co-chaired by Environment Canada and National Defence, with secretariat services being provided by the Hazardous Waste Branch of Environment Canada. During the 1997-98 fiscal year, Environment Canada (as a result of Program Review decisions) withdrew as Co-Chair of the CSMWG and withdrew all funding other than as a participating member department. Subsequently, the Working Group was chaired by Jack Cole of the Canadian Coast Guard (Fisheries and Oceans Canada), and a private consultant provided the secretariat support.

Activities of the Working Group are cost-shared by all participating departments, which in 1997-98 included the following:

Agriculture and Agri-Food Canada
Canadian Heritage/Parks Canada
Fisheries and Oceans/Canadian Coast Guard
Indian and Northern Affairs Canada
Public Works and Government Services Canada
Solicitor General/Royal Canadian Mounted Police
Environment Canada
Canada Mortgage and Housing Corporation

Department of Finance
National Defence
Transport Canada
Revenue Canada
Treasury Board Secretariat
Natural Resources Canada
Health Canada

Since its inception, the Working Group has identified needs and priorities for federal contaminated sites, and has worked towards the development of a consistent federal approach to the management of these sites.

Over the 1997-98 year, the Working Group served a vital function for all participating departments. It provided a forum for the exchange of information on contaminated sites and the opportunity to pool resources and experiences. In a cooperative and consensual manner, the CSMWG has advanced the knowledge of contaminated sites within the federal government.

In fiscal year 1997-98, the CSMWG continued its work in defining the scope of the federal problem and its understanding of the size and nature of federal contaminated sites inventory in terms of costs, liabilities and risks. As a result of its successes to date, the CSMWG is now recognized as a centre of expertise in the federal government. The Auditor General on Environment and Sustainable Development, Treasury Board and departmental deputy ministers see this group as the source of information and action on contaminated sites.

More information on the structure of the Working Group can be found in Appendix A.

1.2 Annual Reporting

Annual reporting first began in the 1996-97 fiscal year. The purpose of reporting was threefold: to provide an historical account of the activities of the CSMWG to senior managers throughout government responsible for environmental programs; to help in planning activities for the following year; and, to serve as a repository of information for new members who would be joining the CSMWG, either as a replacement for an existing member, or as a new departmental representative. A copy of the 1996-97 Annual Report is available on the CSMWG web site www.publiservice.gc.ca/committees/fcems/english/consites.htm.

This report is intended to serve as a summary of the Working Group's activities, initiatives and accomplishments over the course of 1997-98.

2.0 RESULTS AND ACTIVITIES

In 1997-98, the CSMWG continued to work cooperatively and was able to complete many of the initiatives begun in 1996-97 and start on many of the planned activities for 1998-99. This section provides detailed descriptions of the 1997-98 activities of the CSMWG.

2.1 Treasury Board's Proposed Policy on Accounting for Costs and Liabilities Related to Contaminated Sites

On February 2, 1998, the Treasury Board Secretariat issued a draft policy entitled, *Policy on Accounting for Costs and Liabilities Related to Contaminated Sites* (Appendix B). In the policy, departments are required to identify, quantify and report on environmental liabilities related to contaminated sites starting March 31, 1999, as part of the public accounts for 1998-99.

The objective of the policy is to ensure that costs and liabilities related to the management and restoration of contaminated sites, under the responsibility of the Government of Canada, are accounted for and reported in the financial statements of government.

The CSMWG prepared a companion document, which will provide guidance for federal managers of contaminated sites regarding the requirements of the policy. The guidance manual will be modified to reflect the final version of the accounting policy in 1998-99.

2.2 Federal Policy on Contaminated Sites

The Environmental Accountability Partnership (EAP) Sub-Committee on Contaminated Sites was tasked with the development of a general policy for the management of contaminated sites. Policy development was undertaken in conjunction with the Contaminated Sites Management Working Group. The final draft has been reviewed and endorsed by the Contaminated Sites Management Working Group and the EAP Sub-Committee on Contaminated Sites.

The proposed policy requires that "contaminated sites on federal lands shall be identified, classified, managed and recorded in a consistent manner" (Appendix C). It has been forwarded to Treasury Board with a recommendation for inclusion in the Real Property Management Manual, Chapter 1-8 Environment. In sending it to Treasury Board, the EAP was seeking endorsement for use across the federal government.

2.3 Federal Framework on Contaminated Sites

A Contaminated Sites Management Framework is being developed to outline a consistent approach to the management of contaminated sites under federal custody. A sub-committee of the Contaminated Sites Management Working Group has been established to develop the Framework. The subcommittee is chaired by Transport Canada and comprises Parks Canada (Canadian Heritage), Indian and Northern Affairs Canada, Environment Canada and Public Works and Government Services Canada.

The Framework will explain how to implement the proposed federal policy by following a standardized method for addressing a contaminated site. A number of supporting tools have been developed for incorporation in the Framework to assist those responsible for contaminated sites. To date, an outline of the Framework has been developed and is expected to be finalized during the fiscal year 1998/99.

2.4 Outreach and Education

During 1997-98, the Contaminated Sites Management Working Group took several opportunities to share its information with other members of the federal government and the private sector. In addition, each department was provided copies of the CSMWG publications for dissemination throughout their organizations.

The following is a description of the outreach activities of the CSMWG for 1997-98.

Web Site

The CSMWG created a web site, as a cost-effective means to share information. It will house the numerous publications on contaminated sites, the CSMWG minutes and all reports of the Working Group. The CSMWG web site will be linked to the FCEMS site and will contain links to other related sites. Given the volume of information, the number of publications on contaminated sites and the need to be informed of changes and solutions in managing contaminated sites, the web site will be continually updated.

Glossary for Contaminated Sites

CSMWG is in the process of finalizing a glossary of technical terms related to the identification, assessment, remediation and monitoring of contaminated sites. The glossary will be a valuable reference tool for property managers and others who deal with contaminated sites. The first draft of the glossary is being reviewed and the final product will be released in 1998-99.

Workshops, Conferences and Seminars

At the 1997 Federal Real Property Conference in Ottawa, a workshop was held on the activities of the CSMWG. The session, which was moderated by Jack Cole of the Canadian Coast Guard, provided staff directly involved with management of federal contaminated properties with exposure to contaminated sites issues and members of the Working Group. Short presentations were made on the publications and workshops developed in 1996-97, the proposed EAP *Federal Policy on Contaminated Sites* and one department's approach to site management using the existing federal tools.

At the February 1998 Environmental Issues Workshop and Trade Show, sponsored by Environment Canada, a short presentation was made highlighting the pollution prevention manual entitled *Preventing Site Contamination at Federal Facilities: A Guidance Manual* developed by the CSMWG. This presentation provided the CSMWG the opportunity to showcase their pollution prevention initiatives to federal government employees and individuals from the private sector involved in implementing environmental management systems and preparing sustainable development strategies.

 House of Commons Standing Committee on Environment and Sustainable Development

On February 17, 1998, the House of Commons Standing Committee on Environment and Sustainable Development convened to discuss federal contaminated sites. The Committee heard from the Commissioner of Environment and Sustainable Development, Treasury Board, Public Works and Government Services Canada, Environment Canada and the Society to Defeat Pollution.

Subsequent to the meeting, the Chair of the CSMWG sent a letter to the Chair of the Standing Committee in an attempt to clarify various points raised in the meeting. The letter also suggested that a central fund for clean up be created and highlighted the need for a single approach for risk assessment of contaminated sites. A copy of the letter can be found in Appendix D.

2.5 Departmental Progress Reports

In addition to their involvement in the CSMWG, federal departments continued to make progress on contaminated sites in their custody during the fiscal year 1997-98. A summary of these advancements can be found in Appendix E.

3.0 UPDATE ON 1996-97 CONCLUSIONS

The 1996-97 Annual Report contained a number of conclusions. This section covers the conclusions and provides a brief update on the progress made in addressing the statements.

1996-97 Conclusion: There is a need for a government policy on the management of federal contaminated sites, including a need for the consistent recording and long-term tracking of information related to contaminated sites.

Comment: A policy has been drafted and forwarded to Treasury Board for inclusion in the *Real Property Management Manual*.

1996-97 Conclusion: The CSMWG has put forward a definition and a recording template that should be formally endorsed by the Environmental Accountability Partnership Steering Committee (EAP) and implemented by all custodial departments.

Comment: The EAP has endorsed the definition of contaminated sites and use of the template. See Appendix B.

1996-97 Conclusion: There is a need for legal clarification on federal liability for contamination at former federal sites (ie. those sites for which ownership has been transferred to a province or the private sector <u>prior</u> to the coming into force of the Treasury Board Real Property Manual Chapter 1-8, Environment).

Comment: This remains an outstanding issue. The challenge is that each site is unique and a single set of principles will not always apply.

1996-97 Conclusion: There is a need for full participation by Justice Canada and Health Canada.

Comment: Health Canada is now a full and active member of the CSMWG. Justice Canada has been participating on a part-time basis, and is expected to participate in the legal workshops planned for 1998-99.

1996-97 Conclusion: There is a need for clarification of the policy requirements related to acquisition and disposal, as stated in Chapter 1-8 of the Treasury Board Manual on Real Property.

Comment: This is an outstanding issue.

1996-97 Conclusion: There is a need for Justice Canada to provide more guidance on "due diligence".

Comment: A federal workshop is being organized for fiscal year 1998-99 and lawyers from Justice will be participating.

1996-97 Conclusion: The EAP should endorse the use of *Preventing Site* Contamination at Federal Facilities: A Guidance Manual and Site Remediation Technologies: A Reference Manual.

Comment: These publications have been endorsed by the EAP.

1996-97 Conclusion: There is a need for Health Canada to complete the document on human health risk assessment at contaminated sites.

Comment: Work has begun on the document and is expected to be completed in 1998-99.

1996-97 Conclusion: There is a need for Treasury Board to develop and promulgate a policy on the accounting for environmental liabilities.

Comment: Treasury Board has prepared a draft *Policy on Accounting for Costs and Liabilities Related to Contaminated Sites.*

1996-97 Conclusion: There is a need for continued action on the management of federal contaminated sites and the CSMWG should continue to undertake its work program in a cost-shared manner.

Comment: This is an ongoing objective of the CSMWG and work has proceeded accordingly, with a commitment to continue its work into the 1998-99 fiscal year.

4.0 UPDATE ON 1996-97 NEXT STEPS

The following section provides a brief status report on the progress of the activities proposed for the 1997-98 fiscal year.

Proposed Activity: contribute towards the development of a framework and policy for the management of federal contaminated sites.

Update: a draft federal framework for contaminated sites has been developed and sent out for response; a policy has been prepared and forwarded to Treasury Board for inclusion in the *Real Property Management Manual*.

Proposed Activity: develop guidance on risk assessment and risk management.

Update: sought the input of the Canada Mortgage and Housing Corporation, who provided reports entitled *Environmental Site Assessment Interpretation Guidelines* and *Evaluation of Site-Specific Risk Assessment for Contaminated Land*.

Proposed Activity: provide guidance and disseminate information on legal issues associated with contaminated sites, with an emphasis on 'due diligence'.

Update: continued to provide information on privately offered conferences and workshops, and initial planning for legal issues workshop for the federal house was completed and an event planned for May 1998.

Proposed Activity: support the development of a federal policy on the accounting of environmental liabilities.

Update: the *Policy on Accounting for Costs and Liabilities Related to Contaminated Sites* has been drafted and a supporting guidance document has also been prepared.

Proposed Activity: facilitate information sharing on remediation technologies and support the demonstration of innovative technologies on federal sites.

Update: many presentations have been made to the Working Group this year, including one by the soon to be privatized Emergencies Engineering Division of Environment Canada, who specialize in site assessment and remediation. A series of demonstrations is planned for 1998-99.

Proposed Activity: develop a glossary of terminology relevant to contaminated site management in order to improve clarity and consistency.

Update: a draft glossary, some 30 pages long, has been prepared and is currently being reviewed by the Working Group.

5.0 PROPOSED ACTIVITIES FOR 1998-99

This section details the proposed activities for 1998-99.

(1) Complete the work started last year on the federal government's *Contaminated Sites Management Framework* document.

Once the framework has been completed, the subcommittee will address how best to provide guidance on risk assessment and management. The subcommittee will consider previous work by Environment Canada and the forthcoming report being developed by Health Canada on risks to human health.

The Contaminated Sites Management Framework will provide direction to Site Managers on the 10 steps for addressing a contaminated site, sample statement of work and advice on risk assessment and management. The Working Group will solicit government-wide acceptance and promote its use, including a possible presentation at the Fall 1998 Real Property Management conference and CSMWG workshop.

(2) Provide guidance and disseminate information on legal issues associated with contaminated sites.

Proposed actions include holding a one-day legal workshop in the spring and another in the fall. The findings will be posted on the CSMWG's home page.

(3) Identify remediation technology information gap common to all members and develop a strategy to close the gap for both conventional and emerging approaches.

The committee will consider a demonstration site or sites for emerging remediation technologies, including funding from other partners such as the Alberta Research Council.

(4) Hold a federal contaminated sites workshop.

Potential agenda items include training on the *Contaminated Sites Management Framework*, a review of existing and emerging remediation technologies, risk management, legal issues, and departmental activities. Ideas include holding a workshop the same week as the Fall Real Property Management conference and retaining a professional conference planner.

(5) Complete the glossary and make it available on CSMWG's home page.

- (6) Develop, operate and promote the use of CSMWG's home page.
- (7) Retain the services of a technical and science advisor for the CSMWG.

Proposals will be requested to establish a technical and science advisor capability to respond to Working Group inquiries.

- (8) Complete the CSMWG 1998-99 Annual Report.
- (9) Continue to work with federal departments and central agencies in raising the profile and awareness of the contaminated sites issues and to develop a consistent and common approach to dealing with the issue.

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APPENDIX A

CONTAMINATED SITES MANAGEMENT WORKING GROUP

The Contaminated Sites Management Working Group (CSMWG) is an interdepartmental committee which provides expert advice to the Federal Committee on Environmental Management Systems (FCEMS) and the Environmental Accountability Partnership (EAP) Steering Committee. It was established to investigate and propose a common federal approach to the management of contaminated sites under federal custody.

Since its inception in the summer of 1995, the CSMWG has worked towards increasing its federal membership, defining its structure and determining the scope of the 'problem'. Through its activities, it has been able to complete an initial assessment of the current federal situation and identify key areas which need addressing.

Mandate

In supporting the FCEMS and the EAP in promoting Greening of Government, the CSMWG's mandate is to investigate, propose and develop a common federal approach for dealing with contaminated sites under federal custody.

Strategic Goal

The goal of the CSMWG is to promote and develop a consistent federal approach for the management of contaminated site issues which integrates sustainable development and pollution prevention principles, while meeting environmental regulations and protecting public health, safety and the environment.

Strategic Objectives

The CSMWG will strive to meet the following strategic objectives.

- 1. To establish a forum for discussion and sharing, evaluation and rationalization of the various existing processes, guidelines and policies.
- 2. To better define the scope of the federal problem and to contribute to the determination of the size and nature of the federal contaminated sites inventory, in terms of costs, liabilities and risks.
- 3. To demonstrate and promote due diligence in the management of contaminated sites.

- 4. To properly mitigate the potential risks to human health and the environment so as to relieve, to an acceptable level, public concern and liabilities to the government within a reasonable time frame and with the most effective use of affordable resources.
- 5. To develop and promote an overall management approach that will provide for the multi-year funding for the assessment and remediation of high-risk sites.
- 6. To develop proper risk management approaches considering technically, economically, socially and politically acceptable alternative actions tailored to respond to the specific probability and gravity of risks due to contamination or potential contamination.
- 7. To maintain, to the extent possible, the operational capacity of contaminated or suspected to be contaminated sites in order to disturb as little as possible the delivery of government services to Canadians and the cost to society as a whole.
- 8. To preserve the value of sites that are contaminated or suspected to be contaminated.

Specific Objectives

By meeting its strategic objectives, the CSMWG intends to promote a consistent federal approach to achieving the following specific objectives.

- 1. Identification/compilation of sites already known to be contaminated or suspected to be contaminated.
- 2. Assessment of sites suspected to be contaminated or sites that require further investigation to determine the means of remediation.
- 3. Remediation of contaminated sites in descending order of immediate risk to human health and the environment and legal compliance.
- 4. Identification and evaluation of operations that might be the source of further contamination and, once evaluated, modification of these operations where technically, operationally and economically feasible.
- 5. Establishment of federal funding to meet requirements for activities as sites as indicated in the priorities above.
- 6. Clarification of legal requirements.
- 7. Promotion of joint projects to share resources and knowledge processes and technologies.

Contaminated Sites Management Working Group for 1997-98 fiscal year

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Nancy Esther John Ricki Salim Kent Garry Leigh Mike Steven Svlvain Rhonda Mary-Ann Kate Ginger	Gagnon Hault Horricks Hurst Jam Jenkins Lynott Mazany McCormick Morgan Ouellet Preston Spicer Stefanuk Stones	Treasury Board Secretariat Revenue Health Canada Indian and Northern Affairs - NAP Fisheries & Oceans Environment RCMP Finance Treasury Board Secretariat Agriculture and Agri-Food Environment Canada (for C.Gaudet) Transport Public Works Government Services Heritage (Parks) National Defence	957-7063 952-4097 957-1924 994-7457 993-0008 994-6571 993-3184 992-4005 957-9678 759-6927 953-7919 990-0516 775-4349 994-3247 995-8850	957-2405 954-0503 952-7389 953-2590 954-5674 953-5004 993-9003 992-3648 952-9613 759-6857 953-0461 957-4260 775-4912 997-3380 992-9422
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APPENDIX B

TREASURY BOARD'S DRAFT POLICY ON ACCOUNTING FOR COSTS AND LIABILITIES RELATED TO CONTAMINATED SITES

EFFECTIVE DATE

This policy is effective for the fiscal year beginning April 1, 1998, and subsequent fiscal years.

POLICY OBJECTIVE

To ensure that all costs and liabilities related to management and restoration of environmentally contaminated sites under the responsibility of the Government of Canada are accounted for and reported in the financial statements of the government in the fiscal year in which environmental damage is incurred, or in the fiscal year that costs and liabilities are identified.

POLICY STATEMENT

It is the policy of the government to account for costs and liabilities related to the management and restoration of environmentally contaminated sites when contamination occurs if the government is obligated, or is likely to be obligated, to incur such costs:

- for reasons of public health and safety,
- to be in compliance with an act or regulation issued by a government (federal, provincial or municipal) in Canada or abroad, or
- due to contractual arrangements.

APPLICATION

This policy applies to all organizations considered to be departments within the meaning of Section 2 of the Financial Administration Act.

POLICY REQUIREMENTS

Costs are to be accounted for when the damaging event takes place and not when site management or restoration is undertaken. Should damage not be recognized when it is incurred, costs for such damage will be accounted for in the fiscal year when the damage is identified.

In respect of obligations for reasons of public health and safety, departments must report as liabilities costs related to contaminated sites assessed as Classes 1 and 2 under the classification system established by the Canadian Council of Ministers of the Environment (CCME) (see Definition of Contaminated Sites attached).

The government is "likely to be obligated" to incur site management and restoration costs if the probability of incurring these costs exceeds 50%. If it is unclear whether the government is obligated or the probability of incurring these costs is less than 50%, the costs should be disclosed as contingencies.

Departments should estimate costs using the most appropriate methods for their circumstances. Methods may include technical or engineering estimates, historical comparisons or other analytical tools. Present values should be used with the government's borrowing rate for a like term serving as the discount rate.

The recording of costs and liabilities under this policy will be undertaken centrally by the Receiver General. Costs will only be charged against appropriations at the time site management and restoration work is undertaken.

Site management and restoration costs which are desirable or which reflect the stated intentions of the government, but which are not obligations as defined in this policy statement, should only be recorded when site restoration work is undertaken. Departments will report site management and restoration costs and liabilities under this policy annually in accordance with instructions issued by the Receiver General for Canada.

MONITORING

Accounting for site management and restoration costs and liabilities will be reviewed by departmental internal audit groups on a regular basis.

REFERENCES

This policy is issued under the authority of the *Financial Administration Act*.

ENQUIRIES

Enquires concerning this policy should be directed to your departmental headquarters. For interpretations of this policy departmental headquarters should contact:

Treasury Board Secretariat
Deputy Comptroller General Branch
Financial, Contract and Asset Management Sector
Government Accounting Policy Division
Ottawa Ontario
K1A 0R5

Telephone: (613) 957-9678 or Facsimile: (613) 952-9613

Definitions of Contaminated Sites

The Canadian Council of the Ministers of the Environment (CCME) (1992) has developed a national classification system to provide a simple, consistent, and reliable basis for classifying sites according to their current and potential adverse impact on human health and the environment. The system provides a convenient basis for assessing the need for remediation at individual sites, and for establishing the relative priority for implementing remedial measures among the sites that have been classified.

Contaminated sites are placed into one of five classes, namely:

Class 1 – available information indicates that action is required to address existing concerns for public health and safety;

Class 2 – available information indicates that there is a high potential for adverse off-site impacts, although threat to human health and the environment (public haelth and safety) is generally not imminent. Action is likely required;

Class 3 – available information indicates that the site is not a high concern. Additional investigation may be carried out to confirm the classification and some degree of action may be required;

Class N - available information indicates that there is probably no significant environmental impact or human health threats, and there is likely no remedial action required; and

Class I – there is insufficient information to classify the site.

APPENDIX C

Recommended Policy on Contaminated Sites

As a responsible government and consistent with the recommendations of the office of the auditor general, an environmental policy is required to ensure that a consistent approach is adopted. "such a policy should define an organization's environmental objective. Responsibility for implementing the policy needs to be clearly defined - both administrative responsibilities and management reporting responsibilities. The policy needs to be supported by a practical, comprehensive set of common procedures to ensure that the condition of the lands in the portfolio is assessed in a consistent way."

The EAP sub-committee on contaminated sites proposed the following policy on contaminated site management:

Contaminated sites on federal lands shall be identified, classified, managed and recorded in a consistent manner.

Objectives:

- Provide a consistent federal approach to contaminated site management.
- Enable information across departments to be compiled and compared.
- Ensure that limited resources are directed to addressing high-risk sites by providing a consistent contaminated sites management framework.

This policy envisions the application of information gathering and decision-making processes which are similar across departments. Common terminology and processes will allow information to be compiled and compared across departments.

The policy recognizes the reality of fiscal constraint and the need for mechanisms to ensure that limited resources are allocated to the most significant issues. This is also an endorsement of risk management as a management tool in the environmental context.

A contaminated sites management framework is being developed for policy implementation. Policy implementation shall be the responsibility of each member department. Management reporting responsibilities shall be identified in departmental environmental management systems.

A number of supporting tools have been developed for incorporation into the contaminated sites management framework. These tools should be endorsed and promoted within federal departments. It is important to note that while the policy promotes consistency in process it does not demand consistency in departmental environmental priorities. Departmental goals and mandates vary across the government and it is imperative that these differences be recognized in a contaminated sites policy.

APPENDIX D

Letter to the Clerk of the House of Commons Standing Committee on Environment and Sustainable Development

Dear Mr. Knowles:

In response to the invitation from Gar Kundsen, acting chair of your committee, i am pleased to provide you with some information about the Federal Contaminated Sites Management Working Group (CSMWG). I also want to make some suggestions for your committee to consider.

You may recall that i attended the February 17, 1998 meeting of your committee. Our CSMWG was mentioned several times as an organization working actively to resolve a number of issues related to contaminated sites in the federal government. Our group was established in 1995 and is currently composed of representatives from some 15 federal departments and agencies. We fund our activities through financial contributions from our members. This year we have a \$135k budget. The overall objectives of our group can be summarized as follows: to investigate and develop a common consistent approach to dealing with federal contaminated sites.

I am attaching a copy of our annual report from 1996/97 to give you an overview of our work and our results so far.

In 1997/98 we are working on a number of projects including the following:

- 1. A proposed federal policy statement
- 2. A framework for dealing with contaminated sites
- 3. A seminar on the legal aspects of contaminated sites
- 4. A series of projects to demonstrate new remediation technologies

We plan to continue our activities into next year and perhaps beyond that.

While sitting through your February 17 meeting, i had several comments that i thought may be interest to you. Please allow me to elaborate.

Are departments doing much in this area?

Several departments are diligently directing significant resources to assessing and remediating their contaminated sites. For example the Department Of National Defence has budgeted some \$50m during this year to deal with contamination at several of its bases across Canada. Most other departments have similar, albeit smaller, programs.

Is it necessary to clean up all contaminated sites?

While the mental image of a contaminated site may not be a pretty one, it may not be necessary, or even desirable, to clean up each site, at least not to "pristine" condition. How can we say that? There are some sites which have no negative environmental effect. There are others where the risk involved in cleaning up the site may be higher that the risk of leaving it alone.

Is throwing money at the problem the best answer?

Almost everything we do in life, there are risks which we assume. The risk we take each time we ride in an automobile probably far outweigh the risk we may ever have from a contaminated site. Yet we readily accept that higher risk associated with the automobile ride. What is an acceptable level of risk for a contaminated site? This is something we intend to work on during next year. The risk may not warrant the huge expenditures associated with a complete clean up of all sites.

Has Environment Canada abdicated its role in this area?

Environment Canada has apparently taken decisions in response to program review to cut back on some of its activities. One of those led to a reduction of resources for this area. It certainly did leave a legacy of useful tools and information for other federal departments to carry on. Sure, we could all use more money to deal with contaminated sites but, we continue to make significant progress, even with this lower level of participation from Environment Canada.

I would also like to leave you with two suggestions for you to consider:

1. Establish a central fund to clean up the worst sites.

It doesn't seem right that there may be sites that, even though they are dangerous to human health and/or the environment, they are not being cleaned up or at least safely managed. This is one area where government-wide action is probably necessary. Candidate sites, which are found to meet some threshold level of danger, should be funded from a central source. Perhaps our CSMWG could manage such a fund.

2. Develop a common approach to risk assessment for all departments.

Our CSMWG is trying to come to terms with this issue but it may take long time to resolve it with our current level of resources. There are numerous technical, legal, and perhaps even moral issues associated with this issue. We could use a little financial help to accelerate our work here. You may find it worthwhile to hear from our CSMWG at one of your next meetings. I would be pleased to attend along with some members of our group. If you agree, please feel free to contact me at your convenience.

Jack T. Cole Chair, Contaminated Sites Management Working Group

APPENDIX E

Departmental Progress Reports

The following progress reports have been provided by participating federal departments in the Contaminated Sites Management Working Group (CSMWG). The progress reports are intended to discuss the progress achieved (status), provide management information, and a description of the departmental Environmental Management Systems (EMS)/Sustainable Development Strategy (SDS) linkages used to facilitate the creation of a consistent approach towards the management of federal contaminated sites.

AGRICULTURE AND AGRI-FOODS CANADA (AAFC)

Approach

All activities related to the management of AAFC contaminated sites are carried out by Environmental Engineers of the Asset Management and Capital Planning (AMCP) of the Corporate Services Branch (CSB). These activities consist of assessment, analysis and remediation of contaminated sites. To date all contaminated sites have been assessed using the CCME National Classification System for Contaminated Sites.

Progress Achieved/Status

In support of the National Contaminated Sites Reporting Program (NCSRP), AAFC have assessed all known waste disposal sites and underground storage tanks. To date all high risk sites have been remediated, other sites classified as low/medium risk will continue to be monitored. Funding has been allocated in the Department's long-term capital investment plan to address any unforseen environmental situations that may arise.

Management Information

All inventories of land holdings (acquisitions and disposals) and storage tanks (under and aboveground) are managed corporately by AMCP.

It is the intention to integrate this information as a component of the Departmental Environmental Management System (EMS).

EMS/SDS Linkages

AAFC is currently implementing its EMS in support of the Departmental Sustainable Development Strategy. The EMS project team will incorporate the management of contaminated sites as part of the Departmental EMS.

ENVIRONMENT CANADA (EC)

Approach

Environment Canada's site inventory identifies sites through a listing approach. Potentially contaminated sites, ranging from sites classified under the NCS through sites suspected of being contaminated due to past or present activities, as well as sites which have the potential of becoming contaminated due to present activities. Sites representative of broad categories such as weather stations, upper air stations, hydrometric stations etc. are selected for assessments. Results from the assessments are extrapolated and evaluated to determine the source and level of risk anticipated over the entire site inventory.

Progress Achieved/Status

Environment Canada has developed a contaminated sites remediation framework. A comprehensive site inventory has been completed. In the past year Phase I and Phase II Environmental Site Assessments (ESA) have taken place at Environment Canada sites across the country. Clean up was completed at two high priority sites. Remediation is ongoing at another four sites.

Management Information

Regular updates are provided to the Environment Management Board (EMB), chaired by the Deputy Minister and comprised of all RDGs and ADMs.

EMS/SDS Linkages

Environment Canada's EMS is organized around a set of priority environmental risk and opportunity areas. Contaminated sites is identified as one of these areas. A departmental working group has been set up to complete the planning and implementation of sound environmental management as it relates to contaminated sites by developing environmental objectives and targets; developing performance indicators, action plans and procedures to reach those targets; and measuring and reporting on results using the indicators selected.

FISHERIES AND OCEANS (DFO)

Approach

Fisheries and Oceans developed an environmental accountability framework in order to identify the gaps in existing procedures, systems and structures created as a result of the merger of Canadian Coast Guard with Fisheries and Oceans in 1995.

The objective of this accountability framework was to enable the Department to improve its overall environmental performance. It will further allow the Department to develop a standard approach to risk assessment on a Department-wide basis.

Progress Achieved/Status

The Department has prepared an Operational Greening Plan to continue the improvement of its state of environmental compliance.

The Departmental initiative to solarize seasonal buoys has reduced the risk of contamination with batteries.

Best practices have been developed for Base Operations, Small Craft Harbours and Ship Operations. Three pilot projects have been initiated -- a green base in Ontario and two green harbours in British Columbia -- with associated environmental management systems that could be extended to other bases and harbours for implementation.

The Department is implementing a national environmental management database that will track and monitor its environmental issues.

An inventory of our underground and aboveground storage tanks has been carried out and has been registered within the Department.

Much progress has been made since 1994 to reduce our water and energy consumption at the major laboratory facilities. Further efforts are being made through pilot projects in the Maritime Region with a view to extend the same initiatives in other Regions.

A departmental inventory of contaminated sites is being updated as Phase I Environmental Site Assessments are being conducted and documented for our properties. Where contamination is suspected, a Phase II Environmental Site Assessment is considered and implemented based on an evaluation of the potential risk associated with the site.

Management Information

The Departmental Executive Committee (DEC) approved the accountability framework model and directed the implementation of the decision by setting up a National Environmental Coordination Office in Corporate Services. Regional Environmental ffices have been established to ensure that the Department fulfills its overall environmental responsibilities.

EMS/SDS Linkages

A National Greening Government Operations Committee was formed in the Fall of 1996 to develop an action plan and to conduct a regulatory gap analysis. An analysis of over 20 key environmental issues identified the status and implication of out-of-compliance situations. Time lines have been developed to allow the Department to monitor the progress of closing these gaps.

Fisheries and Oceans' Sustainable Development Strategy and Action Plan was tabled in Parliament on December 10, 1997.

HEALTH CANADA (HC)

Approach

A series of environmental compliance reviews of Health Canada facilities was completed in the Summer of 1997. Information from these reviews, including information related to contaminated sites and aboveground and underground storage tanks, is held in the departmental environmental database maintained by the Corporate Services Branch.

Progress Achieved/Status

Health Canada is presently taking steps to assess the sites and storage tank systems identified as having potential for contamination, in order to develop a risk management strategy and a remediation schedule.

The Department is continuing work on the guidance document for human health risk assessment of contaminated sites. The first draft of the document is expected to be completed in June 1998.

Health Canada is now represented on the CSMWG.

Management Information

Senior managers of the Department's facilities management organization and the responsible branch have been briefed on the findings, and will be kept informed of the results of the sites and tank systems assessments.

EMS/SDS Linkages

In its SDS, HC included a commitment to incorporate existing sound environmental practices into a departmental environmental management system, which includes the management of underground and aboveground storage tanks. Within this context, the Department committed to identifying all contaminated sites and preparing a remediation plan by 2000-01.

INDIAN AND NORTHERN AFFAIRS CANADA INDIAN AND INUIT AFFAIRS PROGRAM (INAC/IIAP)

Approach

In 1997-1998 the IIAP continued with its activities under the four phased Environmental Issues Inventory and Remediation Plan (EIIRP), completing the majority of the Phase III site characteristics on all inhabited reserves across the country.

Progress Achieved/Status

To date, over 2,400 issues have been identified in the inventory. Of this total, funding for remedial activities has been allocated to some 296 issues on reserve. The Remediation Strategy and Remediation Plan (Phase IV) will be finalized to address the remaining remediation issues.

Community Prevention Training continued for participants from First Nation communities. Subject areas covered have included the management of petroleum products and equipment, fuel handling and storage, spills, hazardous waste and material management.

Management Information

One element of the EIIRP was the establishment of an automated, national database known as the Environmental Issues Inventory System (EIIS). The system, accessible both at the regional and headquarters level, captures baseline data in order to manage and track actions carried out to address an environmental issue.

Status reports on the EIIRP have been submitted to the Deputy Minister on an annual basis utilizing the data from the EIIS. A summary report, covering the life of the EIIRP beginning in 1992, has been completed and submitted to the Deputy Minister.

EMS/SDS Linkages

Contaminated sites will continue to be addressed in support of one of the Department's sustainable development objectives. Remedial action will be undertaken on priority issues identified through the EIIRP. In addition, funding and assistance from the department will continue to help First Nation communities in their development of Environmental Management Practices.

INDIAN AND NORTHERN AFFAIRS CANADA NORTHERN AFFAIRS PROGRAM (INAC/NAP)

Approach

The Northern Affairs Program (NAP) is using a risk assessment approach to address, as a priority, waste sites where there are significant risks to human health and safety, or where legal and land claim obligations exist. To meet its commitments and make the most efficient use of limited resources, the program will follow strict managerial and technical procedures within a ten-year, clean-up time frame. This time frame will also allow continuation of a successful approach to northern capacity building, involving northern people and businesses to the greatest extent possible, consistent with the Gathering Strength initiative.

Progress Achieved/Status

The waste clean-up program has inventoried, assessed or prioritzed more than 1,300 waste sites from exploration, mining and former Canadian and U.S. military operations. Approximately 500 of these sites have been cleaned up, and assessments indicate that of the remaining sites, approximately 70 need remediation because of physical or chemical hazards, and the remainder are either non-hazardous or require further work and more detailed assessment.

The costs for clean-up since 1991 have been approximately \$50 million. In the fiscal year 1997-98, approximately \$8.2 million was spent on site clean-up activities in the Yukon and NWT. These activities include clean up and remediation, monitoring, engineering, and risk assessment at about 25 sites, as well as initiatives such as inventory and data base development in support of the Waste Program.

EMS/SDS Linkages

The Waste Program will continue to be an integral part of Environmental Management System and Sustainable Development objectives.

NATIONAL DEFENCE (DND)

Approach

In fiscal year 1997-98, the Department of National Defence (DND) continued to forge ahead with the implementation of its "Contaminated Sites Remediation Framework". DND has identified the majority of its contaminated sites and is currently in the process of characterizing, remediating and/or risk managing these sites.

Progress Achieved/Status

Initial assessments have been conducted at 438 of the 568 suspected contaminated sites identified on DND property. Out of the 438 sites, soil and groundwater contamination in excess of the CCME remediation criteria has been confirmed at 238 sites. Detailed investigations are now underway to delineate the extent of contamination at these sites. As part of the site characterization process, all sites are classified in accordance with the CCME National Classification System for Contaminated Sites. A total of 101 priority 1 and 105 priority 2 sites have been identified on DND property.

In FY 1997-98, remediation and risk management projects were ongoing at 136 sites and many of these sites will take several years to complete.

Management Information

DND has developed a contaminated sites database to track the progress of contaminated site projects. The information is rolled up at National Defence Headquarters on an annual basis and is subsequently forwarded to Environment Canada. The information contained within the database assists personnel in making decisions, allocating resources, tracking progress, and briefing senior management.

EMS/SDS Linkages

In December 1997, DND tabled its Sustainable Development Strategy in Parliament. Effective contaminated site management has been identified as an integral part of this Strategy. DND has set the goal that it will remediate or risk manage all identified contaminated sites that pose a risk to the environment or human health by fiscal year 2001-02. In doing so, the Department will be allocating between \$10M and \$15M per year over the next four years to achieve this goal.

The DND/CF Environmental Management System is being developed in-house as a tool to achieve sustainable development. The goals, targets and objectives identified in the SDS will be dealt with according to the ISO 14000 model of an EMS and

implemented at all levels within the Department. All members and employees are expected to exercise due diligence towards achieving these goals.

NATURAL RESOURCES CANADA (NRCAN)

Approach

The Department maintains an environmental database which holds information on various items of potential environmental impacts, such as contaminated sites, storage tanks, and ODS equipment. Site assessments are carried out on an ongoing basis when they are identified as having potential for contamination or during property disposal.

Progress Achieved/Status

Monitoring activities were carried out in 1997 at the two sites remediated in 1996. One site, which has been identified as contaminated but does not require immediate action due to low risk, has not been dealt with.

Management Information

Management is aware of the clean-up cost of the remaining site. This cost will be reported to the Treasury Board as a contingent liability.

EMS/SDS Linkages

The Departmental Environmental Protection Policy, which is the basis of NRCan's Environmental Management System (EMS), commits the Department to conduct the assessment and rehabilitation of contaminated sites following a risk-based approach.

PARKS CANADA - CANADIAN HERITAGE (PC)

Canadian Heritage's Sustainable Development Strategy commits to demonstrate exemplary environmental management throughout Parks Canada's Operations. As part of this commitment, a target was established to implement the federal policy on contaminated sites management. Under the section *Actions*, it is further noted that Parks Canada will complete a national inventory of known or suspected contaminated sites by the end of March 1998 and classify according to risk and prepare actions for all contaminated sites within one year after identification.

There has been no new contaminated sites identified during 1997-98. Two sites were created as the result of traffic accidents and they were immediately remediated. Three suspicious sites were investigated as part of major construction projects and do not require further attention. Three orphan sites were remediated and are now in the monitoring stage. Parks Canada is working with other departments and its leaseholders to establish remediation/risk management objectives for three contaminated sites that are on its lands or in the future will be transferred to its responsibility.

A major assessment was completed at Bankhead in Banff National Park. The final phase of assessments at Lachine Canal are nearly finished, with findings to be published under the Canadian Environmental Assessment Act. Both of these sites have received inquiries from the media and concerned citizens.

Work is underway to develop a computerized registry to facilitate responses to the media, and to manage the issue of contaminated sites on a national basis.

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA (PWGSC)

Approach

PWGSC's approach in dealing with contaminated land under its custody has consisted of three basic steps: (1) identify potentially contaminated sites; (2) undertake site assessments to confirm and characterize contamination, and (3) manage risk by remediating sites in cases when contamination is considered to pose a danger to human health or to the environment, or managing sites in situ in other cases. As an alternative to remediation and in situ management, sites may be sold as they are, if they do not pose an immediate danger to health or to the environment.

Progress Achieved/Status

There are an estimated 223 PWGSC sites either known, suspected, or remediated of contamination. Of these, 16 have been completely remediated, 116 indicate that no further action is required based on Phase I or Phase II assessment results, and nine are being monitored. Forty-five sites still require a Phase I assessment, while 35 require or are undergoing remediation or further study. Two sites have been transferred out of PWGSC's inventory.

Management Information

To provide greater consistency and direction to the Department's management of contaminated sites, our departmental strategy is currently being updated to be consistent with the management framework prepared by the Contaminated Sites Management Working Group, as well as the policy drafted by the EAP Sub-committee on Contaminated Sites. The strategy will reflect the Department's contaminated site goals, as well as the targets which have been set for managing these sites.

EMS/SDS Linkages

Contaminated sites management is an integral part of the PWGSC Sustainable Development Strategy (SDS). In support of the goals set in the SDS, the Real Property Services Branch (custodial arm of the Department - RPS) has set two targets related to contaminated sites: (1) identify and prioritize contaminated sites, and prepare action plans by March 1999; (2) remediate and monitor contaminated sites as determined by these action plans. Through the implementation of the RPS Environmental Management System (EMS), programs to achieve these targets will be implemented and performance will be monitored against established indicators.

ROYAL CANADIAN MOUNTED POLICE (RCMP)

(Unedited version)

Approach

The RCMP during the fiscal year 97/98, has taken a more proactive approach in the ongoing development of it's program for the effective management of contaminated sites and the prevention of site contamination. This approach provides for the identification, by means of a national survey, of all Force owned sites which are contaminated or have the potential for contamination and is supplemented by, the development and distribution of best practices manuals to aid those responsible in the operation of the Force's facilities in preventing site contamination.

Progress Achieved/Status

There were twenty Force owned sites identified as contaminated and programmed for remedial action in fiscal year 97/98. All of the sites programmed were remediated successfully with the extent of contamination being minimal at nineteen sites with only one site requiring a more extensive effort to clean up.

Management Information

The effective management of contaminated sites is being accomplished through ongoing reporting and monitoring by regional property managers and is further supplemented by an annual national survey. As sites are identified they are reviewed and prioritized for programming in Regional/Divisional work plans and recording in the Force's central registry.

EMS/SDS Linkages

The effective management of contaminated sites is one of the priorities identified in the RCMP Sustainable Development Strategy (SDS) and will be one of the first areas to have performance measures developed that reflect the goals, targets and objectives as set out in the SDS. The RCMP Environmental Management System (EMS) is currently under development and when completed, will require due diligence and best practices, respective of the environment, be incorporated into all the Force's administrative and operational activities.

TRANSPORT CANADA (TC)

Approach

Transport Canada divestiture activities continue to leave the Department with a smaller and smaller portfolio of property to manage. To balance the demands of the divestiture programs with the need for a contaminated site inventory, the Department will focus its inventory efforts on the properties which will remain in its portfolio.

Transport Canada has endorsed the recommended Environmental Accountability Partnership (EAP) *Policy on Contaminated Sites* and is working towards its implementation through information dissemination, training and the development of appropriate tools for its application.

The Department continues to invest resources in the evaluation of suspected contaminated sites and mitigative actions are initiated where adverse environmental effects are identified.

Progress Achieved/Status

Due to the limitations in the original database developed for tracking TC contaminated sites, a more comprehensive user-friendly database was developed and distributed to Regional Offices for implementation. Modifications to the database may be needed to incorporate the requirements of the proposed Treasury Board policy for liability cost accounting, once the TB policy is finalized. Existing information should be transcribed into the database by the end of 1998.

Management Information

Regions will forward their database information to Headquarters on an annual basis. Reporting will correspond with the Departmental EMS reporting date. Data will be compiled into a national inventory and reported to the Real Property and Finance Divisions.

EMS/EDM Linkages

The Department's Sustainable Development Strategy (SDS) was developed and tabled in Parliament in December 1997. A component of the SDS is an Environmental Management System (EMS), which is currently being implemented at Headquarters and in Regional Offices. Contaminated sites management is one of the key components of the EMS.

Land Management

Transport Canada has committed to a specific target for the management of contaminated sites: identification and management of contamination -- target 100% of properties by 2003.