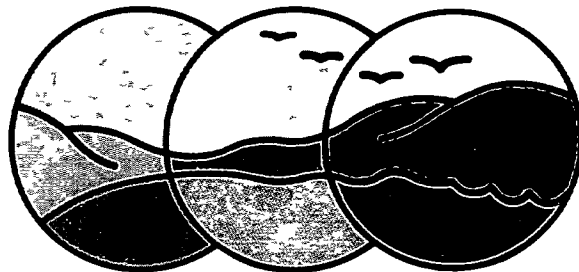


The National Contaminated Sites Remediation Program



1990~1991
ANNUAL REPORT

CCME

Canadian Council of Ministers
of the Environment Le Conseil canadien
des ministres de l'environnement

For additional copies of this report please write to

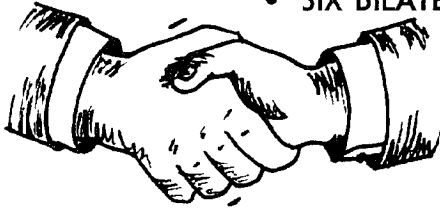
CCME Secretariat
326 Broadway Suite 400
Winnipeg Manitoba
R3C 0S5

CCME-EPC/CS14
ISBN 0 919074 78-2

RECYCLED PAPER 

YEAR ONE ACCOMPLISHMENTS

In October of 1989 the Canadian Council of Ministers of the Environment initiated a plan of action to deal with high-risk contaminated sites by establishing the National Contaminated Sites Remediation Program (NCSRP). In the first year of operation, the program has made progress in a number of areas:



- **SIX BILATERAL AGREEMENTS ESTABLISHED**

Six bilateral agreements that will result in the remediation of many high-risk sites have been signed between the Government of Canada and the Governments of British Columbia, Alberta, Ontario, Quebec, New Brunswick and Nova Scotia.

- **INTERGOVERNMENTAL COOPERATION IS HIGH**

The CCME's mission is to achieve agreement on a national approach for the NCSRP, and to encourage the full participation of all the federal, provincial and territorial governments. Early successes in negotiating bilateral agreements, and the development of a classification system and assessment criteria, contribute to the establishment of a positive identity for the program and demonstrate the high level of cooperation that exists under the program through the CCME.

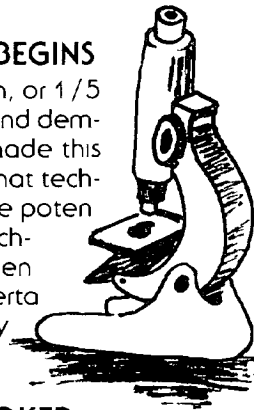
- **PROJECTED FUNDING LEVELS WILL BE ACHIEVED**

The program operates on a cost shared 5-year \$250 million budget based on matching funding by the federal government and the provincial/territorial governments. Of the total amount, \$200 million will be directed to the remediation of orphan high-risk contaminated sites, and the remaining \$50 million will be used to develop and demonstrate new remediation technologies.

The six bilateral agreements signed in the first year represent over \$200 million of the 5-year budget. Achieving a large commitment of funding early in the program improves the likelihood that these funds can be put to good use over the course of the program.

- **REMEDIATION TECHNOLOGY DEVELOPMENT BEGINS**

As stated above, the program calls for \$50 million, or 1/5 of total program funds, to go toward the development and demonstration of remediation technology. The CCME has made this commitment because it recognizes the important role that technology will play in site remediation in the future, and the potential benefits for marketing Canadian expertise and technologies. To that end, the agreements signed between Canada and the governments of British Columbia, Alberta and New Brunswick all involve remediation technology development and demonstration projects.



- **THE POLLUTER PAYS PRINCIPLE WILL BE INVOKED**

The CCME has clearly stated that application of the 'polluter pays' principle is paramount in the implementation of the NCSRP. To reinforce the 'polluter pays' principle, the federal/provincial

and territorial governments are reviewing their existing laws with the objective of defining liabilities. In 1990, the provinces of Ontario, Quebec and British Columbia all amended existing legislation to more effectively apply the polluter pays principle.

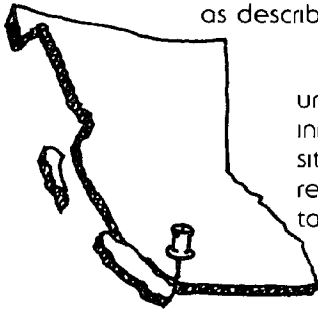
REPORT ON BILATERAL AGREEMENTS

As agreed by the CCME, \$250 million has been committed over the five year life of the program, beginning in 1990. The money is provided on a cost-shared basis, with half coming from the federal government, and half from the provinces and territories. Each province obtains its share of the federal resources on the basis of its population. The six bilateral agreements signed in the first year of the program are for levels of funding, indicated below.

British Columbia	\$23.40 million
Alberta	\$23.25 million
Ontario	\$91.25 million
Quebec	\$63.75 million
New Brunswick	\$ 6.75 million
Nova Scotia	\$ 8.50 million

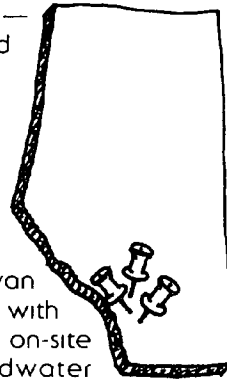
SITE-SPECIFIC ACTIVITIES

In the first year of the program, site remediation or technology demonstration activities have been initiated at ten sites as described below.



The initial project to be carried out under this agreement will focus on the demonstration of innovative technologies at the Pacific Place contaminated site located in downtown Vancouver. These technologies relate to the treatment of soil and groundwater contaminated by coal tars, trace metals, and volatile organic compounds caused by industrial dumping.

Under the Alberta agreement, work has begun at three orphan high-risk sites — Canada Creosote in Calgary, Peerless Wood Preservers in Cayley and Purity 99 in Hartell. Initial work at the Canada Creosote site will involve on-site containment, free product recovery and technology development for washing contaminated river-bed materials. At the Peerless site, contaminated soil will be excavated and sent to the Alberta Special Waste Management Facility in Swan Hills. At Hartell, a former refinery site with widespread hydrocarbon contamination, on-site containment accompanied by groundwater recovery and treatment will be pursued.

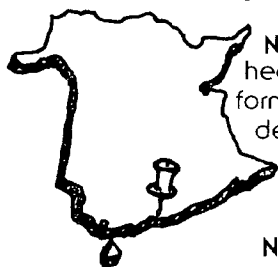


Two sites — one in Hagersville, and the other in Smithville — are the first to be addressed under the Canada/Ontario Agreement. Remediation at the Hagersville site will address the release of rubber.



by-products from a massive fire at this tire storage site. This may include the removal of contaminated surface soils, subsurface oil recovery, and the treatment of contaminated surface and groundwater. Remediation of the Smithville site, a former waste oil transfer station, will include the incineration of PCB liquids and PCB contaminated soils and sludges.

Quebec Two sites — one in Saint-Jean-sur-Richelieu and the other in Saint-Amable, are the first to be included under this agreement. Remediation at the Saint-Jean-sur-Richelieu site involves the excavation and secure landfilling of lead contaminated soil from residential properties located near a battery recycling facility formerly operated by Balmet Canada Inc. Remediation at Saint-Amable will initially focus on the treatment of groundwater contaminated as a result of a fire at this tire storage site.



New Brunswick Under this agreement, PCB and heavy metal contamination will be addressed at a former scrap yard in Saint John. Site remediation demonstration activity on this site will include soil washing techniques and bioslurry treatment technology.

Nova Scotia The first orphan high-risk contaminated site to undergo clean-up under the Canada-Nova Scotia bilateral agreement is a scrap yard site located at Five Island Lake near Halifax. Excavation and secure storage of lead and PCB contaminated soils will be the first order of business. Additional assessment is being carried out to determine whether groundwater contamination at the site is a problem which must also be addressed.



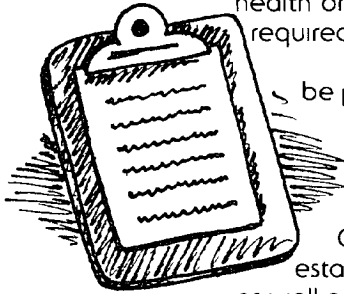
DEVELOPMENT OF A NATIONAL APPROACH

In the first year of the program, two activities have begun on behalf of the CCME in support of the development of a consistent national approach to deal with contaminated sites in Canada. These are the development of a National Site Classification System, and the development of National Environmental Quality Criteria.

In working towards a national approach, the CCME has benefited considerably from the evaluation of systems and criteria currently in use in various jurisdictions in Canada and in other countries. As well, consultations held between governments, industry and public interest groups in April and November of 1990 have contributed to ensuring that these systems and criteria are both workable and responsive to the needs and expectations of various sectors and interests in Canadian society.

The CCME National Classification System, due to be released in July 1991, will be used to designate contaminated

sites into three broad categories of concern, according to their level of risk. A site is designated high-risk when site contamination is such that it represents a real or imminent threat to human health or to the environment. In this case, immediate action is required to reduce the threat.



Interim National Environmental Quality Criteria, due to be published in July 1991, will establish numerical limits for the assessment and remediation of soil and water based on the safe use of agricultural, residential and parklands and commercial and industrial properties. They are based on a review of existing criteria used by Canadian jurisdictions, and incorporate the guidelines established by the CCME in 1987 on Canadian water quality, as well as Health and Welfare guidelines established in 1989 on Canadian drinking water quality.

LOOKING AHEAD

In the last decade, environmental concerns have become a major preoccupation. There is a recognition that preventable damage must be avoided and, where possible, the effects of past neglect attenuated. In the coming year, the NCSRP will continue to carry this basic principle forward and to focus on consolidating its early gains in five ways:

First, we will be looking to sign bilateral agreements between Canada and the remaining four provinces and two territories to ensure that high-risk contaminated sites are dealt with as a first priority in all jurisdictions.

Second, we will continue to work through the CCME to further the effective application of the polluter pays principle.

Third, we will work to ensure the continued development of Environmental Quality Criteria and risk assessment methodologies which ensure that environmental reviews of contaminated sites can be undertaken.

Fourth, the program will be making considerable advances in technology development in the second year of operation.

Fifth, as the number of high-risk contaminated sites being remediated increases, the NCSRP will be planning to develop communications for the years ahead, so that the public and specific targeted audiences, such as engineering firms, are made more aware of the important goals and activities associated with contaminated sites remediation in Canada.

In this, the first year of operation, the program is off the ground and clearly moving toward fulfilling the objectives laid out for it. We can now look forward to consolidating our gains, and to focusing on the remediation work at hand.

