

2002



Report of the
**Commissioner of the
Environment and
Sustainable Development**
to the House of Commons

**The Commissioner's Perspective—2002
The Decade After Rio**



Office of the Auditor General of Canada

The 2002 Report of the Commissioner of the Environment and Sustainable Development comprises 6 chapters and The Commissioner's Perspective—2002. The main table of contents is found at the end of this publication.

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For copies of this report or other Office of the Auditor General publications, contact

Office of the Auditor General of Canada
240 Sparks Street, Stop 10-1
Ottawa, Ontario
K1A 0G6

Telephone: (613) 952-0213, ext. 5000, or 1-888-761-5953
Fax: (613) 954-0696
E-mail: distribution@oag-bvg.gc.ca

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Commissioner of the Environment and Sustainable Development of Canada
Commissaire à l'environnement et au développement durable du Canada
Office of the Auditor General of Canada • Bureau du vérificateur général du Canada

To the Honourable the Speaker of the House of Commons:

On behalf of the Auditor General of Canada, I have the honour to transmit herewith my Report to the House of Commons for the year 2002, to be laid before the House in accordance with the provisions of section 23(3) of the *Auditor General Act*.

A handwritten signature in black ink that reads 'Johanne Gélinas'.

Johanne Gélinas
Commissioner of the Environment
and Sustainable Development

OTTAWA, 22 October 2002

To the reader:

I welcome your comments and suggestions on this Report and other issues related to the environment and sustainable development. I can be reached at the following:

Johanne Gélina
Commissioner of the Environment and Sustainable Development
240 Sparks Street
Ottawa, Ontario
K1A 0G6
E-mail: green-report@oag-bvg.gc.ca



Foreword



Report of the Commissioner of the Environment and Sustainable Development—2002

Foreword

As Commissioner of the Environment and Sustainable Development, I am pleased to present the 2002 Report for tabling in the House of Commons.

This Foreword is followed by The Commissioner's Perspective—2002: The Decade After Rio, and the Main Points from each chapter. The Report contains six chapters:

- 1 Toxic Substances Revisited
- 2 The Legacy of Federal Contaminated Sites
- 3 Abandoned Mines in the North
- 4 Invasive Species
- 5 Sustainable Development Strategies
- 6 Exercising Your Right to Know: The Environmental Petitions Process



**The Commissioner's
Perspective—2002**

The Decade After Rio

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The Commissioner's Perspective—2002

The Decade After Rio



Johanne Gélinas
Commissioner of the Environment
and Sustainable Development

Looking back to Rio

Ten years ago Canada committed to the principles of sustainable development

1. The World Summit on Sustainable Development held in Johannesburg, South Africa in August 2002 marked a special 30-year anniversary. Governments around the world have been gathering and working together to improve the condition of our planet and its people since the 1972 Conference on the Human Environment held in Stockholm.

2. Canada enthusiastically embraced the notion of sustainable development 10 years ago at the United Nations Conference on Environment and Development, held in Rio de Janeiro, Brazil. In Rio, Canada and more than 175 other nations committed to a comprehensive plan of action for socially, economically, and environmentally sustainable development—a plan known as Agenda 21. The plan was supported by the Rio Declaration on Environment and Development—27 guiding principles that proclaim, among other things, that

- environmental protection shall constitute an integral part of development;
- states shall conserve, protect, and restore the health and integrity of the Earth's ecosystem;
- they shall enact effective environmental legislation;
- the precautionary approach shall be widely applied;
- states should endeavour to promote the internalization of environmental costs and the use of economic instruments; and
- national environmental impact assessment shall be undertaken.

3. At the same time, Canada also signed two conventions on issues of particular concern. The United Nations Framework Convention on Climate Change seeks to reduce emissions of greenhouse gases and their harmful impact on the planet's climate system. The Convention on Biological Diversity aims to conserve the diversity of the planet's biological resources, make their use more sustainable, and share the benefits fairly and equitably.

4. The three documents are among more than 200 binding international agreements and non-binding instruments that Canada has signed over the years to protect the environment and advance sustainable development.

Five objectives of sustainable development

- Sustain our natural resources
- Protect the health of Canadians and ecosystems
- Meet our international obligations
- Promote equity
- Improve our quality of life and our well-being

Concrete steps toward sustainable development

- Use non-renewable resources efficiently
- Ensure that renewable resources are developed in sustainable ways
- Protect representative areas and conserve biodiversity
- Adopt a pollution prevention approach to development
- Ensure that the costs and benefits of sustainable development are distributed fairly between generations and between the poor and the more affluent
- Virtually eliminate persistent toxic substances, protect the ozone layer, and reduce greenhouse gas emissions

The federal government pledged to turn talk into action

5. Three years after Rio the federal government—in its *Guide to Green Government*—committed to turning talk into action and integrating sustainable development “into the way government defines its business and makes its decisions.” The guide identified **five objectives** as a common starting point for turning the talk of sustainable development into action. It also set out some **concrete steps** toward those objectives.

Key institutions were put in place

6. Canada saw a significant institutional change in 1995: Parliament amended the *Auditor General Act* to require that each department of the federal government prepare a sustainable development strategy. The strategy would outline the department’s concrete goals and action plans for integrating sustainable development into its policies, programs, and operations; those goals and plans would be the benchmarks against which the department would measure its progress.

7. The amendments to the *Auditor General Act* also created the position of Commissioner of the Environment and Sustainable Development. The Commissioner would report to Parliament annually on issues important to the environment and other aspects of sustainable development and, in particular, would monitor and report on departments’ progress toward their sustainable development goals.

The Auditor General and I have investigated many issues

8. During this first post-Rio decade, we have conducted more than 60 audits of activities the federal government carries out to protect the environment and promote sustainable development (see Appendix A). We have reported on a variety of issues—focussing mainly on the environmental principles noted in paragraph 2—and have monitored the federal government’s progress toward its sustainable development objectives, which include

- meeting international obligations, such as protecting the ozone layer and reducing greenhouse gas emissions;
- protecting the health of Canadians and ecosystems by managing toxic substances, conserving biological diversity, and protecting air quality; and
- sustaining our natural resources, such as fisheries and water.

What is the federal government’s track record?

9. What is the federal government’s track record of fulfilling its sustainable development promises? In this chapter, I look at that record—the accomplishments and the disappointments—in the key areas we have examined in the ten years since Rio. I highlight the main findings and messages of our work this year. And I discuss the impact of the sustainable development strategies and the importance of their role. My conclusion: The federal government is not investing enough—enough of its human and

financial resources; its legislative, regulatory, and economic powers; or its political leadership—to fulfil its sustainable development commitments. The result is a growing environmental, health, and financial burden that our children will have to bear.

The past ten years: Key federal commitments are not being met

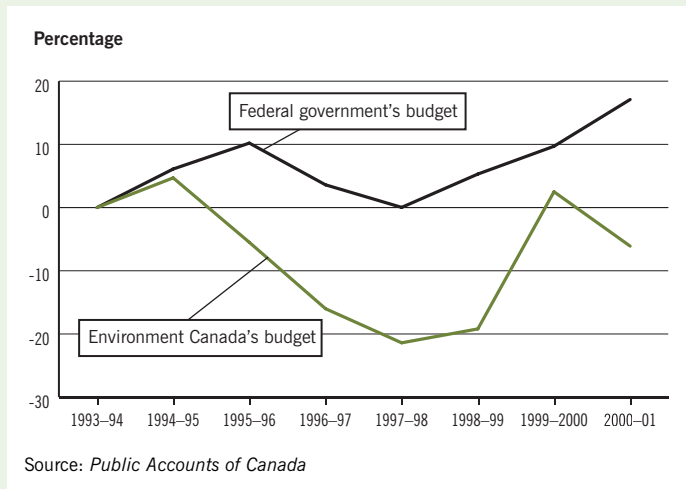
10. During all of our audits, we found dedicated people throughout the federal government working hard to protect the quality of our environment and to promote sustainable development in their departments and organizations. We found some significant accomplishments. We also found many disappointments.

More investment is not a call for more taxation

Isn't it time for the government to invest in sustainable development by funding its commitments?

Key federal departments have suffered cuts in funding—especially Environment Canada, whose budget dropped by 6 percent while the government's grew by 17 percent.

Government's cut in funding for Environment Canada



By reducing funding, the government reduces its capacity to meet the sustainable development objectives it has set for itself.

But a call for more federal funding in support of the government's sustainable development commitments need not be a call for more taxation. There are other mechanisms at the government's disposal.

One of the principles of sustainable development agreed to at Rio is that governments build environmental costs into their decisions and use economic instruments to encourage more sustainable behaviour. The Organisation for Economic Co-operation and Development in particular has noted that Canada could make greater use of these tools.

Adopting the "polluter pays" principle is another approach that can help fund sustainable development and promote equity—both now and for future generations—without adding to the tax burden of Canadians.

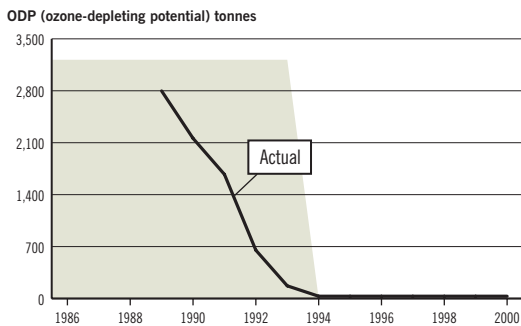
Protecting the stratospheric ozone layer: A major accomplishment

11. Scientists became concerned in 1974 about the impact of certain chemicals on the stratospheric ozone layer. Eleven years later, evidence showed conclusively that chlorofluorocarbons (CFCs) and other substances had created a “hole” in the ozone layer over the Antarctic. In 1987, through the Montreal Protocol on Substances that Deplete the Ozone Layer, signatory countries committed to control these substances and ultimately eliminate them.

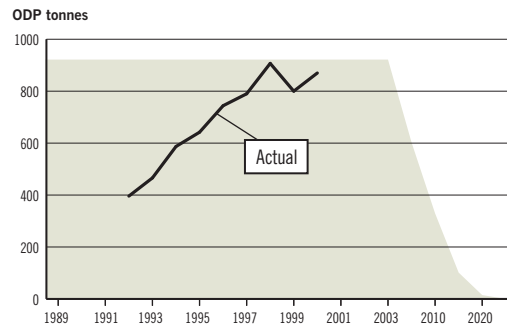
12. Canada played a leading role in the global effort to protect the ozone layer. The federal government showed that it could mobilize its resources to promote development that is more sustainable. Canada has met or exceeded its phase-out commitments under the Montreal Protocol every year (Exhibit 1). While trends over the last 15 years are generally positive, all countries must continue to meet their targets if the ozone layer is to fully recover, as predicted, some 50 years from now.

Exhibit 1 Protecting the stratospheric ozone layer

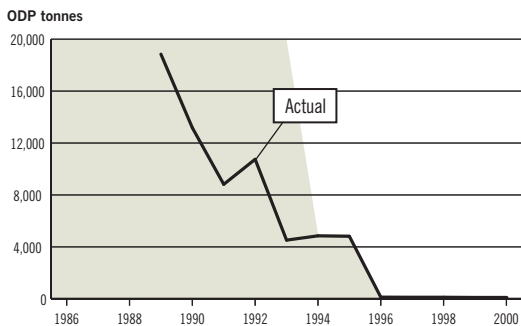
Halon consumption
1987 goal: Phase out by 1994



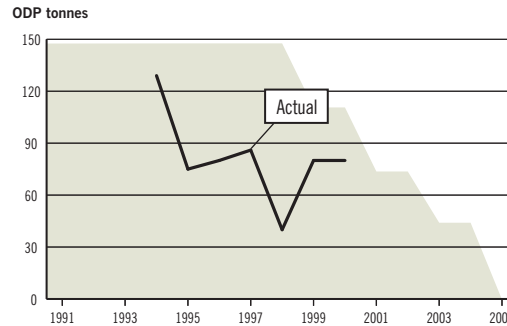
Hydrochlorofluorocarbons consumption
1987 goal: Phase out by 2020



Chlorofluorocarbons consumption
1987 goal: Phase out by 1996



Methyl bromide consumption
1987 goal: Phase out by 2005



■ Reduction goal of the Montreal Protocol

Source: UNEP Data Report: Production and Consumption of Ozone Depleting Substances, 1986–1998, and Environment Canada

Protecting air quality: Some successes, but further action needed

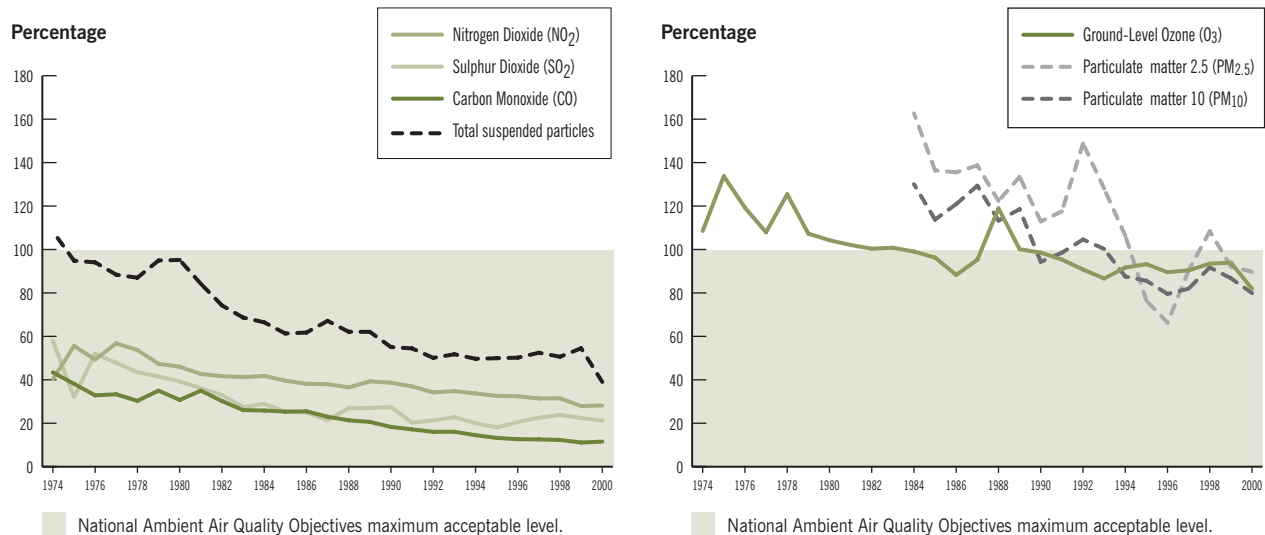
13. Although smog is defined by its main components—ozone and particulate matter—the pollutants that contribute to the formation of smog also include nitrogen oxides, volatile organic compounds, sulphur dioxide, and carbon monoxide. Continuing trends it began in the 1970s, Canada has achieved steady reductions over the past decade in emissions of sulphur dioxide and nitrogen dioxide—two major contributors to air quality problems. Over the same period, amounts of total suspended particles have also declined (Exhibit 2).

14. However, ground-level ozone and particulate matter—including PM₁₀ and PM_{2.5}, responsible for causing the greatest harm to human health—have remained at high levels; research has been unable to identify safe levels. Environment Canada has reported that yearly average concentrations of PM_{2.5} have risen recently and that some Canadian cities continue to record daily levels high enough to pose a health risk. More action is needed to protect air quality, and the federal government must take the lead.

Sustaining our water resources: Quality and quantity still under pressure

15. The federal government has invested over \$300 million, along with the provinces and municipalities, to improve municipal wastewater treatment in Canada. The result is that the number of municipal residents not served by wastewater treatment is one in thirty; in 1989 it was one in five. However, effluents from municipalities remain a serious source of water contamination and environmental and health concerns, while a national strategy for treating them has yet to be developed. Added to this is the problem of safely managing manure from intensive livestock operations—a problem that has been getting worse.

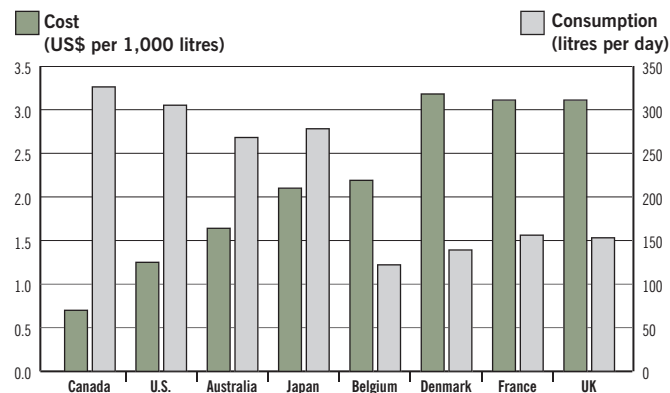
Exhibit 2 Levels of harmful substances in Canada's air



Source: Environment Canada

16. Concerns about water include not only its quality but also its quantity. Canada is the guardian of one of the largest supplies of fresh water in the world. Yet Canadians continue to consume water at a rate 65 percent higher than the average of other major industrialized nations (Exhibit 3). Our water prices are among the lowest in the world, and our demand is increasing. Since its release in 1987, the federal water policy has not been effective at reducing water consumption through either demand management or realistic pricing. It is time for the federal government to fulfil its commitment and start building the true cost into the pricing of this key environmental resource.

Exhibit 3 The cost and consumption of water



Source: Organisation for Economic Co-operation and Development—All data are from 1994 to 1999 except data on U.S. consumption, which are from 1980.

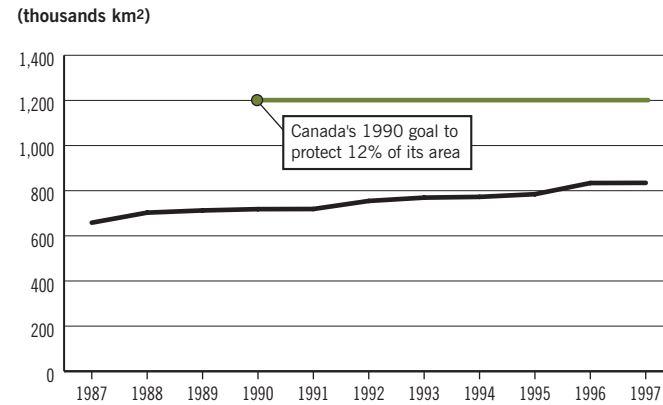
Conserving biological diversity: Species and spaces still at risk

17. The Convention on Biological Diversity was one of the major accomplishments of the Rio Earth Summit. Canada's federal government identified the protection of representative areas and the conservation of biological diversity as concrete steps toward sustainable development. Looking at the updates and reassessments in the past five years of species in Canada listed as at risk, we see that the status of 72 percent of them has not changed: they are still at risk. Of the remaining 28 percent, twice as many species have declined as have improved. And while one of the Rio Declaration principles proclaims that states shall enact effective environmental legislation, Canada's federal legislation for species at risk was introduced five years ago and was only recently sent from the House of Commons to the Senate. As Parliament was prorogued this September, the future of the legislation is unknown.

18. Conserving biodiversity includes not only protecting species of plants, animals, and other creatures but also protecting the spaces where they live. In 1990, Canada committed to creating protected areas of representative ecosystems equal to 12 percent of the country's total territory. From 1992 to 1997, it increased its square kilometres of protected area by about 17 percent so that about 9 percent of the country was protected area by 1998—the latest

year for which data are available (Exhibit 4). Unfortunately, about a third of the land in Canada's ecoregions still has virtually no protection. More than three quarters of Canada's national parks—30 percent of the total area protected—are reportedly suffering significant to severe ecological stress.

Exhibit 4 Protecting ecosystems



Source: Environment Canada

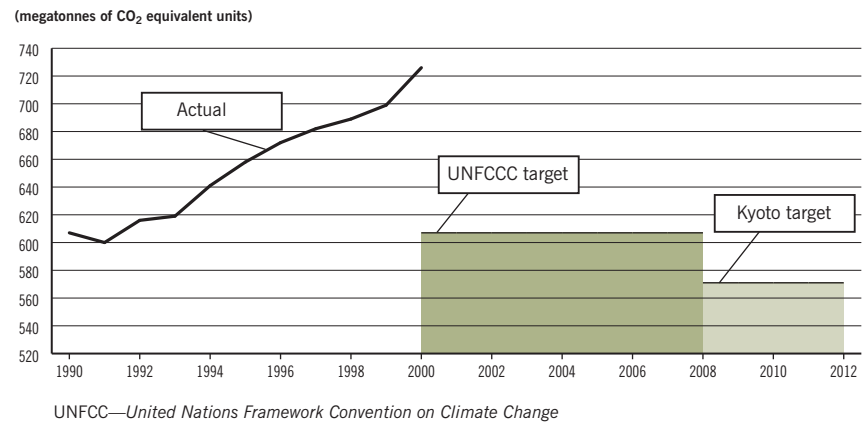
Sustaining our fisheries: Vital information unavailable and caution still needed

19. It is not an easy task to construct a picture of the state of Canada's coastal fisheries, given the complex nature of fish stocks and fisheries and the difficulty of getting reliable information. Adding to the challenge are the dramatic changes to the fisheries—the 1992 moratorium on fishing northern cod stocks in the Atlantic, followed in 1995 by a dramatic drop in the commercial catch of Pacific salmon.

20. As the Auditor General has noted, during the 1990s Fisheries and Oceans Canada “had limited knowledge of stocks and habitat to determine conservation requirements and catch limits, and it failed to take precautions when its own scientific advice was warning of stock declines. This led the Department to partially or completely close some fisheries.” The need for better information about the state of our fish resources and the need for caution in their management were reinforced recently by the news that northern cod have not rebounded significantly, even after the 10-year moratorium on commercial fishing.

Reducing greenhouse gas emissions: A widening gap

21. The United Nations Framework Convention on Climate Change, a key result of the Rio Earth Summit in 1992, set as an interim objective to aim to stabilize greenhouse gas emissions at 1990 levels by 2000. In the 1997 Kyoto Protocol to the Framework Convention, the federal government agreed to a Canadian target of 6 percent below 1990 emission levels by 2008 to 2012 (Exhibit 5). While the federal government still has not ratified the Kyoto target, emission levels continue to rise—to almost 20 percent higher in 2000 than in 1990, up sharply from 15 percent in 1999.

Exhibit 5 Greenhouse gas emissions in Canada

Source: Environment Canada

Applying sound management: Recurring problems inhibiting progress

22. Besides monitoring the progress of the federal government on its key commitments, we have looked in the past decade at whether it applies sound management practices to environmental and sustainable development issues. Our work has uncovered the following common, recurring problems:

- gaps in the information needed for effective program management and policy development;
- missing or incomplete strategies and plans for some issues and missing or fuzzy objectives, targets, and timetables in some of the strategies and plans that do exist;
- unclear or disputed roles and responsibilities, including responsibility for leading the federal action on certain issues;
- incomplete and unbalanced reporting on program performance; and
- problems of co-ordination among federal departments and between the federal government and other jurisdictions.

23. I believe that our continued reporting of these problems will help the federal government focus its resources, monitor its progress, and improve its accountability to Parliament and all Canadians to turn its sustainable development promises into actions.

24. While far from exhaustive, the list of issues we have investigated in the past 10 years includes many of the federal government's major commitments. We have noted its political leadership and regulation of ozone-depleting substances, and its financial support for improved water infrastructure. Yet we see a growing sustainable development deficit—depleted fish stocks and rising greenhouse gas emissions, health problems linked to poor air and water quality, and insufficient resources to protect biodiversity and manage toxic substances.

This year: The sustainable development deficit continues to grow

25. This year we examined four issues, three of them closely related. Our chapters on toxic substances, federal contaminated sites, and abandoned mines in the North all consider the impact of toxic chemicals on the health of Canadians and the environment. They highlight the consequences of inaction in the past and the need to manage toxic substances better in the future. Our chapter on invasive species highlights an issue with potentially devastating implications for the future. We also examined whether the sustainable development strategies of federal departments are fulfilling their roles. Overall, our findings leave me more concerned than ever about the inadequacy of the federal government's investment to protect the environment and meet its sustainable development commitments.

Managing toxic substances: Still a long way to go

26. The production, use, and release of industrial chemicals, pesticides, and their by-products in Canada can pose serious risks to the health of Canadians and to the environment. Some chemicals are associated with health problems such as cancer, decreased fertility, and neurological disorders. Other chemicals are the subject of considerable scientific debate over which ones (and in what concentrations) might be affecting us and our environment.

27. In 1999 we audited the federal government's scientific investigation of existing industrial chemicals and pesticides and its management of their use. This year we revisited the departments we had audited to assess their progress in implementing our recommendations. Although the federal government has made some progress in managing toxic substances since 1999, its ability to detect, understand, and prevent the harmful effects of toxic substances is still limited. Departments have made encouraging progress in some areas. Progress has been more limited in some essential areas, for example, measuring the presence of toxic substances in the environment and their effects; achieving the government's objective of virtually eliminating predominantly man-made releases of toxic substances that are persistent and bioaccumulative; and preparing a risk reduction policy to guide pesticide management.

28. Many of the root causes of problems we found in 1999 continue today: underresourced commitments; major gaps in scientific knowledge; and burdensome regulatory processes. None of this augurs well for the protection of our health. In my opinion, the current situation and future prospects are not environmentally, economically, or socially acceptable. The federal government must increase its efforts to address our previous recommendations and to better manage this critical issue. Otherwise, our children may have to finish the job of assessing, and certainly managing, toxic substances in use today.

The legacy of federal contaminated sites: Government fails to clean up its own back yard

29. The federal government knows it has about 3,600 contaminated sites and at least 1,500 more sites where contamination is suspected. They include harbours and ports, government laboratories, lighthouse stations, military bases and training facilities, abandoned mines in the North, and airports. The contaminants at these sites range from petroleum products to a variety of toxic substances. They can do significant damage to the quality of water, soil, and air, and they take valuable land out of productive use.

30. The federal failure to deal decisively with its contaminated sites problem has left a significant financial burden to be paid by Canadian taxpayers today and for decades to come. The costs these sites incur range from a few thousand dollars for a minor spill from a leaking gasoline storage tank to many millions of dollars for an abandoned northern mine. Spending for cleanup and management of federal contaminated sites averages about \$90 million a year. We estimate that the cost of dealing with known sites under federal responsibility is in the billions of dollars.

31. The federal government does not have a full picture of risks to the environment and human health at all the sites it knows about. There are no federal laws, regulations, or policies that require it to clean up its sites, many of which could face cleanup orders in some provinces were the federal government not exempt from provincial law. Sound environmental management would see the federal government prepare a priority list of the worst sites and an action plan for their timely cleanup. It has not done this; nor has it provided long-term, stable funding to manage the problem effectively or to clean up high-risk sites. The federal government needs to develop a clear, mandatory requirement for federal organizations to clean up or manage their contaminated sites.

Abandoned mines in the North: Yesterday's mines threaten today's environment

32. Among the most worrisome federal contaminated sites are abandoned mines in the North. Mining in northern Canada has left the federal government a legacy of hundreds of thousands of tonnes of highly toxic chemicals such as arsenic and cyanide in abandoned mine sites. These chemicals are contained in structures that are deteriorating rapidly and that require regular repairs. In some cases, time is running out and there could be significant environmental damage and risk to human health if nothing is done.

33. In the past, Indian and Northern Affairs Canada did not collect sufficient financial security from mining companies operating in the North to cover the costs of the eventual cleanup and closure of mine sites. Prior to 1993, there were legislated limits on the amounts that could be collected as financial security. For some mines currently operating in the North, there is still a shortfall. Now, the Department is spending millions of dollars each year to stop pollutants from escaping these sites. This care and maintenance is a band-aid approach that does little to solve the problem in the long term. The Department estimates that the cleanup and closure of these abandoned

mines will cost at least \$555 million. In many cases, complete and definitive cleanup will not be possible and long-term site management will be required.

34. For two new diamond mines, Indian and Northern Affairs Canada reported that full financial security is being achieved. The Department has also made progress toward establishing a comprehensive program to deal with contaminated sites in the North, including abandoned mines. However, the full implementation of this program will depend on available human and financial resources.

Invasive species: A destructive force has met limited resistance

35. Fish, plants, insects, bacteria, viruses, and other organisms found in an area beyond their native range are alien to that area. Not all alien species are harmful. Indeed, many have been introduced intentionally into Canada for the benefits they have offered. But some, known as invasive species, can cause disease in native plants and animals or prey upon them; change local habitat, making it inhospitable to native species; or simply reproduce faster than native plants and crowd them out by inhabiting their space and eating their food. Experts have concluded that invasive species are second only to habitat destruction as a leading cause of biodiversity loss, including local extinctions of species. Studies to date indicate that they cause billions of dollars of damage to Canada's economy every year.

36. The federal government has not responded effectively to invasive species that threaten Canada's ecosystems, habitats, and other species. It has not identified the invasive species with the greatest potential to become established in Canada's ecosystems, determined the main pathways by which they arrive, or assessed the risks they pose to the environment and economy. There is no agreement among federal departments on priorities for prevention or on who will do what to respond to major risks. Ten years after the government committed to prevent their introduction or to control or eradicate them, the number of invasive species in Canada continues to grow.

37. Unlike most chemical pollutants that degrade over time, invasive species—which some scientists have termed biological pollution—have the potential to multiply, spread, and persist in the environment. Given the impacts of invaders once they have become established—the ecological and economic damage they cause, the financial cost of keeping them in check, and the possible implications of controlling them chemically—it is clear that keeping them out is the best strategy and that not investing in doing so will carry a far greater cost.

Sustainable development strategies: Central leadership is needed to drive change

38. In 1992, Canada and many other countries around the world committed to develop national strategies for sustainable development. Twenty-eight federal departments and agencies tabled their first sustainable development strategies in December 1997. In our 1998 Report, we called the strategies “less a commitment to change in order to move toward sustainable development than a restatement of the status quo.”

39. This year we looked at whether the strategies fulfilled two roles we believe are essential: whether the strategies are strategic documents and whether they are effective accountability tools. We found that the strategies are used as a communications tool, a foundation for further change, and a focal point for managing sustainable development. But currently they are not the strategic documents they were meant to be, which hinders the process of change the government intended.

40. The commitments made by departments and agencies are the nuts and bolts of the strategies. They form the basis on which departments report annually on their progress toward sustainable development. We found that measuring and reporting on progress continues to be a challenge for departments. The sheer volume of commitments in the strategies makes reporting an onerous task. Moreover, in departmental performance reports the quality of reporting on sustainable development varies widely, with weaknesses persisting from year to year.

41. To make sustainable development real, the strategies need to convey a vision of a sustainable future, a small number of key priorities, and specific objectives for the next 10 years. And they need to focus on what departments will do differently to achieve sustainable development. This will take leadership and commitment by all federal ministers.

Looking forward from Johannesburg

Canada has reaffirmed its commitments

42. I attended the World Summit on Sustainable Development this past August to witness first-hand how Canada and others would prepare for the second decade after Rio. Countries from around the world met with high expectations to agree on a concrete plan, timetables, and targets for implementing the commitments made at Rio and since then. At the Summit, countries adopted a new Plan of Implementation for sustainable development. Through this plan, Canada has “strongly re-affirmed its commitment to the Rio principles [and] the full implementation of Agenda 21.” It has committed “to achieving internationally agreed development goals, including those contained in the United Nations Millennium Declaration and in the outcomes of the major United Nations conferences and international agreements since 1992.” And it has agreed to “undertak[e] concrete actions and measures at all levels.” But making such commitments isn’t news—Canadians have heard them before. The real questions now are, What exactly needs to be done? And how? By whom? And by when? And how will Canadians know whether progress has been made and the commitments have been fulfilled?

Principles of good governance need to be applied

43. I believe it is imperative that the federal government start by producing its own concrete plan of action to answer these questions. For many years, the Auditor General of Canada and I have been stressing the importance of

applying the principles of good governance—effective accountability mechanisms, adequate transparency, credible reporting, and protection of the public interest—to federal programs, partnerships, and practices. More than ever, I believe these principles are the key to future success and must be applied to the government's plan of action. In practical terms, this means that the federal government must do the following:

- Provide a plain language description of the commitment and what it means.
- Identify the new actions it needs to undertake along with those already under way, complete with realistic timetables and milestones.
- Assign clear and specific roles and responsibilities to federal departments and agencies for these actions.
- Establish concrete performance expectations and indicators of progress.
- Provide the necessary resources to implement them.
- Monitor and review progress that is made, including actions undertaken by partners.
- Report to the Canadian public regularly and in a transparent way.

We will continue to monitor and report on progress

44. In the coming months and years, I intend to track and report to Parliament and the Canadian public on the federal government's efforts to develop and implement a federal plan of action and meet the hundreds of commitments it made in Rio and Johannesburg and in the years between.

45. Further, I know that many national audit offices around the world share my concern about effective governance and the implementation of these commitments. Through the Working Group on Environmental Auditing of the International Organization of Supreme Audit Institutes—an international association of Auditors General and equivalents—I intend to build a collaborative audit regime along with my international counterparts to provide for independent monitoring and reporting of progress toward implementing commitments.

Conclusion

46. During this first decade after Rio, our findings have highlighted the serious and recurrent shortcomings in the federal government's efforts to protect the environment and promote sustainable development. Since the creation of the position of Commissioner of the Environment and Sustainable Development, we have reported numerous deficiencies in management practices and too many federal commitments that have not been implemented completely. It is rare that we can say "mission accomplished" where the federal government's promises for environmental protection and sustainable development are concerned.

47. Ten years after the Rio Declaration codified the principles of sustainable development and Canada formally committed to adopt them, is it not time to start applying them? The environmental impacts and the financial and social burdens of environmental degradation and unsustainable development are such that Canadians can no longer afford the luxury of indecision or inaction. By continuing to allow these costs to grow, the federal government is failing to address the most fundamental principle of sustainable development: ensuring that future generations have the resources to meet their needs.

48. If the environment and sustainable development are truly a priority of the federal government, I believe the government needs to provide Canadians with a vision of what a sustainable future can look like. And it must invest more to meet its commitments—more of its human and financial resources; its legislative, regulatory, and economic powers; and its political leadership—or Canada's environmental and sustainable development deficit will continue to grow.

49. Canada played a strong leadership role in Rio. And while I recognize that some efforts have been made by the Canadian government since then, much more needs to be done. My deep concern is that these efforts are not keeping pace with the profound effects of human activity on the vital natural resources that sustain us all. The challenges we face are multiplying far faster than the solutions we are adopting. I believe Canada can once again serve as a model for environmental protection and sustainable development. But the federal government will need to make a serious investment in sustainable development—one that matches the ambition of its commitments.

Appendix A Previous Work of the Office of the Auditor General and the Commissioner of the Environment and Sustainable Development

Our Office has conducted numerous audits and studies of environmental and sustainable development matters. All of our reports are available on our Web site (www.oag-bvg.gc.ca). The following are some of the issues we have examined and our main findings:

- **Climate change** is considered one of the greatest current sustainable development challenges. Chapter 3 of the Commissioner's 1998 Report (Responding to Climate Change—Time to Rethink Canada's Implementation Strategy) found that Canada was not expected to meet long-standing domestic and international commitments to stabilize greenhouse gas emissions. We attributed this failure primarily to poor planning and ineffective management. We updated our work in Chapter 6 of the Commissioner's 2001 Report where we noted that the federal government had made some important progress in rethinking its implementation strategy on climate change, and in changing the management structure for dealing with this issue by establishing a national climate change process.
- **Urban smog** is a serious form of air pollution for many Canadians. Chapter 4 (Smog: Our Health at Risk) of the Commissioner's 2000 Report found that while federal and provincial governments had set sound strategic direction through development of a national plan, the plan was destined to fail: governments and their partners never reached agreement on how to implement it.
- **Toxic substances** such as industrial chemicals, pesticides, and waste byproducts are a major cause of pollution in our lakes, rivers, air, and land. Chapter 3 (Understanding the Risks From Toxic Substances: Cracks in the Foundation of the Federal House) and Chapter 4 (Managing the Risks of Toxic Substances: Obstacles to Progress) of the Commissioner's 1999 Report raised concerns about the weakened state of scientific research and environmental monitoring, the slow progress in reducing releases of toxic substances into the environment, the government's growing reliance on voluntary controls of high-priority substances, the lack of a pesticide risk reduction strategy, and the sometimes divisive relations among federal departments. We have reported the results of our follow-up to this work in our current report.
- **Federal contaminated sites** pose a risk to the public in the release of harmful substances. Chapter 22 (Federal Contaminated Sites—Management Information on Environmental Costs and Liabilities) of the Auditor General's November 1996 Report, and our subsequent follow-up work, heavily criticized the government for its failure to identify and characterize—let alone remediate—hundreds of federally owned contaminated properties in Canada. The government still does not have a consolidated cleanup plan for its sites. This work has also been updated in this report.
- **Loss of biodiversity** relates to the protection of species and spaces at risk. Chapter 4 (Canada's Biodiversity Clock Is Ticking) of the Commissioner's 1998 Report raised concern about slow progress in acting on the Canadian Biodiversity Strategy and cited the need for a more cohesive federal implementation plan. Our 2001 chapter on the Great Lakes and St. Lawrence River basin contained a section on species and spaces at risk where we focused on protecting and recovering species at risk, conserving wetlands, and the federal government's stewardship efforts for conserving habitat.
- **Transboundary hazardous waste** was the subject of an audit that assessed whether the federal government had an effective regime for controlling its transport. Chapter 4 (Control of the Transboundary Movement of Hazardous Waste) of the Auditor General's April 1997 Report pointed to significant deficiencies in the enforcement of federal laws.
- **Ozone layer protection** reviewed the government's progress in dealing with this global environmental threat. In Chapter 27 (Ozone Layer Protection: The Unfinished Journey) of the Auditor General's December 1997 Report, as well as in Chapter 2 (Working Globally—Canada's International Environmental Commitments) of the Commissioner's 1998 Report, we credited the federal government for its leadership in implementing controls on ozone-depleting substances and meeting its international commitments. We also flagged the importance of maintaining a long-term perspective and focussing future efforts where they mattered the most.

- **Environmental assessment** is a key tool for preventing environmental harm caused by various projects. Chapter 6 (Environmental Assessment—A Critical Tool for Sustainable Development) of the Commissioner's 1998 Report found significant weaknesses in implementing the *Canadian Environmental Assessment Act* and a lack of rigorous assessments under the *Fisheries Act* (related to fish habitat). We also found poor compliance with the 1990 Cabinet directive that required departments to assess the environmental effects of federal policy and program initiatives submitted for Cabinet's consideration.
- **Tracking compliance with international agreements** is critical to the environment and to Canada's reputation. Chapter 2 (Working Globally—Canada's International Environmental Commitments) of the Commissioner's 1998 Report found that Canada does not systematically track implementation of the nearly 230 international environmental agreements and instruments that it is party to or has endorsed.
- **Freshwater pollution** in the Great Lakes, the St. Lawrence River and the Fraser River and along the Atlantic Coast was an audit subject in the past. Chapter 14 (The Control and Clean-up of Freshwater Pollution) of the Auditor General's 1993 Report, as well as follow-up recommendations in the 1995 Report, found that action plans for the management of water quality needed more attention from the federal government. The need for a federal framework of water quality objectives and for federal long-term strategic planning was also identified.
- **Partnerships for sustainable development** were the focus of a study that looked specifically at the use of partnering arrangements in the environmental field. In chapters 5, 6, 7, and 8 of the Commissioner's 2000 Report, we concluded that key success factors for successful partnerships include clear and realistic objectives and expectations for results, shared or complementary goals, effective and committed individuals, clear benefits for participating organizations, and senior management's interest.
- **New governance arrangements** with external partners are increasingly used to deliver federal programs and services to Canadians. Chapter 23 (Involving Others in Governing: Accountability at Risk) of the Auditor General's November 1999 Report found that under many of these arrangements, Parliament has limited means—in some cases, no means—of holding the government to account for the federal functions performed or the federal objectives to be achieved.
- **Reporting performance to Parliament** is critical to effective accountability. Chapter 19 (Reporting Performance to Parliament: Progress Too Slow) of the Auditor General's 2000 Report found persistent deficiencies, including a lack of concrete, measurable expectations; too much focus on reporting of activities instead of outcomes; very little linking of financial and non-financial information; and an overall lack of balance (reporting of good news only).
- **Science and technology** was the subject of work that assessed whether the federal government had met its commitments to manage its science and technology portfolio more strategically. In Chapter 9 (Science and Technology—Overall Management of Federal Science and Technology Activities) and Chapter 10 (Science and Technology—Management of Departmental Science and Technology Activities) of the Auditor General's 1994 Report, we noted that there had been a lot of activity but few results. We attributed the lack of progress to a lack of overall government-wide leadership, direction, and accountability for implementing desired changes. Our follow-up in Chapter 15 (Federal Science and Technology Activities—Follow-Up) of the Auditor General's 1996 Report noted considerable progress by the government, but we reiterated our concern about the need for leadership and effective accountability for results.
- **Fisheries management** has been a major focus of our work over the past decade. Reports by the Auditor General have examined the Northern Cod Adjustment and Recovery Program (1993, Chapter 12); the sustainability of Pacific salmon (1997, Chapter 28; 1999, Chapter 29) and Atlantic groundfish (1997, chapters 14 and 15); managing Atlantic shellfish in a sustainable manner (1999, Chapter 4); and salmon farming in British Columbia (2000, Chapter 30). The 2001 Report of the Commissioner examined a number of fisheries issues in the Great Lakes and St. Lawrence River basin. In all of the fisheries covered in our audits, we found that in the absence of a strategic framework for managing sustainable fisheries—a framework that would establish clear objectives and guiding principles and bring together biological, economic, and social factors—Fisheries and Oceans Canada reacted to events with a crisis management approach. Recent planning and policy initiatives show that the Department has given considerable thought to the problems it faces and is moving toward developing policy frameworks that may allow for orderly management of sustainable fisheries.

- **Agriculture** is a major economic activity in this country and has a significant impact on the environment. In recent years, the Auditor General has examined agri-food policy review (1993, Chapter 13); animal and plant health (1996, Chapter 9); and Prairie Farm Rehabilitation Administration (1997, Chapter 24). The Commissioner's 2001 Report examined manure and fertilizer management, soil erosion, the environmental impacts of agricultural policies and programs, and working toward environmentally sustainable agriculture, all with a focus on the Great Lakes and St. Lawrence River basin. Our findings show that the federal government must take greater action to make agriculture environmentally sustainable. Better evaluation, clearer roles, targeted action, and clearer and measurable commitments are needed.
- **Energy**, and in particular energy efficiency, is closely linked to climate change. Over the past decade, the Auditor General has examined energy megaprojects (1992, Chapter 14); the Atomic Energy Control Board (1994, Chapter 15) and Atomic Energy of Canada Limited (1996, Chapter 39); energy efficiency (1997, Chapter 10); and the Canadian Nuclear Safety Commission (2000, Chapter 27). In the Commissioner's 2001 Report, Chapter 6 reviewed Natural Resources Canada's progress in addressing our 1997 recommendations on energy efficiency initiatives. We found that the Department stated clearer performance expectations for these initiatives, made considerable progress in measuring and assessing the initiatives' performance, and significantly increased its efforts to link changes in energy use to changes in greenhouse gas emissions.

Appendix B Auditor General Act—Excerpts

An Act respecting the Office of the Auditor General of Canada and sustainable development monitoring and reporting

INTERPRETATION

| | |
|---|---|
| Definitions | 2. In this Act, |
| "appropriate Minister" | "appropriate Minister" has the meaning assigned by section 2 of the <i>Financial Administration Act</i> ; |
| "category I department" | "category I department" means <ul style="list-style-type: none"> (a) any department named in Schedule I to the <i>Financial Administration Act</i>, (b) any department in respect of which a direction has been made under subsection 24(3), and (c) any department, as defined in the <i>Financial Administration Act</i>, set out in the schedule; |
| "Commissioner" | "Commissioner" means the Commissioner of the Environment and Sustainable Development appointed under subsection 15.1(1); |
| "sustainable development" | "sustainable development" means development that meets the needs of the present without compromising the ability of future generations to meet their own needs; |
| "sustainable development strategy" | "sustainable development strategy", with respect to a category I department, means the department's objectives, and plans of action, to further sustainable development. |

DUTIES

| | |
|--|---|
| Examination | 5. The Auditor General is the auditor of the accounts of Canada, including those relating to the Consolidated Revenue Fund and as such shall make such examinations and inquiries as he considers necessary to enable him to report as required by this Act. |
| Idem | 6. The Auditor General shall examine the several financial statements required by section 64 of the <i>Financial Administration Act</i> to be included in the Public Accounts, and any other statement that the President of the Treasury Board or the Minister of Finance may present for audit and shall express his opinion as to whether they present fairly information in accordance with stated accounting policies of the federal government and on a basis consistent with that of the preceding year together with any reservations he may have. |
| Annual and additional reports to the House of Commons | 7. (1) The Auditor General shall report annually to the House of Commons and may make, in addition to any special report made under subsection 8(1) or 19(2) and the Commissioner's report under subsection 23(2), not more than three additional reports in any year to the House of Commons |

- (a) on the work of his office; and,
- (b) on whether, in carrying on the work of his office, he received all the information and explanations he required.

Idem

(2) Each report of the Auditor General under subsection (1) shall call attention to any thing that he considers to be of significance and of a nature that should be brought to the attention of the House of Commons, including any cases in which he has observed that

- (a) accounts have not been faithfully and properly maintained or public money has not been fully accounted for or paid, where so required by law, into the Consolidated Revenue Fund;
- (b) essential records have not been maintained or the rules and procedures applied have been insufficient to safeguard and control public property, to secure an effective check on the assessment, collection and proper allocation of the revenue and to ensure that expenditures have been made only as authorized;
- (c) money has been expended other than for purposes for which it was appropriated by Parliament;
- (d) money has been expended without due regard to economy or efficiency;
- (e) satisfactory procedures have not been established to measure and report the effectiveness of programs, where such procedures could appropriately and reasonably be implemented; or
- (f) money has been expended without due regard to the environmental effects of those expenditures in the context of sustainable development.

STAFF OF THE AUDITOR GENERAL**Appointment of Commissioner**

15.1 (1) The Auditor General shall, in accordance with the *Public Service Employment Act*, appoint a senior officer to be called the Commissioner of the Environment and Sustainable Development who shall report directly to the Auditor General.

Commissioner's duties

(2) The Commissioner shall assist the Auditor General in performing the duties of the Auditor General set out in this Act that relate to the environment and sustainable development.

SUSTAINABLE DEVELOPMENT**Purpose**

21.1 The purpose of the Commissioner is to provide sustainable development monitoring and reporting on the progress of category I departments towards sustainable development, which is a continually evolving concept based on the integration of social, economic and environmental concerns, and which may be achieved by, among other things,

- (a) the integration of the environment and the economy;
- (b) protecting the health of Canadians;
- (c) protecting ecosystems;
- (d) meeting international obligations;

- (e) promoting equity;
- (f) an integrated approach to planning and making decisions that takes into account the environmental and natural resource costs of different economic options and the economic costs of different environmental and natural resource options;
- (g) preventing pollution; and
- (h) respect for nature and the needs of future generations.

Petitions received 22. (1) Where the Auditor General receives a petition in writing from a resident of Canada about an environmental matter in the context of sustainable development that is the responsibility of a category I department, the Auditor General shall make a record of the petition and forward the petition within fifteen days after the day on which it is received to the appropriate Minister for the department.

Acknowledgement to be sent (2) Within fifteen days after the day on which the Minister receives the petition from the Auditor General, the Minister shall send to the person who made the petition an acknowledgement of receipt of the petition and shall send a copy of the acknowledgement to the Auditor General.

Minister to respond (3) The Minister shall consider the petition and send to the person who made it a reply that responds to it, and shall send a copy of the reply to the Auditor General, within

- (a) one hundred and twenty days after the day on which the Minister receives the petition from the Auditor General; or
- (b) any longer time, where the Minister personally, within those one hundred and twenty days, notifies the person who made the petition that it is not possible to reply within those one hundred and twenty days and sends a copy of that notification to the Auditor General.

Multiple petitioners (4) Where the petition is from more than one person, it is sufficient for the Minister to send the acknowledgement and reply, and the notification, if any, to one or more of the petitioners rather than to all of them.

Duty to monitor 23. (1) The Commissioner shall make any examinations and inquiries that the Commissioner considers necessary in order to monitor

- (a) the extent to which category I departments have met the objectives, and implemented the plans, set out in their sustainable development strategies laid before the House of Commons under section 24; and
- (b) the replies by Ministers required by subsection 22(3).

Commissioner's report (2) The Commissioner shall, on behalf of the Auditor General, report annually to the House of Commons concerning anything that the Commissioner considers should be brought to the attention of that House in relation to environmental and other aspects of sustainable development, including

- (a) the extent to which category I departments have met the objectives, and implemented the plans, set out in their sustainable development strategies laid before that House under section 24;

- (b) the number of petitions recorded as required by subsection 22(1), the subject-matter of the petitions and their status; and
- (c) the exercising of the authority of the Governor in Council under any of subsections 24(3) to (5).

Submission and tabling of report (3) The report required by subsection (2) shall be submitted to the Speaker of the House of Commons and shall be laid before that House by the Speaker on any of the next fifteen days on which that House is sitting after the Speaker receives it.

Strategies to be tabled 24. (1) The appropriate Minister for each category I department shall cause the department to prepare a sustainable development strategy for the department and shall cause the strategy to be laid before the House of Commons

- (a) within two years after this subsection comes into force; or
- (b) in the case of a department that becomes a category I department on a day after this subsection comes into force, before the earlier of the second anniversary of that day and a day fixed by the Governor in Council pursuant to subsection (4).

Updated strategies to be tabled (2) The appropriate Minister for the category I department shall cause the department's sustainable development strategy to be updated at least every three years and shall cause each updated strategy to be laid before the House of Commons on any of the next fifteen days on which that House is sitting after the strategy is updated.

Governor in Council direction (3) The Governor in Council may, on that recommendation of the appropriate Minister for a department not named in Schedule I to the *Financial Administration Act*, direct that the requirements of subsections (1) and (2) apply in respect of the department.

Date fixed by Governor in Council (4) On the recommendation of the appropriate Minister for a department that becomes a category I department after this subsection comes into force, the Governor in Council may, for the purpose of subsection (1), fix the day before which the sustainable development strategy of the department shall be laid before the House of Commons.

Regulations (5) The Governor in Council may, on the recommendation of the Minister of the Environment, make regulations prescribing the form in which sustainable development strategies are to be prepared and the information required to be contained in them.



Main Points

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Main Points

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Toxic Substances Revisited

Chapter 1 Main Points

1.1 The production, use, and release of industrial chemicals, pesticides, and their by-products in Canada can pose serious risks to the health of Canadians and to our environment. Specific groups of Canadians—for example, the Inuit in the North and children—can be particularly at risk because of their higher exposure and sensitivities. Some chemicals are associated with health problems such as cancer, decreased fertility, and neurological disorders. Other chemicals are the subject of considerable scientific debate over which ones (and in what concentrations) might be affecting human health and the environment.

1.2 In 1999 we audited the federal government's scientific investigation of existing industrial chemicals and pesticides and its management of their use. We concluded that the federal government was not adequately managing the risks created by toxic substances.

1.3 In 2002 we revisited the departments we had audited to assess their progress in implementing our 27 recommendations. This follow-up has found mixed progress. Although the federal government has made some progress in managing toxic substances since our 1999 audit, its ability to detect, understand, and prevent the harmful effects of toxic substances is still limited. The processes we observed seem to defy timely, decisive, and precautionary action. Many of the root causes of problems we found in 1999 continue today: underresourced commitments; major gaps in scientific knowledge; and burdensome regulatory processes. None of this augurs well for our health or our environment. Sustainable development offers the hope of a new approach to managing the risks posed by toxic substances. In our opinion, the current situation and future prospects are not environmentally, economically, or socially acceptable. We are leaving our children the responsibility of assessing, and certainly of managing, toxic substances in use today.

1.4 In the management of industrial chemicals, we found that departments have made encouraging progress in some areas:

- Research activities are better co-ordinated and research priorities have been established, helping to ensure that the expertise of the federal government and other partners will be used to protect human health and the environment.
- The process for managing toxic substances has been improved. It will allow for the development of strategies and management options to begin before the final assessment report on a substance is completed.

- Tracking of key toxic substances has been improved through additions to the National Pollutant Release Inventory. The information provides Environment Canada with the ability to track changes in releases of key substances from some sources.

1.5 However, we found more limited progress in these essential areas:

- Measuring the presence of toxic substances in the environment and their effects on plants, animals, and humans in order to understand, for example, key impacts.
- Applying risk management controls to the substances on the first list of priority substances that were declared toxic in 1994, to reduce their release into the environment.
- Applying the Toxic Substances Management Policy across federal departments, a policy that establishes precautionary and proactive principles and accountability for dealing with toxic substances and that is to be applied in all areas of federal responsibility.
- Achieving the government's objective of virtually eliminating predominantly man-made releases of toxic substances that are persistent and bioaccumulative.

1.6 Progress in addressing our recommendations on pesticides is limited:

- There is still no risk reduction policy guiding pesticide management to assist in minimizing the risks to people and the environment.
- Few of the pesticides approved for use decades ago have been re-evaluated against current standards.
- The government has no overall picture of pesticide use in Canada because there is still no database on pesticides sales to assist in monitoring the risks to health, safety, and the environment.

Background and other observations

1.7 Since our 1999 audit a number of new developments have occurred, including the ratification of the Stockholm Convention on Persistent Organic Pollutants (POPs) and the introduction of the new *Canadian Environmental Protection Act, 1999* (CEPA, 1999). CEPA, 1999 has led to sweeping changes in federal activities, introducing new requirements and modifying existing ones.

1.8 Our follow-up looked more closely at one of these changes, the requirement that Environment Canada and Health Canada categorize all substances on the Domestic Substances List—around 23,000 substances. This categorization must be completed by 14 September 2006. The federal government is also required subsequently to assess or screen the substances that have been identified as having the greatest potential exposure to Canadians, or that are persistent or bioaccumulative and inherently toxic to human beings or non-human organisms. This process may take up to a few decades to complete.

The Department has responded. In this follow-up, we did not make new recommendations to departments. The six departments affected by the 1999 audit and by this follow-up have provided a joint response to the chapter. The response, in the Conclusion section of this chapter, indicates that the responsible departments will continue to “strengthen their capacity within available resources” but does not indicate the specific actions they will take.



The Legacy of Federal Contaminated Sites

Chapter 2 Main Points

2.1 The federal government has so far failed to address the issue of federal contaminated sites adequately. Thirteen years after it started to deal with this issue, it still

- does not know how many of its sites are contaminated;
- does not have a full picture of the risks to human health and the environment and the likely cost of dealing with (cleaning up or managing) the sites;
- does not have a ranking of the worst sites in order of risks;
- does not have long-term, stable funding to manage the problem effectively; and most important,
- does not have firm central commitment and leadership, including an action plan for dealing with the higher-risk sites in a timely manner.

2.2 The federal government could appear to be applying a double standard. On the one hand, those who lease federal lands and cause contamination are required under recent lease agreements to clean up their own mess. On the other hand, the government has failed to establish a similar mandatory requirement for federal organizations to clean up their own contamination on federal lands.

2.3 At its current spending rate, the government will need decades to deal with its known contaminated sites. It has assessed over 8,500 sites since 1996 but has yet to begin evaluating at least 1,500 additional sites it suspects to be contaminated. Government officials are considering including their current estimate of the minimum amount of the government's environmental liability in the notes to the government's financial statements for the year ended 31 March 2002. We estimate that the total cost to Canadians to deal with these sites represents billions of dollars.

2.4 The federal government says it is managing its fiscal deficits to avoid leaving a burden for future generations, but its failure to deal in a timely manner with the environmental legacy of contaminated sites in its own backyard passes on another burden.

Background and other observations

2.5 As noted in our audits of 1995 and 1996, the need for a program to clean up contaminated sites in Canada was recognized in 1989 when the federal government participated in a \$250 million five-year federal/provincial program. As part of this program, Environment Canada started to develop a

list of federal sites suspected of being contaminated and requiring further study. This program ended in 1995. Other federal commitments since 1996 have so far resulted in only limited progress toward resolving the problem of contaminated sites under federal responsibility. The progress has been focussed on developing policy and guidance documents, assembling a more complete picture of federal contaminated sites, and cleaning up some of them.

2.6 Unless they are managed properly, contaminated sites can lead to significant contamination of water, soil, and air, thus threatening human health and the environment; they can also take valuable land out of productive use and jeopardize the way of life of those who live off the land.

2.7 It is far easier and less costly (up to 40 times less expensive in the case of groundwater supply contamination, according to an estimate by the United States Environmental Protection Agency) to prevent environmental damage than to try and correct it after contamination occurs. Pollution prevention is an important element of sustainable development.

2.8 The use of storage tank systems containing petroleum or allied petroleum products is a major cause of the contamination on federal sites and is a widespread problem. The current regulations are mainly a paper exercise that will do little, if anything, to reduce contamination caused by spills or leaks. Significant gaps exist, with potentially harmful consequences. For example, under the regulations a leaky storage tank could remain in use, polluting the surrounding environment, and there is no requirement to clean up the contamination.

2.9 One of Canada's largest and most contaminated sites is the Sydney tar ponds. Although federal officials do not consider it to be a federal site, the government has

- spent over \$66 million on environmental studies and cleanup attempts since the 1980s. An additional contribution of \$187 million was made to modernize steel-making facilities—amounting to over \$250 million spent on this site and surrounding area during the last 20 years;
- not yet found, along with the other parties involved, an acceptable cleanup or management solution, although federal government officials anticipate that the community will recommend options in spring 2003 for consideration by the three levels of government;
- not decided on the extent of its future contribution, if any, toward the costs associated with the next cleanup phase of the Sydney tar ponds site; and
- not developed a clear policy for dealing with contaminated sites where other levels of government are involved.

After 20 years and \$66 million spent on environmental studies and cleanup attempts, the federal government still needs to finalize its game plan for the Sydney tar ponds site.

Federal departments and agencies have responded. All federal departments and agencies responsible for contaminated sites, except for Agriculture and Agri-Food Canada and Health Canada, provided a response to our recommendations. Their detailed responses follow each recommendation throughout the chapter. They generally agree with our recommendations and in their responses have indicated a number of actions under way to deal with them, in whole or in part. The Treasury Board Secretariat and Environment Canada did not fully agree with all of our recommendations. We noted that some departments and agencies expressed concerns in their responses regarding the adequacy of existing human and financial resources to complete the identification and assessment of contaminated and suspected sites, and to deal with (clean up or manage) the sites in a timely manner. Responses also revealed different points of view on a mandatory requirement for federal organizations to clean up or manage their contaminated sites and the preparation of a consolidated report on progress achieved against action plans.



Abandoned Mines in the North

Chapter 3 Main Points

3.1 Hundreds of thousands of tons of highly toxic chemicals such as arsenic and cyanide are found at northern abandoned mine sites. These chemicals, the result of past mining operations, have accumulated to hazardous levels. Indian and Northern Affairs Canada estimates that the cleanup and closure of these complex contaminated sites will cost Canadian taxpayers at least \$555 million. In many cases, long-term site management will be needed because complete and definitive cleanup will not be possible.

3.2 Every year, Indian and Northern Affairs Canada spends millions of dollars in an effort to stop contaminants from escaping these sites. This year alone, the Department has budgeted up to \$26 million to prevent water contamination and protect human health and the environment.

3.3 This current care and maintenance approach is a band-aid approach that does little to solve the problems in the long term. Further, considering the rapidly growing costs associated with delaying decisive action, it is not an optimal use of public funds. With insufficient financial resources, the Department is scrambling to keep up with the demands. Long-term stable funding and long-term solutions are required.

3.4 In the past, the Department did not collect sufficient financial security from mining companies operating in the North to cover the costs for the eventual cleanup and closure of mine sites. Prior to 1993, there were legislated limits to the amount of financial security that could be collected. These restrictions were removed in 1993. Since then, Indian and Northern Affairs Canada has progressively increased the amount of financial security required from owners of operating mines in the North. Its objective is to obtain full financial security for all mining projects.

3.5 The Department reported that full financial security is being achieved for the two new diamond mines. However, it may not be possible for some older mines still in operation. If these older mines are abandoned, Canadian taxpayers will end up paying the difference for their cleanup and closure.

3.6 The Department's challenge of addressing the problems of northern abandoned mines is two-fold:

- cleaning up the environmental mess it has inherited from the past; and
- ensuring that mining companies operating in the North pay for the cleanup of the environmental problems they create now and in the future.

Background and other observations

3.7 As the key federal department in Canada's north, which includes the Yukon, Northwest Territories, and Nunavut, Indian and Northern Affairs Canada has a broad mandate. It is the land administrator on behalf of the federal government, a key promoter of economic development, and a contributor to the protection of the environment. The Department also has responsibilities for Aboriginal peoples, primarily for Status Indians living on reserve and Inuit.

3.8 An abandoned mine is one whose owner is out of business. When a northern mine is abandoned, the land lease reverts back to the federal government, and Indian and Northern Affairs Canada inherits the associated environmental costs and the day-to-day management responsibility for the mine.

3.9 Over recent years, the Department has made progress toward establishing a comprehensive program to deal with contaminated sites in the North, including abandoned mines. Officials of the Department indicated that full implementation of the related draft management framework will depend on available human and financial resources.

3.10 The method chosen by Indian and Northern Affairs Canada to ensure that mining companies pay for the eventual cleanup of mine sites is the collection of financial security deposits from them prior to start-up and while they are in operation. If a mining company conducts the proper cleanup and closure of its mine site, the financial security collected by the Department is returned.

The Department has responded. Indian and Northern Affairs Canada agrees with our recommendations. The Department has provided us with a clear description of the specific actions it will take to address our recommendations, including time frames within which these actions are to be completed, where appropriate.



Invasive Species

Chapter 4 Main Points

4.1 The federal government has not responded effectively to invasive species that threaten Canada's ecosystems, habitats, and other species. Ten years after the federal commitment to prevent their introduction or to control or eradicate them, the number of invasive species in Canada continues to grow. We found that neither the United Nations Convention on Biological Diversity nor the Canadian Biodiversity Strategy has triggered an identifiable change in the government's approach:

- The federal government has not identified the invasive species that threaten Canada's ecosystems or the pathways by which they arrive.
- The human and financial resources to deal with invasive species are spread across several federal departments and agencies as well as outside organizations, and they are not co-ordinated. There is no consensus on priorities and no clear understanding among federal departments or between the federal government and other jurisdictions of who will do what to respond.
- The federal government has not established the capability to gauge progress on its commitment to deal with invasive species.

4.2 No federal department sees the big picture or has overarching authority to ensure that federal priorities are established and action is taken. There is a bias toward continuing dialogue and consensus building and a lack of practical action to prevent invasive species from harming Canada's ecosystems, habitats, or native species.

4.3 Since invasive species frequently travel along as stowaways with people, goods, and vehicles moving between regions with different ecosystems, increases in trade and the gross national product—clearly a key economic goal—will almost certainly lead to further invasions unless the federal government takes concrete steps to prevent them. If action is not taken, costs will mount; and because invasive species are a leading cause of biodiversity loss, our storehouse of biological resources will continue to be depleted.

4.4 Prevention is recognized by experts and the government as the best response to invasive species. Preventive measures would not be cost-free, or stop all invaders, but they are generally considered more practical than reacting to a succession of crises and repairing damage after invaders have become established. Prevention can also reduce the cost and ecological impacts of chemical controls and biodiversity loss associated with invasive species.

Background and other observations

4.5 Fish, plants, insects, bacteria, viruses, and other organisms found in an area beyond their native range are alien to that area. Not all alien species are harmful. Indeed, many have been introduced intentionally into Canada for the benefits they offered. But some, known as invasive species, can cause disease in native plants and animals or prey upon them; change local habitat, making it inhospitable to native species; or simply reproduce faster than native species and crowd them out by inhabiting their space and eating their food. Experts have concluded that invasive species are second only to habitat destruction as a leading cause of biodiversity loss, including local extinctions of species. Studies to date indicate that they cause billions of dollars of damage to Canada's economy every year.

4.6 In 1992, Canada and 167 other countries signed the United Nations Convention on Biological Diversity and pledged to prevent the introduction of, or control or eradicate, alien species that threaten ecosystems, habitats, or other species. The Biodiversity Convention Office was established at Environment Canada to co-ordinate a Canadian response; it produced the Canadian Biodiversity Strategy in 1995.

4.7 This audit focussed on the extent to which Environment Canada, on behalf of the federal government, has co-ordinated an effective national response to invasive species that threaten Canada's ecosystems, habitats, or other species. We set out to determine to what extent Canada's 1992 commitment and its 1995 strategy triggered a change in the federal government's approach to managing those species and the impact of any changes on prevailing trends.

The departments have responded. Environment Canada, Fisheries and Oceans Canada, and Transport Canada have accepted our recommendations. Their responses, which follow each recommendation in the chapter, indicate what the departments plan to do. The majority of their responses do not indicate when action will be taken; and in some cases the responses indicate that action is conditional on the availability of resources or on action by other departments or jurisdictions.



Sustainable Development Strategies

Chapter 5 Main Points

5.1 Sustainable development strategies of federal departments and agencies are not yet fulfilling their potential to influence change toward sustainable development. The strategies are used as a communications tool, a foundation for further change, and a focal point for managing sustainable development. But currently they are not the strategic documents they were meant to be.

5.2 The commitments made by departments and agencies are the nuts and bolts of the strategies. They form the basis on which departments report annually on their progress toward sustainable development. We found that measuring and reporting on progress continues to be a challenge for departments. The sheer volume of commitments in the strategies makes reporting an onerous task. Moreover, in departmental performance reports the quality of reporting on sustainable development varies widely, with weaknesses persisting from year to year.

5.3 The first two rounds of sustainable development strategies laid the foundation for progress. The next step for departments is to focus their strategies more on what they need to do differently to further sustainable development.

5.4 If the strategies are to evolve to their full potential, direction and support from the centre of government are essential. The challenge currently faced by each department is like assembling a large jigsaw puzzle without the picture box. Many of the needed pieces are on the table, but it is not clear what picture is meant to emerge. In setting direction, the federal government needs to describe, in terms all Canadians can understand, what a sustainable Canada would look like 20 years from now.

Background and other observations

5.5 In 1992, Canada and many other countries around the world who attended the Earth Summit in Rio de Janeiro committed to develop national strategies for sustainable development. The strategies were seen as a way to translate the concept of sustainable development into a reality. Canada chose to make selected federal departments and agencies responsible for sustainable development within the sphere of their mandates.

5.6 Twenty-eight departments and agencies tabled their first sustainable development strategies in December 1997. In our 1998 Report, we called the strategies “less a commitment to change in order to move toward sustainable development than a restatement of the status quo.” The Commissioner said

in that report that the second strategies were expected to focus more on what departments would do differently to promote sustainable development. The second strategies were tabled in February 2001.

The government has responded. Several departments and agencies accepted our recommendation to use the inventory of commitments as the basis of comprehensive and explicit reporting on progress toward sustainable development. Other departments deferred to the government response prepared by the Privy Council Office in conjunction with the Treasury Board Secretariat. This response does not require use of the inventory.

The Privy Council Office did not agree to play a leadership role in renewing the federal government commitment to sustainable development, including providing enhanced guidance and direction to departments and agencies. In its response, the Privy Council Office indicated that leadership should come from the Sustainable Development Coordinating Committee, working with the Assistant Deputy Ministers Task Force and the Interdepartmental Network on Sustainable Development Strategies.



Exercising Your Right to Know: The Environmental Petitions Process

Chapter 6 Main Points

6.1 The Commissioner of the Environment and Sustainable Development is convinced that the environmental petitions process offers great promise. In response to recent petitions, government organizations have changed or clarified their policies, undertaken site inspections, and even launched a new project. As the guardian of the process, the Commissioner is committed to ensuring that the opportunities afforded by the process are realized.

6.2 While a number of petitions received to date are from established national or international environmental groups, most continue to come from individual Canadians, local volunteer lobby groups, regional and provincial organizations, and parliamentarians.

6.3 Protecting fish and fish habitat remains a significant concern for Canadians. Fisheries and Oceans Canada continues to be one of the most petitioned departments.

6.4 Of the 13 responses required from Fisheries and Oceans Canada during the past year, only two responses were within the time limit stipulated under the *Auditor General Act*.

6.5 Environmental petitions and the responses provided by federal ministers are now part of the public record. For full details on environmental petitions and their responses, you can access our petitions catalogue on our Web site at www.oag-bvg.gc.ca/environment.

Background and other observations

6.6 Canadians have a right to know whether the government is taking environmental and sustainable development issues seriously. The environmental petitions process, under the *Auditor General Act*, provides parliamentarians and Canadians with a unique vehicle for pursuing environmental concerns that involve the federal government. The issue may be something that affects all Canadians, such as biotechnology, or it could be something happening in a local community. With a petition, which can be a simple letter, it is possible to raise questions and concerns and to get answers and action from federal departments and agencies.

6.7 Through the petitions process, federal departments and agencies may be asked to explain federal policy, investigate an environmental infraction, or examine their enforcement of federal environmental legislation.

6.8 The Commissioner of the Environment and Sustainable Development, Johanne G  linas, is committed to making the petitions process work for

Canadians. Charged with overseeing petitions on behalf of the Auditor General, the Commissioner is responsible for petitions from the beginning of the process right through to the end. She receives petitions and ensures that they are forwarded to the appropriate federal ministers. She monitors the responses and is required to report annually on petitions to the House of Commons.

6.9 It is evident that many departments and agencies are putting a lot of time and effort into their responses. Responses that do not adequately address the petitioners' requests may be sent back to federal ministers. In the coming year, the Commissioner intends to scrutinize responses more closely and selectively follow up on petition commitments made by departments and agencies.

6.10 The process is gaining momentum. In the past year (16 July 2001 to 15 July 2002), we received 28 petitions, considerably more than in previous years and close to one half of the total of all petitions received to date (60 in total).

Report of the Commissioner of the Environment and Sustainable Development to the House of Commons—2002

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