2011

Report of the

Commissioner of the Environment and Sustainable Development

DECEMBER

The Commissioner's Perspective

Main Points—Chapters 1 to 5

Appendix

Office of the Auditor General of Canada

The December 2011 Report of the Commissioner of the Environment and Sustainable Development comprises The Commissioner's Perspective, Main Points—Chapters 1 to 5, an appendix, and six chapters. The main table of contents for the Report is found at the end of this publication.

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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 Speakers of the House of Commons and the Senate:

On behalf of the Auditor General of Canada, I have the honour to transmit herewith this 2011 December Report to the House of Commons, which is to be laid before the House and the Senate, in accordance with subsection 23(5) of the *Auditor General Act*.

Scott Vaughan
Commissioner of the Environment
and Sustainable Development

OTTAWA, 13 December 2011

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The Commissioner's Perspective

The Commissioner's Perspective

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Scott Vaughan
Commissioner of the Environment
and Sustainable Development

Introduction

Science helps Canadians make decisions every day, and in the federal government, informed decision making is at the heart of sound policies. Our report this year covers two themes that relate to decision making: how environmental science and monitoring help support sound environmental decision making, and how the enforcement of federal environmental laws and regulations helps to foster good environmental stewardship.

This report includes an audit of environmental science at Environment Canada, as well as a study of federal environmental monitoring systems that shows how scientific analysis supports key decisions. We also include a study of the principles of sustainable fisheries that increases our understanding of how scientific information can help to improve the management of fisheries.

Federal environmental laws and regulations need to be enforced to foster good environmental stewardship. This report presents the audit results of how the federal government is managing the enforcement of some federal environmental laws and regulations according to the *Canadian Environmental Protection Act, 1999*, the *Transportation of Dangerous Goods Act, 1992*, and the *National Energy Board Act*. The last chapter of this report is the annual report on environmental petitions, which summarizes the petitions submitted in the past year, from 1 July 2010 to 30 June 2011, and the performance of federal ministries in responding to petitioners.

Finally, at the end of this Perspective, and as required by law, I comment on the information in Environment Canada's *Progress Report* for the government's *Federal Sustainable Development Strategy 2010–2013*, submitted in June 2011.

Environmental science and monitoring

Environmental science and Environment Canada

Chapter 2, Environmental Science, examines how Environment Canada is managing various science-based activities, from understanding and managing air and water pollution to determining which of the thousands of chemicals used every day are harmless and which are toxic.

Environment Canada defines itself as a "science-based" federal department: some 3,000 professionals work in various science and

technology programs, and over 65 percent of the Department's annual budget is spent on science and technology. Analysis by Environment Canada indicates that it is among the world's leaders in producing high-quality environmental research. The Department has a long record of accomplishments. These include taking action on the acid rain that damaged so many lakes and rivers in the 1980s, launching the UV Index in the 1990s to warn of risks from the depleted stratospheric ozone layer, and managing risks from mercury over the last several decades.

Our audit looked at how Environment Canada manages science, from ensuring the quality and strategic relevance of scientific research to communicating scientific evidence to decision makers.

We found that Environment Canada has the necessary systems in place to conduct high-quality science. How it ensures the quality of the scientific research it produces is based on principles of transparency that other world-class, science-based institutions apply so that research findings can be scrutinized and reproduced.

We examined the internal systems that Environment Canada has for informing programs and management of scientific evidence, and we found that good practices are in place. Overall, we found that federal scientists provide input into every major program area of Environment Canada; for example, reducing pollution, conserving nature, and assessing toxicity. Providing scientific evidence to meet the demands of programs and decision makers is a challenge. For example, the training of decision makers typically differs from that of scientists; the two groups use different workplace vocabularies, work on different schedules, and may have different assumptions about what constitutes fact-based decisions.

One important federal program noted in the audit is the federal government's Chemicals Management Plan. The process for assessing if substances are toxic includes risk assessments. The decision that a particular substance is toxic or not is made publicly available, and is subject to public commentary. The information and rationale are disclosed, allowing for informed opinion and debate, even if there is disagreement regarding a recommendation or a decision. Moreover, seeking public comment provides another benefit: information not considered previously can be submitted by an outside party. That additional information can strengthen the government's position or lead it to reconsider final recommendations.

Science and transparency

The federal government is required by law to increase its transparency in environmental matters. The specific purpose of the *Federal Sustainable Development Act*—adopted in 2008—is to increase the government's transparency and accountability to Parliament for environmental decision making. In my view, the Chemicals Management Plan is a model for the kind of transparency in decision making called for in the *Federal Sustainable Development Act*.

Transparency is an essential part of effective governance for democratic institutions, international financial markets, scientific research, and multilateral trading systems. Transparency is not a one-way street, whereby information is disclosed to the public after the fact. Instead, it involves a two-way exchange between government and its partners, based on meaningful public participation.

The communication of scientific research to external stakeholders is an important part of transparency. By objectively explaining what science findings mean, scientists can help Parliament and Canadians understand the significance of ongoing scientific research. I encourage the government to clarify when and under what conditions federal scientists are able to communicate the results of their research externally. Chapter 4, A Study of Managing Fisheries for Sustainability, notes that open and well-documented decisions can help in promoting acceptance and compliance between government and its stakeholders.

The federal government—including Environment Canada—conducts scientific research in support of the public interest. Across Canada, First Nations communities possess a wealth of information and traditional knowledge about Canada's changing environment. Universities, the private sector, and environmental organizations conduct important environmental research each day. However, few if any organizations, aside from the federal government, are capable of conducting credible, long-term environmental research and monitoring at a national level.

The current round of budget reductions facing the federal government underscores how critical it is for Environment Canada to have a strategy that specifies exactly which scientific research and environmental monitoring activities are indispensable and irreplaceable for Canada's public interest; which activities are duplicated, if any; and which can be performed by others.

In 2007, Environment Canada produced a long-term strategic science plan. It contained three long-term directions for its science activities aimed at ensuring that Canadians can continue to benefit from the Department's scientific skills and resources. However, our audit found that the plan had not been implemented across the Department. While individual programs have systems to set their own priorities, a department-wide strategic plan for science is more urgent than ever during this period of fiscal restraint.

Environmental studies

This report contains the results of two studies. Chapter 5, A Study of Environmental Monitoring, provides Parliament with an up-to-date inventory of the various federal monitoring systems in place and describes key attributes of an effective monitoring system. The second study, on sustainable fisheries, describes how scientific information can be used to confront the challenges to managing fisheries for sustainability.

Enforcing environmental laws

The second theme of this report is the enforcement of key federal laws and regulations intended to protect Canadians and the environment. We present the results of two audits: one on the transportation of dangerous products, and the other on the enforcement of the *Canadian Environmental Protection Act, 1999* (CEPA 1999).

The government has established legislative and regulatory frameworks to protect human health and the environment. Transport Canada, the National Energy Board, and Environment Canada have programs intended to identify those who violate the law and have the authority to make violators take corrective action.

As discussed in Chapter 1, the *Transportation of Dangerous Goods Act, 1992* regulates the everyday shipment of goods considered to be dangerous if mishandled. It covers transport systems and substances regulated by Transport Canada, such as industrial acids and petroleum products. The *National Energy Board Act* governs the shipment of petroleum products through the roughly 71,000 kilometres of oil and gas pipelines that are regulated by the National Energy Board.

Weaknesses in the management practices of Transport Canada's transportation of dangerous goods program are long-standing. An internal audit conducted in 2006 identified a number of weaknesses in management practices that have yet to be addressed. These include the need for a consistent approach to planning and carrying out Transport Canada's enforcement activities.

The National Energy Board has developed a sound risk-based approach for monitoring the adherence of regulated companies to established regulations and standards. Of concern is that the Board has yet to review many of the emergency response procedures manuals submitted by regulated companies.

In Chapter 3, Enforcing the *Canadian Environmental Protection Act, 1999*, we examined the enforcement of the *Canadian Environmental Protection Act, 1999*, and 45 of its 53 regulations that govern a wide variety of substances and activities in the Canadian economy—from hazardous wastes to contaminated fuels, asbestos, and the disposal of waste at sea. CEPA 1999 is enforced by Environment Canada.

We found that Environment Canada's enforcement program is not well managed to adequately enforce compliance with CEPA 1999. The Department's ability to adequately manage the enforcement program is limited by an incomplete knowledge of the regulated community. We noted that some of the regulations are not enforced at all due to a lack of training for enforcement officers or inadequate laboratory tests.

I am concerned that these three organizations have not been diligent in verifying that regulated companies have taken action to correct identified instances of non-compliance.

Assessing the fairness of information in the *Progress Report for the Federal Sustainable Development Strategy 2010–2013*

As required by section 23(3) of the *Auditor General Act*, I have assessed the information contained in Environment Canada's *Progress Report for the Federal Sustainable Development Strategy 2010–2013*.

My responsibility is to examine the progress report required under section 7(2) of the *Federal Sustainable Development Act* to assess the fairness of the information in the report with respect to the progress of the federal government in implementing the Federal Sustainable Development Strategy (FSDS) and meeting its targets.

My assessment covered only the information contained in Environment Canada's *Progress Report for the Federal Sustainable Development Strategy 2010–2013*. My assessment did not include information referenced by web links included in the report.

Environment Canada's first progress report on the implementation of the Federal Sustainable Development Strategy 2010–2013 describes the systems and strategies needed to implement the FSDS, and describes how results will be measured and shared in future reports. The report states that subsequent progress reports will track the implementation of the FSDS, and that a second and more substantive progress report will be tabled in the fall of 2012.

The FSDS report does not contain information on the progress of the federal government in meeting the targets set out in the Federal Sustainable Development Strategy that was developed in 2010. As a consequence, at this time, there is no basis for providing an assessment of fairness as required by section 23(3) of the *Auditor General Act*.

Conclusion

The year 2012 marks the fortieth anniversary of many national environmental ministries in the countries that are members of the Organisation for Economic Co-operation and Development (OECD). It also marks four decades since the first global meeting was held in Stockholm to examine the planet's changing environmental conditions. Achievements over this time have shown that environmental stewardship is complex and must be supported by informed decisions based on scientific knowledge and the results of effective environmental monitoring. Canadians look for policy choices that are based on the best available facts. I hope this report will help Parliament hold the government to account for the federal role in the environmental sciences.

Main Points—Chapters 1 to 5

Transportation of Dangerous Products

Chapter 1 Main Points

What we examined

Dangerous products, as defined by federal legislation, play a key part in Canada's economy, whether exported directly, like gas and oil, or used by industry—for example, natural gas in the plastics industry and explosives in the mining and construction industries.

Shipments of dangerous products transported throughout Canada each year by road, rail, air, and ship number in the tens of millions and are subject to the *Transportation of Dangerous Goods Act, 1992* and its regulations administered by Transport Canada. The crude oil, petroleum products, natural gas liquids, and natural gas that move through approximately 71,000 kilometres of Canada's interprovincial and international oil and gas pipelines are subject to the *National Energy Board Act* and its regulations administered by the National Energy Board.

Both Transport Canada and the National Energy Board aim to promote the prevention of spills and releases of dangerous products and preparedness for incidents and emergencies that may arise. They do this by monitoring and enforcing compliance with legislation and standards and by taking actions to ensure that regulated organizations have appropriate and effective mechanisms in place to respond if an emergency does occur. In 2011–12, regulatory oversight activities accounted for about 63 staff and $7.3 million at the National Energy Board and 74 staff and $6.7 million at Transport Canada's Transportation of Dangerous Goods Directorate.

We examined how Transport Canada and the National Energy Board determine whether regulated organizations have complied with established legislation and standards in transporting dangerous products and whether they have prepared emergency response plans. We did not look at emergency response and recovery activities that would take place following an incident.

While this chapter contains references to various private sector companies, it must be noted that our conclusions about management practices and actions refer only to those of Transport Canada and the National Energy Board. We did not audit the records of the private

sector organizations. Consequently, our conclusions cannot and do not pertain to any practices that regulated organizations followed.

Audit work for this chapter was completed on 30 June 2011.

Why it's important

Dangerous products are a necessary element in the daily lives of Canadians. They range from gasoline used in motor vehicles to substances such as lead and mercury used in manufacturing electronics products. Industries that manufacture and use dangerous products provide jobs to Canadians.

While major spills and releases involving dangerous products are rare, they can have significant consequences for Canadians' health, the economy, and the natural environment. The shipment of dangerous products must be managed well to reduce the risk and impact of spills and releases.

What we found

- Transport Canada lacks a consistent approach to planning and implementing compliance activities. As a consequence, it cannot ensure that sites are inspected according to the highest risk.
- Transport Canada has not ensured that corrective action has been taken on instances of non-compliance. In the sample of completed inspection files we reviewed, 53 percent identified instances of non-compliance and, of those files, 73 percent contained incomplete or no evidence that corrective action had been taken.
- Transport Canada has given only temporary, interim approval for nearly half of the emergency response assistance plans put in place by regulated organizations. As a consequence, many of the most dangerous products regulated under the Act have been shipped for years without the Department having completed a detailed verification of plans for an immediate emergency response.
- Many of the issues our audit identified in Transport Canada are not new; an internal audit identified these same concerns over five years ago. The Department has yet to correct some of the key weaknesses in its regulatory oversight practices.
- While the National Energy Board has identified gaps and deficiencies through its verification of compliance for the companies it regulates, there is little indication that it has followed up to ensure that these deficiencies have been corrected. In our audit sample of completed compliance verification activities, 64 percent of the files identified gaps and deficiencies and, of those files, only 7 percent contained evidence that the Board had followed up to determine if corrective action had been taken.

- The National Energy Board has yet to review the emergency procedures manuals of 39 percent of regulated companies. As a consequence, it has not determined whether those manuals meet its established expectations. In our sample of manuals that it had reviewed, the Board identified deficiencies in all 30 cases but communicated those to only 3 of the regulated companies, and in only 1 case did it check to ensure that the noted deficiencies had been corrected.

The entities have responded. The entities agree with all of our recommendations. Their detailed responses follow the recommendations throughout the chapter.

Environmental Science

Chapter 2 Main Points

What we examined

Science plays a significant role at Environment Canada. Scientific expertise and the results of scientific research and monitoring are used to inform a wide range of decisions, from protecting Canada's freshwater resources to providing real-time weather and climate predictions; from protecting wildlife and habitat to controlling pollution; and from assessing and managing the risks of toxic substances to understanding Canada's changing climate.

In the 2010–11 fiscal year, the Department spent $726 million of its total $1.1 billion budget on science and technology; about 3,600 of its 7,000 employees were engaged in science and technology activities.

We examined how Environment Canada manages the quality of its science activities and communicates scientific evidence to decision makers. We also examined strategic and operational planning for science in support of departmental priorities and outcomes.

Audit work for this chapter was completed on 29 July 2011.

Why it's important

Science is part of the everyday life of Canadians. It contributes to having safe food and drinking water; it supports daily weather forecasts; it is used to prevent or control the entry of toxic substances into our environment and to protect natural ecosystems and biological diversity; and it contributes to the economic well-being of Canadians by supporting various industries such as farming, fisheries, forestry, and energy.

The importance of using scientific evidence to inform decision making is well recognized. Science is a key factor that informs decisions about legislation, regulations, policies, and programs that may contribute to sustainable development in Canada. Federal decision makers need access to timely, high-quality, and objective scientific advice to make decisions about policy challenges. Many of the issues that Canadians care about are also informed by science.

What we found

- Environment Canada released a Science Plan in 2007 that set long-term directions and priorities for managing and conducting its science activities. However, the Department recognizes that it has not implemented the Plan with sufficient rigour, and specific commitments in the Plan have yet to be carried out or documented. The Department does not have an operational plan with clear and measurable objectives necessary for putting the Plan into effect and measuring progress on the Plan's long-term directions.
- Environment Canada communicates scientific evidence in a variety of ways, from electronic newsletters that target broad audiences to briefing notes that are more tailored to the needs of internal decision makers. However, it has not systematically assessed how well it is communicating scientific evidence to decision makers. This makes it difficult for the Department to know whether communications are effective and whether they need to be improved.
- The Department has established systems and practices—ranging from peer review of its scientific publications to accreditation of its environmental testing laboratories—to ensure the quality of the science it conducts.

The Department has responded. The Department agrees with all of the recommendations. Its detailed responses follow the recommendations throughout the chapter.

Enforcing the *Canadian Environmental Protection Act, 1999*

Chapter 3 Main Points

What we examined

The *Canadian Environmental Protection Act, 1999* (CEPA 1999) is Canada's principal federal environmental statute. It is intended to protect the environment and human health by mitigating and managing risks posed by harmful substances. CEPA 1999 and its regulations govern a variety of environmental matters, including toxic substances, cross-border air and water pollution, and waste disposal. The Act also imposes requirements for pollution prevention planning and emergency plans, and it regulates the interprovincial and international movement of hazardous wastes and recyclable materials.

Environment Canada's enforcement program is aimed at ensuring that individuals, companies, and government agencies comply with the pollution prevention and conservation goals of environmental and wildlife protection Acts and regulations, including CEPA 1999. The enforcement of CEPA 1999 is carried out by the Department's Environmental Enforcement Directorate, comprising a national office and five regional offices across Canada whose activities include monitoring and enforcing regulatory compliance.

We examined whether Environment Canada's enforcement program was well managed to adequately enforce compliance with CEPA 1999. We assessed whether the Department has applied a risk-based approach to plan its enforcement activities and target the greatest threats to human health and the environment; enforced the law in a fair, predictable, and consistent way, as the Act requires; measured the results of its enforcement activities; and acted on identified opportunities for improvement.

Audit work for this chapter was completed on 11 October 2011.

Why it's important

CEPA 1999 states that the protection of the environment is essential to the well-being of Canadians and that the primary purpose of the Act is to contribute to sustainable development through pollution prevention. According to Environment Canada, environmental laws alone are not enough to guarantee a cleaner, better environment. These laws also need to be enforced. Enforcing CEPA 1999 is therefore an important part of protecting the health of Canadians, biodiversity, and the quality of Canada's air, soil, and water.

According to Environment Canada, enforcement of the law can encourage behavioural changes needed to protect the environment and human health by preventing and managing risks posed by toxic and other harmful substances.

What we found

- The enforcement program has not been well managed to adequately enforce compliance with the *Canadian Environmental Protection Act, 1999* and ensure that threats to Canadians and their environment from pollution are minimized. The Environmental Enforcement Directorate lacks key information on regulated individuals, companies, and government agencies to know whether it is targeting its enforcement activities toward the highest-risk violators or the highest risks to human health and the environment, as called for by Environment Canada's own environmental enforcement policy.
- The Department's enforcement actions are limited by gaps in its capacity to enforce CEPA regulations. Many of the factors it considers in setting priorities for enforcement have nothing to do with risks to human health or the environment or with the past record of compliance of those regulated. Instead, some regulations are excluded from being priorities due to lack of adequate training for enforcement officers or lack of adequate laboratory testing to verify compliance.
- The Environmental Enforcement Directorate failed to follow up on half of its enforcement actions during the audit period to verify that violators returned to compliance with CEPA regulations. In addition, often it did not apply key management controls to ensure that enforcement officers applied the Act in a fair, predictable, and consistent manner across the country, as called for by the Act.
- The Department has been slow to act on significant shortcomings that continue to impede successful enforcement, such as inadequate gathering and analysis of information to inform enforcement planning and targeting, and inadequate training of enforcement officers. Furthermore, Environment Canada is not measuring the results of its enforcement activities and actions and does not know whether they have achieved the program objectives of encouraging compliance and minimizing damages and threats to the environment.

The Department has responded. Environment Canada agrees with our recommendations and has provided responses. However, it disagrees with our findings and conclusions. We elaborate on the disagreement at the end of the Conclusion section of this chapter.

Information contained in the Department's responses to our audit recommendations contradicts our audit evidence. The Department was not able to provide evidence to support the representations made in its responses.

A Study of Managing Fisheries for Sustainability

Chapter 4 Main Points

What we examined

The federal government is responsible for managing seacoast and inland fisheries on behalf of all Canadians and for ensuring that these activities are conducted in a sustainable manner.

Based on principles of sustainable development that are generally accepted internationally, a sustainable fishery would support the current needs of society and of individuals engaged in the fishery and would be managed with a view to protecting the resource for future generations.

We conducted this study to identify the challenges of operating fisheries in a sustainable way; the key properties of sustainable fisheries; and the principles, responsibilities, and management practices involved in managing fisheries sustainably. We focused on marine fisheries, which in Canada include First Nations, commercial, and recreational users.

This document is not an audit report. For this reason, our observations should not be seen as an assessment of the federal government's current fisheries practices or performance. This study is a step toward identifying a framework and criteria for our future audits to determine whether fisheries management practices are supporting sustainable fisheries.

Why it's important

Fisheries account for about 15 percent of the animal protein directly consumed by humans, and the demand for fish is expected to grow. In 2010, however, the Food and Agriculture Organization (FAO) of the United Nations reported that 32 percent of fish stocks worldwide were overexploited, depleted, or recovering.

In Canada, fisheries contribute to the national and coastal economies, but they are also under pressure. Some major fish stocks have declined substantially in recent years, with dramatic economic and social consequences. Because of the complexity of marine ecosystems, it can be challenging to manage human activities against a backdrop of natural variability.

Organizations that manage fisheries have a difficult job. They oversee and regulate the harvesting of fish in the context of significant uncertainty. They need to make decisions so that fish will be available in the future to provide the food and jobs on which many people rely.

What we found

- A sustainable fishery helps sustain fish stocks, markets, fishers, and, in some cases, communities. The long-term sustainability of a fishery depends, in part, on respecting ecological limits identified through the use of reliable scientific information. Respecting these limits requires taking into account the ecosystems on which fish survival depends and uncertainties about how the ecosystem will change.
- One element of a sustainable fishery is a framework of clear roles and responsibilities that is appropriate to the size and importance of the fishery. The FAO and others have concluded that fisheries are at greatest risk when such a clear framework does not exist. An effective framework of clear roles and responsibilities built on accountability and transparency can reduce the risk that fishing activity will endanger the long-term ecological sustainability of fish stocks.
- Every fishery includes many stakeholders. Within the necessary framework, management practices to help achieve a sustainable fishery include establishing and clearly communicating the social, economic, and ecological objectives for the fishery in order to guide the decisions and conduct of all those involved in it. Sound management practices also entail developing, implementing, and evaluating fishery plans aimed at sustainability, but they provide no guarantee of future harvests.

A Study of Environmental Monitoring

Chapter 5 Main Points

What we examined

The federal government collects information about what is going on in the environment to help Canadians make decisions every day. It monitors many different aspects of the environment, including solar flares, weather, air quality, migratory birds, fish, insects that carry human diseases, forests, water quality and quantity, changes in permafrost, and the ecology of national parks.

We conducted this study to develop an inventory of systems the federal government uses in monitoring the state of the environment; to identify the challenges associated with environmental monitoring; and to highlight good environmental monitoring practices. Together these serve as a basis for criteria for future audits of environmental monitoring conducted by the federal government.

We studied the environmental monitoring systems of several federal departments and agencies with responsibilities related to the environment. We interviewed expert officials from those organizations and from other jurisdictions, and reviewed the relevant literature. This included past observations and recommendations by our office; however, we did not follow up to determine what progress had been made.

This document is not an audit report. For this reason, our observations should not be seen as an assessment of the federal government's current practices or performance with respect to environmental monitoring. Because this is a study, it is descriptive and does not include recommendations.

Work for this chapter was completed on 31 July 2011.

Why it's important

Environmental monitoring is critical to knowing whether the quality of our environment is getting better or worse. Information gathered through environmental monitoring is important to many different decision makers, inside and outside the federal government. With the results of monitoring, the federal government can make informed decisions about how the environment will affect Canadians and how Canadians are affecting the environment. Outside the federal

government, the information is used by many people, such as municipal engineers to design flood control systems or public health experts to design effective policies. Timely and effective responses to environmental emergencies, such as spills, are impossible without adequate information. Farmers, hunters, foresters, and fishers all need to know what is happening to the natural resources they rely on.

The Canadian federal government shares responsibilities for environmental monitoring with businesses, local governments, provincial and territorial governments, and other national governments. Based on a Statistics Canada survey of federal science activities, we estimate that the federal government spends more than $500 million each year on different environmental monitoring activities and assigns more than 2,500 people to these activities.

What we found

- Environmental monitoring generates the critical information that is essential for the federal government to provide sound stewardship of the environment. The government uses the information to assess the current state of the environment, to predict the future environment, and to develop sound strategies for adapting to environmental change. For example, daily weather forecasts rely on a complex set of linked environmental monitoring systems.
- Environmental monitoring systems are most successful when they are well coordinated with other systems, when the right partners participate, when quality is built in from the beginning, when reports are designed to be useful, and when resources are used efficiently. For example, some monitoring systems rely heavily on expensive tools and equipment, such as satellites or scientific research vessels, that need to be managed carefully with respect to their long-term benefits and costs.
- Well-managed environmental monitoring systems can provide a basis for Parliament to hold departments and agencies accountable for their environmental stewardship.

Appendix

Appendix *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 *Financial Administration Act*;

. . .

"category I department"

"category I department" means

(a) any department named in Schedule I to the *Financial Administration Act*;

(b) any department in respect of which a direction has been made under subsection 11(3) of the *Federal Sustainable Development Act*; and

(c) any agency set out in the schedule to the *Federal Sustainable Development Act*.

"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;

POWERS AND 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.

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 anything 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 In addition to carrying out the functions referred to in subsection 23(3), 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 contributed to meeting the targets set out in the Federal Sustainable Development Strategy and have met the objectives, and implemented the plans, set out in their own sustainable development strategies laid before the Houses of Parliament under section 11 of the *Federal Sustainable Development Act*; 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 Parliament concerning anything that the Commissioner considers should be brought to the attention of Parliament in relation to environmental and other aspects of sustainable development, including

(a) the extent to which category I departments have contributed to meeting the targets set out in the Federal Sustainable Development Strategy and have met the objectives, and implemented the plans, set out in their own sustainable development strategies laid before the Houses of Parliament under section 11 of the *Federal Sustainable Development Act*;

(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 subsections 11(3) and (4) of the *Federal Sustainable Development Act*.

Duty to examine

(3) The Commissioner shall examine the report required under subsection 7(2) of the *Federal Sustainable Development Act* in order to assess the fairness of the information contained in the report with respect to the progress of the federal government in implementing the Federal Sustainable Development Strategy and meeting its targets.

Duty to report

(4) The results of any assessment conducted under subsection (3) shall be included in the report referred to in subsection (2) or in the annual report, or in any of the three additional reports, referred to in subsection 7(1).

Submission and tabling of report

(5) The report required by subsection (2) shall be submitted to the Speakers of the Senate and the House of Commons and the Speakers shall lay it before their respective Houses on any of the next 15 days on which that House is sitting after the Speaker receives the report.

Report of the Commissioner of the Environment and Sustainable Development—December 2011

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