

4th E Practice Guide

Integrating Environmental Considerations Into Performance Audit Work

December 2005

“Our office has an important role to play in helping to ensure that the federal government’s policies, programs and activities foster sustainable development...

We audit most areas of the Government of Canada. We are thus in a good position to inform parliamentarians and Canadians about whether departments and agencies are considering the environmental consequences of their activities appropriately. We also make recommendations for improvement. This is where we can make the biggest difference for Canada’s sustainable development prospects.”

**[Message from the Auditor General
Sustainable Development Strategy of the Auditor General of Canada 2003–06]**

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Introduction

Background

In 1995 Parliament formally expanded the mandate of the Office of the Auditor General to include environmental and sustainable development issues. It also established within the Office the position of Commissioner of the Environment and Sustainable Development. Through our audit work the Office plays an important role in helping to ensure that the federal government's policies, programs, and operations protect the environment and foster sustainable development as intended.

Another change dating from 1995 is the requirement that certain federal departments/agencies each submit a Sustainable Development Strategy (SDS) to Parliament starting in 1997, and update the Strategy every three years (see Exhibit 1 and Appendix 3).

As amended in 1995, section 7(2)(f) of the *Auditor General Act* (see <http://laws.justice.gc.ca/en/A-17/>) directs the Auditor General to call attention to any case in which it has been observed that “money has been expended without due regard to the environmental effects of those expenditures in the context of sustainable development.”

When auditing an entity, this means examining whether it has considered the environmental consequences of its operations, programs, and activities.

The current Auditor General has chosen to focus on five areas, three of which have a close connection to environment and sustainable development concerns. They are

- the well-being of Canadians,
- Aboriginal issues, and
- legacy and heritage.

The “4th E”

Traditionally our audits have focussed on economy, efficiency, and effectiveness—known as the “3 Es.” The 1995 amendments to the *Auditor General Act* added a fourth: the environment.

In conducting an audit, the auditor asks questions such as:

- Has money been spent with due regard to **economy**?
- Has money been spent with due regard to **efficiency**?
- Are procedures in place to measure and report on the **effectiveness** of programs?
- Has money been spent with due regard to the effects on the **environment**?

In its 2003–06 Sustainable Development Strategy, the Office committed to better integrating environmental considerations into its performance audit work. Achieving this objective requires the development of tools and guidance that will help auditors throughout the Office to systematically consider environmental issues in long-term audit planning and individual performance audits.

Purpose

The purpose of this guide is to help auditors identify and assess environmental risks in two contexts:

- one-pass planning (OPP), and
- the survey phase of a performance audit.

For auditors with little or no environmental expertise, the guide provides practical direction and a structured approach. Entity teams should seek advice from the Office’s Internal Specialist—Environment and Sustainable Development, as necessary.

Users of the guide should be familiar with the Office’s audit policies and practice requirements.

The guide contains links to key documents and resources that it mentions. Note that some of the on-line resources may not be accessible outside the Office or the Government of Canada.

While not specifically designed for special examinations or annual attest work, this guide could help auditors identify environmental risks and liabilities for Crown corporations. Practice guidance from the Canadian Institute of Chartered Accountants (CICA) is also available for addressing environmental liabilities in financial attest audits.

1

Guidance for Identification of Environmental Risks: One-Pass Planning

Assessing an entity's major risks is the starting point of effective long-term audit planning. In the Office this is referred to as one-pass planning. As part of this process, auditors consider environmental risks along with other business risks. This guide provides direction for conducting the analysis.

Teams assess environmental risks by completing an Entity Environmental Risk Profile, organized by strategic outcomes and key program activities (p. 13). The environmental risks then are reflected in the overall OPP Entity Risk Profile as appropriate.

The Office has committed to ensuring that audit teams systematically identify environmental risks and assess their significance when developing audit plans. By employing this guide, teams will be helping to meet the Office's commitment.

The basic requirements are to

- identify program activities and key related policies, regulations, programs, projects, and operations;
- identify the potential associated environmental effects; and
- assess the risks associated with the potential effects to determine whether they are significant.

The result could be

- a finding of no significant environmental risks in the entity;
- planning of a full performance audit of an environmental risk issue in the entity;
- planning of an environmental line of enquiry within a broader performance audit of the entity;
- planning of a wider-focus Tier II audit in co-operation with other audit teams whose entities have similar environmental risk issues; or
- planning to incorporate a line of enquiry on the environmental risk issue within a broader Tier II performance audit.

For one-pass planning purposes, the Office has defined significant risks as those that would result in widespread failure to achieve the entity's mandate, loss of significant resources, or serious threats to personal safety. For the purposes of this guide, significant risks also include serious threats to natural resources, the natural environment, or human health and well-being. Also to be considered are risks associated with missed opportunities.

Careful judgment must be exercised to reach conclusions about environmental risk. Familiarity with the entity along with assistance from the Internal Specialist will be valuable for this analysis. The Internal Specialist is available to work with audit teams to identify significant environmental risks.

Instructions for completing the Entity Environmental Risk Profile for One-Pass Planning

Note: Provide a copy of the completed Entity Environmental Risk Profile to the Internal Specialist.

Before you begin, remember to

- focus on identifying strategic considerations at a high level, and
- describe the overall scope and nature of the environmental effects.

The Entity Environmental Risk Profile included in this guide can be applied to a wide range of entities and their activities. The Internal Specialist should be consulted, where appropriate, to develop an environmental risk profile that is more detailed or that can be tailored to the circumstances of a specific entity to be audited.

The following are the steps for completing the profile:

Step 1: Create a working version of the risk profile. Do this by photocopying the risk profile, or by using the electronic form on the INTRANet.

Step 2: Identify the entity's strategic objectives and related program activities and sub-activities. Enter this information in the first two columns of the Entity Environmental Risk Profile.

Note: Consult the entity's Sustainable Development Strategy as well as other documents, such as the yearly Reports on Plans and Priorities (see Exhibits 1 and 2 for links). Another important source of information is an environmental issues report commissioned in 2001 by Audit Group 4 (Commissioner of the Environment and Sustainable Development). This summarizes key environmental issues and federal vulnerabilities. It also analyzes the federal mandate for each key issue and identifies the main departments concerned. The report is available from the Internal Specialist.

Step 3: Identify key related policies, plans, programs, projects, or operations for each program sub-activity. Stick to a high level. Focus only on major items. Describe these very briefly in column 3.

Step 4: Identify and describe potential environmental effects. The next section of the risk profile helps audit teams identify and describe potential environmental effects associated with the entity's policies, programs, projects, or operations. It has several components.

The first three deal with effects on air, water, and land. These could result from releases into the environment (e.g., pollution) or physical changes.

- Air effects include climate change and other air quality issues (e.g., ozone depletion, smog, acid rain).
- Water effects cover freshwater and the marine/coastal environments. They include changes to water quality and quantity, as well as effects on biodiversity, or habitat.
- Land effects include changes to soil, habitats, and biodiversity. They also cover contaminated sites.

The fourth component covers substances or emissions that are known to have harmful effects on the environment and human health.

The fifth component deals with environmental emergencies, such as shipping accidents, or industrial or land-based emergencies.

The last component focuses on resources. It includes consumption as well as activities linked to resource extraction and harvesting. Natural resources can be affected directly, by an entity's own operations (e.g., procurement) and/or indirectly, by the control or influence that it exerts on the activities of others. Not all the issue areas on the profile will necessarily apply, and there may be others not identified here. If necessary, consult the Internal Specialist to tailor the risk profile to the entity being reviewed.

Step 5: Analyze the risk. This section generates an overall risk rating for the potential environmental effect identified.

Please refer to the next section on assessing the significance of environmental risks.

Assessing the significance of environmental risks

Risk is typically defined as the combination of the probability of an event and its consequences. For each potential environmental effect identified, the audit team should assess the likelihood or probability of occurrence and the consequence or severity. The overall risk rating will be the product of these two elements.

Severity

To assess severity of the effect, use the following definitions and enter the rating on the worksheet:

- **High**—Serious environmental effect and impairment of ecosystem function. Potentially long-term impact on the environment.
- **Medium**—Moderate effect on biological or physical environment. Impact over the medium term or widespread impact.
- **Low**—No lasting effect. Low-level impact on biological or physical environment.

Likelihood

To determine the likelihood or probability of the environmental effect, use the following definitions and enter the rating on the worksheet.

- **High**—Effect is occurring or is imminent.
- **Medium**—Effect is likely to occur at some time.
- **Low**—Effect may occur but only under exceptional circumstances.

Factors to consider when assessing the level of effect	
Characteristic	Description
Magnitude	Level of effect: number or volume affected
Location	Where the effect occurs
Scale	Local, regional, national, or global
Timing	During construction or operation, or during migration: seasonal factors, immediate or delayed effects
Duration	Short-, medium-, or long-term: intermittent or continuous
Reversible or irreversible	Extent of recovery and length of time required
Ecological context	Percent of population affected, size of population, number of generations to recovery, implications for other environmental components and the food chain
Socio-economic context	Socio-economic and health effects derived from environmental effects

Rating overall risk and significance

The overall risk rating is the product of the two factors you have just rated—severity and likelihood/probability. Plot the intersection of the ratings as shown in the following table.

Any effect that yields a risk rating in the darkest boxes of the table should be considered significant, and would warrant further consideration and analysis in the one-pass planning process.

Significance Classification Table

Severity of Potential Effect	High	H/L	H/M	H/H
	Medium	M/L	M/M	M/H
	Low	L/L	L/M	L/H
		Low	Medium	High
Likelihood of Potential Effect				

Degree of Entity Influence

Identify the extent to which the entity has influence or control over the program outcome or activity, by applying the following guidance.

Level of Control or Influence	Description
Low	The entity is involved but has limited responsibility for this activity.
Medium	The entity has shared responsibility for this activity.
High	The entity has direct responsibility within its mandate for this activity.

Step 6: Provide comments or additional analysis in the appropriate space.

For example, you could note any relationship between the potential environmental effects and commitments in the entity’s sustainable development strategy. You are encouraged to use endnotes to include as much information as possible. If possible, give a rationale for the final risk rating.

Next Steps

When significant environmental risks are identified, they need to be considered together with other business risks identified during the one-pass planning process.

Entity Environmental Risk Profile for One-Pass Planning

Name: Date: Entity:			Potential Environmental Impact															Risk Analysis									
			Air		Water				Land				Hazardous Materials		Environmental Emergencies		Natural Resources (Extraction and Consumption)					Severity of Potential Impact *	Likelihood of Occurrence **	Significant Environmental Risk	Degree of Entity Influence ***		
Strategic Outcome	Program Activity	Program Sub-activity	Key Policies, Programs, Projects, Operations	Climate change	Air quality (smog, ozone depletion, acid rain, etc.)	Surface water (marine and freshwater)	Groundwater / drinking water	Biodiversity (marine and freshwater)	Habitat	Agricultural land / soil	Contaminated sites	Habitat	Biodiversity (flora and fauna)	Toxic substances / hazardous waste	New substances / organisms	Land-based	Shipping-related	Land use	Energy	Water	Marine resources	Materials (timber, minerals, etc.)	Waste	High (H) Medium (M) Low (L)	High (H) Medium (M) Low (L)	Yes/ No	High (H) Medium (M) Low (L)

Comments: (including remarks on the ratings assigned and any links to the entity's sustainable development strategy)

*** Severity of Potential Impact**

High—Serious or potential long-term impact on the environment.
 Medium—Moderate or widespread impact.
 Low—No lasting or only low-level impact.

**** Likelihood of Occurrence**

High—Effect is occurring or is imminent.
 Medium—Effect is likely to occur at some time.
 Low—Effect may occur but only under exceptional circumstances.

***** Degree of Entity Influence**

High—Direct responsibility within its mandate.
 Medium—Shared responsibility.
 Low—Limited responsibility.

2

Guidance for Considering Environmental Effects in the Survey Phase of a Performance Audit

The Office’s one-pass planning process yields a selection of audit topics for examination. Applying this section of the guide will ensure that environmental issues are consistently and systematically considered in performance audits where the central focus is not already an environmental or sustainable development issue.

The section presents a two-part screening tool that helps auditors identify environmental issues potentially related to their audit topic. The section also provides guidance on evaluating the degree of environmental risk involved and ultimately the significance of the issue in an audit context. It does not include specific guidance on developing lines of enquiry or criteria related to environmental issues.

The screening tool is applicable to entity or program audits, as well as government-wide and sectoral audits.

If you are engaged in one-pass planning, you should consult Section 1 of this guide.

When you should use this audit guidance

Audit teams should use this section’s guidance and the screening tool to identify and assess environmental issues during the survey phase of their audit. This will help teams comply with Office requirements that they specifically consider environmental issues when planning an audit, as set out in the Office’s Quality Management Framework and performance audit policies. For example, Section 4.21 of the Office’s *Performance Audit Manual* specifies that the survey report should include “environmental issues considered and reasons for their inclusion or exclusion in the proposed audit scope.”

The screening tool should be filled out **after** the team has gained a good understanding of the audit topic and familiarity with it. However, it is a good practice to review the screening tool and other guidance provided much earlier when the team is starting to plan its survey work.

Instructions for completing the Environmental Risk Screening Tool for performance audits

Step 1: Start by reviewing the documents and other resources noted. The screening tool is designed to be completed by audit teams with a minimum amount of time and effort. Teams will naturally rely heavily on the information they gather in their overall survey phase efforts, but they should also review the documents and resources listed here before they complete the screening tool. (See Exhibits 1 and 2 for links.)

Note: Some sections of the screening tool and some of the resources noted here apply only to departments and agencies required to prepare Sustainable Development Strategies. See Exhibit 1 for a list of these organizations.

- **Departmental/agency issues scans** exist only for departments/agencies preparing Sustainable Development Strategies. These organizations were each asked to prepare a departmental profile and issues scan as a first step toward developing an initial Sustainable Development Strategy. The issues scan is a self-assessment of departmental policies, programs, and operations in terms of their impact on the environment and sustainable development. It presents environmental and sustainable development issues identified by the organization itself as important.

If the current strategy does not contain an issues scan, consult previous strategies.

- The **Sustainable Development Strategy** of any department/agency required to prepare it. Review the current SDS carefully to determine whether there are any targets/objectives and commitments associated with the audit topic. If the SDS is relatively new, review the previous strategy as well.
- The **Database of Canada's International Environmental Commitments** allows teams to determine whether an entity is involved in implementing international environmental commitments made by Canada that relate to the subject matter of the audit. A search of the database by entity name will generate a list of agreements where the entity is involved in either a lead or supporting role. The database was developed by the Office and is currently managed by the Department of Foreign Affairs and International Trade. It has not been updated since late 2002 and does not reflect changes or agreements beyond that date. Nonetheless it provides useful information on close to 100 binding environmental agreements. It does not provide information on trade agreements.
- **Documents outlining the general principles and priority areas for greening physical operations of the federal government include**
 - *A Guide to Green Government*, 1995;
 - Sustainable Development in Government Operations: A Coordinated Approach, 2000.

See also Appendix 3.

- **Environmental petitions submitted to the Office pursuant to the *Auditor General Act*** (only for departments/agencies that table Sustainable Development Strategies). Departmental/agency responses to petitions are posted in our Petitions Catalogue on the Office’s website. It can be searched by entity name or subject matter.
- **Other accountability documents include**
 - departmental performance reports, and
 - reports on plans and priorities.

Exhibit 1 — Entity Sustainable Development Strategies				
Departments/agencies required to prepare sustainable development strategies and respond to environmental petitions.				
Departments and agencies	SDS I (1997–2000)	SDS II (2000–03)	SDS III (2003–06)	SDS IV (2007–09)
Agriculture and Agri-Food Canada	I	II	III	IV
Atlantic Canada Opportunities Agency	I	II	III	IV
Canada Border Services Agency	N/A	N/A	N/A	IV
Canada Economic Development for Quebec Regions	I	II	III	IV
Canada Revenue Agency * Revenue Canada ** Canada Customs and Revenue Agency	I *	II **	III	IV
Canadian Heritage	I	II	III	IV
Canadian International Development Agency	I	II	III	IV
Citizenship and Immigration Canada	I	II	III	IV
Environment Canada	II	II	III	IV
Finance Canada, Department of	I	II	III	IV
Fisheries and Oceans Canada	I	II	III	IV
Foreign Affairs and International Trade, Department of	I	II	III	IV
Health Canada	I	II	III	IV
Human Resources and Social Development Canada * Human Resources Development Canada	I *	II *	III *	IV
Indian and Northern Affairs Canada	I	II	III	IV
Industry Canada	I	II	III	IV
Justice Canada, Department of	I	II	III	IV
National Defence	I	II	III	IV
Natural Resources Canada	I	II	III	IV
Parks Canada	N/A	II	III	IV

Exhibit 1 — Entity Sustainable Development Strategies (continued)				
Departments/agencies required to prepare sustainable development strategies and respond to environmental petitions.				
Departments and agencies	SDS I (1997–2000)	SDS II (2000–03)	SDS III (2003–06)	SDS IV (2007–09)
Public Health Agency of Canada	N/A	N/A	N/A	IV
Public Safety and Emergency Preparedness Canada * Solicitor General Canada	I *	II *	III	N/A
Public Service Human Resources Management Agency of Canada	N/A	N/A	N/A	IV
Public Works and Government Services Canada	I	II	III	IV
Transport Canada	I	II	III	IV
Treasury Board of Canada Secretariat	I	II	III	IV
Veterans Affairs Canada	I	II	III	IV
Western Economic Diversification Canada	I	II	III	IV
Federal organizations that voluntarily prepare strategies				
Canadian Environmental Assessment Agency	I	II	III	IV
Correctional Service Canada	I	II	III	IV
Office of the Auditor General of Canada	I	II	III	IV
Royal Canadian Mounted Police	I	II	III	IV

Exhibit 2 — Other Documents and Resources
Database of Canada’s International Environmental Commitments
Documents outlining the general principles and priority areas for greening physical operations of the federal government: <ul style="list-style-type: none"> • A Guide to Green Government • Sustainable Development in Government Operations: A Coordinated Approach
Environmental Petitions Catalogue
Other accountability documents: <ul style="list-style-type: none"> • Departmental Performance Reports • Reports on Plans and Priorities

Step 2: Complete the Environmental Risk Screening Tool for performance audit. Photocopy the screening tool and create a working version, or work from the electronic form on the INTRAnet. Start by completing Part 1. This helps you quickly identify whether there are any potentially significant environmental issues associated with the entity and area being audited.

If all of the responses to Part 1 are negative, there may be no significant environmental issues or risks associated with your audit topic. With these screening results you may decide, in consultation with the Internal Specialist—Environment and Sustainable Development, that further investigation of environmental issues is not required. If so, you need not complete Part 2 of the screening tool.

The results of the evaluation using Part 1 of the tool are documented in the survey report and summary examination plan.

If some of the responses to Part 1 of the screening tool are in the affirmative, complete Part 2. Only certain portions of Part 2 are likely to be applicable. This part helps auditors explore relevant issues in more depth, and start to consider the level of environmental risk and ultimately the significance of the environmental issues identified.

With the information gained plus other information gathered in the survey phase of the audit, auditors can determine whether there are matters of potential significance associated with environmental issues for the audit topic, and ultimately whether a line of enquiry and audit criteria to address these issues are merited. Audit objectives may also need to be adjusted to reflect the application of the screening tool.

The Internal Specialist is available to assist teams in making this determination, which may be based on additional survey work. The Internal Specialist is available to advise and assist teams on conducting additional survey work, as well as developing or refining audit objectives, audit scope, applicable lines of enquiry, and criteria. Teams should consult with the Internal Specialist as appropriate.

Environmental issues identified and considered in Part 2 of the screening tool should be documented in the survey report as well as discussed with the Internal Specialist.

How can environmental issues/risks emerge from an audit where the central focus is not an environmental or sustainable development issue?

For example

An audit on management of military training and test areas by National Defence is slated to begin. The team has not yet defined the scope of the audit, the lines of enquiry, or the criteria. Use of the environmental screening tool prompts the team to consider how activities may have adversely affected the land where military training or testing has occurred. The screening results point them to priority areas for greening of government operations (which includes addressing the legacy of contaminated sites), as well as activities or hazards that lead to environmental degradation of the land and/or ecosystems. Further survey work in these areas reveals that past and present use of the training and test areas has given rise to several environmental problems for National Defence, including significant liabilities. The Department's Sustainable Development Strategy also includes commitments related to environmental stewardship of training and test areas. Lines of enquiry and criteria are developed to audit the Department's management of contamination problems arising from past military training and testing in these areas, as well as the Department's present efforts to exercise due diligence with the aim of preventing further problems and complying with federal environmental standards and best practices.

For more information on environmental issues associated with military training and test areas, refer to the Auditor General's April 2003 Report to Parliament, National Defence—Environmental Stewardship of Military Training and Test Areas.

Environmental Risk Screening Tool

Environmental Risk Screening Tool		
Audit topic (briefly describe): _____ Entity(-ies) being audited: _____ Audit team: _____ _____ Documents/resources reviewed: (e.g., issues scan, SDS, Petitions, Departmental Performance Report)		
PART 1		
Please respond to all questions in Part 1.		
a) The entity’s Sustainable Development Strategy	Yes	No
Are there any objectives, targets or commitments related to the audit topic outlined in the entity’s SDS?* * Applies only to departments and agencies that prepare strategies. Teams should also consult the previous strategy if the current strategy was tabled within the last year.		
If so, please list and provide a brief explanatory note. 		

<p>b) Projects that may be covered by the <i>Canadian Environmental Assessment Act</i></p> <p>Does the audit topic involve projects?* (Is the entity undertaking or supporting them?) If so, these projects could be covered by the requirements set out in the <i>Canadian Environmental Assessment Act</i>.</p> <p><small>* Under the Act, projects are generally construction, modification or demolition of physical works (e.g., roads, bridges). Other physical activities may be covered as well. See Part 2b for more information.</small></p>	Yes	No
<p>If so, briefly describe the nature of the entity’s involvement within the context of the audit topic.</p>		
<p>c) Government operations</p> <p>Are government operations* a significant focus of the audit topic?</p> <p><small>* Government operations encompass such things as how departments purchase goods and services, operate their buildings, run their vehicles, and manage the land they occupy.</small></p>	Yes	No
<p>If so, please briefly describe what aspect of government operations is involved.</p>		
<p>d) Funding or other financial assistance or services, including subsidies, taxation, etc.</p> <p>Does the audit topic cover activities or programs related to loans, grants, or any other kinds of funding or financial assistance?</p> <p><small>(Activities or initiatives that benefit from these funding activities/programs may have environmental consequences.)</small></p>	Yes	No
<p>If so, please describe.</p>		

e) Policies, plans, or programs (Strategic Environmental Assessment)	Yes	No
Are there any federal policies, plans, or programs related to the audit topic that have been approved by the Minister and/or Cabinet since 1999?		
(The requirements set out in the Cabinet Directive on the Strategic Environmental Assessment of Policy, Plan and Program Proposals, revised in 1999 and 2004, may be applicable.)		
If so, please describe.		
f) International environmental commitments	Yes	No
Are there any relevant commitments under international environmental agreements for which the entity is responsible (in a lead or supporting role)?		
If so, please describe.		
g) Environmental petitions	Yes	No
Has the entity responded to any environmental petitions related to the audit topic?*		
* Applies only to departments and agencies required to prepare Sustainable Development Strategies.		
If so, please describe.		

<p>h) Environmental issues</p> <p>Please review Appendix 1.</p> <p>Based on your review of Appendix 1, did you identify any environmental issues that relate to your topic?</p>	Yes	No
<p>If so, please identify and describe the connection to the audit topic.</p>		
<p>i) Other environmental concerns</p> <p>Have you identified other environmental concerns (e.g., issues, effects) related to the audit topic, aside from those already covered in this screening tool?</p>	Yes	No
<p>If so, please describe (include the source/reference).</p>		
<p>Following completion of Part 1</p> <p>Did you identify potential environmental issues or risks?</p> <p>If so, please proceed to Part 2 of the screening tool.</p> <p>If not, do not proceed to Part 2. Please provide a brief explanation of your findings, and arrange to meet with the Internal Specialist—Environment and Sustainable Development.*</p>	Yes	No

* Use this space to provide additional information or analysis for the Internal Specialist.

Internal Specialist assessment

- Further consideration of environmental risks is required.
(If the answer is yes, it is recommended that you proceed
to Part 2)

Internal Specialist: _____ Date: _____

PX: _____ Date: _____

PART 2

In this part of the screening tool, we ask audit teams to consider potential issues identified in Part 1 in more depth. We also ask them to consider and assess the significance of the issues identified.

Teams respond to sections of this part of the screening tool that correspond with sections answered in the affirmative in Part 1. For example, if you answered “yes” for Sustainable Development Strategies in Part 1a, you would proceed to the corresponding section, Part_2a.

Please contact the Internal Specialist if you have any questions about this part of the screening tool.

a) Sustainable Development Strategies—commitments

If you have identified relevant objectives, targets and/or commitments in the entity’s SDS related to your audit topic (in Part 1):

- What are they? (please describe)
- Are they closely related to the audit topic?
- Are they auditable (e.g., are they concrete, timebound, and/or measurable)?

In assessing the significance of these objectives, targets and/or commitments, please consider the

- scope and substance (major commitment in terms of effort and resources);
- degree of risk* if not adequately completed; and
- level of parliamentary or public interest.

Please note any comments or conclusions arising from the above.

* Please refer to “[Assessing the significance of environmental risks](#)” on page 10.

b) Projects subject to federal environmental assessment through the <i>Canadian Environmental Assessment Act</i>		
<p>Since you indicated in Part 1 that the audit topic involves projects,* it is necessary to delve into this issue further.</p> <p>* Projects covered by the Act are generally construction, modification, or demolition of physical works (e.g., roads, bridges); however, by regulation, other physical activities may be subject to environmental assessment requirements under the Act (e.g., activities related to national parks, fisheries, or nuclear facilities). Certain projects are specifically excluded from the application of the Act.</p> <p>The website of the Canadian Environmental Assessment Agency (www.ceaa.gc.ca) contains relevant regulations under the Act as well as a registry where you can search for projects by entity.</p>		
If the answer to any of the following questions is “yes,” environmental assessment of the project is required:	Yes	No
Is the entity acting as a project proponent (undertaking or proposing projects)?		
Is the entity taking any of the following actions that enable projects to be carried out:		
• providing grants or other forms of financial assistance;		
• selling, leasing, or otherwise transferring control of federal land/ property; or		
• issuing a licence, permit, or approval?		
Additional Information		
Please provide details on the entity’s involvement in projects (within the scope of the audit topic).		
Is the entity involved in a significant number of these projects (for the area being audited)?	Yes	No
Is the entity conducting or participating in environmental impact assessments for these projects as a federal authority or otherwise?	Yes	No

c) Government operations		
i) Given that the audit topic involves government operations (as identified in <u>Part 1</u>), we would like to explore this issue further. The list below indicates seven priority areas for greening government operations.		
Are any of these areas included in or part of the audit topic:	Yes	No
<ul style="list-style-type: none"> • procurement of goods and services; 		
<ul style="list-style-type: none"> • land-use management—purchase, sale, and management of land (including contaminated sites and underground storage tanks); 		
<ul style="list-style-type: none"> • water usage and wastewater management; 		
<ul style="list-style-type: none"> • energy efficiency (including energy use, conservation, and greenhouse gas emissions); 		
<ul style="list-style-type: none"> • solid waste management (including reducing, recycling, and reusing material and managing hazardous waste); 		
<ul style="list-style-type: none"> • vehicle fleets and fuels; or 		
<ul style="list-style-type: none"> • human resources? 		
If so, do they feature significantly in the audit topic?		
ii) Are any of the following issues relevant to your audit:		
<ul style="list-style-type: none"> • new building construction; 	Yes	No
<ul style="list-style-type: none"> • pollution releases/emissions (aside from wastewater); 		
<ul style="list-style-type: none"> • equipment operation; 		
<ul style="list-style-type: none"> • management of hazardous substances such as PCBs, ozone-depleting substances (associated with cooling and refrigeration systems), asbestos; 		
<ul style="list-style-type: none"> • indoor air quality; 		
<ul style="list-style-type: none"> • drinking water quality; 		
<ul style="list-style-type: none"> • federal land (endangered species and other important natural values such as wetlands); or 		
<ul style="list-style-type: none"> • environmentally friendly technologies? 		
If so, do they feature significantly in the audit topic?		

Please explain.		
d) Funding or other financial assistance or services, including subsidies, taxation, etc.		
Please describe the kind(s) of financial assistance programs or services covered in the audit topic that were identified/noted in Part 1.		
(For financial assistance involving or enabling projects, see also Part 2b.)		
i) Has the entity integrated environmental considerations into its programs through the development and consistent application of environmental screening criteria?	Yes	No
If so, how?		
ii) Are processes and procedures established to ensure that potential environmental problems are mitigated?	Yes	No
If so, please describe.		

e) Policies, plans, or programs (Strategic Environmental Assessment)		
<p>According to the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals, ministers expect federal departments and agencies to assess the potential environmental impact of initiatives bound for Cabinet or ministerial approval. They expect strategic environmental assessments to be conducted when a proposal may result in important environmental effects, either positive or negative.*</p> <p>* The Directive probably does not apply if a proposal is a matter of routine government practice or human resources, financial, or administrative procedures.</p>		
If you indicated in Part 1 that a policy, plan, or program related to the audit topic was approved by the Minister and/or Cabinet since 1999,	Yes	No
i) What was the subject of the policy, plan, or program submitted for Cabinet or ministerial approval?		
Describe briefly.		
ii) Were environmental issues/considerations discussed in the submissions or memorandum to Cabinet and/or the Minister?		
If so, which issues (please describe)?		
iii) Could the policy, plan, or program result in important environmental effects (negative or positive)?		
Briefly describe rationale. (For a list of risks/effects, see Appendix 1. For guidance on assessing significance, see “Assessing the significance of environmental risks” on page 10.)		

f) International environmental commitments

If you identified one or more international environmental commitments that are applicable to the entity and audit topic in Part 1, please consider the following and provide comments below:

- Is a significant/important environmental issue addressed by the commitment? (Please consult Appendix 1.)
- Are significant resources involved?
- Would failure to implement the commitment create a significant risk?
- Is the commitment strongly tied to the audit topic?

Comments:

g) Environmental petitions

Yes	No

If the entity responded to environmental petition(s) related to the audit topic, does the petition and/or response raise any important environmental issues?

Comments:

Did the entity identify or highlight any significant environmental issues or make significant commitments in its petition response?

Yes	No

Do the issues/commitments strongly relate to the audit topic?

Comments:

h) and i) Other environmental issues

If you identified other environmental issues, please list them here and provide an estimated rating of risk.

Please consult the risk assessment information in “Assessing the significance of environmental risks” on page 10. Assistance from the Internal Specialist is also available.

Issue	Rating

Following completion of Parts 1 and 2:		
<p>Are there potentially significant environmental risks/effects associated with the audit topic?</p> <p>If no, please explain.</p> <p>If unsure, please discuss with the Internal Specialist, who can provide guidance with this determination.</p> <p>If yes, please consult the Internal Specialist for assistance to further explore questions, such as significance, auditability, and the development of a line of enquiry, if appropriate.</p>		
Internal Specialist assessment:		
<p>The Internal Specialist agrees with overall assessment.</p> <p>Comments:</p>	Yes	No
<p>Further survey work required.</p> <p>Comments:</p>		
<p>Internal Specialist: _____ Date: _____</p> <p>Audit PX: _____ Date: _____</p>		

Section 2 — Guidance for Considering Environmental Effects in the Survey Phase of
a Performance Audit

Appendix 1—Human Activities and their Potential Impact on the Environment

In general, human activities have an impact on the environment through

- releases to the environment (polluting emissions, discharges, waste production, etc.);
- changes to (degradation of) land/habitat; and/or
- use and depletion of resources.

The following is a list of major components of the environment and activities that affect the environment (and their potential effects). Within the context of your audit topic, please examine the information presented and think about how your entity's policies, programs, projects, and operational activities may affect the environment either directly (through its own operations) or indirectly, by the control or influence that the entity exerts on the activities of others.

Also consider ways that entities could avoid or minimize their impact on the environment. Some of these are described at the end of this appendix.

For a more complete list of activities, see [“Activities that have an impact on the environment” on page 40.](#)

Air

Examples of activities:

- transportation (all modes);
- energy production, refining, and distribution;
- generation of electricity (e.g., burning of coal, natural gas);
- use of refrigerants and coolants (ozone-depleting substances);
- metal smelting and other industrial activities (e.g., pulp and paper, chemical manufacturing, and other heavy industries);
- mining of aggregates;
- application of pesticides for agriculture;
- waste incineration; and
- use of various volatile chemicals.

Potential impact of these activities:

- releases of carbon dioxide and other greenhouse gases (contributing to global warming);
- depletion of the ozone layer;
- impairment of air quality;
- smog (including particulates, ground-level ozone);
- effects on human and wildlife health (e.g., upper respiratory problems and higher rates of hospitalization);
- acidification of lakes and rivers (acid rain); and
- deposition of air pollutants on land and surface water bodies.

Water

Surface water (freshwater lakes and rivers, etc.)

Examples of activities:

- removal of shoreline vegetation;
- logging/forestry and mining;
- collection, storage and disposal of agricultural wastes;
- application of pesticides;
- sewage discharges;
- industrial and other discharges (e.g., pulp and paper, mining, chemical, food processing);
- spills and accidental releases of pollutants;
- boating/shipping (e.g., discharges of fuel, ballast water);
- waste disposal landfilling (leaching);
- refuelling activity;
- draining and removal of wetlands; and
- development of infrastructure (e.g., dams and bridges).

Potential impact of these activities:

- reduction in quality of habitat for fish and other aquatic organisms;
- increased runoff and erosion;
- depletion of fish populations;
- impairment of water quality (pollutants, pathogens, bacteria, nutrients);
- need for increased water treatment;

- increased algal growth/blooms;
- decreased biodiversity; and
- encroachment of exotic, invasive species (e.g., zebra mussels).

Groundwater

Examples of activities:

- provision of water for drinking and household uses;
- water removal / water taking for industrial activities;
- irrigation;
- manure management (e.g., collection, storage, disposal/spreading);
- fuel storage (tanks), distribution, refuelling activities;
- waste disposal (hazardous and non-hazardous); and
- urban development (removal of vegetation, increase in hard surfaces).

Potential impact of these activities:

- reduced groundwater quality (e.g., pollutants/toxins, hydrocarbons, pathogens, bacteria);
- impairment of drinking water quality;
- need for increased water treatment;
- reduced groundwater quantity;
- surface water effects (quality and quantity);
- explosions (from petroleum products, fuels).

Coastal areas / marine

Examples of activities:

- discharges of sewage/wastewater;
- commercial fisheries, dredging;
- ocean dumping;
- energy production (exploration, drilling, distribution);
- boating/shipping (e.g., releases, refuelling, ballast water exchange);
- aquaculture;
- urban development (removal of coastal vegetation, including wetlands);
- spills and accidental releases.

Potential impact of these activities:

- alteration/degradation of quality of fish and other marine habitat;
- depletion of fish populations;
- increased disease and pathogens affecting fish;
- impairment of water quality—e.g., pollutants, (including petroleum products), pathogens, bacteria, nutrients;
- exotic, invasive species;
- socio-economic effects;
- reduction of tourism activity.

Land

Examples of activities:

- creation of transportation infrastructure (roads, highways, bridges);
- urban development (tree and vegetation removal);
- forestry/logging (including access roads, herbicide spraying);
- mining activities;
- agriculture (e.g., soil tilling, livestock grazing, application of fertilizers and pesticides, intensive farming practices);
- spreading of manure and sewage sludge;
- tourism and recreational development (e.g., ski resorts, golf courses);
- oil and gas production and distribution, and oil sands development;
- storage of fuels and other hazardous materials (e.g., storage tanks);
- landfilling—disposal of waste (hazardous and non-hazardous);
- spills and accidental releases (during transportation or from stationary sources); and
- military training (use of training areas).

Potential impact of these activities:

- depletion of renewable and non-renewable resources;
- soil and groundwater contamination;
- erosion/desertification;
- reduction/removal of wildlife habitat;
- removal/reduction of wetlands;
- reduction in biodiversity (soil organisms, plants, wildlife);

- increased surface water runoff / stormwater runoff;
- mining waste (tailings); and
- opening of remote areas.

Opportunities to Avoid or Minimize Negative Environmental Effects

- consideration of environmental factors/concerns in the early stages of decision making (e.g., for projects, product development);
- reducing energy consumption and increasing use of renewable energy sources through
 - increased efficiency (e.g., enhanced fuel efficiency for vehicles, reduced electricity consumption by household appliances); and
 - building design (new buildings) or retrofitting;
- advancing, developing, and employing green technologies;
- reducing consumption of resources;
- increased reuse and recycling, thus decreasing resource consumption, and waste production and disposal;
- eco-efficiency;
- green procurement—purchasing more environmentally friendly goods and services;
- pollution prevention by
 - avoiding the use of hazardous/toxic materials;
 - using cleaner fuels;
 - using clean emissions technologies for engines; and
 - using cleaner energy sources (e.g., solar, windpower); and
- improved emergency response and preparation.

Activities that have an impact on the environment

- **Energy**—development, distribution, processing, management, and/or consumption/use (oil, gas, nuclear, other)
- **Natural resources**—development, management, and/or harvesting, use (e.g., fisheries, aquaculture, forestry, hunting/trapping, mining)
- **Agriculture/food production**—land cultivation, animal husbandry, food processing (waste handling, treatment, and disposal)
- **Physical infrastructure**—creation or use of infrastructure, such as roads, housing, bridges, ports, storage facilities, railways, sewage, or waterworks
- **Transportation**—road, marine, rail or air transportation, and all related activities and infrastructure
- **Toxic/hazardous substances and materials**—generation/ manufacture, use, management, regulation, transportation, or disposal (e.g., toxics and pesticides)
- **New substances and organisms**—development, deployment, and regulation (e.g., new chemicals, genetically modified organisms)
- **New products and technologies**—development and deployment
- **Industrial activity**—e.g., resource processing and manufacturing
- **Urban development**
- **Military activities**—training, equipment, materials, natural disasters and other emergencies (e.g., preparation and response)
- **Waste generation or management** (including hazardous waste)
- **Movement of goods and services** (local, regional, national, international)
- **International trade** (export and import)
- **Occupational/workplace hazards**
- **Cleanup/rehabilitation of contaminated sites**
- **Procurement and consumption of goods**

Appendix 2—Glossary

Environment

According to subsection 2(1) of the *Canadian Environmental Assessment Act*,

Environment refers to the components of the Earth, and includes

- (a) land, water and air, including all layers of the atmosphere,
- (b) all organic and inorganic matter and living organisms, and
- (c) the interacting natural systems that include components referred to in paragraphs (a) and (b).

Similar definitions can be found in other related federal legislation. Inherent in all of them is the idea that environment encompasses the natural surroundings or conditions in which an organism or individual lives. According to a still broader interpretation, environment encompasses the social and economic dimensions of the world in which we live.

Environmental Effect

Subsection 2(1) of the *Canadian Environmental Assessment Act* defines “environmental effect” as any change that a project may cause in the environment, including any effect of any such change on health and socio-economic conditions, on physical and cultural heritage, on the current use of lands and resources for traditional purposes by Aboriginal persons, or on any structure, site, or thing that is of historical, archaeological, paleontological, or architectural significance.

Due Regard for Environmental Effects of Expenditures

The Office’s *Performance Audit Manual* explains “due regard” as: “The audited entity is obligated to be prudent in its use of resources, that is, to consider all reasonable and practical actions in its decision making.”

Under this definition, due regard is to be determined by assessing the basis on which decisions were made. Auditors must determine whether the entity considered all reasonable and appropriate actions for addressing environmental effects of expenditures in its planning and decision-making process. The analysis should be logical and transparent.

Sustainable Development

The *Auditor General Act* (see <http://laws.justice.gc.ca/en/A-17/>) includes the classic definition of sustainable development that appeared in the 1987 report of the World Commission on Sustainable Development, *Our Common Future*, also known as the Brundtland Report:

Sustainable development means development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (section 2 of the Act)

Section 21.1 of the Act expands on this definition:

Sustainable development . . . 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.

Improving quality of life and well-being, integrated decision making, and equity are three of the foundations of sustainable development.

Sustainable development is defined in more detail in the federal government's Guide to Green Government, at <http://www.sdinfo.gc.ca/reports/en/ggg/Default.cfm> and also in the Office's Sustainable Development Strategy (2003–06).

Excerpt from the Office’s Sustainable Development Strategy (2003–06)

Progress toward sustainable development requires an integrated approach to planning and decision making. By integrated decision making we mean that before key decisions are made, their potential economic, social, and environmental consequences are considered. Any conflicts that may emerge are dealt with openly.

[. . .]

To promote sustainable development, it is helpful to understand why unsustainable development occurs:

- Development that is environmentally unsustainable often stems from an organization’s failure to assess and manage ecological risks. This can happen at several stages—when the organization plans, carries out, or eventually winds up its key activities.
- Development that is socially unsustainable reflects a similar failure to assess and manage the broad societal consequences.
- Development that is economically unsustainable results from a failure to assess and manage economic risks.

Activities that are unsustainable in any one of these areas can lead to unsustainable conditions in one or both of the others.

An organization committed to sustainable development must be firmly committed to an integrated approach to planning and decision making. It also needs to review which aspects of its business support or could support sustainable development and which aspects, if any, undermine it.

Appendix 3—Reference Information on Federal Policies and Guidelines on Sustainable Development and Greening Government

This appendix lists key government-wide policies, guidelines, and initiatives that provide direction on how departments and agencies are to consider and manage environmental issues related to their activities. It also lists policy instruments used by federal departments to achieve their environmental and sustainable development goals. Please consult with the Internal Specialist—Environment and Sustainable Development for more detailed information.

A Guide to Green Government

This is a guide to taking action on sustainable development that documents the Government of Canada's commitment to integrating sustainable development into the way it defines its business and makes its decisions.

The Guide outlines some objectives for sustainable development, including

- sustainable use of renewable resources,
- efficient use of non-renewable resources,
- protecting the health of Canadians and ecosystems,
- meeting international obligations, and
- improving quality of life and well-being.

The Guide presents possible tools for integrated planning and decision making, based on sound science and broad consultation. These include full-cost accounting, environmental assessment, and ecosystem management. Presented as well are potential policy tools for achieving sustainable development goals plus guidance for federal departments on greening their operations.

Finally the Guide gives practical advice on the main elements on which departments could base their departmental sustainable development strategies, and approaches for preparing them.

Departmental Sustainable Development Strategies

Under the *Auditor General Act* (see <http://laws.justice.gc.ca/en/A-17/>), most federal departments and agencies are required to table a sustainable development strategy (SDS) in Parliament every three years. Since 1997 four rounds of strategies have been prepared and tabled by federal entities including one that covers 2007 to 2009.

A sustainable development strategy is intended to serve as an entity's blueprint for protecting and preserving the environment and promoting sustainable development. Through its strategies, the entity is expected to establish goals, objectives, and targets as well as an action plan for achieving them. Sustainable development strategies can also cover day-to-day operations and include actions to prevent pollution and reduce consumption or waste.

The first two versions of each entity's strategy (SDS I and SDS II) generally included a departmental profile and an issues scan. These are important information sources, particularly for identifying what the entity perceives to be the relevant environmental (and sustainable development) issues associated with its activities. Attention should also be paid to any commitments made in an SDS.

For links to all of the strategies covering 1997 to 2009, see Exhibit 1.

More on Greening Physical Operations

The federal government has identified priority areas for greening of government operations:

- energy efficiency,
- human resources management,
- land use management,
- procurement,
- vehicle fleet management,
- waste management, and
- water conservation and wastewater management.

For further information, see

- Guide to Green Government; and
- Sustainable Development in Government Operations: A Coordinated Approach.

Environmental Management Systems

An Environmental Management System (EMS) is a systematic management framework and approach for identifying and managing environmental issues. In their sustainable development strategies most federal departments have committed to developing and implementing an EMS using ISO 14001 or comparable standards. Auditing to detect evidence of EMS development and implementation is therefore an effective means of evaluating whether, and to what degree, a department is managing the environmental implications of its operations.

The planning elements of an EMS should include a process (such as an issues scan) to identify environmental aspects (issues) and assess their significance. In assessing the potential environmental effects of expenditures, it would be reasonable to obtain the results of any identification exercises that a department or agency has undertaken, with a view to identifying the potential environmental effects of products, services, or activities (these are the three categories of items that ISO 14001 requires an organization to assess for environmental effects).

For more information on EMS, visit the Greening of Government website at <http://www.greeninggovernment.gc.ca/default.asp?lang=En&n=A4FA4E9C-1>.

Greenhouse Gas Initiatives

The Federal House in Order initiative is the Government of Canada's plan for reducing greenhouse gas (GHG) emissions within its own operations. Through the initiative, the 11 departments and agencies that account for 95 percent of federal emissions have agreed to collectively meet a target of reducing GHG emissions within their operations by 31 percent from 1990 levels by 2010. The departments and agencies are

- Agriculture and Agri-Food Canada,
- Correctional Service Canada,
- Environment Canada*,
- Fisheries and Oceans Canada,
- National Defence,
- National Research Council Canada,
- Natural Resources Canada*,
- Parks Canada,
- Public Works and Government Services Canada*,
- Royal Canadian Mounted Police, and
- Transport Canada.

* lead department for this initiative

For more information visit the Federal House in Order website at <http://www.fhio.gc.ca/>.

Strategic Environmental Assessment for New Policies, Plans, and Programs (Cabinet Directive)

A Cabinet directive sets specific requirements for considering the environmental consequences of new federal policies, plans, or programs.

According to the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals, federal departments and agencies are required to assess the potential environmental impact of initiatives bound for Cabinet or ministerial approval. The Directive says that ministers “expect strategic environmental assessments to be conducted . . . when a proposal may result in important environmental effects, either positive or negative.”

The Cabinet Directive was put in place in 1990 and revised and clarified in 1999 and 2004.

A strategic environmental assessment (SEA) is intended to be conducted early in the development phase of a new policy, plan, or program proposal so that environmental issues and risks can be identified, avoided, and/or mitigated as the proposal is developed.

The Cabinet Directive indicates that an SEA should include a preliminary scan to determine whether a proposal is expected to result in environmental effects considered to be important. The Directive also requires a detailed analysis of the expected environmental effects of any outcomes of the proposal.

For policies, plans, or programs approved since 1999, auditors should examine the process applied by the entity to make the determination required under the Cabinet Directive.

Any preliminary scan and analysis prepared by an entity for an SEA would provide useful information on environmental issues/risks to auditors.

More information on the Cabinet Directive is available on the Canadian Environmental Assessment Agency website at <http://www.ceaa.gc.ca/>.

Environmental Impact Assessment for Projects Involving the Federal Government (*Canadian Environmental Assessment Act*)

Under the *Canadian Environmental Assessment Act*, an environmental impact assessment must be conducted when the federal government is involved in a new project in any of the following ways:

- It is proposing or undertaking the project.

- It is providing a grant, or grants, or other form of financial assistance to enable the project to be carried out.
- It is selling, leasing, or otherwise transferring control of federal land or property to enable the project to be carried out.
- It is issuing a licence, permit, or approval to enable the project to be carried out.

The Act and Regulations require that proposed projects be assessed by federal entities to ensure that potential environmental effects are identified and considered in decision making.

Note: Generally speaking, projects are physical works to be constructed or decommissioned (e.g., roads or bridges). However, they can also include certain physical activities covered by the Act through a special regulation. Examples include establishment of nuclear facilities or certain activities in national parks.

More information on the *Canadian Environmental Assessment Act* is available on the Canadian Environmental Assessment Agency website at <http://www.ceaa.gc.ca/>.

Some policy instruments/tools used by the federal government to achieve its environmental and sustainable development goals:

- legislation/regulation,
- compliance and enforcement,
- federal-provincial arrangements,
- economic instruments,
- voluntary measures,
- public participation and awareness, and
- access to information.

Appendix 3—Reference Information on Federal Policies and Guidelines on Sustainable Development
and Greening Government

Appendix 4—Key Environmental Issues Identified by Group 4 (Commissioner's Group) in 2001

Within the Office, the Commissioner's Group undertook a review of key environmental issues and federal vulnerabilities in April 2001. The report is entitled "Identifying Key Federal Environmental Issues and Assessing Federal Vulnerabilities." The purpose of the review was to develop

- a list of environmental issues,
- preliminary profiles of each issue, and
- an indicative rating and ranking of issues based on issue profiles.

Table 5.1 outlines the issues identified and described in the report. For a copy of the report, contact the Internal Specialist—Environment and Sustainable Development.

For each issue, the report provides

- a description of the issue, including key characteristics and major sources of the problem;
- a profile of the federal mandate and role as it relates to the issue;
- identification of any international agreements or obligations; and
- identification of key departments or agencies concerned.

The report is an important source of information for entity one-pass planning. It should be reviewed when completing the Entity Environmental Risk Profile for OPP purposes (see Section 1).

Table 5.1: List of Issues		
TOPIC	CLUSTER	ISSUES
Releases to the Environment	1. Global and Regional Atmospheric Issues	1.1 Climate change 1.2 Stratospheric ozone depletion 1.3 Acid precipitation 1.4 Air quality/smog
	2. Toxic Substances	2.1 Generation/release of toxic chemicals 2.2 Generation/release of genetically modified organisms 2.3 Hazardous wastes 2.4 Contaminated sites 2.5 Radioactive wastes
	3. Environmental Emergencies	3.1 Nuclear emergencies 3.2 Industrial environmental emergencies 3.3 Land transportation environmental emergencies 3.4 Shipping accidents resulting in environmental releases
Depletion and Degradation of Resources	4. Depletion/Degradation of Resources	4.1 Agricultural land / soils 4.2 Timber resources 4.3 Fisheries (freshwater and coastal) 4.4 Energy 4.5 Minerals 4.6 Water (surface water / groundwater)
Ecosystem Integrity	5. Other Challenges to Ecosystem Integrity	5.1 Protected areas 5.2 Terrestrial habitat degradation/loss 5.3 Wetland and other freshwater habitat degradation/loss 5.4 Coastal and marine habitat degradation/loss 5.5 Species at risk
Human Environment	6. Human Environment Issues	6.1 Urban environmental quality 6.2 Drinking water quality 6.3 Indoor air quality 6.4 Occupational exposure to toxic substances 6.5 Accumulated exposure