

4.

ENVIRONMENTAL MANAGEMENT - A SURVEY OF GOVERNMENT PRACTICES

BACKGROUND

4.1 There are significant potential environmental impacts associated with many of the activities of government. Examples include Department of Agriculture and Marketing's advice relating to land use and pesticides, Department of Natural Resources' development of a sustainable forestry, and Department of Transportation and Public Works' building of highways and other construction projects.

4.2 A new Environment Act came into effect January 1, 1995; effectively updating the environmental laws of Nova Scotia and consolidating 16 pieces of existing environmental legislation. The Act is just as relevant to Provincial government operations as private-sector activities, as it specifically binds "*Her Majesty's corporations, agents, administrators, servants and employees and Government agencies.*" It addresses important environmental issues such as pollution, dangerous goods and pesticides, contaminated sites, water-resources, waste-resource and air quality. The Act is extensive and provides significant powers of enforcement. In addition, regulations were developed by government to help clarify the requirements of the Act. The only acceptable legal defence available under the Act is "*due diligence or reasonably and honestly (believing) in the existence of facts that, if true, would render the conduct of that person innocent.*"

4.3 One effective means of ensuring good environmental stewardship and displaying "due diligence" is to establish and maintain an environmental management system (EMS) wherever significant impacts on the environment are a possibility. The Canadian Standards Association defines an EMS as the organizational structure, responsibilities, practices, procedures, processes and resources for implementing environmental management. Such systems, if comprehensive and operating effectively, should ensure environmental risks and liabilities are properly identified, minimized and managed; as well as ensure entities comply with environmental laws.

4.4 An EMS will not necessarily exist as a discrete system, but may consist of policies, procedures and accountabilities integrated into an existing management framework. The complexity and size of the system should depend on the nature of the environmental responsibilities of the organization. Ideally, an EMS should contribute to the integration of environmental concerns into all levels of decision making.

4.5 In the fall of 1998, we surveyed various government departments to obtain an understanding of the systems and practices government uses to fulfil its responsibilities under the Environment Act.

SCOPE OF SURVEY

4.6 The objectives of this assignment were to:

- survey the government-wide policy framework for environmental management; and
- gain an understanding of the policies, systems and practices used at the departmental level to fulfil environmental responsibilities.

4.7 For purposes of our survey of departmental practices, we selected a sample of five departments with operations that have a significant potential of impacting the environment. The five departments included in our survey were:

Agriculture and Marketing

Environment

Fisheries and Aquaculture

Natural Resources

Transportation and Public Works

4.8 We interviewed senior managers who have responsibility for environmental issues in their department. Because this was not an audit, we relied on the representations made by each department in producing this Chapter. Our assignment did not include testing or other verification to ensure systems functioned as described, though we did review some supporting documentation to help us better understand the practices and issues involved.

4.9 Our interviews were guided by a questionnaire which we developed from our research. It focussed on five key areas of environmental management: definition of responsibilities, availability of resources, risk identification, management control and performance reporting. After a description of the government-wide policy framework for environmental management, the Chapter summarizes the results of our survey using the format of our questionnaire. Because of the nature of this assignment, our descriptions of environmental management are generalized and do not indicate the specific practices of individual departments surveyed.

PRINCIPAL FINDINGS

Government-wide Policy Framework

4.10 *Government By Design*, the government's annual planning document, indicates that the government's agenda is based on four pillars of public policy: social responsibility, economic growth, responsive government and fiscal stability. In the 1997-98 plan, under the pillar of social responsibility, protecting the environment and ensuring resources are managed for sustainability were stated as priorities. In the 1998-99 plan, under the pillar of economic growth, the government stated its commitment to securing a lasting future for the industries that capitalize on the Province's natural resources. Under the pillar of responsive government, the government expressed its commitment to protecting the environment. As such, the government's commitment to environmental stewardship has been integrated into its highest-level planning activities.

4.11 There is no government-wide policy framework for environmental management at this time. In 1997 a policy was implemented to outline environment-friendly purchasing practices for government, but there is no comprehensive guide to help departments manage all of their environmental responsibilities. In 1992 the Nova Scotia Round Table on Environment and Economy developed a policy paper on a strategy for sustainable development for Nova Scotia. The strategy addressed issues such as the state of the atmosphere, water management and biological diversity. It also proposed sustainable goals in a number of economic sectors, such as agriculture, forestry, fishing and aquaculture, and tourism and recreation. It was intended to apply to government operations, as well as to establish a framework for government's encouragement of the private sector

to adopt sustainable development practices. However, the strategy was never formally adopted by government and has not led to the development of central policy for environmental stewardship.

4.12 Later, in 1993, an Environmental Self-Assessment policy was approved by government and announced by the Department of the Environment. It required all departments, agencies, boards and commissions to conduct environmental self-assessments on significant new policy and economic development initiatives. The policy also highlighted five practices of good environmental management. In addition, there was now a requirement that a summary statement on environmental implications accompany all requests for approval from central government. However, no mechanisms were developed to encourage and monitor departments' self-assessment practices. Compliance by departments with the reporting requirement has not been regular, and there is little information with respect to the degree of compliance with the requirement for self-assessments.

4.13 Although the Nova Scotia Round Table on Environment and Economy was created by government in 1988, the 1995 Environment Act formally established it as an advisory body to government on sustainable development planning in Nova Scotia. Its mandate was formalized to include:

- researching and analyzing issues relating to sustainable development;
- advising government on the incorporating of environmental and economic considerations into its decision-making processes, and sustainable development principles and practices into its activities and undertakings;
- increasing public awareness of the cultural, social, economic and policy changes required to attain sustainable development; and
- assisting the government to overcome barriers to sustainable development.

4.14 The Round Table has since been active in advising on various environmental issues, including accountability and environmental self-assessment. However, in the past year, the Round Table's ability to function has been hampered by membership vacancies and legislative delays in filling those vacancies.

4.15 In lieu of government-wide policy, departments develop their own environmental policies, strategies and plans, and look to the Environment Act and its regulations for a comprehensive description of their environmental responsibilities. All of the departments we surveyed had an opportunity to advise on the writing of the legislation, and thus were well versed in it. The Department of the Environment has the lead role in overseeing and enforcing the Act, both with respect to private sector as well as government activities. We observed that, with respect to environmental issues, there is considerable communication and collaboration between the Department of the Environment and the other departments we surveyed.

Responsibility for Environmental Management

4.16 One characteristic of a well-functioning environmental management system is that environmental responsibilities are clearly defined. This can be achieved through an environmental policy that outlines the commitment to meeting environmental responsibilities and assigns roles and accountability for its achievement. Senior management commitment and leadership in implementing an organization's environmental management function are essential.

4.17 The five departments in our survey demonstrated an understanding of their responsibilities under the Environment Act. While only one department had a distinct environmental policy, all five departments included statements of their commitment to the environment in their annual business plans. The statements ranged from a broad, high-level commitment set out in the mission statement, to strategic goals of sustainability and environmentally responsible management, to specific operational priorities and objectives for the year ahead. Two departments have a division or branch with specific environmental management responsibilities, while the other three have a more decentralized form of environmental management. All five departments made environmental management a key responsibility of their senior management teams, but each also held the view that operating in a manner that is responsible to the environment is the duty of all departmental staff.

Availability of Resources

4.18 The availability of adequate resources in terms of knowledge, experience and funding is a requirement for effective management of environmental responsibilities.

4.19 In terms of knowledge and experience, management in all five departments indicated that they had adequate resources, either within their departments or available to them from other departments and outside sources. In three of the departments it was indicated that management of certain operational aspects of their environmental responsibilities was constrained by limitations in funding.

Risk Identification

4.20 The identification of environmental risks and liabilities inherent in an organization's operations is an important aspect of environmental management. It helps management understand the organization's potential for environmental impact, and to focus attention and resources on higher priority issues.

4.21 From our interviews we determined that none of the five departments have performed a formal, department-wide environmental risk analysis. Management of each department indicated that it has developed a good awareness of the environmental risks and liabilities inherent in its operations through its regular activities and through contacts with other departments and agencies. One department has completed a review of its legislation for potential conflicts with the Environment Act and two other departments have reviewed and prioritized certain risk sites. Management in all five departments noted that some of the work of the occupational health and safety committees helped identify environmental risks; for example, through the development of hazardous material identification and monitoring systems.

4.22 A comprehensive review of the Environment Act and its regulations, to be initiated within five years of its enactment, is a requirement under the Act. The Department of the Environment has begun planning for the review process and is developing approaches to provide opportunity for input from all stakeholders. Such a review process will likely help identify environmental risk factors relating to government's activities.

Environmental Management

4.23 Environmental management should include practices and controls such as planning, coordinating, monitoring, reporting and auditing to help ensure environmental responsibilities are met. Environmental management should be integrated with other areas of management and, as a result, environmental considerations should be included in all senior-level decision-making.

4.24 All five departments incorporated a variety of the above-noted elements in their management of environmental responsibilities. Although the elements were more apparent in the two departments with environmental service divisions, the three departments with more decentralized environmental management also demonstrated environmental practices and controls.

4.25 Each of the five departments had goals and outcome measures relating to the environmental impact of their operations, which were included in their annual business plans. The departments have also established a number of policies, guidelines and practices on conducting operations in a manner responsible to the environment. One department has developed a handbook for its private sector clients to guide them through the environmental regulations. Another department has implemented a pollution prevention program to promote improvement in operational practices. A third department is developing natural resource databases for better land-use planning and management. Three of the departments have undertaken initiatives to encourage good environmental practices in the workplace.

4.26 Annual performance appraisals are part of the management regime at all five departments, but are used to varying degrees as a means of establishing accountability for environmental responsibilities. At four of the departments, environmental responsibilities are included in annual performance goals to some degree, and achievement of these goals is subsequently evaluated. Of these four, annual performance appraisals are performed for all staff at two of the departments, and primarily with management personnel at the other two. In the one remaining department, environmental responsibilities are tied into performance goals to a much more limited extent.

4.27 Contractors and consultants hired by the departments are required to follow environmental regulations and guidelines. Environmental conditions are often specified in the contracts that govern their services. The departments monitor to ensure compliance with contract terms and conditions.

4.28 All five departments carry out inspections to ensure regulatory compliance by their clients, and inspectors generally prepare reports or letters to document their inspections. Internal reporting on environmental responsibilities is generally informal; usually through meetings, memos and briefings.

4.29 None of the departments have undergone an audit of their environmental management practices to provide assurance on proper implementation and effectiveness in achieving environmental objectives. There are also no established mechanisms for such audits.

Environmental Reporting

4.30 Under the Environment Act, the government is committed to reporting on the state of the environment in the Province. The first report was released in July 1998 and called *The State of the Nova Scotia Environment 1998*. This report gives an overview of environmental issues, concerns and actions related to air, water and waste management. Subsequent reports will cover land resources, biota, and coastal and marine ecosystems. The report focusses on the major responsibilities of the Department of the Environment, but also contains references to three of the other departments included in our survey. Even though the report claims that it is not comprehensive and that data gaps have been identified, we commend this effort to document the progress the Province has made in protecting the environment.

4.31 Each of the five departments reported performance results for 1997-98 in *Nova Scotia Counts*. This document reports on government's level of achievement of performance goals developed and reported in *Government By Design*. Thus, *Nova Scotia Counts* serves as a reporting mechanism on environmental responsibilities only to the extent that those responsibilities were

included in performance targets in the departments' business plans and in *Government By Design*. We noted that three of the departments had details on their environmental responsibilities included in *Government By Design*. We also noted that one department released a progress report in relation to an environmental strategy it developed, and another department plans to implement a regular reporting mechanism for one of its environmental responsibilities.

CONCLUDING REMARKS

4.32 The importance of environmental stewardship has been recognized in government's top-level planning, but there is no formal government-wide policy framework for managing the Province's environmental responsibilities. Departments are responsible for meeting the requirements of the Environment Act and regulations, and for developing the policies and systems that are most appropriate for their individual requirements.

4.33 There is no generally accepted model of an environmental management system and the focus of our survey was on the embodiment of sound environmental management principles, rather than on specific techniques and procedures. We also recognize that each department's environmental management needs are specific to that department. Practices must be allowed to vary to fit a department's business and management style, and evolve to reflect changes in a department's organization and business.

4.34 The departments in our survey were aware of their environmental responsibilities and had developed systems, policies and procedures to manage them. None of the departments have implemented a comprehensive environmental management system, but most have implemented a number of the component elements of a formal EMS and are actively developing others to meet environmental challenges. We support and encourage their continual improvement of environmental management and accountability.
