

Guidance Document

Improving Environmental Performance and Compliance

10 Elements of Effective
Environmental Management Systems

June 2000

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Enforcement
Cooperation Program
of the Commission for
Environmental Cooperation

Guidance Document

Improving Environmental Performance and Compliance

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Environmental Management Systems

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Introduction

In recent years the private sector has developed various types of environmental management systems (EMSs) for identifying and managing the impacts that commercial and industrial operations have on the environment. These systems primarily serve internal management purposes; however, when designed and implemented to realize their full potential, they offer opportunities for enhancing environmental protection in both regulated and unregulated areas. The governments of Canada, Mexico and the United States are interested in promoting the use of EMSs that not only assure compliance with environmental laws and regulations but also encourage their users to improve their environmental performance and to move “beyond compliance.”

This document represents the first time the three North American governments have jointly expressed their views on how voluntary EMSs designed for internal management purposes can also serve the broader public policy goals of compliance assurance and improved environmental performance in regulated and non-regulated areas. It was produced by a trilateral group working on enforcement and compliance cooperation issues (the Enforcement Working Group) under the auspices of the North American Commission for Environmental Cooperation (CEC), with input through a targeted public consultation process.

The Enforcement Working Group believes that EMSs can be implemented to achieve positive results: market benefits for industry and better environmental protection for all. This document is intended for users of EMSs—regulated entities including industry, government agencies and other organizations—as well as the public, who share an interest in effective implementation of EMSs to achieve better environmental performance. This guidance document is endorsed by Council Resolution 2000-05 as a useful tool for those organizations seeking to implement an EMS that will enhance compliance and environmental performance.

Purpose of this Document

This document sets out what the three North American governments have agreed is important to address in implementing EMSs. It is intended to assist EMS users make responsible decisions and take actions to achieve better environmental performance through maintaining compliance with environmental laws and moving beyond compliance. Although no system can provide a guarantee of success, this document provides a list of 10 elements to help ensure that what needs to be done is being done to meet these goals. It is intended as a guidance for those organizations in the public and private sectors that seek an EMS applied in a way that will work effectively and build better relationships with customers, suppliers, lenders, investors or the local community as well as with government.

All organizations have the right to choose the EMS model best suited to their internal needs and goals. These EMSs can have external as well as internal value to those who use them. Properly implemented, they have the potential to improve corporate image, achieve financial savings through improved efficiency, lead to competitive advantage and achieve measurable reductions in pollution of the environment. An EMS that follows through on a commitment to continuous improvement allows the organization using it to achieve better performance levels than those required by government regulation.

In this document, the governments have chosen to focus on two goals: compliance with environmental laws and environmental performance that moves beyond compliance in both regulated and non-regulated areas. There are numerous other important policy issues associated with the use of EMSs such as pollution prevention, public reporting of compliance or environmental performance information as well as certification or third-party verification. The Enforcement Working Group plans to explore these issues in future work.

Use of the document is not intended to alter or diminish the rights and responsibilities of organizations under the domestic laws of their respective countries. The Council of the CEC has recognized that governments must retain the primary role in establishing environmental standards and verifying and enforcing compliance with laws and regulations. EMSs do not replace the regulatory system. Nor do the governments propose this document as a new product to compete with already existing EMS models. Instead, the Enforcement Working Group believes that this document can serve as a useful tool to complement existing EMS models in two ways: a) by stating government support for properly designed and implemented EMSs that help organizations achieve and maintain compliance and improve their environmental performance in both regulated and non-regulated areas; and b) by setting out a list of elements that will enhance the ability of users of EMSs to address these goals.

Elements for Improving Environmental Performance and Compliance

This document lists 10 elements that are compatible with many EMS models in use, including ISO 14001. This list is not meant to be a new or competing system. Instead, it is intended to provide a simple way of checking whether existing or planned EMSs include elements to help users meet public policy needs of regulatory compliance and environmental performance that moves beyond compliance. Each user would make its own decision as to the extent to which it needs to augment its existing or planned EMS by incorporating these elements. However, users of this guidance document are encouraged to include all 10 elements in their EMSs to achieve maximum environmental benefit.

1 Environmental Policy

The EMS should be based upon a documented and clearly communicated policy. This policy should set out the organization's commitment towards a cleaner environment. It should include:

- provision for compliance with environmental requirements;
- commitment to continuous improvement in environmental performance, including in areas not subject to regulation;
- commitment to pollution prevention that emphasizes source reduction;
- commitment to continuous reduction of environmental risks;
- commitment to sharing information with external stakeholders on environmental performance against all EMS objectives and targets.

2 Environmental Requirements and Voluntary Undertakings

The EMS should provide a means to identify, explain and communicate all environmental requirements and voluntary undertakings to all employees, on-site service providers and contractors, whose work could affect the organization's ability to meet those requirements and undertakings. Environmental requirements include statutes, regulations, permits, enforceable agreements. Voluntary undertakings include any environmental principles or industry norms that an organization may choose to adopt. Examples include voluntary codes of practice for safety, risk management and energy efficiency issues, where applicable, or sectoral and international environmental principles such as the CERES principles or the International Chamber of Commerce Charter for Sustainable Development, among others.

The EMS should include procedures for ensuring that the organization meets these environmental requirements and voluntary undertakings. The EMS should also specify procedures for anticipating changes to environmental requirements—including new requirements that may apply as a result of changes in operations—and incorporating these changes into the EMS.

3 Objectives and Targets

Users of this guidance document should ensure that the EMS establishes specific objectives and targets for:

- achieving and maintaining compliance with environmental requirements;
- environmental performance demonstrating continuous improvement in regulated and non-regulated areas;
- pollution prevention that emphasizes source reduction;
- sharing information with external stakeholders on environmental performance against all EMS objectives and targets.

The EMS should establish appropriate time frames to meet these objectives and targets. These should be documented and updated as environmental requirements change or as modifications occur in activities and structures within organizations in a manner that affects environmental performance. The Enforcement Working Group encourages organizations that are already performing or seeking to go “beyond compliance” to report on their progress towards continued environmental performance and leadership, including reporting on voluntary undertakings.

4 Structure, Responsibility and Resources

The organization should ensure that it is equipped with sufficient personnel and other resources to meet the objectives and targets of its EMS. The EMS should spell out procedures and steps for achieving those objectives and targets. For example it should define the compliance roles and responsibilities of environmental protection personnel, specify how they and management will be held accountable for achieving and maintaining compliance, and describe how environmental performance and compliance information will be communicated to relevant employees, on-site service providers, and contractors. The EMS should also establish procedures for receiving and addressing concerns raised by these personnel regarding environmental performance and compliance.

5 Operational Control

The EMS should identify and provide for the planning and management of all the organization's operations and activities with a view to achieving the EMS objectives and targets. For example, facility maintenance may be an important aspect in achieving and maintaining compliance and enhancing environmental performance.

6 Corrective and Preventive Action and Emergency Procedures

The organization, through its EMS, should establish and maintain documented procedures for preventing, detecting, investigating, promptly initiating corrective action, and reporting (both internally and externally, in accordance with the country's applicable laws) any occurrence that may affect the organization's ability to achieve the EMS objectives and targets. Such measures should pay particular attention to incidents that may have an effect on compliance with environmental requirements as well as on environmental performance in regulated and non-regulated areas. Examples of such situations include equipment malfunctions, operator errors and accidental releases of hazardous substances. The EMS should also establish documented procedures for mitigating any adverse impacts on the environment that may be associated with accidents or emergency situations and for ensuring that similar incidents are avoided.

The EMS should include procedures for tracking any preventive and corrective actions that are taken. If the environmental violation or incident resulted from a weakness in the system, the EMS should be updated and refined to minimize the likelihood of such problems recurring in the future. The EMS should also, to the extent possible, provide for the testing of emergency procedures.

7 Training, Awareness and Competence

The EMS should establish procedures to ensure that all personnel (including employees, on-site service providers, and contractors) whose job responsibilities affect the ability to achieve the EMS objectives and targets, have been trained and are capable of carrying out these responsibilities. In particular, the training should highlight means to enhance the ability of personnel to ensure compliance with environmental requirements and voluntary undertakings affecting the organization.

8 Organizational Decision-making and Planning

The EMS should describe how these 10 elements will be integrated into the organization's overall decision-making and planning, in particular, decisions on capital improvements, product and process design, training programs, and maintenance activities.

9 Document Control

The EMS should establish procedures to ensure maintenance of appropriate documentation relating to its objectives and targets and should also ensure that those records will be adequate for subsequent evaluation and improvement of the operation of the EMS. For example, it should document the organization's state of compliance with environmental requirements as well as environmental performance relating to non-regulated aspects. All records should be maintained in accordance with relevant laws for document retention and protection.

10 Continuous Evaluation and Improvement

The EMS should require periodic, documented and objective auditing of the organization's performance in achieving these objectives and targets and on how well the EMS assists the organization in achieving those objectives and targets. The goal of the review should be to allow management to bring about overall improvements. The scope and frequency of the review should depend upon the size and complexity of the organization and other factors that are determined relevant in each organization and country.

“Plan, Do, Check and Act”

The guidance document's elements are designed to be integrated into the “Plan, do, check and act” model for continuous improvement, which many existing EMS models use. This model helps to ensure that environmental issues are systematically identified, controlled and monitored. Moreover, the Enforcement Working Group believes that an EMS that provides for reporting on environmental performance, both internally and externally, supplies EMS users with additional mechanisms to respond to changing environmental conditions and requirements, to build confidence with stakeholders and to reinforce continuous improvement.

As an initial step in developing a comprehensive EMS, some organizations may find it helpful to complete an objective baseline audit. This will enable the organization to identify its current status regarding compliance and environmental performance in regulated and non-regulated areas. It should also highlight risks and impacts that require attention and a higher degree of active management under an EMS. This audit may be conducted by an outside consultant or by internal personnel, in accordance with generally recognized environmental audit requirements for objectivity and adequate expertise.

Implementation

The three Parties have prepared this document with the goal of incorporating its elements into their respective voluntary programs in a way that strengthens the Parties' effectiveness at protecting the environment. Each Party is developing a separate implementation plan. For organizations already performing "beyond compliance," incorporating the guidance document's elements into an EMS can further enhance their ability to achieve "beyond compliance" performance goals. Each Party may decide if it needs to develop mechanisms for verifying an organization's implementation of the document's elements.

CEC

The CEC Secretariat will post the document on the CEC Internet site and make hard copies of the document available for distribution to various chambers of commerce, nongovernmental groups and international organizations including the International Organization for Standardization, the Organization for Economic Cooperation and Development, the United Nations Environment Program, the European Union, the International Network for Environmental Compliance and Enforcement, and the G-8 Environment Ministers.

Canada

Canada supports continued use and expansion of private sector EMSs including Responsible Care, Sustainable Forestry Management, the ISO 14001 Standard and others in use by private organizations and public agencies.

Canada intends to provide opportunity over the balance of 2000 to further consult with industry and other interested bodies in the development of Canada's Implementation Plan for the guidance document. EC will post the document on its Green Lane Internet site for access by any interested companies or organizations. As a consequence of these ongoing consultations, it is expected that Canada will provide contributions to the review of the document within the next three years.

Mexico

The current scope of the Mexican Environmental Audit Program (PMAA) covers both regulated and non-regulated aspects that are of fundamental importance for the protection of the environment. It includes areas such as prevention and control of environmental pollution, industrial safety, evaluation of risk, among others, which help define the applicable environmental requirements for each facility.

Since its inception in 1992, the PMAA has promoted the implementation of environmental management systems. Mexico will revise its "Terms of Reference for Conducting Environmental Audits" and will promote adoption of this guidance document in order to improve current levels of environmental protection for all new audits for the issuance of "Clean Industry" certificates as well as for reviews carried out for the reissue of these certificates.

For the purpose of Mexico's implementation of this guidance document, the words "improve environmental performance" or "beyond compliance" mean to improve environmental performance in all aspects of a facility's activities, whether regulated or not. These expressions will be interpreted in conjunction with Mexico's "Terms of Reference for Conducting

Environmental Audits." In addition, sharing of information with external stakeholders as referred to in elements 1 and 3 shall be done in accordance with applicable Mexican laws, voluntary programs and policies, including the policies under the PMAA.

Mexico will make the appropriate changes to the PMAA as well as to the policies established by the *Procuraduría Federal de Protección al Ambiente* (PROFEPA) for the promotion and conduct of audits by approved auditors in order to include, within the scope of an audit or of a review for reissue of a certificate, aspects corresponding to EMS models such as ISO 14001, the European Union's Eco-management and Audit Scheme (EMAS) or other systems. Each organization may choose the EMS model best suited to its requirements.

In addition, all the necessary adjustments will be made to allow micro and small enterprises to have access not only to the benefits of conducting environmental performance audits but also to those of environmental management systems.

Mexico will distribute copies of this document to industrial groups, business associations and nongovernmental organizations, in order to promote its use through the PMAA or as a stand-alone tool, at the discretion of the potential user.

The United States of America

The United States plans to post the document on the Environmental Protection Agency's internet site and provide hard copies to various business trade organizations, US government departments and agencies (such as the Department of Commerce, National Oceanic and Atmospheric Administration and the US Fish and Wildlife Service), and to nongovernmental organizations. The United States also plans to utilize the Enforcement Working Group's document in the "EPA Action Plan for Promoting the Use of Environmental Management Systems," as appropriate.

Follow-up

The Enforcement Working Group believes that use of this document can lead to benefits for users of EMSs, for government agencies and for the environment. Integrating these 10 elements into an EMS can also help organizations achieve more cost effective management that can lead to a reduction of pollutant levels and promote corporate leadership by demonstrating a commitment to environmental responsibility.

The Enforcement Working Group will be reviewing this guidance document within the next three years. As the Parties acquire additional expertise and experience with EMS models, the Group may decide to revise the document from time to time in light of practical experience. However, the document will be revised only when the Parties agree that changes are warranted.

Annex: Background

This document has been produced by the North American Working Group on Environmental Enforcement and Compliance Cooperation (Enforcement Working Group), a trilateral group formed under the North American Commission for Environmental Cooperation (CEC). It reflects the Enforcement Working Group's mandate to examine complementary approaches to effective enforcement and compliance with environmental and wildlife laws as well as voluntary initiatives to enhance environmental performance. The Parties participating in the Enforcement Working Group are the governments of Canada, Mexico and the United States.

In recent years the private sector in North America has made increased use of various types of EMSs ranging from the chemical industry's Responsible Care program to ISO 14001. The CEC Council recognized the potential of such systems to foster improved environmental protection and directed the Enforcement Working Group in Council Resolution 97-05 "to explore (1) the relationship between the ISO 14000 series and other voluntary EMSs to government programs to enforce, verify, and promote compliance with environmental laws and regulations and (2) opportunities to exchange information and develop cooperative positions regarding the role and effect of EMSs on compliance and other environmental performance."

In June 1998, the Enforcement Working Group delivered an initial report to Council on "Environmental Management Systems and Compliance." In its preliminary findings, the report noted that while EMSs are a useful tool to assist an organization in achieving improved compliance and overall performance, they do not *per se* guarantee compliance or improved environmental performance.

The Enforcement Working Group work has been examining the link between government programs and private sector initiatives to improve environmental quality—on the one hand through government regulatory and voluntary programs—on the other hand through private sector EMSs. All sectors involved are trying to understand how these efforts can evolve together to achieve this goal.

This document is the product of the Enforcement Working Group's ongoing work to address these issues. It is the second in a series of documents being produced by the Enforcement Working Group that explore tools to (i) achieve effective enforcement and enhanced compliance with the respective environmental requirements of the three Parties and (ii) promote "beyond compliance" efforts. The first document was the Enforcement Working Group's June 1998 report, "Environmental Management Systems and Compliance." This was followed by a public forum in 1999 in Washington, DC on EMSs and on ISO 14001 in particular. Copies of the report and the summary proceedings of the public forum are available on the CEC web site at <http://www.cec.org>.