

June 1995

ISO 14000 Emerging International Environmental Law

Donna Solen

Follow this and additional works at: <https://scholarship.law.ufl.edu/fjil>

Recommended Citation

Solen, Donna (1995) "ISO 14000 Emerging International Environmental Law," *Florida Journal of International Law*: Vol. 10: Iss. 2, Article 4.

Available at: <https://scholarship.law.ufl.edu/fjil/vol10/iss2/4>

This Article is brought to you for free and open access by UF Law Scholarship Repository. It has been accepted for inclusion in Florida Journal of International Law by an authorized editor of UF Law Scholarship Repository. For more information, please contact kaleita@law.ufl.edu.

NOTES

ISO 14000: EMERGING INTERNATIONAL ENVIRONMENTAL LAW

*Donna Solen**

I. INTRODUCTION	275
II. HISTORY	276
A. <i>The International Organization for Standardization</i>	276
B. <i>Events Leading to ISO 14000</i>	277
1. ISO 9000	277
2. Other Environmental Management Systems	278
C. The Formation of ISO 14000	281
III. THE ISO 14000 STANDARDS	284
IV. ANALYSIS OF THE ISO 14000 SERIES	286
A. <i>Implications of ISO 14000 for Business and Industry</i> ...	286
B. <i>Implications of ISO 14000 for the Environment</i>	290
V. CONCLUSION	292

I. INTRODUCTION

A new era of corporate environmental management is fast approaching. Corporations throughout the world are being confronted with increasing pressure from both the public and private sectors to become more environmentally responsible. Multinational corporations are facing stricter environmental standards in foreign countries. Consumers now demand environmentally friendly goods and services. Additionally, the insurance and banking industries are concerned about the staggering costs of mismanagement by businesses that results in environmental disasters.¹ Companies and organizations throughout the world are faced with the challenge of taking responsibility for their environmental policies, management, and processes.² In response to these pressures, the International Organization for Standardization (ISO) developed the ISO 14000 series for environmental management.

* *Editor's Note:* This note was selected as the best note for Spring 1996.

1. *In re the Exxon Valdez*, No. A89-0095-CV, 1995 WL 527988, at *1-12 (D. Alaska Jan. 27, 1995); see *infra* note 126 and accompanying text for a discussion of *Exxon Valdez*.

2. *Management System Info & Links* (visited Sept. 9, 1997) <<http://www.informintl.com/maps/./managesyslinks.html#whatisISO14000>> [hereinafter *Management System Links*].

ISO 14000 is the new set of environmental management standards soon to be published by the ISO. ISO 14000 will put in place voluntary standards for environmental management to be used by corporations and other business entities in formulating their own environmental policies.³ These standards cover five areas of corporate environmental management: (1) environmental performance evaluation, (2) guidelines for a comprehensive environmental management system, (3) environmental auditing, (4) environmental labeling series, and (5) life-cycle assessment.⁴

The ISO 14000 series has been praised by some as the wave of the future.⁵ They believe ISO 14000 will be an eventual requirement for all companies that do business abroad. Others commentators have criticized ISO 14000 stating that it does not provide any substantial improvements or benefits to already existing environmental management systems.⁶ Regardless, ISO 14000 is an important new force for doing business throughout the world, and it will be impossible to ignore for long.

Part II of this note explores the history of ISO 14000, including events leading to ISO 14000, such as its predecessor, ISO 9000, and other environmental management systems in place in the European Union, Great Britain, and the United States. This note also covers the important elements of ISO 14001, which is the Draft International Standard, and the history of the debates that occurred in forming this and other standards. In part IV, the implications of ISO 14000 for business, industry, and the environment are analyzed in light of their effectiveness. In conclusion, this note predicts the role that the new standards will play in shaping modern corporate environmental responsibility.

II. HISTORY

A. *The International Organization for Standardization*

The ISO was founded in 1946 to simplify the exchange of goods and services throughout the world.⁷ This was to be done by advocating international standards.⁸ The organization is comprised of more than 100

3. Naomi Roht-Arriaza, *Shifting the Point of Regulation: The International Organization for Standardization and Global Lawmaking on Trade and the Environment*, 22 *ECOLOGY L.Q.* 479, 486 (1995).

4. Kerry E. Rodgers, *The ISO Environmental Standards Initiative*, 5 *N.Y.U. ENVTL. L.J.* 181, 181-82 (1996).

5. *ISO 14000 Hailed as Savior, Questioned as Problematical, in Congressional Review*, *PESTICIDE & TOXIC CHEM. NEWS*, June 19, 1996 [hereinafter *ISO 14000 Congressional Review*].

6. Ronald Begley, *Is ISO 14000 Worth It?*, 17 *J. BUS. STRATEGY*, Sept. 1, 1996, at 50.

7. Roht-Arriaza, *supra* note 3, at 489 (citing ISO, *MEMENTO* 3 (1993)).

8. *Id.*

national standard setting bodies, each of which represents a different country.⁹ Each participating standard setting body of ISO is the body that is “‘most representative of standardization in its country.’”¹⁰ Some of these national bodies represent predominantly private interests, while others represent significant governmental interests.¹¹ The United States’ standard setting representative to the ISO is the American National Standards Institute.¹²

The ISO is made up of various technical committees (TC). These TCs first form subcommittees and then working groups.¹³ National representatives may form technical advisory groups to advance their particular national positions on any proposed standards.¹⁴

The eventual goal of these committees, technical advisors, and working groups is to produce a final product that is known as an International Standard.¹⁵ The ISO has created more than 9000 standards, mostly in areas such as mechanical engineering, basic chemicals, information processing, and photography.¹⁶ One of the most recent and most popular international standards has been the ISO 9000 series for quality management and assurance.¹⁷

B. *Events Leading to ISO 14000*

1. ISO 9000

ISO 9000 was developed as a voluntary standard in 1987 by TC 176.¹⁸ The purpose of ISO 9000 is to install and maintain quality management systems for organizations that manufacture products or provide services.¹⁹ ISO 9000 provides guidance on how to create or improve effective quality management systems and “provides customers with [the] generic require-

9. *Id.*

10. *Id.* (quoting ISO, MEMENTO, 3 (1993)).

11. *Id.*

12. *The Increasing Importance of International Standards to the U.S. Industrial Community and the Impact of ISO 14000, 1996: Hearing Before the Subcomm. on Tech. of the House Comm. on Science*, 104 Cong. (1996), microformed on CIS No. 1996 H-701-33.1, at 42 (Congressional Info. Serv.) [hereinafter *ISO 14000 Hearing*] (testimony of Sergio Mazza, President, American National Standards Institute).

13. Roht-Arriaza, *supra* note 3, at 489.

14. *Id.*

15. *Id.* at 490.

16. *Id.*

17. Mark Morrow, *ISO 14000: When Green Means “Proceed with Caution,”* EXPORT TODAY, Oct. 1996, at 73 (stating that greater than 127,000 businesses throughout the world have adopted ISO 9000).

18. *Management System Links*, *supra* note 2.

19. *Id.*

ments with which to assess a supplier's quality system."²⁰ ISO 9000 is a process, not a product standard. It is geared towards meeting customer requirements, creating more efficient production processes, and continuous improvement.²¹

ISO 9000 contains five basic documents: ISO 9000-1, ISO 9001, ISO 9002, ISO 9003, and ISO 9004-1. ISO 9000-1 and ISO 9004-1 are guidance standards, and ISO 9001, ISO 9002, and ISO 9003 are conformance standards. These standards have been adopted in more than eighty countries.²² More than 100,000 companies throughout the world, including more than 8000 in the United States, are registered to the conformance standards of ISO 9001, ISO 9002, or ISO 9003.²³ ISO 9000 is important because it enhances product quality and business efficiency.²⁴ Registration offers businesses a competitive advantage, helps companies meet customer requirements, and increases productivity and profitability.²⁵ Due in part to the success of ISO 9000 and in response to the growth of environmental standards worldwide, the ISO began to explore the environmental management realm.²⁶

2. Other Environmental Management Systems

One of the driving forces of the environmental standard-setting process is the European Union's regulation on ecomanagement and audit schemes (EMAS).²⁷ EMAS went into effect in early 1995.²⁸ Similar to ISO 14000, EMAS is a voluntary standard.²⁹ Organizations that choose to comply must meet a "relatively detailed [environmental management system] EMS and

20. *Id.*

21. David McCallum & Isis Fredericks, *The Utility of Risk Assessment and Risk Management in the ISO 14001 Environmental Management System Framework* (visited Sept. 9, 1997) <<http://www.mgmt14k.com/awma96.htm>> (originally presented at the Air & Waste Management Ass'n 89th Ann. Meeting & Exhibition, June 23-28, 1996).

22. *Management Systems Links*, *supra* note 2.

23. *Id.*

24. *Id.* The ISO 9000 series are not static. They are to be revised every five years "to ensure that the standards keep pace with management practices and technological advances." *Id.*

25. *Id.* ISO 9000 registration is required in some countries before businesses can conduct trade with government entities or with companies that operate under government regulations. *Id.*

26. McCallum & Fredericks, *supra* note 21.

27. Roht-Arriaza, *supra* note 3, at 492. "The Council of the European Community, [now the European Union,] passed a regulation allowing voluntary participation by companies in the industrial sector in a Community eco-management and audit scheme." *Id.* at n.66 (citing Council Regulation 1836/93, art. 1, 1993 O.J. (L 168) 1 [hereinafter EMAS Regulation]).

28. *Id.*

29. EMAS Regulation, *supra* note 27, art. 1.

auditing protocol.”³⁰ The goal of EMAS is to promote continual improvement in the environmental performance of industries by establishing environmental policies and management systems and ensuring continuous evaluation of these policies and systems and the periodic release of environmental performance statements to the public.³¹ To participate in EMAS, a company must: adopt a corporate environmental policy;³² perform an environmental site review;³³ institute an environmental program and an environmental management system for the site;³⁴ conduct environmental audits at the site;³⁵ at top management levels, create objectives to ensure that environmental performance improves;³⁶ and prepare and then issue to the public periodic environmental statements that have been verified.³⁷

Companies that implement national, European, or international standards and are certified according to the appropriate procedures as having met those standards will also meet the requirements of the EMAS regulation.³⁸ While the system is proffered as voluntary, many companies expect that, similar to the ISO 9000 quality control system, it will become a de facto requirement for doing business in the European Union.³⁹

In 1992 in Great Britain, the nongovernmental, British Standards Institute published the environmental management system, BS 7750.⁴⁰ BS 7750 was updated in 1994.⁴¹ It was drafted specifically to be compatible with EMAS.⁴² Even though British industry will have a choice of certification under either BS 7750, EMAS, or ISO 14000, the British Standards Institute worries that the ISO 14000 standard will be less rigorous, especially in the area of continual improvement.⁴³

30. Christopher L. Bell & James L. Connaughton, *International Environmental Standards*, 2 J. ENV. LAW & PRAC. 39, 40 (1995).

31. Rodgers, *supra* note 4, at 213.

32. *Id.* (citing EMAS Regulation, *supra* note 27, art. 3(a), annex I).

33. *Id.* (citing EMAS Regulation, *supra* note 27, art. 3(b)).

34. *Id.* (citing EMAS Regulation, *supra* note 27, art. 3(c)). “A company’s EMS [environmental management system] consists of the organizational structure, responsibilities, practices, procedures, processes, and resources involved in setting and implementing company environmental policy.” *Id.* at 213 n.150.

35. *Id.* at 213 (citing EMAS Regulation, *supra* note 27, art. 3(d)).

36. *Id.* “[A] policy must contain commitments to the ‘reasonable continuous improvement of environmental performance, with a view to reducing environmental impacts to levels not exceeding those corresponding to economically viable application of best available technology.’” *Id.* (quoting EMAS Regulation, *supra* note 27, art. 3(a)).

37. EMAS Regulation, *supra* note 27, art. 3.

38. *Id.* art. 12.

39. Roht-Arriaza, *supra* note 3, at 492.

40. Rodgers, *supra* note 4, at 215-16.

41. McCallum & Fredericks, *supra* note 21.

42. Rodgers, *supra* note 4, at 216.

43. *Id.*

In the United States, the Environmental Protection Agency (EPA) has a formal tradition of agency rulemaking, characterized by public participation through notice and comment procedures.⁴⁴ The availability of judicial review of EPA decisions has expanded; this has encouraged challenges to agency rules by industry and environmental organizations.⁴⁵ This has created a highly adversarial environment between government and industry.⁴⁶ Consequently, in the past the EPA and other federal agencies have not approved of voluntary compliance programs.⁴⁷

However, in recent years, the EPA has begun to encourage companies to adopt voluntary compliance programs.⁴⁸ It has even established environmental compliance programs of its own. One of these programs is EPA's Environmental Leadership Program.⁴⁹ The EPA offers incentives for companies to participate in pilot projects by publicly recognizing those that participate and offering them an opportunity to assist in the formation of the EPA's Leadership Program and in the EPA's rethinking of its environmental auditing policy.⁵⁰ Proposals for pilot projects should contain information regarding "(1) compliance history; (2) environmental management and auditing programs; (3) disclosure of audit results; (4) pollution-prevention activities; (5) example-setting for other facilities, companies, customers, suppliers, and contractors; (6) performance measures; and (7) employee and community involvement."⁵¹

The U.S. Department of Justice (DOJ) has adopted a policy of considering self-auditing, self-policing, and voluntary disclosure of environmental infractions as mitigating factors in its prosecution of environmental crimes.⁵² The DOJ's policy aims to provide an incentive for companies to adopt voluntary compliance measures.⁵³

In November 1993, a U.S. Sentencing Commission advisory committee

44. *Id.* (citing Richard B. Stewart, *Regulation, Innovation, and Administrative Law: A Conceptual Framework*, 69 CAL. L. REV. 1256, 1273-77 (1981)).

45. *Id.*

46. *Id.* at 217.

47. *Id.* One exception is the Occupational Safety and Health Administration Voluntary Protection Program. *Id.* n. 171.

48. *Id.* For example, the EPA created an Office of Compliance to help businesses "in achieving comprehensive pollution control and to wield the threat of enforcement actions." *Id.* at 218.

49. *Id.* at 219. After receiving public comment on its proposed program, the EPA initiated a less comprehensive program than originally proposed. *Id.* "Both the initial proposal and the revised program inform the subsequent analysis of the ISO 14000 standards." *Id.*

50. *Id.* at 221.

51. Rodgers, *supra* note 4, at 221.

52. *Id.* at 222.

53. *Id.* at 222-23 (citing U.S. DEP'T OF JUST., FACTORS IN DECISIONS ON CRIMINAL PROSECUTIONS FOR ENVIRONMENTAL VIOLATIONS IN THE CONTEXT OF SIGNIFICANT VOLUNTARY COMPLIANCE OR DISCLOSURE EFFORTS BY THE VIOLATOR (1991)).

set forth Sentencing Guidelines for Organizational Environmental Crimes.⁵⁴ The Commission opted not to adopt the guidelines; however, its compliance provisions are likely to have an influence on DOJ and EPA policies and perhaps, might appear in future amendments to the Sentencing Guidelines.⁵⁵

C. *The Formation of ISO 14000*

In 1991, the ISO formed the Strategic Action Group on the Environment (SAGE) to formulate suggestions on international standards.⁵⁶ SAGE's members included representatives from the United States, from both the public and private sectors.⁵⁷ SAGE was required to examine the feasibility of an international environmental standard, and whether such a standard could achieve certain ISO goals.⁵⁸ These goals included: promoting a common approach to environmental management similar to the quality management of ISO 9000; enhancing an organization's ability to achieve and measure improvements in environmental performance; and advancing trade and removing trade barriers.⁵⁹

In June 1993, in order to facilitate the formation of international management system standards, ISO formed TC 207.⁶⁰ TC 207 is responsible for developing the set of environmental management standards that have come to be known as the 14000 series.⁶¹ The focus of TC 207 is on the "standardization in the field of environmental management tools and systems."⁶² Like ISO 9000, ISO 14000 focuses on process management, as opposed to substantive outcomes.⁶³ It specifically excludes substantive standards such as setting particular maximum levels of emissions regarding pollutants or effluents, setting environmental performance levels, or establishing the standardization of products.⁶⁴

54. *Id.* at 224.

55. *Id.* (citing Kenneth R. Woodrow, *The Proposed Federal Environmental Sentencing Guidelines: A Model for Corporate Environmental Compliance Programs*, ENV'T REP. (BNA) No. 25, at 327 (June 17, 1994)). The Guidelines call for "the identification of a primary offense level, which consists of a base offense level that may be increased by various specific characteristics. . . . The final offense level corresponds to a percentage of the statutory maximum fine." *Id.* at 225.

56. TOM TIBOR & IRA FELDMAN, *ISO 14000: A GUIDE TO THE NEW ENVIRONMENTAL MANAGEMENT STANDARDS* 32 (1996).

57. *ISO 14000 Hearing*, *supra* note 12, at 21 (testimony of Belinda Collins, Ph.D., Director, Office of Standards Serv., National Inst. of Standards & Tech.).

58. TIBOR & FELDMAN, *supra* note 56, at 32.

59. *Id.*

60. *Id.*

61. *ISO 14000 Hearing*, *supra* note 12, at 32 (testimony of Belinda Collins, Director, Office of Standards Serv., Nat'l Inst. of Standards & Tech.).

62. *Id.*

63. *Id.*

64. *Id.*

During negotiations of ISO 14000, many issues were hotly debated. Most of these issues revolved around the difference in the legal cultures of Europe and the United States.⁶⁵ In the United States, the driving force behind environmental management tends to be both regulatory compliance, and more importantly, the threat of liability.⁶⁶ In Europe, discovery rules are more protective, and the possibility of large-scale liability is less likely.⁶⁷

When discussing environmental management systems, the United States took the position of seeking less substantive but more procedural requirements.⁶⁸ It also encouraged positions that preserve management freedom and corporate secrecy.⁶⁹ Many countries were concerned about the possibility that trade barriers that would result from substantive standards and therefore, supported the United States on that position.⁷⁰

Serious disagreement occurred between European and non-European countries concerning "the extent to which the standard would require substantive improvements in environmental performance."⁷¹ European delegates wanted assurance that compliance with the ISO standard would satisfy the requirements of the EMAS regulation.⁷² Not only does EMAS require continual improvement, but it also lists areas for mandatory evaluation and improvement.⁷³ Again, the United States preferred a flexible management approach, as opposed to a fixed set of compulsory improvements.⁷⁴ The United States also was responsible for inserting "pollution prevention" language into the requirements for certification.⁷⁵

Another area of contention involved the extent to which the standard would require a specific level of pollution prevention technology.⁷⁶ While a standard for best available technology would have little, if any, effect in the European countries, it would change substantive legal requirements in the United States and possibly result in tremendous civil and criminal liability.⁷⁷

A third area of conflict came about over the requirements for evaluation of environmental impact and compliance with local law.⁷⁸ Under the British

65. Roht-Arriaza, *supra* note 3, at 504.

66. *Id.*

67. *Id.*

68. *Id.*

69. *Id.*

70. *Id.*

71. *Id.*

72. *Id.* at 505.

73. *Id.*

74. *Id.*

75. *Id.*

76. *Id.* at 506.

77. *Id.*

78. *Id.*

standard BS 7750, which served as a model for the ISO draft, organizations must institute a "register of significant direct and indirect environmental effects of activities, products and services."⁷⁹ The United States was concerned that a document listing activity injurious to the environment could be acquired by regulatory agencies or discovered in litigation, with ruinous effects.⁸⁰ As a result of the U.S. objections, the environmental management system standard does not mention an environmental register.⁸¹

Finally, U.S. representatives cringed at the European idea of requiring public disclosure of environmental policies and objectives.⁸² The Europeans argued that making at least basic information available to the public was necessary to maintain the integrity of the standards.⁸³ The United States argued that requiring public notice would encourage companies to list broad, vague goals instead of setting specific, significant goals.⁸⁴ The draft standard requires a company's policies to be available to the public, but regarding the publication of environmental impacts, a company is required only to "'consider processes for external communication on its significant environmental aspects and record its decision.'"⁸⁵

ISO 14010 posed new concerns for its drafters. ISO 14010, 14011, and 14012 discuss the guidelines for environmental auditing. The most controversial issues were whether to require that audits be carried out by external auditors and the results be published.⁸⁶ European delegates argued that external, third-party auditors were consistent with ISO 9000 certification, and therefore they could easily be combined.⁸⁷ This would allow conformation of the ISO standards to EMAS requirements, including the use of independent, accredited environmental verifiers.⁸⁸ The United States and other delegations believed the requirement to use external, third-party

79. *Id.*

80. *Id.*

81. *Id.* The draft standard only mentions that

an organization shall establish and maintain a procedure to identify the environmental aspects of its activities, products or services that it can control and over which it can be expected to have an influence, in order to determine those which have or can have significant impacts on the environment. The organization shall ensure that the aspects related to these significant impacts are considered in setting its environmental objectives.

ISO, Draft International Standards ISO/TC 207/SC 1, art 4.2.1 (1995) (on file with the *Florida Journal of International Law*) [hereinafter Draft ISO/DIS 14001].

82. Roht-Arriaza, *supra* note 3, at 507.

83. *Id.*

84. *Id.*

85. *Id.* (quoting Draft ISO/DIS 14001, *supra* note 81, art. 4.3.3.).

86. *Id.* at 508.

87. *Id.*

88. EMAS Regulation, *supra* note 27, art. 4.3.

auditors would be costly and most likely unnecessary.⁸⁹ Some U.S. companies believe that participation in ISO 14000 based on third-party verification will, in effect, give larger companies a competitive advantage over smaller companies and might even put smaller companies out of business.⁹⁰

Despite these conflicts, the delegations were able to agree on a system of environmental management. ISO 14001, 14004, 14010, 14011/1, and 14012 have been published as international standards.⁹¹

III. THE ISO 14000 STANDARDS

"Environmental management system standards are the focus of ISO 14000."⁹² These standards are "expected to become the worldwide benchmark for environmental improvement."⁹³ Recently, ISO standards 14001 and 14004 were released as International Standards.⁹⁴ ISO 14001 is the standard for Environmental Management System Specification.⁹⁵ In its introduction ISO 14001 notes that an increasing number of organizations are concerned with demonstrating and achieving sound environmental performance.⁹⁶ It also states that the standards are not intended to be used as a nontariff trade barrier.⁹⁷ The environmental management system was written so that it could be applied to all types and sizes of organizations and to conform to differing geographical, social, and cultural conditions.⁹⁸

89. Roht-Arriaza, *supra* note 3, at 508.

90. *ISO 14000 Hearing*, *supra* note 12, at 81 (testimony of Steven A. Bold, Manager/Environmental Compliance Group, Continental Circuits Corp.). Mr. Bold stated that his company, Continental Circuits Corp., was implementing an environmental management system that would conform to the requirements of ISO 14000. *Id.* at 79. He estimated that it would initially cost his company roughly \$100,000, consisting of close to \$40,000 in software and \$60,000 in labor. *Id.* at 80. He said his company believed that the economic and environmental payoffs would exceed the costs. *Id.* Mr. Bold also informed the Subcommittee that an estimated cost of \$30,000-\$100,000 for certification was simply not feasible for smaller companies. *Id.* Small companies may be committed to improving their environmental performance and willing to go beyond current regulatory requirements, but they are simply unwilling to pay an outside third party to certify that they comply with ISO 14000. *Id.* "Small companies should not be penalized because they do not have the resources to undergo formal certification." *Id.* at 81.

91. *Standards and Guidelines in the ISO 14000 Series* (visited Sept. 10, 1997) <<http://www.mgmt14k.com/14kseries.htm>> [hereinafter *Standards and Guidelines*].

92. Henry R. Balikov & Patrick O. Cavanaugh, *What We Need to Know About ISO 14000*, 10 NAT. RESOURCES & ENV'T 64, 64 (1996). In the beginning ISO standards were mostly technical in nature. Roht-Arriaza, *supra* note 3, at 490.

93. *Id.*

94. *Standards and Guidelines*, *supra* note 91.

95. *See generally* Draft ISO/DIS 14001, *supra* note 81.

96. *Id.* at 4 (Introduction).

97. *Id.*

98. *Id.*

ISO 14001 does not establish requirements for environmental performance beyond a policy commitment to compliance with applicable statutes and regulations and to continual improvement.⁹⁹ The drafters reassure organizations that it is possible to comply with the standards contained in ISO 14001 by adapting preexisting management system components.¹⁰⁰

ISO 14001 requires an organization to formulate an environmental policy and objectives, "taking into account legislative requirements and information about significant environmental impacts."¹⁰¹ This encompasses only those environmental impacts over which an organization would be expected to have some control.¹⁰² Again, the standard does not set specific environmental performance criteria.¹⁰³

There are many requirements that go into an effective environmental management system. One of the most important steps for an organization is to clearly set out its environmental policy.¹⁰⁴ An organization should make sure its policy "is appropriate to the nature, scale and environmental impacts of its activities."¹⁰⁵ The policy should reflect the organization's commitment to continual improvement, prevention of pollution, and adherence to legislation and regulations that apply to the organization.¹⁰⁶ A plan should be outlined for establishing and reviewing its environmental goals.¹⁰⁷ The policy should be "documented, implemented and maintained and communicated to all employees" and made available to the public.¹⁰⁸

Any aspects of an organization's activities that could have significant effects on the environment must be determined.¹⁰⁹ This is crucial to the setting of environmental objectives. Objectives and targets should be established for all levels of an organization during the planning process.¹¹⁰ A program should be established to achieve these objectives, which includes designating responsible persons at each level, the means by which these persons should carry out the targets, and a timeframe for doing so.¹¹¹ Each person's role, responsibility, and authority should be designated within the organization.¹¹² Resources must be provided for the implementation of the

99. *Id.* at 6.

100. *Id.*

101. *Id.* art. 1.

102. *Id.*

103. *Id.*

104. *See id.* art. 4.1.

105. *Id.* art. 4.1(a).

106. *Id.* art. 4.1(b)-(c).

107. *Id.* art. 4.1(d).

108. *Id.* art. 4.1(e)-(f).

109. *Id.* art. 4.2.1.

110. *Id.* art. 4.2.3.

111. *Id.* art. 4.2.4.

112. *Id.* art. 4.3.1.

environmental management system.¹¹³ Organizations should appoint top management representatives to ensure that it is in compliance and to report on the performance of the environmental management system to top management.¹¹⁴ Management also should identify training needs to effectively implement the system and then execute these training procedures.¹¹⁵ Information regarding environmental aspects and the environmental management system must be communicated within the organization.¹¹⁶ The organization should consider if and how it wants to communicate this information externally.¹¹⁷

The organization is required to establish procedures for maintaining documents required by ISO 14001.¹¹⁸ The organization needs to identify operations that relate to its environmental management system and must establish procedures to cover situations where a lack of established procedures could lead to a deviation from this policy.¹¹⁹ Procedures for handling accident and emergency situations must be established, as well as procedures for preventing and mitigating these situations.¹²⁰

Key characteristics of the management system that could have significant effects on the environment should be monitored on a regular basis.¹²¹ In addition, the organization must establish procedures for investigating nonconformance, taking action to mitigate environmental impact, and initiating corrective action.¹²² The organization should establish procedures for maintenance and disposition of environmental records.¹²³ Procedures for auditing should be set out.¹²⁴ Finally, top management should establish a systematic review of the environmental management system.¹²⁵

IV. ANALYSIS OF THE ISO 14000 SERIES

A. *Implications of ISO 14000 for Business and Industry*

Before business and industry will be willing to take part in ISO 14000, they must believe that the benefits they receive will outweigh the costs.

113. *Id.*

114. *Id.*

115. *Id.* art. 4.3.2.

116. *Id.* art. 4.3.3.

117. *Id.*

118. *Id.* arts. 4.3.4-.5.

119. *Id.* art. 4.3.6.

120. *Id.* art. 4.3.7.

121. *Id.* art. 4.4.1.

122. *Id.* art. 4.4.2.

123. *Id.* art. 4.4.3.

124. *Id.* art. 4.4.4.

125. *Id.* art. 4.5.

Many commentators believe that ISO 14000 has much to offer an organization. The implementation of an environmental management system can result in improved compliance, better pollution prevention, and a higher utilization of cutting-edge technology.¹²⁶ Others, however, feel that participation in ISO 14000 requires a high initial monetary outlay, one that many small to medium sized companies simply cannot afford.¹²⁷

What can ISO 14000 do for my company? That is the question most companies ask. Incentives abound with ISO 14000. Registration and compliance with international environmental standards, like ISO 14000, most likely will become a de facto requirement for doing business in the international market.¹²⁸ Foreign customers may require U.S. suppliers to be registered under ISO 14000.¹²⁹ Companies may feel that they are compelled to comply if a major competitor is participating.¹³⁰ This could have a tremendous effect on the ability of U.S. companies to sell their products internationally.¹³¹

Another incentive for companies to voluntarily incorporate an environmental management system into their business is the increasing concern the public has with corporate environmental responsibility. "The processes . . . [companies] put in place to ensure that impacts on the environment from their organizations are acceptable, both in fact and in perception, are vital to market penetration and regulatory compliance."¹³² This increasing public pressure for improved environmental performance is occurring worldwide.¹³³ Adopting an internationally recognized and accepted environmental management system would demonstrate commitment to environmental protection and could promote good will and a positive corporate image.

When an environmental catastrophe occurs, it is all that is discussed in the media for weeks. When people think of environmental disasters, the *Exxon Valdez* oil spill off the coast of Alaska is generally one of the first cases to come to mind.¹³⁴ Corporations should consider the potential for

126. Gordon M. Davidson & Ira R. Feldman, *The Greening of Corporate America* (text on file with *Florida Journal of International Law*).

127. *ISO 14000 Hearings*, *supra* note 12, at 81 (testimony of Steven A. Bold, Manager/Environmental Compliance Group, Continental Circuits Corp.)

128. *Management System Links*, *supra* note 1; *see also ISO 14000 Hearings*, *supra* note 12, at 42 (testimony of Sergio Mazza, President, American National Standards Institute) (noting that compliance may become a condition of customer-supplier transactions, especially in Europe).

129. TIBOR & FELDMAN, *supra* note 56, at 9.

130. Roht-Arriaza, *supra* note 3, at 516.

131. TIBOR & FELDMAN, *supra* note 56, at 9.

132. *Management System Links*, *supra* note 2.

133. *Id.*

134. *In re the Exxon Valdez*, No. A89-0095-CV, 1995 WL 527988, at *1-12 (D. Alaska Jan. 27, 1995). In the *Exxon Valdez* case, plaintiffs brought suit against Exxon Corporation

lawsuits and extensive liability that follows this type of disaster. The extent that corporations are currently being held responsible for their environmental harms should be enough incentive to initiate an environmental management system. An effective management system will help companies take into account where their environmental risks lie and to address them. The ISO 14000 environmental management system also will ensure that companies have a formal plan to implement if a disaster occurs, thereby minimizing its effects on the environment.

Without a common international standard, companies will be forced to deal with varying and often inconsistent policies in the countries in which they do business,¹³⁵ which can increase the cost of doing business and create trade barriers.¹³⁶ With one internationally accepted standard, a company can reduce the cost of multiple inspections, audits, certifications, and other conflicting requirements.¹³⁷

Another benefit of subscribing to ISO 14000 is that insurance companies will be more willing to issue coverage to a company for environmental accidents if it has a reputable environmental management system in place.¹³⁸ In high-risk industries, insurance companies might be willing to lower their rates for a company that has instituted an environmental management system. Better access to capital is another motive for companies to invest in an environmental management system. Large institutional investors are beginning to make investment decisions based on a corporation's environmental history.¹³⁹

Proof of compliance with ISO 14000 might factor into the government's decision to prosecute.¹⁴⁰ ISO 14000 could become a means to satisfy the mitigation criteria established by the U.S. DOJ Sentencing Guidelines, and the EPA's position on environmental audits.¹⁴¹ The EPA currently is

for damages that resulted when the *Exxon Valdez*, an oil tanker, ran aground off the coast of Alaska. *Id.* at *7. The resulting 11,000,000 gallon oil spill "was the largest oil spill and greatest environmental disaster in American history. The spill disrupted the livelihoods of tens of thousands of people." *Id.* at *4. Exxon made a motion for judgment on the plaintiff's punitive damages, and for a new trial. *Id.* at *1. When considering punitive damages, the court instructed the jury "that punitive damages were not designed to provide compensatory relief. . . . [and that they must] focus[] on the reprehensibility of Exxon's conduct, the magnitude of the harm, Exxon's financial condition, and mitigating factors." *Id.* The jury determined that Exxon's reckless acts had caused the *Exxon Valdez* to run aground. *Id.* at *4. The jury found Exxon liable for U.S.\$5 billion in punitive damages. *Id.*

135. TIBOR & FELDMAN, *supra* note 56, at 7.

136. *Id.*

137. *Id.* at 8.

138. *Id.* at 13.

139. *Id.*

140. *Id.*

141. Balikov & Cavanaugh, *supra* note 92, at 65.

deciding how ISO 14000 will be incorporated into its regulatory regime.¹⁴²

ISO 14000 could even affect the industry standard of care. Companies involved in environmental tort actions may turn to their compliance with environmental management systems to show what is customary in establishing compliance or noncompliance with the standard of care.¹⁴³ "Showing conformance to [these standards] . . . could be very advantageous in civil and criminal liability suits."¹⁴⁴ Evidence of compliance with ISO 14001 is "likely to have standing in a court of law, and could be used to determine if an organization is practicing sound environmental management."¹⁴⁵ Some courts might even begin to impose ISO 14000 as the standard of care required of corporations.¹⁴⁶

142. *Id.* (noting "the allusions to ISO 14001-type management systems" in recent EPA revisions of its audit policy).

143. Roht-Arriaza, *supra* note 3, at 517.

144. *ISO 14000 Congressional Review*, *supra* note 5.

145. *Id.* If courts accept ISO 14000 as the standard of care, environmentalists fear that organizations could simply adopt ISO 14000, do the minimum that is required under ISO 14000, and avoid liability because they were following the industry standard of care. ISO certification does not necessarily mean that a company is not still a major polluter; ISO 14000 "is a process, not a performance standard." TIBOR & FELDMAN, *supra* note 56, at 16.

146. *See, e.g.*, Tory, Tory, DesLauriers & Binnington, *Environmental Management Systems: The Legal Framework* (visited Sept. 30, 1997) <<http://www.mgmt14k.com/tory.htm>> (unpublished text on file with *The Florida Journal of International Law*). Before the ISO 14000 standards became very well known, a Canadian court required a corporation to implement an environmental management system after it had committed significant environmental harm. *Regina v. Bata Indus. Ltd.*, 9 O.R. 3d 329, 362 (Ont. Prov. Div. 1992) (Can.). Bata Industries Limited (Bata), an Ontario corporation, operated a footwear manufacturing plant in Batawa, Ontario. *Id.* at 332. Bata had allowed drums of liquid waste to accumulate at the Batawa plant. *Id.* at 334. Over time, the drums had rusted and deteriorated; many were not covered, and one was proved to have leaked its contents into the ground. *Id.* at 332. The court convicted the president of the corporation and the vice-president in charge of the footwear plant, of failure to take all reasonable care to prevent the discharge. *Id.* at 333. The trial judge acknowledged that there was little Canadian judicial guidance available to him regarding the proper standard of care to be imposed on the directors. *Id.* at 361. In assessing whether the directors used due diligence, the judge asked the following questions:

(a) Did the board of directors establish a pollution prevention "system" . . . was there supervision or inspection? was there improvement in business methods? did he exhort those he controlled or influenced?

(b) Did each director ensure that the corporate officers have been instructed to set up a system sufficient within the terms and practices of its industry of ensuring compliance with environmental laws, to ensure that the officers report back periodically to the board on the operation of the system, and to ensure that the officers are instructed to report any substantial non-compliance to the board in a timely manner?

Id. at 362. The judge required some type of management system to be in place before he could find that there was due diligence. "[O]ne would hope to find remedial and contingency plans for spills, . . . and other indices of a pro-active environmental policy." *Id.* It is likely that other judges will follow this lead in the future, especially if the ISO 14000 standards become widespread.

Drawbacks to the standards, as mentioned previously, include the extensive costs involved, especially for small businesses and businesses in less-developed countries. If these companies are unable to afford the costs of an environmental management system, the standards could end up serving as nontariff barriers to trade.¹⁴⁷

Some worry that a lack of input from a developing country might present future problems.¹⁴⁸ If companies in developing countries do not participate, the purpose behind the international standard would be defeated.¹⁴⁹ Drafters of the ISO 14000 standards maintain that they “t[ook] into account the problems of industries in lesser developed countries and those of small companies.”¹⁵⁰ The ISO 14000 standards offer “a gradual, baseline approach to managing environmental systems.”¹⁵¹ This indicates that a company does not have to begin with the most sophisticated management system.¹⁵² The biggest challenge to smaller businesses will be the effective implementation of the ISO standards.¹⁵³

B. *Implications of ISO 14000 for the Environment*

Environmentalists argue that the ISO 14000 management standards will not adequately reduce corporate environmental harms. One key point they emphasize is that the ISO standards are “process — not performance — standards.”¹⁵⁴ They do not set out any substantive requirements for organizations to achieve.¹⁵⁵ There are no set reduction levels that an organization must achieve to comply with the standards.¹⁵⁶ Conceivably, a company could be in perfect compliance with ISO 14000 and still be a substantial polluter.

Proponents of ISO 14000 say that the standards may stimulate consideration of environmental harms where otherwise there would have been no thought given because it forces companies to methodically review the environmental effects of current practices. ISO 14000 might induce “pollution prevention efforts which would otherwise have gone unnoticed.”¹⁵⁷ There is an assumption that better environmental management

147. Roht-Arriaza, *supra* note 3, at 527.

148. *Id.*

149. *Id.*

150. TIBOR & FELDMAN, *supra* note 56, at 14-15.

151. *Id.* at 15.

152. *Id.*

153. *Id.*

154. *Id.* at 6.

155. *Id.*

156. *Id.*

157. Roht-Arriaza, *supra* note 3, at 516.

practices will lead to better environmental performance.¹⁵⁸ Nevertheless, because of the vague nature of the standards, efforts may be restricted to immediate cost savings rather than meaningful, long-term investment strategies or the complete cessation of all environmentally unsound products and practices.¹⁵⁹

However, none of the benefits or drawbacks will matter if the standards are not widely accepted. The degree of acceptance they have received worldwide is varied. For example, in the United States, the Pennsylvania Department of Environmental Protection announced its plans to utilize aspects of the ISO 14000 environmental management system for its programs.¹⁶⁰ Internationally, countries are gearing up for ISO 14000. Brazil is actively implementing the environmental requirements of ISO 14000 in preparation for competing in the global market.¹⁶¹ In Canada's movement towards deregulation, the Quebec Environmental Department is embracing ISO 14000 for its own environmental management standards.¹⁶² In Germany, ISO 14000 is an implied requirement, whereas in some developing countries, it is simply a cost-effective tool for strengthening environmental protection laws.¹⁶³

It is still too early to tell how widely ISO 14000 will be accepted. Numerous surveys have been conducted with varying results. For example, Apple Computer questioned ninety-nine U.S. firms in fields such as electronics, manufacturing, pharmaceuticals, and engineering consulting.¹⁶⁴ They found that the majority anticipate sizable benefits.¹⁶⁵ However, some small- to medium-sized firms articulated hesitation because of cost and compliance concerns.¹⁶⁶ A recent study by IRWIN Professional Publishing

158. TIBOR & FELDMAN, *supra* note 56, at 6.

159. Roht-Arriaza, *supra* note 3, at 516.

160. Emily Jipson, *Pennsylvania Considers ISO 14000 Standards* (last visited Sept. 9, 1997) <<http://www.envirobiz.com/newsdaily/960322e2.htm>>.

161. Bruce D. Cowen & Kathryn R. Braithwaite, *A Growing Environmental Agenda*, BUS. LATIN AM., Sept. 2, 1996, at 4 (noting that companies doing business in Latin America are confronted with a multitude of varying local environmental standards that "reflect[] numerous influences, such as economic stability, pressure from developed countries and multinational institutions, and the level of environmental awareness").

162. Aaron Derfel, *The Age of Self-Cleaning: Quebec Is Planning to Scrap Environmental Regulations and Entrust Standards and Cleanup to Industry*, MONTREAL GAZETTE, Feb. 10, 1996, at B1.

163. Kara Sissell, *Management: ISO 14000: Acceptance Varies Worldwide*, CHEM. WEEK, Sept. 25, 1996, at 53. EMAS, ISO's nearest equivalent, has found support in Germany, which has a reputation as a leader in addressing environmental concerns. Two hundred and forty of the two hundred and seventy registered sites in the European Union are in Germany. *Id.*

164. Daniel W. Gottlieb, *ISO 14000 Standards Ready for Launching*, 120 PURCHASING, July 11, 1996, at 5.

165. *Id.*

166. *Id.*

surveyed more than 7000 ISO 9000-registered companies.¹⁶⁷ Almost half of those surveyed stated that they did not plan to implement ISO 14000.¹⁶⁸ Among the respondents, slightly more than 31% were interested in registering; however, only 13% of those interested expected to seek registration within the next few years.¹⁶⁹ Only 2.4% of the respondents said they would seek to comply with ISO 14000 within the next few years.¹⁷⁰ Thus, the future of ISO 14000 remains uncertain.

V. CONCLUSION

Indeed, the current ISO 14000 standards have many problems that still need to be ironed out before they can become a driving force in the crusade for environmental improvement. The success of ISO 14000 is hindered by weaknesses in the process and by a lack of substantive requirements. Still, it is a major innovation in the area of improving corporate environmental responsibility, a domain that is in dire need of improvement. Despite its weakness, ISO 14000 should prove to be the catalyst for a new era in environmental management.

167. Morrow, *supra* note 17, at 73.

168. *Id.*

169. *Id.*

170. *Id.* However, Morrow states that “[t]hese number may soon begin to swell . . . com[ing] from the ranks of companies that have yet to seek ISO 9000 registration . . . and which soon may find their environmental management systems the subject of an EMS audit by one of their customers.” *Id.*