

COMMENTS

SEALING THE CONCEPTUAL CRACKS IN THE SEC'S ENVIRONMENTAL DISCLOSURE RULES: A RISK COMMUNICATION APPROACH

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1. INTRODUCTION

Both the United States and the European Union have experimented with environmental risk disclosure systems that attempt to communicate to the public the environmental hazards posed by the activities of corporations. The United States, through the regulations promulgated by the Securities and Exchange Commission ("SEC"), mandates that companies disclose limited environmental information.¹ The European Union encourages companies to voluntarily disclose more comprehensive environmental information.²

Although both systems disclose corporate environmental information to the public, the question remains as to which system is more effective in doing so. In attempting to answer this question, commentators have analyzed these two systems from

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¹ See *infra* Section 2.

² See *infra* Section 3.

many different perspectives.³ These approaches, however, largely ignore the premise that the fundamental purpose of any environmental disclosure system is to achieve a nation's public policy goals through the communication of environmental risk to the public.⁴ The effectiveness of environmental disclosure therefore depends primarily on the ability to communicate information efficiently, in a way that the public can understand and act upon, allowing the attainment of these policy goals.⁵ This Comment examines the effectiveness of the environmental disclosure systems of both the United States and the European Union by addressing this issue of communication efficiency. In doing so, this Comment uses the "risk communication" methodology, which empirically analyzes the effectiveness of risk disclosure systems by methodically assessing how efficiently these systems communicate information to the public.⁶

Using this approach, this Comment determines that the environmental disclosure system of the European Union better

³ See generally Eric W. Orts, *Reflexive Environmental Law*, 89 NW. U. L. REV. 1227 (1995) (discussing environmental disclosure from a "reflexive law" viewpoint); Perry E. Wallace, *Disclosure of Environmental Liabilities Under the Securities Laws: The Potential of Securities-Market-Based Incentives for Pollution Control*, 50 WASH. & LEE L. REV. 1093 (1993) (analyzing environmental disclosure from a market-based efficiency perspective); Robert J. Lewis, Note, "Shh! Maybe in My Backyard!" *An Equity and Efficiency-Based Critique of SEC Environmental Disclosure Rules and Extraterritorial Environmental Matters*, 78 MINN. L. REV. 1045 (1994) (exploring the extraterritorial implications of environmental disclosure)

⁴ See *infra* Section 4.2.

⁵ See *infra* Section 4.3.

⁶ This is not, however, the first use of the "risk communication" methodology in this manner. For an excellent risk communication analysis of the environmental disclosure systems of both the United States and the European Union prior to the dramatic revisions of the European system in 1993, see generally Michael S. Baram, *Corporate Risk Management and Risk Communication in the European Community and the United States*, 2 HARV. J.L. & TECH. 85 (1989). For examples of the use of the "risk communication" approach in analyzing other environmental problems, see also F. Reed Johnson et al., *Informed Choice or Regulated Risk? Lessons from a Study in Radon Risk Communication*, in READINGS IN RISK 247 (Theodore S. Glickman & Michael Gough eds., 1990) (measuring the success of the EPA's radon risk reduction program by assessing how it communicated risk to the public); Peter M. Sandman, *Getting to Maybe: Some Communications Aspects of Siting Hazardous Waste Facilities*, in READINGS IN RISK 233 (Theodore S. Glickman & Michael Gough eds., 1990) (inferring that community acceptance of hazardous waste sites is linked to the effectiveness of the risk communication strategy used).

communicates environmental risk to the public, and argues that the environmental disclosure system used by the United States, as articulated by the regulations of the SEC, can become more effective by adopting some of the fundamental risk communication principles exhibited by the European Union's environmental disclosure system. Section 2 begins with an examination of the environmental disclosure system of the United States. Next, Section 3 contrasts this system with the environmental disclosure system of the European Union. Section 4 subsequently explains the analytical framework of the risk communication methodology used to evaluate these two systems. Finally, Section 5 analyzes the two systems, concludes that the European system is superior from a risk communication perspective, and identifies the best way to use the lessons learned from the European system to improve the U.S. system. Section 5 also concludes that, in making these modifications, incremental change is preferable. To use a familiar analogy, faced with a slowly crumbling dike (the environmental risk communication system of the United States) holding back a sea of environmental problems, the logical short term solution for the United States is not to rebuild the dike. Rather, the United States should use its proverbial finger to seal the conceptual cracks in that dike.⁷

2. THE ENVIRONMENTAL RISK DISCLOSURE SYSTEM OF THE UNITED STATES

2.1. *Historical Overview*

The United States was the first nation to develop an environmental disclosure system. In the wake of the Great Depression, Congress enacted securities legislation to impose a general, affirmative disclosure obligation to all issuers of publicly-traded securities.⁸ This legislation's basic purpose was to ensure that

⁷ "The Hero of Haarlem," also known as the tale of the little Dutch boy, tells of a resourceful youngster who saves his village from flooding. Upon discovering a leak in the dike holding back the sea, he plugs the cracked wall with his finger and saves the community. See MARY MAPES DODGE, HANS BRINKER, OR THE SILVER SKATES 129 (1946).

⁸ See generally Securities Act of 1933, 15 U.S.C. §§ 77a-77bbbb (1994) (requiring initial disclosure related to the registration, issue, and sale of securities); Securities Exchange Act of 1934, 15 U.S.C. §§ 78a-78ll (1994) (requiring continued periodic disclosure for issuers whose securities are publicly traded). In the language of this legislation and related regulations, the terms "issuer,"

issuers of securities would disclose important information, allowing investors to make informed business and investment decisions.⁹ Congress accordingly granted the SEC the power to establish rules and regulations requiring the disclosure of information "necessary or appropriate in the public interest or for the protection of investors."¹⁰ Over the years, the courts have concluded that issuing corporations need only disclose "material" information, defined as information that would assume "actual significance in the deliberations of a reasonable shareholder."¹¹

Throughout the 1970s, the SEC struggled with the question of whether this legislation should govern the reporting of environmental information as well. The SEC eventually concluded that the term "material" must necessarily include the disclosure of applicable environmental information, in addition to more traditional financial data.¹² The first step in this evolutionary process resulted from the broad Congressional mandate expressed in the National Environmental Policy Act of 1969 ("NEPA").¹³ In short, Congress wanted

[t]o declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; [and] to enrich the understanding of the ecological systems and natural resources important to the Nation. . . .¹⁴

"registrant," and "reporting company," although not interchangeable, often refer to the same type of entity: a company required to disclose information to the public. *See id.* This Comment refers to a reporting entity by the term used by the case, regulation, or statute being discussed.

⁹ *See* 15 U.S.C. § 78b (1994).

¹⁰ 15 U.S.C. § 77g(a) (1994).

¹¹ *TSC Indus., Inc. v. Northway, Inc.*, 426 U.S. 438, 449 (1976). In explaining this standard, the Supreme Court rejected a lower standard that "includ[ed] 'all facts which a reasonable shareholder *might* consider important'" in making investment decisions. *Id.* at 445.

¹² *See* Risa Vetri Ferman, Note, *Environmental Disclosures and SEC Reporting Requirements*, 17 DEL. J. CORP. L. 483, 485-500 (1992).

¹³ 42 U.S.C. §§ 4321-4370d (1994).

¹⁴ *Id.* § 4321.

Consequently, NEPA profoundly influenced all federal administrative agencies. Perhaps most significantly, NEPA affected the *operations* of all federal agencies. Indeed, Congress directed all government agencies, to the fullest extent possible, to interpret and administer the laws of the United States in accordance with the policies set forth in NEPA.¹⁵ Furthermore, in carrying out this mission, Congress encouraged cooperation among agencies to “use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources.”¹⁶ In addition to its impact on operations, NEPA affected the *rulemaking function* of administrative agencies as well. Most significantly, the Act provided that “[a]ll agencies of the Federal Government shall review their present statutory authority, administrative regulations, and current policies and procedures for the purpose of determining whether there are any deficiencies or inconsistencies therein which prohibit full compliance with the purposes and provisions of [NEPA].”¹⁷

Though it took almost four years, the SEC eventually complied with this mandate. In 1973, the SEC released its first guidelines regarding environmental disclosure.¹⁸ In most ways, these guidelines were identical to the existing standards for other corporate disclosure, in that they required registrants to disclose all “material” effects of compliance with environmental laws.¹⁹ These guidelines were more stringent than existing standards for non-environmental disclosures, however, in that they obliged registrants to disclose *any* “material legal proceedings ‘known to be contemplated by governmental authorities’” which arose under existing environmental laws.²⁰

Despite the relatively strict nature of these standards, several public interest groups were nevertheless dissatisfied, eventually

¹⁵ See *id.* § 4332.

¹⁶ *Id.* § 4331(b).

¹⁷ *Id.* § 4333.

¹⁸ Disclosure with Respect to Compliance with Environmental Requirements, Securities Act Release No. 5386, Exchange Act Release No. 10116, [1973 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 79,342, at 83,029 (Apr. 20, 1973).

¹⁹ See *id.*

²⁰ See *id.* at 83,030.

bringing suit (the "NRDC litigation") to compel the SEC to modify these environmental disclosure rules.²¹ Generally, these groups sought to establish a precedent requiring that every registrant disclose all of the effects of its activities on the environment.²² The asserted legal basis for this claim was that the "materiality" standard should logically require disclosure above and beyond the financial information historically provided, because "it is difficult and perhaps impossible for investors to make either socially responsible or financially sound investment decisions" in the absence of extensive corporate environmental information.²³ The D.C. District Court agreed, holding that

[t]here are many so-called "ethical investors" in this country who want to invest their assets in firms which are concerned about and acting on environmental problems of the nation. This attitude may be based purely upon a concern for the environment; but it may also proceed from the recognition that awareness of and sensitivity to environmental problems is the mark of intelligent management. Whatever their motive, this Court is not prepared to say that they are not rational investors and that the information they seek is not material information within the meaning of the securities laws.²⁴

Ultimately, the United States Court of Appeals for the District of Columbia Circuit reversed this decision, holding that NEPA's requirements were "essentially procedural" and therefore did not

²¹ See *National Resources Defense Council, Inc. v. SEC*, 389 F. Supp. 689 (D.D.C. 1974), *rev'd*, 606 F.2d 1031 (D.C. Cir. 1979).

²² See *id.* at 694. Specifically, these groups called for detailed reports which would include three types of information. First, they wanted the reports to describe the nature and effect of any pollution caused by the registrant. Second, these groups wanted the reports to outline the feasibility of, and any plans for, correcting pollution caused by the registrant. Third, they wanted the reports to identify any changes in the registrant's products, projects, production methods, policies, investments, and advertising made to advance environmental values. See *id.*

²³ *Id.* (citations omitted).

²⁴ *Id.* at 700.

require the achievement of specific substantive goals.²⁵ As long as the SEC followed a rulemaking procedure that considered environmental concerns, as contemplated by NEPA, then the court would find that the agency had complied with the Act.²⁶

Despite the outcome of the NRDC litigation, the SEC did toughen its environmental disclosure requirements somewhat during the next few years. In 1979, the Commission issued the U.S. Steel Release,²⁷ which made three significant changes to the existing environmental disclosure standards.²⁸ Most importantly, this release required that every registrant disclose estimates of anticipated environmental compliance costs if such costs had been calculated and were expected to be materially greater than current costs.²⁹ Also, this release obligated registrants to disclose any environmental proceeding to which the government was a party, even if the proceeding was initiated by the registrant.³⁰ Finally, this release stipulated that any registrant could make voluntary disclosures of environmental information, as long as the information provided was accurate and did not neglect any pertinent facts, the omission of which might be misleading.³¹

2.2. *Current Disclosure Requirements*

In the early 1980s, the SEC further refined existing environmental disclosure requirements for registrants, honing the applicable regulations into their current form. In 1982, the SEC promulgated Regulation S-K as part of a comprehensive disclosure system.³² Generally, there are three provisions of this regulation that are applicable to environmental disclosure.

The first of these provisions is Item 101, which principally requires a general description of a registrant's business activities.³³

²⁵ National Resources Defense Council, Inc. v. SEC, 606 F.2d 1031, 1044 (D.C. Cir. 1979).

²⁶ See *id.* at 1045.

²⁷ Environmental Disclosure, Securities Act Release No. 33-6130, Exchange Act Release No. 34-16,224, 44 Fed. Reg. 56,924 (1979) (commonly referred to as the "U.S. Steel Release").

²⁸ See Ferman, *supra* note 12, at 496-97.

²⁹ See Environmental Disclosure, *supra* note 27, at 56,925.

³⁰ See *id.* at 56,926.

³¹ See *id.*

³² 17 C.F.R. §§ 229.10-229.915 (1996).

³³ See *id.* § 229.101.

Within this general description, however, registrants must disclose specifically whether environmental compliance will materially affect the "capital expenditures, earnings and competitive position of the registrant and its subsidiaries."³⁴ Furthermore, Item 101 incorporates the U.S. Steel Release by requiring that "[t]he registrant shall disclose any material estimated capital expenditures for environmental control facilities for the remainder of its current fiscal year and its succeeding fiscal year and for such further periods as the registrant may deem material[.]"³⁵

Second, Item 103 requires the disclosure of all material environmental legal proceedings, including both litigation and administrative action. It mandates that the registrant "[d]escribe briefly *any* material pending legal proceedings, other than ordinary routine litigation incidental to the business, to which the registrant or any of its subsidiaries is a party or of which any of their property is the subject."³⁶ Item 103 also incorporates the U.S. Steel Release, in that it requires registrants to "[i]nclude similar information as to any such proceedings known to be contemplated by governmental authorities."³⁷

Third, Item 303,³⁸ which includes the management's discussion and analysis of financial conditions and the results of operations ("MD&A"), is generally interpreted to require environmental disclosure. In general, the purpose of Item 303 is "to give investors an opportunity to look at the registrant through the eyes of management by providing a historical and prospective analysis of the registrant's financial condition and results of operations, with particular emphasis on the registrant's prospects for the future."³⁹ Although Item 303 does not explicitly address environmental liabilities and obligations, its provisions are thought to require disclosure of relevant forward-looking environmental information.⁴⁰ The disclosure required by Item 303, however,

³⁴ *Id.* § 229.101(c)(1)(xii).

³⁵ *Id.*

³⁶ *Id.* § 229.103 (emphasis added).

³⁷ *Id.*

³⁸ *Id.* § 229.303.

³⁹ Management's Discussion and Analysis of Financial Condition and Results of Operations, Securities Act Release No. 33-6835, Exchange Act Release No. 34-26831, 54 Fed. Reg. 22,427, 22,436 (1989)[hereinafter Management's Discussion].

⁴⁰ Wallace, *supra* note 3, at 1109-10.

can be differentiated from that mandated by Item 101 because Item 303 requires a discussion of current “trends, events, and uncertainties that are reasonably expected to have material effects” in the future, as distinguished from events that would have a present material effect.⁴¹

3. THE ENVIRONMENTAL RISK DISCLOSURE SYSTEM OF THE EUROPEAN UNION

3.1. Comparative Overview

It is perhaps an understatement to note that the environmental risk disclosure system of the European Union is quite different from its counterpart in the United States. Basically, there are three superficial elements which serve to differentiate European Eco-Management Scheme (“EMAS”) from its counterpart in the United States.⁴² The most important of these differences is that EMAS is voluntary in nature.⁴³ This distinction, however, faces extinction. Current regulations require the European Commission to review the progress of the EMAS not more than five years after its adoption “in the light of the experience gained during its operation” and to propose to the Council of the European Union “appropriate amendments, particularly concerning the scope of the scheme.”⁴⁴ This could very well mean mandatory application to all European companies in the future.⁴⁵

The second superficial difference is that EMAS only applies to companies that engage in industrial activities.⁴⁶ In looking at these regulations, it is unclear why the European Council would choose to limit the application of EMAS to industrial businesses.⁴⁷ One likely reason, however, is that the Council felt that the EMAS should initially concentrate on industrial firms because “environmental management systems and environmental auditing [was] already practiced” by such companies.⁴⁸ Regardless of the

⁴¹ Management’s Discussion, *supra* note 39, at 22,429.

⁴² See Orts, *supra* note 3, at 1290.

⁴³ See Council Regulation 1836/93, art. 1(1), 1993 O.J. (L 168) 1, 2.

⁴⁴ *Id.* art. 20, at 7.

⁴⁵ See Orts, *supra* note 3, at 1293-94.

⁴⁶ See Council Regulation 1836/93, art. 1(1), 1993 O.J. (L 168) 1, 2.

⁴⁷ See Orts, *supra* note 3, at 1295.

⁴⁸ Council Regulation 1836/93, pmb., 1993 O.J. (L 168) 1, 2.

reasoning behind the Council's decision, however, member states still have the option of applying the EMAS to "sectors outside industry" on an "experimental basis."⁴⁹

The third superficial characteristic which differentiates EMAS is its focus on individual industrial sites.⁵⁰ EMAS rather loosely defines a site as "all land on which the industrial activities under the control of the company at a given location are carried out."⁵¹ Therefore, in making disclosure to the public, a company participating in EMAS may selectively choose among sites where it wishes to participate.⁵²

3.2. Comparative Disclosure Requirements

In addition to these superficial differences, the most substantive factor, at least for the purposes of this discussion, that distinguishes the system of the European Union from that of the United States is the role of disclosure in achieving public policy.⁵³ Although the sole purpose of the disclosure system of the United States is to provide adequate investment information to the public,⁵⁴ the disclosure of information in accordance with the EMAS is part of a process designed to improve the way a company handles environmental matters.⁵⁵

Having decided to participate in the EMAS, a company must begin this process by conducting a thorough environmental

⁴⁹ *Id.* art. 14, at 6.

⁵⁰ *See id.* art. 3, at 3.

⁵¹ *Id.* art. 2(k), at 3.

⁵² The participating company may choose to only participate with one site, in which case it would disclose to the public "This site has an environmental management system and its environmental performance is reported on to the public in accordance with the Community eco-management and audit scheme." *Id.* annex IV, at 17. Should it choose to participate at multiple sites, the company would disclose "The following sites where we carry out our industrial activities have an environmental management system and their performance is reported on to the public in accordance with the Community eco-management and audit scheme. . . ." *Id.* Or, should the company involve all of its industrial sites, it would report "All sites in the Community where we carry out our industrial activities have an environmental management system and their environmental performance is reported on to the public in accordance with the Community eco-management and audit scheme." *Id.*

⁵³ *See* Orts, *supra* note 3, at 1290.

⁵⁴ *See supra* Section 2.1.

⁵⁵ *See* Council Regulation 1836/93, art. 1(1), 1993 O.J. (L 168) 1, 2.

review.⁵⁶ The environmental review is “an initial comprehensive analysis of the environmental issues, impact and performance” of each site.⁵⁷ In addition to being the basis for all subsequent environmental practices, this review initiates three different levels of corporate environmental planning. First, the company must develop an organizational statement of “environmental policy,” which articulates the company’s “overall aims and principles of action with respect to the environment.”⁵⁸ This policy must include a statement which promises compliance with all relevant regulatory requirements regarding the environment.⁵⁹ Further, the objective of this policy must be “the reasonable continuous improvement of environmental performance, with a view to reducing environmental impacts to a level not exceeding those corresponding to economically viable application of best available technology.”⁶⁰ Second, the company must initiate an “environmental programme” for each individual site enrolled in EMAS.⁶¹ The environmental program is perhaps best described as the company’s strategic plan for coordinating the environmental activities of an individual site with its organizational environmental policy, and as such incorporates the overall practices, procedures, and processes for the site.⁶² Finally, the company must create an “environmental management system” for each site.⁶³ The environmental management system is perhaps best described as the company’s tactical plan for implementing its environmental policy at a given site, and, as such, must describe the specific activities the company intends to undertake so as to ensure greater protection of the environment.⁶⁴

Having performed the initial review and the related organizational planning, the participating company must then internally audit each site every three years.⁶⁵ Audits must examine both

⁵⁶ See *id.* art. 3(b), at 3.

⁵⁷ See *id.* art. 2(b), at 2.

⁵⁸ *Id.* art. 2(a), at 2.

⁵⁹ See *id.* art. 3(a), at 3.

⁶⁰ *Id.*

⁶¹ *Id.* art. 3(c), at 3.

⁶² See *Id.* art. 2(c), at 2.

⁶³ *Id.* art. 3(c), at 3.

⁶⁴ See *id.* art. 2(e), at 2.

⁶⁵ See *id.* annex II.H, at 13.

the environmental program and the environmental management system at each site.⁶⁶ In doing so, they must address several mandatory issues.⁶⁷ The regulation allows audits performed either by “auditors belonging to the company or external persons or organizations acting on its behalf.”⁶⁸ Auditing individuals, however, must have both training in the art of auditing and understanding of the scientific subject matter audited, including “knowledge and experience on the relevant environmental management, technical, environmental and regulatory issues.”⁶⁹

The company must also undergo external audits conducted by an independent, outside “accredited environmental verifier.”⁷⁰ Essentially, the purpose of this redundant exercise is to enforce a uniform European auditing standard, in order to verify the efficacy of each participating company’s internal audits in complying with all elements of the EMAS regulation.⁷¹ In performing these duties, verifiers are sworn to strict confidentiality, and “shall not divulge, without authorization from the company management, any information or data obtained in the course of their auditing or verification activities.”⁷² To ensure proper adherence to these duties and responsibilities, each European Union member state has the responsibility for “establish[ing] a system for the accreditation of independent environmental verifiers and for the supervision of their activities.”⁷³

Having completed these rather rigorous internal and external reviews, each participating company takes the final step of reporting the results of this process to the public. To insure proper reporting, the EMAS requires the preparation and

⁶⁶ See *id.* art. 2(f), at 2-3.

⁶⁷ See *id.* annex I.C, at 10. These issues include environmental impact assessment, energy use, raw material conservation, waste reduction, recycling, noise pollution reduction, evaluation of production process efficiency, product planning and design efficiency, environmental performance of suppliers, accident prevention, education of employees, and external information policies. *Id.*

⁶⁸ *Id.* art. 4(1), at 4.

⁶⁹ *Id.* annex II.C, at 12.

⁷⁰ *Id.* art. 4(4) at 4.

⁷¹ See *id.* annex III.B, at 15.

⁷² *Id.* art. 4(7), at 4.

⁷³ *Id.* art. 6(1), at 4.

dissemination of standardized “environmental statements.”⁷⁴ In general, these statements may summarize the findings and conclusions of audits in a way that is “designed for the public and written in a concise, comprehensible form.”⁷⁵ These statements, however, must adhere to a fairly rigid format which includes rather extensive data on emissions, waste generation, and resource consumption; a description of the environmental policy, management system, and programs; the date for the submission of the next environmental statement; the name of the environmental verifier; and all other “environmental issues of relevance.”⁷⁶

4. THE RISK COMMUNICATION APPROACH TO ANALYZING COMMUNICATIVE EFFICIENCY

Although it is clear the United States and the European Union communicate environmental information to the public in a different manner, it is not clear which system has the greater potential to achieve the policy goals that drive environmental disclosure. In order to analyze this question, it is appropriate to use the “risk communication” approach. Risk communication is the field of behavioral science which attempts to understand how efficiently information about risk is communicated to the public.⁷⁷ In using this approach, it is instructive to examine why governments would choose to communicate information about corporate environmental performance, how such disclosure might work to achieve policy goals, and what factors might prevent environmental disclosure from meeting expectations.

4.1. *Why Do Governments Require Risk Communication?*

While there are many potential reasons why those in positions of authority might wish to communicate risk, commentators have generally focused on four basic reasons why public officials attempt to communicate risk to the public.⁷⁸

First, many legal systems see the disclosure of risk as a moral

⁷⁴ *Id.* art. 5, at 4.

⁷⁵ *Id.* art. 5(2), at 4.

⁷⁶ *Id.* art. 5(3), at 4.

⁷⁷ See Alonzo Plough & Sheldon Krinsky, *The Emergence of Risk Communication Studies: Social and Political Context*, in READINGS IN RISK 223, 226 (Theodore S. Glickman & Michael Gough eds., 3d prtg. 1993).

⁷⁸ See Baram, *supra* note 6, at 97-100.

obligation.⁷⁹ From this perspective, it would be negligent for entities engaged in hazardous activities not to undertake reasonable measures to prevent harm to others.⁸⁰ At the very least, this approach requires those who engage in hazardous activities to identify the hazards related to their activities and to warn those individuals placed at risk by these hazards.⁸¹

Second, most democracies view risk communication as a political necessity,⁸² because the democratic system is facilitated by informed citizens freely exercising their franchise.⁸³ In the words of Thomas Jefferson, "I know no safe depository of the ultimate powers of the society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to inform their discretion."⁸⁴

Third, risk communication is seen by professional risk managers as a method by which public apprehension over the uncertain impacts of technology may be eased.⁸⁵ For example, many risk managers feel that excessive media coverage exerts a powerful influence over public opinion, causing the average person to over-react to the environmental and health threats posed

⁷⁹ See *id.* at 98.

⁸⁰ For example, since the late nineteenth century, employers who place inexperienced employees in dangerous work situations have been required to give adequate instruction so that these individuals fully appreciate the threat posed to their safety and can take adequate measures to avoid bodily harm. See, e.g., *Ingerman v. Moore*, 27 P. 306, 307 (Cal. 1891) (stating the general principle that an employer is required to instruct inexperienced employees as to the dangers posed in the workplace); see also *Alton Paving, Bldg. & Fire-Brick Co. v. Hudson*, 52 N.E. 256, 257 (Ill. 1898) (recognizing that an employer has a duty to warn an inexperienced employee of the dangers related to the operation of a steam shovel); *Texas Mexican Ry. Co. v. Douglas's*, 11 S.W. 333, 335 (Tex. 1889) (clarifying that an employer has a duty to inform an inexperienced employee of the dangers related to parking a steam locomotive).

⁸¹ See RESTATEMENT (SECOND) OF TORTS § 301 (1965). Note, however, that in many circumstances a warning may not be not enough to protect an actor engaged in hazardous activities from liability. *Id.*

⁸² See Baram, *supra* note 6, at 98.

⁸³ See Harry Otway, *Experts, Risk Communication, and Democracy* Lecture at the Annual Meeting of the Society for Risk Analysis, in 7 RISK ANALYSIS 125, 126 (1987).

⁸⁴ David L. Bazelon, *Risk and Responsibility*, 205 SCIENCE 277, 278 (1979).

⁸⁵ See Baram, *supra* note 6, at 100.

by technology.⁸⁶ Whether or not the media deserves this criticism, there is no question that in light of any perceived public over-reaction, risk managers see it as their responsibility to calm public fears by putting risks in perspective, usually in the form of trusted expert opinion, and to explain the steps those in authority are taking to manage risks.⁸⁷

Fourth, and perhaps most important for the purposes of this discussion, risk communication is thought to be politically expedient.⁸⁸ By requiring communication rather than obedience to command and control regulations, which are far more costly to monitor for compliance, authorities can shift most of the responsibility for environmental reform to private entities, thereby taking action without excessive effort or expense.⁸⁹

4.2. *How Does Risk Communication Work?*

Of course, risk communication is only politically expedient if it actually affects corporate environmental behavior. Most theories regarding how this can occur conclude that disclosed information will awaken the public from its apathetic slumber to somehow cause offending companies to reform their errant ways in a manner acceptable to policymakers.⁹⁰ But how exactly can the public cause corporations to change their practices?

At first, government officials theorized that environmental risk communication would work by informing and mobilizing the public to take part in collective political action at the local level, thereby compelling polluters to curtail their most offensive

⁸⁶ See Paul Slovic, *Informing and Educating the Public About Risk*, 6 RISK ANALYSIS 403, 410 (1986). A good example of this was the fear experienced by residents of Love Canal, exacerbated by "conflicting and fluctuating reports of the potential danger of the wastes." See Roger E. Kasperson, *Six Propositions on Public Participation and Their Relevance for Risk Communication*, 6 RISK ANALYSIS 275, 275 (1986).

⁸⁷ See Ralph L. Keeney & Detlof von Winterfeldt, *Improving Risk Communication*, 6 RISK ANALYSIS 417, 421 (1986). For example, a scientist speaking to a community about risks "may be carrying out a ritual that displays confidence and control. The technical information (the message) is secondary to the real goal of the communicator: 'Have faith; we are in charge.'" Plough & Krinsky, *supra* note 77, at 227.

⁸⁸ See Baram, *supra* note 6, at 100.

⁸⁹ See *id.*

⁹⁰ See Kasperson, *supra* note 86, at 279.

activities.⁹¹ Over time, however, commentators have come to realize that individuals, acting solely in pursuit of financial gain through the medium of the securities market, accomplish the same results.⁹² Assuming that the market for securities is an efficient one, the price of a corporation's stock should reflect all publicly available information about that company, both good and bad.⁹³ It follows, then, that adverse information relating to environmental liabilities and obligations should have the effect of lowering the price of securities in an efficient market. If this is true, a company which is required to publicly disclose environmental information may have an incentive to resolve its environmental problems in order to preserve the value of its securities in the public markets.⁹⁴

Further, it is increasingly evident that groups of informed shareholders, acting collectively in pursuit of financial gain, may have the most significant impact on the environmental behavior of corporations.⁹⁵ Throughout the 1990s, institutional investors, such as pension plans and mutual funds, have become increasingly influential.⁹⁶ Further, these entities have shown a willingness to use this clout.⁹⁷ Institutional investors can no longer adhere to

⁹¹ See Plough & Krinsky, *supra* note 77, at 227-28.

⁹² See Wallace, *supra* note 3, at 1125-27.

⁹³ There are three generally accepted theories of market efficiency. RICHARD A. BREALEY & STEWART C. MYERS, *PRINCIPLES OF CORPORATE FINANCE* 295-96 (4th ed. 1991). The weak theory of efficiency assumes that the present price of a stock reflects all historical information of past prices for that stock. See *id.* The semi-strong theory of efficiency assumes that present prices reflect not only past prices, but all other published information regarding that stock. See *id.* The strong theory of efficiency assumes that present prices reflect all information that can be obtained through painstaking financial analysis of the company that issued the stock, including inside information. See *id.* When using the term "market efficiency," this comment adopts the semi-strong theory, as it has been repeatedly verified with empirical data. See *id.*

⁹⁴ See Wallace, *supra* note 3, at 1126-27.

⁹⁵ Cf. Joel Seligman, *The Obsolescence of Wall Street: A Contextual Approach to the Evolving Structure of Federal Securities Regulation*, 93 MICH. L. REV. 649, 657-61 (1995).

⁹⁶ In 1992, institutional investors held \$2.7 trillion, or 54.2%, of the \$4.96 trillion market value of stock outstanding. See *Institutions Hold Dominant Stake in Equities Market, Fed Board Data Show*, 25 Sec. Reg. & L. Rep. (BNA) No. 27, at 943 (July 9, 1993).

⁹⁷ According to Peter Drucker, "[t]he largest and fastest growing funds, those of public employees, are no longer content to be passive investors. Increasingly, they demand a voice in the companies in which they invest . . ."

the “Wall Street” rule, which specifies that an investor should sell a company’s stock if he or she doesn’t agree with the decisions of management.⁹⁸ Consequently, in the future it may be routine for institutional investors to engage in so called “social investing” by seeking out and investing in companies with purportedly high quality environmental policies and practices or, in the alternative, by influencing the environmental behavior of the companies in which they already own stock.⁹⁹ This would be done not for ideological reasons, but rather under the assumption that such a strategy is “economically sound because the [] benefits of social investing . . . are, in economic analysis, as real as [traditional] investment benefits.”¹⁰⁰

4.3. *Why Does Risk Communication Frequently Fail?*

Although it is important to understand how risk communication works when assessing environmental disclosure systems, it is

Peter F. Drucker, *Reckoning with the Pension Fund Revolution*, HARV. BUS. REV., Mar.-Apr. 1991, at 106, 106.

⁹⁸ See John C. Coffee, Jr., *Liquidity Versus Control: The Institutional Investor as Corporate Monitor*, 91 COLUM. L. REV. 1277, 1288 n. 29 (1991). The implications of the size of institutional trades have a significant influence on the institutional ability to trade. Between 1962 and 1995, the average size of a trade increased from 204 to 1489 shares, largely due to the influence of institutional traders. See N.Y. STOCK EXCH., FACT BOOK 98 (1995). Further, institutions often hold controlling stock blocks of the companies in which they invest. In 1988, institutions as a whole owned 53% of the stock market value of the top one hundred American corporations. Some of the most extreme examples of institutional control are General Motors Corporation (82%), Mobil Corporation (74%), Citicorp (70%), Amoco (86%), and Eli Lilly & Company (71%). See Carolyn K. Brancato, *The Momentum of the Big Investor*, DIRECTORS & BOARDS, Winter 1990, at 38, 39. As a result, it is often impractical for an institutional investor to dispose of its holdings in a company. Trades engaged in by these entities are necessarily so large that, even absent other market activity, the market price of the security traded in is significantly affected. Thus, the substantial losses that an institutional investor would have to suffer upon such a sale, as a result of supply and demand-related depression of the price of the security traded in, creates a disincentive to sell. See Coffee, *supra* at 1287-89, *Liquidity Versus Control: The Institutional Investor as Corporate Monitor*, 91 COLUM. L. REV. 1277, 1287-89 (1991).

⁹⁹ See Wallace, *supra* note 3, at 1138-42. Indeed, some institutional investors have established mutual funds where the primary criteria for stock selection is concern for the protection of the environment. See, e.g., *Socially Responsible Investing Can Pay*, PHILA. INQUIRER, Mar. 2, 1997, at B5.

¹⁰⁰ John H. Langbein & Richard A. Posner, *Social Investing and the Law of Trusts*, 79 MICH. L. REV. 72, 107 (1980) (discussing the compatibility of an institutional investor’s fiduciary duties with “social” investing).

even more important to discover why risk communication frequently fails, in order to avoid common stumbling blocks to achieving environmental policy goals. Generally, risk communication fails because of the psychological and physical limitations on human ability to understand and act on information.¹⁰¹

Arguably, the most important limitation on human perception is known as the *status quo bias*. In short, the status quo bias recognizes that people often cling to currently held beliefs or practices, even when it is easy or cheap to experiment.¹⁰² Although the recognition of this phenomenon is certainly not new,¹⁰³ recent research has empirically proven what philosophers have suspected for centuries. This research has conclusively shown that people's beliefs change slowly and are extraordinarily persistent in the face of contrary evidence.¹⁰⁴ People's initial impressions will structure the way they interpret subsequent evidence. They will accept new evidence as reliable and informative if it is consistent with their initial beliefs, dismissing contrary evidence as erroneous or unrepresentative.¹⁰⁵

Another significant limitation exists when people lack strong prior opinions. In this case, the opposite of the status quo bias

¹⁰¹ See Slovic, *supra* note 86, at 404-06.

¹⁰² See Colin F. Camerer & Howard Kunreuther, *Decision Processes for Low Probability Events: Policy Implications*, 8 J. POL'Y ANALYSIS & MGMT. 565, 577 (1989). For example, researchers cited by this article mention a colleague who ordered the same lunch every day for many years. One day, his regular meal was not available, so he ordered something different. He then proceeded to order this new lunch every day for many years. *Id.*

¹⁰³ In the 16th century, Niccolo Machiavelli observed:

It must be remembered that there is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new system. For the initiator has the enmity of all who would profit by the preservation of the old institutions and merely lukewarm defenders in those who would gain by the new ones. The hesitation of the latter arises in part from the fear of their adversaries, who have the laws on their side, and in part from the general skepticism of mankind which does not really believe in an innovation until experience proves its value.

NICCOLO MACHIAVELLI, *THE PRINCE* 15 (Thomas G. Bergin ed. & trans., Harlan Davidson 1947).

¹⁰⁴ Slovic, *supra* note 86, at 405.

¹⁰⁵ *Id.*

occurs: people's opinions are extremely malleable.¹⁰⁶ Accordingly, the format in which information is presented is at least as important as the content.¹⁰⁷ Under these circumstances, research has shown that people are very sensitive to the way in which information is disclosed, because naive viewpoints are easily manipulated by presentation format.¹⁰⁸ Although there is no research which suggests an optimal presentation format, related studies do imply that data which allows people to make comparisons can be helpful, if correct comparisons are made. Specifically, comparisons of unfamiliar information with some sort of standard is thought to be most helpful.¹⁰⁹

Yet another important limitation on the human ability to understand and act on information is the innate desire for certainty. In general, people tend to disregard information if it is not certain enough for them to believe.¹¹⁰ For example, it is not uncommon for individuals to either reduce or amplify risk information so that it can be disregarded. Either they make the risk seem so insignificant that it can be safely ignored, or so large that it clearly should be avoided.¹¹¹ One way to assist people in accepting and comprehending unclear information is to allow

¹⁰⁶ See *id.*

¹⁰⁷ See Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 *SCIENCE* 453, 457 (1981).

¹⁰⁸ See Slovic, *supra* note 86, at 405. For example, in one study researchers asked people to imagine they had cancer and only two choices of treatment, either surgery or radiation. The two therapies were described in detail. Then, some subjects were presented with the cumulative probabilities of surviving surgery. Other subjects received the same cumulative probabilities framed in terms of dying from surgery, rather than surviving (for example, instead of being told that 68% of those having surgery will have survived after one year, they were told that 32% will have died). Framing the statistics in terms of dying from surgery increased the percentage of subjects choosing radiation from 25% to 42%. The effect was as strong in physicians as it was in laypersons. See Barbara J. McNeil et al., *On the Elicitation of Preferences for Alternative Therapies*, 306 *NEW ENG. J. MED.* 1259, 1261-62 (1982).

¹⁰⁹ See Emilie Roth et al., *What Do We Know About Making Risk Comparisons?*, 10 *RISK ANALYSIS* 375, 376 (1990). It is important to note that while empirical research generally supports this assertion, the use of comparisons, in particular comparisons with a standard, has not proven to be as helpful as originally theorized. Nevertheless, it is the best answer that current behavioral scientific research can provide. *Id.* at 381-84.

¹¹⁰ See Paul Slovic et al., *Rating the Risks*, in *READINGS IN RISK* *supra* note 77, at 61, 66.

¹¹¹ See *id.*

them access to professionals who can help clarify this information.¹¹² It is, however, important for these professionals to give unambiguous advice, lest they add to the undesirable effects of uncertainty on the public.¹¹³

5. SEALING THE CONCEPTUAL CRACKS IN THE U.S. SYSTEM

5.1. *Status Quo Bias: The Necessity for Incremental Change*

Before considering any specific changes that may be desirable for the U.S. environmental risk disclosure system, it is important to determine the best method for making such changes. Some commentators have called for radical change in this system.¹¹⁴ Risk communication theory, however, because of its understanding of the status quo bias, recognizes that dramatic changes rarely occur. This is because individuals are more comfortable relying on initial impressions to interpret subsequent information.¹¹⁵ Because most of the interested parties who rely on environmental disclosure have formed their initial impressions within the familiar confines of the current system and reasonably expect to continue receiving future information within the same general format, the existing environmental regime has always developed, and must invariably continue to develop, gradually.¹¹⁶

¹¹² See Slovic, *supra* note 86, at 405.

¹¹³ See Slovic et al., *supra* note 110, at 66. For example, Senator Edmund Muskie once "called for 'one-armed' scientists who do not respond 'on the one hand, the evidence is so, but on the other hand . . . ' when asked about the health risks of pollutants." *Id.*

¹¹⁴ The Administrator of the Environmental Protection Agency ("EPA"), Carol Browner, asserts:

[T]he successes that are available if we continue the traditional regulatory path are incremental at best. The current regulatory system is about going from A to B to C. The changes we undertake today are about going from A to Z. I don't believe anyone in this country - whether an environmentalist or a CEO - believes that incremental steps will achieve the kind of future we all want.

Orts, *supra* note 3, at 1229.

¹¹⁵ See *supra* notes 102-105 and accompanying text.

¹¹⁶ Professor Blomquist refers to this as "the notion of recurring evolutionary change" in modern environmental law. See Robert F. Blomquist, "Clean New World": *Toward an Intellectual History of American Environmental Law, 1961-1990*, 25 VAL. U.L. REV. 1, 6 (1990). This notion characterizes modern American environmental law as a confusing system of "facts, players, policies,

There is a long list of self-interested parties who exacerbate this incremental effect because they owe their very existence to the system they have helped to create.¹¹⁷ At the top of this list are the lawyers and consultants that currently make their living guiding clients through the difficult maze of environmental disclosure requirements. By the year 2000, the estimated expenditures made in the United States to comply with environmental protection programs and to control pollution will be approximately 2.5% of Gross Domestic Product ("GDP").¹¹⁸ As the group which receives the bulk of these expenditures in the form of professional fees, environmental professionals certainly have a large vested interest in the continuation of the current system. Thus, it is not reasonable to expect this influential group to accept dramatic changes in a system that they have spent a professional lifetime learning and to which they owe their livelihood.¹¹⁹

This can also be said of the legions of government bureaucrats and politicians who administer the current system. Indeed, any administrative bureaucracy displays a tendency to perpetuate itself through the self-seeking behavior of employee-bureaucrats.¹²⁰ It

rules, and strategies [that] invariably drift and move when plotted over time" because of "the indirect effect of political ideologies and interest groups." *Id.* at 5-6 (describing the theories of William Rodgers and Thomas Schoenbaum). Historian Samuel P. Hays also sees an incremental approach to environmental law in the United States. He asserts that "[a]s one reviews the relevant potential subjects for such an analysis— cost-benefit, comparative risk, relationship between private and public, federal separation of powers, federal-state-local relationships, the pattern of political forces— it is not difficult to observe that incrementalism reigns" Samuel P. Hayes, *The Future of Environmental Regulation*, 15 U. PITT. J. L. & COM. 549, 549 (1996). Not surprisingly, securities law is also increasingly seen as being evolutionary in nature. Professor Joel Seligman concludes that "the world of corporate and securities law is often a more complicated, more slowly evolving one than the law and economics theorists would have us believe." Seligman, *supra* note 95, at 653.

¹¹⁷ See Blomquist, *supra* note 116, at 5.

¹¹⁸ The consulting firm of McKinsey & Company estimates that between 1972 and 1992, "annual [] environmental protection costs for the United States tripled as a percentage of [GDP], from 0.88% to 2.39%." Further, the firm estimates that costs will "increase to 2.47% of GDP, or around \$200 billion, by the year 2000." Noah Walley & Bradley Whitehead, *It's Not Easy Being Green*, HARV. BUS. REV., May-Jun. 1994, at 46.

¹¹⁹ See Hays, *supra* note 116, at 573.

¹²⁰ See Cass R. Sunstein, *Constitutionalism After the New Deal*, 101 HARV. L. REV. 421, 448-51 (1987). This is because "administrators will attempt to promote their own interests at the expense of the interests of the public" and "seek above all to enlarge their own powers" *Id.* at 450.

would be unreasonable to expect that a radical change in the status quo would be allowed by this powerful group either.¹²¹

Oddly enough, even environmentalists have a stake in the current disclosure system. Some environmental groups have established a niche in sifting through and interpreting the mountain of information which is disclosed by companies every year, publishing and selling this information to interested parties.¹²² Because of the time and effort invested by environmentalists in understanding the current disclosure system, and because of the financial support they receive for their efforts, there may be resistance to change from this group as well.

Thus, in the face of certain resistance to radical change, a risk communication standpoint necessitates incremental modifications of the current environmental disclosure system used by the United States. Indeed, the approach of the little Dutch boy might be the most workable solution in the present situation. Given a dike of environmental regulation and risk disclosure that has sprung a few leaks, it may be best, at least in the short run, merely to seal the conceptual cracks, rather than to rebuild the entire dike.

5.2. Manipulation of Viewpoints: The Necessity of a Meaningful Disclosure Format

The problem-solving approach of the little Dutch boy is not the only useful lesson to be learned from the European system. Incremental change in the U.S. system would be especially effective for implementing a more standardized disclosure format. Risk communication theory recognizes that presentation format is at least as important as the information itself.¹²³ Consequently, a standardized presentation format assists the public in understanding and acting on any information given, increasing the probability of successfully accomplishing public policy goals.¹²⁴

5.2.1. Uniform Extraterritorial Disclosure

The European system excels at standardization because the EMAS encourages uniform extraterritorial disclosure. In other

¹²¹ See Hays, *supra* note 116, at 574.

¹²² See John Holusha, *Environmentalists Assess Corporate Pollution Records*, N.Y. TIMES, Dec. 9, 1991, at D1.

¹²³ See *supra* notes 106-08 and accompanying text.

¹²⁴ See *supra* note 109 and accompanying text.

words, the EMAS allows the public to ascertain from a company's environmental disclosure whether it is engaging in environmentally friendly activities outside the company's country of origin. Because the EMAS is a site-based system, designed to identify those sites where a company is complying with EMAS standards, it is easy to assess a company's performance both inside and outside the borders of its member country of origin.¹²⁵ This is simply not the case in the United States under current SEC environmental disclosure rules. Although Item 303 provides for uniform extraterritorial treatment of forward-looking information, Items 101 and 103 are rather inconsistent in terms of requiring disclosure of relevant extraterritorial compliance costs, risks, and legal actions.¹²⁶

To the credit of the SEC, Item 303 can be interpreted as requiring the disclosure of forward-looking material compliance costs and proceedings in any country around the globe, because the language of this provision makes no distinctions for territorial application.¹²⁷ As long as a corporate trend, demand, commitment, event or uncertainty involving environmental performance is likely to come to fruition, the company must report it, regardless of territorial origin.¹²⁸

Unfortunately, the same cannot be said for Item 101. On the one hand, companies must purportedly meet a higher standard for

¹²⁵ See *supra* notes 50-52 and accompanying text. The EMAS has, however, received criticism for allowing participation in the system without compliance at all sites. Orts, *supra* note 3, at 1297-98. Furthermore, there is currently no method of identifying whether a company participating in EMAS is engaged in environmentally friendly activities in countries outside of the European Union. See Council Regulation 1836/93, annex IV, 1993 O.J. (L 168) 1, 17. At least within the European Union, however, it is easy to ascertain whether a company is engaged in environmentally friendly activities within each of the member states, making EMAS the first truly international environmental disclosure system. See *id.*

¹²⁶ See Lewis, *supra* note 3, at 1070-71.

¹²⁷ See 17 C.F.R. § 229.303 (1996).

¹²⁸ There is a two-part test for determining whether environmental uncertainty must be disclosed. If management determines that the uncertainty is not reasonably likely to occur, no disclosure is required. If management cannot make that determination, it must evaluate the consequences of that uncertainty. Disclosure is required unless management determines that a material effect on the registrant's financial condition or results of operations are not reasonably likely to occur. See Management's Discussion, *supra* note 39, at 22,430.

disclosing extraterritorial environmental *risks* under Item 101.¹²⁹ On the other hand, however, Item 101 only requires the disclosure of material compliance *costs* associated with “[f]ederal, [s]tate and local provisions.”¹³⁰ Thus, although one possible interpretation of Item 101 might require uniform extraterritorial disclosure, the plain language of its provisions would seem to indicate otherwise.¹³¹

Likewise, Item 103 does not provide for uniform extraterritorial coverage in disclosing pending legal actions against reporting companies. Currently, companies must disclose material proceedings both domestically and abroad “known to be contemplated by governmental authorities.”¹³² The company may ignore this obligation, however, if it deems the action to be “ordinary routine litigation incidental to the business.”¹³³ Some time ago, the SEC sealed this loophole, at least domestically, by requiring disclosure of *all* environmental proceedings “arising under any Federal, State or local provisions.”¹³⁴ There is, however, no similar provision that closes this loophole for extraterritorial legal matters.

5.2.2. *Uniform Disclosure Standards*

Another way the United States could improve standardization would be to provide a more uniform disclosure standard for reportable information. Again, the European system provides a good model for this. Currently, the EMAS goes into great detail not only in describing the procedures that a reporting company

¹²⁹ Item 101(d)(2) requires the disclosure of “[a]ny risks attendant to the foreign operations,” rather than the normal materiality standard for disclosure. 17 C.F.R. § 229.101(d)(2)(1996).

¹³⁰ *Id.* 229.101(c)(1)(xii).

¹³¹ According to a no-action letter issued by the SEC in 1973, registrants must report compliance costs in foreign countries if they have a material impact on business operations. See Air Products and Chemicals, Inc., SEC No-Action Letter, [1973 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 79,429, at 83,229 (June 11, 1973). However, the authority of these instructions is in doubt. Generally, no-action letters do not give guidance beyond the specific factual situation addressed, and thus do not carry the weight of SEC rules or regulations. More importantly, it is very clear that the drafters of Regulation S-K intended to supersede earlier disclosure regulations and their interpretive releases. See 17 C.F.R. § 229.10(a) (1996).

¹³² 17 C.F.R. § 229.103 (1996).

¹³³ *Id.*

¹³⁴ *Id.* Instruction 5.

must follow, but also in articulating precisely the information that must be reported and the specific format in which it must be provided to the public.¹³⁵

The SEC rules, however, rely on a vague standard to judge the potential reportability of information. Unfortunately, the application of this standard is not consistent throughout the SEC environmental disclosure rules.¹³⁶ In general, the rules require that all material information must be disclosed.¹³⁷ The test for reportability applied by Item 303, however, does not follow the typical "materiality" analysis of Items 101 and 103. Indeed, the SEC expressly precludes the application of the typical materiality standard to disclosure concerning the prediction of future actions and events.¹³⁸ Under Item 303, this type of future disclosure, more commonly known as "forward-looking information,"¹³⁹ is governed by "its own standard for disclosure— i.e., reasonably likely to have a material effect."¹⁴⁰

5.2.3. *Sealing the Conceptual Cracks*

Although it might be too dramatic a change to require the specific disclosure of information in a standardized format as required by the EMAS, it would be prudent to adopt a few minor changes designed to make environmental disclosure under the SEC rules a bit more uniform. Minimally, this should include modification of Items 101 and 103 to require the disclosure of extraterritorial environmental information, and the application of

¹³⁵ See *supra* Section 3.2.

¹³⁶ See Lewis, *supra* note 3, at 1072-73.

¹³⁷ See *supra* Section 2.2.

¹³⁸ Management's Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosures, *supra* note 39, at 22,430 n.27.

¹³⁹ *Id.* at 22,428. There are two types of forward-looking disclosure. "Required" disclosure, which *must* be reported in accordance with Item 303 and to which a materiality standard, modified or otherwise, would attach, concerns "currently known trends, events, and uncertainties that are reasonably expected to have material effects." *Id.* at 22,429. "Optional" disclosure, which *may* be reported in accordance with Item 303, involves "anticipating a future trend or event or anticipating a less predictable impact of a known event, trend or uncertainty." *Id.*

¹⁴⁰ *Id.* at 22,430 n.27.

a common materiality standard to Items 101, 103, and 303.¹⁴¹ This might be accomplished by rule, regulation, or interpretive release.

Another way in which greater standardization might be achieved without imposing too great a burden on the existing system would be to allow shareholders a greater role in deciding the environmental disclosure format of companies in which they own shares. One way to do this would be for the SEC to support the efforts of shareholders in their attempts to implement binding resolutions affecting the environmental disclosure policies of companies in which they own stock.

Historically, shareholders have had the right to submit such proposals for inclusion in a corporation's proxy solicitation materials, which are routinely distributed to, and voted on, by all shareholders.¹⁴² Currently, Rule 14a-8(a) generally requires a company to include a shareholder's proposal in the company's proxy statement.¹⁴³ There are many exceptions, however, that

¹⁴¹ Given recent Congressional and administrative action, it seems highly unlikely that the disclosure of forward-looking information will be held to the same materiality standard as historical information, at least in the near future. While the standard for disclosure of forward-looking environmental information itself has not changed, there have been dramatic changes in the standard governing the treatment of forward-looking information after it has been disclosed. For some time now, the SEC has allowed a "safe harbor" for forward-looking information after it has been disclosed. See 17 C.F.R. § 230.175 (1996). This "safe harbor" protects disclosers of forward-looking information from liability for making fraudulent statements, so long as the statement was reasonable and disclosed in good faith. *Id.* § 230.175(a). As recently as 1994, however, the SEC queried whether "required" forward-looking information should be held to the same standard as "required" historical information. See Safe Harbor for Forward-Looking Statements, Securities Act Release No. 33-7101, Exchange Act Release No. 34-34831, 59 Fed. Reg. 52,723, 52,731 (1994). Surprisingly, the SEC has never answered this question. Safe Harbor for Forward-Looking Statements, 61 Fed. Reg. 24,073 (1996). Nevertheless, Congress apparently resolved the issue in 1996 by granting "safe harbor" status to *all* forward-looking information, thereby giving support to the notion that forward-looking information ought to be held to a different standard than historical information. See 15 U.S.C. § 77z-2 (Supp. I. 1995); 15 U.S.C. § 78u-5 (Supp. I. 1995). Given these differences in treatment of information after it is disclosed, it stands to reason that there will continue to be differences in the standards which govern whether information need be disclosed in the first place.

¹⁴² See *Amalgamated Clothing & Textile Workers Union v. Wal-Mart Stores, Inc.*, 821 F. Supp. 877, 881-83 (S.D.N.Y. 1993) (describing the history of the origin of this right).

¹⁴³ See 17 C.F.R. § 240.14a-8(a)(1996).

allow the company to omit such proposals from its proxy statement.¹⁴⁴

Recently, many shareholders have attempted to submit proposals which, with the consent of a majority of the corporation's shareholders, would require the corporation to disclose environmental data in a standardized format. For example, shareholders have attempted to require corporations in which they own stock to adopt the controversial Coalition for Environmentally Responsible Economies' ("CERES") principles, which require the release of extensive environmental information in a rigid disclosure format.¹⁴⁵ The SEC has hindered these attempts to standardize corporate environmental disclosure by allowing companies to omit such proposals, assuming them to be "moot."¹⁴⁶ As a result, shareholders have little, if any, ability to

¹⁴⁴ A company that wishes to omit a proposal from its proxy material must file the following with the SEC: (1) a copy of the proposal, (2) any statement in support of the proposal submitted by the shareholder, and (3) a statement explaining why the proposal may be excluded. *See id.* at § 240.14a-8(d). Grounds for exclusion include mootness, relatedness to ordinary business operations, and duplication of previous proposals. *See id.* at § 240.14a-8(c).

¹⁴⁵ *See, e.g.*, The Proctor & Gamble Company, SEC No-Action Letter, 1994 SEC No-Act. LEXIS 609, at *6 (Jul. 15, 1994). This proposal notes that the theory behind the CERES Principles is that public accountability is necessary in the public arena, and that such accountability can be best achieved only if "(1) there is public reporting of basic, standardized data pertaining to uniform substantive principles; and (2) such data is presented in a format which permits comparison among companies." *Id.*

¹⁴⁶ This was not always the case. Long before the CERES principles were even developed, the SEC would generally not allow companies to omit proxy proposals which advocated the development or disclosure of environmental information in a particular format. *See, e.g.*, General Elec. Co., SEC No-Action Letter, [1973-1974 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 79,720, at 83,931 (Feb. 6, 1974)(requiring inclusion of a proposal to develop an energy impact statement); *cf.* General Motors Corp., SEC No-Action Letter, [1973-1974 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 79,753, at 84,030 (Mar. 22, 1974)(requiring inclusion of a proposal to require the board of directors to obtain an environmental impact statement before establishing or discontinuing a facility).

Apparently, the SEC has subsequently reversed this position, determining that proxy proposals requesting information in a specific format may be duplicative of previous requests for similar information already provided by a company in a different format, thereby making the proxy proposal "moot." In general, any "moot" proposal may be omitted in accordance with SEC regulations. *See* 17 C.F.R. § 240.14a-8(c)(10)(1996). In numerous no-action letters, the SEC has taken the position that a proposal may be considered moot, and thus omitted, when the registrant has "substantially" implemented the action requested by the proxy. *See, e.g.*, Amoco Corp., SEC No-Action Letter,

influence the way in which they receive corporate environmental information. It would help if the SEC would recognize that the format in which information is received is at least as important to these shareholders as the information itself. An important starting point would be to require companies to include standardization proposals in their proxy solicitations. An easy way to do this would be to eliminate the exemptions that allow the omission of such proposals.

5.3. *Desire for Certainty: The Necessity of Professional Guidance*

Another area in which the United States might benefit from careful study of the European system is in providing greater access to environmental professionals. Risk communication studies indicate that the public may disregard information entirely if it is ambiguous, reducing the probability of achieving public policy goals.¹⁴⁷ One way to reduce this uncertainty is to provide access to professionals whose opinions and guidance can help the public to understand and act on the environmental information disclosed by companies.¹⁴⁸

5.3.1. *Public Access to Environmental Professionals*

Again, this is an area in which the European system performs

1994 SEC No-Act. LEXIS 124, at *1 (Jan. 31, 1994) (allowing exclusion of proposal to disclose information in accordance with the CERES principles when another environmental disclosure mechanism exists); Allied Signal, Inc., SEC No-Action Letter, 1994 SEC No-Act. LEXIS 129, at *1 (Jan. 31, 1994)(allowing exclusion of proposal to disclose information in accordance with the CERES principles when information is routinely disclosed to customers); E.I. du Pont de Nemours & Co., SEC No-Action Letter, 1995 SEC No-Act. LEXIS 245, at *1 (Feb. 14, 1995)(allowing exclusion of proposal to disclose environmental information in the company's annual report when similar information is disclosed in accordance with Item 303). Further, it appears as if any actions taken by a company to disclose environmental information to the public will be deemed "substantial" implementation of a request to follow the CERES principles, whether or not information is actually disclosed in a format which resembles the CERES format. *See id.* at *1-*9. However, the pendulum may once again be swinging the other way. *See, e.g.,* Amoco Corp., SEC No-Action Letter, 1996 SEC No-Act. LEXIS 146, at *1 (Feb. 1, 1996)(requiring inclusion of proposal to report on the specific impacts of oil and gas exploration on a particular geographic region, even though another environmental disclosure mechanism exists).

¹⁴⁷ *See supra* notes 110-11 and accompanying text.

¹⁴⁸ *See supra* notes 112-13 and accompanying text.

very well. One of the key requirements of the EMAS is that qualified environmental professionals must audit and verify all operations and disclosure documents of participating companies.¹⁴⁹ This gives credibility to the information provided, allowing the public to use this information with confidence. Further, participating companies have no reason to object to this process, as particularly sensitive information cannot be disclosed by these professionals without the approval of corporate management.¹⁵⁰

Unfortunately, this is not the case in the United States. The problem is not that companies *cannot* audit their operations and disclose the results to the public under current SEC rules. Rather, they *refuse* to do so because of the fear that information discovered and disclosed as a result of such audits will be used against them in civil and criminal actions brought by the EPA. This fear discourages otherwise responsible reporting companies that wish to remedy past mistakes from engaging the services of environmental professionals.¹⁵¹ Apparently, this fear is well-founded because “[t]hrough the course of the environmental compliance and audit program, admissible, documentary evidence can be generated. What was designed to be a shield may transform itself into the government’s sword.”¹⁵² Indeed, courts routinely give government agencies access to what would otherwise be confidential audit documents.¹⁵³

Lending credibility to the notion that incremental change is the rule rather than the exception when describing change in

¹⁴⁹ See *supra* notes 65-73 and accompanying text.

¹⁵⁰ See *supra* note 72 and accompanying text.

¹⁵¹ A 1992 survey of corporate general counsel found that 37.4% of companies had never undertaken a formal survey of environmental compliance, and 16% admitted to having altered environmental auditing procedures owing to “concern with whether the violations they find could be used against them.” Marianne Lavelle, *More Lawyers Expect to Urge Their Clients to Examine Compliance*, NAT’L L.J., Mar. 16, 1992, at S6.

¹⁵² Mary Jo Gilsdorf & Joseph M. Manko, *The Sword and Shield in Environmental Criminal Prosecutions . . . the Dilemma Posed by the Department of Justice*, 205 LEGAL INTELLIGENCER 2790, 2791 (Oct. 24, 1991).

¹⁵³ See, e.g., *United States v. Dexter Corp.*, 132 F.R.D. 8 (D. Conn. 1990) (denying “self-evaluative” privilege for documents relating alleged Clean Water Act violations); *United States v. Chevron, U.S.A. Inc.*, No. 88-6681, 1989 WL 121616, at *6 (E.D. Pa. Oct. 16, 1989) (denying attorney-client privilege for internal environmental audits of Chevron’s oil refinery in Philadelphia in the context of a discovery request relating to air emissions of benzene).

environmental standards,¹⁵⁴ the EPA's response to the issue of environmental audit privilege has been characteristically evolutionary.¹⁵⁵ Very early on, the EPA strongly rejected any inference that it should grant an environmental audit privilege.¹⁵⁶ As recently as 1994, the EPA had made no significant changes to this initial position.¹⁵⁷

In response to criticism of this practice, however, and perhaps in recognition that many companies were not conducting environmental audits because of its position, the EPA released a Voluntary Environmental Self-Policing and Self-Disclosure Interim Policy Statement in April, 1995.¹⁵⁸ This interim policy attempted to create limited incentives for companies to adopt environmental auditing programs, without granting a blanket audit privilege. Specifically, the EPA represented that it would not seek punitive or gravity-based civil penalties with regard to environmental audits if companies met seven conditions.¹⁵⁹ These conditions included voluntary self-policing, voluntary disclosure of any violations, prompt correction of violations, remediation of any substantial or imminent endangerment of human health or the natural environment, remediation of the violation, no lack of measures which could have prevented the violation, and coopera-

¹⁵⁴ See *supra* Section 5.1.

¹⁵⁵ As with other changes in environmental law, this incremental approach is not unusual. Some commentators have described environmental rulemaking as a gradual bargaining process, in which the EPA initially takes a strong, sometimes radical, stand on an issue. As time progresses, and interested parties make their views known, the EPA slowly modifies its position to accommodate interested parties while still providing protection to the environment. See Heidi Burgess et al., *Negotiation in the Rulemaking Process (The 301(h) Case)*, in *RESOLVING ENVIRONMENTAL REGULATORY DISPUTES* 222, 251 (Lawrence Susskind et al. eds., 1983).

¹⁵⁶ In its first statement of policy regarding environmental audits, the Agency bluntly asserted that it had the "authority to request and receive any relevant information - including that contained in audit reports - under various environmental statutes." Environmental Auditing Policy Statement, 51 Fed. Reg. 25,004, 25,007 (1986). In its general policy statement, the EPA stated that it would "not promise to forgo inspections, reduce enforcement responses, or offer other such incentives in exchange for implementation of environmental auditing or other sound environmental management practices." *Id.*

¹⁵⁷ See Restatement of Policies Related to Environmental Auditing, 59 Fed. Reg. 38,455, 38,457 (1994).

¹⁵⁸ 60 Fed. Reg. 16,875 (1995).

¹⁵⁹ See *id.* at 16,877.

tion with the EPA.¹⁶⁰ Corporations, however, did not embrace this policy.¹⁶¹ This was primarily because the EPA had not made the policy permanent, and disclaimed any obligation to act in accordance with its own guidance.¹⁶²

In response to continued criticism and skepticism over the interim policy, the EPA issued its permanent audit policy in December, 1995.¹⁶³ On the surface, the permanent policy would appear to be rather similar to the interim policy, in that the EPA represents that it will not seek punitive or gravity-based penalties against companies which meet the seven conditions addressed by the interim policy, and satisfy an additional eighth condition that the violation not be repetitive in nature.¹⁶⁴ In many ways, however, the final policy is superior to the interim policy. Most notably, the final policy provides much needed clarification on two key issues. First, the final policy explicitly states that voluntary disclosure must be made to the EPA, rather than to state agencies, in order for the policy to apply.¹⁶⁵ Second, the final policy provides a bright line rule to determine when previous violations would bar a regulated entity from obtaining relief under the policy.¹⁶⁶

Even so, corporations have not embraced this new and improved version of EPA's environmental audit policy with any

¹⁶⁰ See *id.*

¹⁶¹ See Paul J. Curran & Gregory J. Wallace, *The New EPA "Interim Policy," Which Is Meant to Encourage Companies to Report Violations, May Have the Opposite Effect*, NAT'L L.J., July 31, 1995, at B4; Gail S. Port, *Does EPA Policy Really Provide Protection?*, N.Y.L.J., June 12, 1995, at S1.

¹⁶² The Interim Policy stated:

This interim policy is not final agency action, but is intended solely as guidance. It is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States. EPA officials may decide to follow the guidance provided in this interim policy or to act at variance with the guidance based on analysis of case-specific facts and circumstances.

Voluntary Environmental Self-Policing and Self-Disclosure Interim Policy Statement, *supra* note 158, at 16,879.

¹⁶³ Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. 66,706 (1995).

¹⁶⁴ See *id.* at 66,708-10.

¹⁶⁵ See *id.* at 66,711.

¹⁶⁶ See *id.* at 66,712.

more enthusiasm than they greeted the interim version.¹⁶⁷ Again, this is because several fundamental shortcomings of the interim policy were not corrected in promulgating the final policy. Most importantly, the policy seems to have no binding effect whatsoever.¹⁶⁸ Also, the policy is not valid in judicial proceedings.¹⁶⁹ Finally, the policy conflicts with, and arguably negates, the audit privileges afforded by many states. Thus far, the legislatures of seventeen states have enacted some form of audit privilege or immunity law in which information developed from voluntary environmental audits conducted by companies cannot be used in enforcement actions.¹⁷⁰ The EPA, however, refusing to acknowledge any such audit privilege or immunity, "remains opposed to state legislation that does not include these basic protections, and reserves its right to bring independent action against regulated entities for violations of federal law."¹⁷¹

5.3.3. *Sealing the Conceptual Cracks*

Although it might be too dramatic a change to *mandate* the involvement of environmental professionals in a company's environmental affairs as does the EMAS, it would certainly seem prudent to eliminate any obstacles to the *voluntary* inclusion of these professionals in the disclosure process. Although EPA policies generally discourage companies from conducting and disclosing environmental audits, the SEC might play a key role in encouraging the EPA to refrain from punishing corporations which engage in good faith environmental audits. For both the

¹⁶⁷ See Laurence S. Kirsch & J. Walter Veirs, *Although the EPA Recently Issued Its Final Policy on the Confidentiality of a Company's Environmental Self-Audit, Numerous Questions Remain Unanswered*, NAT'L L.J., Mar. 11, 1996, at B5.

¹⁶⁸ Although the EPA does not explicitly disavow an obligation to follow the final policy, as it does in the interim policy, it still qualifies the applicability of the final policy by indicating that "[t]he policy is not final agency action, and is intended as guidance. It does not create any rights, duties, obligations, or defenses, implied or otherwise, in any third parties." Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, *supra* note 163, at 66,712.

¹⁶⁹ See *id.*

¹⁷⁰ See Daniel M. Steinway & Steven L. Humphreys, *States Assume Greater Role In Policy Implementation*, N.Y.L.J., June 3, 1996, at S5.

¹⁷¹ Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, *supra* note 163, at 66,710.

EPA and the SEC to adopt a binding joint policy that recognizes the audit privileges and immunities afforded by the states, or creates federal privileges or immunities, would be a good first step. An even better solution would be for Congress to decisively pass legislation that grants federal privilege and immunity for information obtained and disclosed as a result of environmental audits, thereby allowing the public greater access to trustworthy information verified by environmental professionals.¹⁷²

6. CONCLUSION

The EMAS provides a model for increasing the efficiency of environmental law in general, and for improving the effectiveness of environmental disclosure in particular. Perhaps its real value as a model lies in the specific ideas it provides for improving environmental disclosure in the United States. Taking a lesson from another European role model, it is perhaps best for the United States to adopt an approach similar to the little Dutch boy's: reforming a viable system rather than replacing it entirely. Thus, in making environmental disclosure more efficient, it would be desirable for the SEC to incrementally adopt the most pertinent provisions of the EMAS by encouraging standardized disclosure and by providing access to the expertise of environmental professionals throughout the disclosure process. Although these reforms are not be the only lessons to learn and apply from the EMAS experiment, risk communication theory suggests that they might be the most effective.

¹⁷² Such legislation was introduced to Congress in early 1995. See S. 582, 104th Cong. (1995); H.R. 1047, 104th Cong. (1995). No action has been taken on these bills, however, since their introduction. In large part, this is because of lack of political support. Primarily, Vice President Al Gore, speaking for the Clinton Administration, opposes these bills. See *Vice President Speaks Out Against Bills to Grant Privilege for Environmental Audits*, 27 Env't Rep. (BNA) No. 9, at 502-03 (June 28, 1996). However, even one of the original sponsors of this legislation, former Senator Mark Hatfield, conceded, "I think improvement needs to be made to this bill." *Hatfield Tells Judiciary Panel His Audit Bill Needs Some Improvements*, Daily Rep. for Executives (BNA), May 22, 1996, available in LEXIS, Legnew Library, Drexec File.