

January 1997

Devising a Compliance Strategy under the ISO 14000 International Environmental Management Standards

Donald A. Carr

William L. Thomas

Follow this and additional works at: <http://digitalcommons.pace.edu/pelr>

Recommended Citation

Donald A. Carr and William L. Thomas, *Devising a Compliance Strategy under the ISO 14000 International Environmental Management Standards*, 15 Pace Envtl. L. Rev. 85 (1997)
Available at: <http://digitalcommons.pace.edu/pelr/vol15/iss1/7>

ARTICLES

Devising a Compliance Strategy Under the ISO 14000 International Environmental Management Standards

DONALD A. CARR AND WILLIAM L. THOMAS*

I. Introduction

Over the last twenty-five years, Congress and the U.S. Environmental Protection Agency (EPA or Agency) have built a pervasive system of governmental controls aimed at regulating chemicals and wastes, and safeguarding land, water and air. Until the mid-1980s enforcement primarily emphasized civil and administrative penalties, cleanup orders, utilization of new pollution control technologies or other supplemental remedial projects. Since then, federal and state prosecutors have been increasingly threatening criminal sanctions, including million dollar fines and incarceration, and targeting major businesses as well as corporate officers, directors and employees.¹ This deterrent message,

* Donald A. Carr, J.D. 1974, George Washington University; B.A. 1970, Cornell University. Mr. Carr is managing partner of the Washington D.C. office of the New York-based law firm of Winthrop, Stimson, Putnam & Roberts, and currently serves as Chair of the International Environmental Law Committee in the ABA section of Natural Resources, Energy, and Environmental Law.

William L. Thomas, J.D. 1989, Georgetown University; B.A. 1986, St. Olaf College. Mr. Thomas is an associate with Winthrop, Stimson, Putnam & Roberts' Washington D.C. office.

1. In some instances, the Environmental Protection Agency has brought an enforcement action, or "overfiled," against firms even though a state agency has already taken action with respect to the same violations. See *In re Harmon*

although somewhat indiscriminate, is not falling on deaf ears. U.S. businesses, foreign companies involved in transactions with U.S. firms, and foreign companies with business enterprises in the U.S. are taking a much closer look at the risk of criminal prosecution for environmental violations and the precautions that can be taken to reduce the risk of violations and maximize chances of securing prosecutorial leniency if an enforcement action is brought.

There is a contemporaneous, somewhat interrelated movement in many corporations to implement comprehensive environmental management systems. Major firms such as Apple Computer, Colgate-Palmolive, Nissan, Hitachi, Lufthansa Airlines, Anheuser-Busch, and the Coca-Cola Company² are rethinking traditional production methods and discovering new ways to lower costs and improve the value of

Electronics Inc., RCRA No. VII-91-H-0037, 1997 WL 133778, at 2 (EPA Mar. 24, 1997); see generally Mark J. Zimmerman, *RCRA Over filing By EPA: The Start of a Trend*, 13 ENVTL. COMPLIANCE & LITIG. No. 1, at 5 (June 1997).

2. Some of the leaders in this area participate in voluntary initiatives such as the Global Environmental Management Initiative and the International Chamber of Commerce Charter for Sustainable Development. The following texts survey current trends and recent developments in environmental management strategy: See LIVIO D. DESIMONE ET AL., *ECO-EFFICIENCY: THE BUSINESS LINK TO SUSTAINABLE DEVELOPMENT* (1997); GREENING THE BOARDROOM: CORPORATE GOVERNANCE AND BUSINESS SUSTAINABILITY (Grant Ledgerwood ed. 1997); ISO 14001 AND BEYOND: ENVIRONMENTAL MANAGEMENT SYSTEMS IN THE REAL WORLD (Christopher Sheldon ed. 1997); CORPORATE ENVIRONMENTAL MANAGEMENT (Richard Welford ed. 1996); JOHN WASIK, *GREEN MARKETING AND MANAGEMENT: A GLOBAL PERSPECTIVE* (1996); FRANCES CAIRNCROSS, *GREEN, INC.* (1995); RICHARD WELFORD, *ENVIRONMENTAL STRATEGY & SUSTAINABLE DEVELOPMENT: THE CORPORATE CHALLENGE FOR THE TWENTY-FIRST CENTURY* (1995); BRUCE W. PIASECKI, *CORPORATE ENVIRONMENTAL STRATEGY: THE AVALANCHE OF CHANGE SINCE BHOPAL* (1995); FRANCES MCINERNEY & SEAN WHITE, *THE TOTAL QUALITY CORPORATION* (1995); DAVID HUNT & CATHERINE JOHNSON, *ENVIRONMENTAL MANAGEMENT SYSTEMS* (1995); *ECO-MANAGEMENT AND ECO-AUDITING: ENVIRONMENTAL ISSUES IN BUSINESS* (Linda S. Spedding et al. eds., 1993); see also *THE GREENING OF INDUSTRIAL ECOSYSTEMS* (Braden R. Allenby & Deanna J. Richards eds., 1994). For additional background see 27 COLUM. J. WORLD BUS. No. 3,4 (1992); 4 REV. EUR. COMMUNITY & INT'L ENVTL. L. No. 2 (1995). Jane C. McGuire examines the contributions of the Global Environmental Management Initiative in *The Global Environmental Management Initiative: Helping Business Balance Economic and Environmental Sustainability*, 4 REV. OF EUR. COMMUNITY & INT'L ENVTL. L. 113 (1995), and Lee M. Thomas describes the activities of the International Chamber of Commerce Charter for Sustainable Development in *The Business Charter for Sustainable Develop-*

products through such techniques as benchmarking, life-cycle analysis, design for disassembly, cost-impact analysis, and environmental (or eco-) labeling. Businesses that once considered environmental regulation solely in the context of risk analysis are now looking closely at the way it promotes innovation and ultimately affects competitiveness.³ The greening of industry is, in many respects, a global trend affecting small and large companies in almost every major sector. Firms with this sort of approach to their environmental footprint and public image should generally be less susceptible to prosecution, and better able to defend against any charges which may be levied against them.

Also closely interwoven are national, regional and international environmental management standards such as the ISO 14000 series of international standards presently being developed by the International Organization for Standardization. Companies achieving certification under such regimes may expect enhanced relations with employees, the public, and government. Certification might also enable some firms to expand market share, gain easier access to permits and authorizations, improve cost control, meet end-product manufacturer criteria, demonstrate reasonable care, and reduce overall liability exposure. The implications of such programs could be profound, especially for U.S. based transnational companies with operations or customers in Europe and Asia, where certification may provide a means of avoiding multiple registrations, labels, and conflicting requirements. An incidental but not insignificant benefit to the ISO-driven exercise is the general enhancement of defensive positioning in regulatory disputes which might ripen into environmental prosecution scenarios.⁴

ment: Action Beyond UNCED, 1 REV. OF EUR. COMMUNITY & INT'L ENVTL. L. 325 (1992).

3. See Tony Lent & Richard P. Wells, *Corporate Environmental Management: Study Shows Shift from Compliance to Strategy*, 1 TOTAL QUALITY ENVTL. MGMT. 379 (1992).

4. See Joseph Cascio, *Implications of ISO 14001 For Regulatory Compliance*, NAT'L ENVTL. ENFORCEMENT J. June 1996 at 35, 38 ("Showing conformance to the elements of ISO 14001 could be very advantageous in civil and criminal liability suits.").

This Article examines these developments, emphasizing the role of a well-conceived corporate compliance program. In the first section, we describe the evolution of criminal enforcement in environmental regulation and offer some suggestions to companies striving to navigate a hostile regulatory current. We follow this discussion with a brief survey of the "beyond-compliance" movement. In doing so, we will explain the integral role of compliance auditing in ISO 14000 and other environmental management systems (EMS). Finally, we will offer some suggestions on EMS design and on how firms may incorporate compliance program elements within their overall implementation strategies.

II. Prosecutions Against Corporate Criminal Liability for Environmental Violations and Compliance Programs: Justifying Prosecutorial Leniency

A. Environmental Prosecution: A New World Order?

It is a serious understatement to say that the enforcement of corporate environmental crime has been in rapid evolution in the last few years. There are a number of forces at work beneath this upsurge, but one thing is clear: the old days are gone. Executives are expected, on pain of corporate and personal criminal penalty, to direct their affairs in such a way as to achieve and maintain full compliance with environmental laws. The knowledge standards of many environmental laws and regulations allow a prosecutor to target officers and managers even where they did not intend to violate the law.⁵ This trend does not appear to be abating much yet in the current deregulatory or "reinvention" vogue. There still seems to be a reticence in Congress and the EPA to concede that it may be wrongheaded or unfair to criminalize innocent transgressions; that would be perceived as the epitome of being "soft on polluters."

5. See generally Kevin A. Gaynor et al., *Significant RCRA Criminal Developments: 1995 Update*, Env't Rep. (BNA) 2275, 2277 (Mar. 29, 1996); Katherine H. Setness, *Statutory Interpretation of Clean Water Act Section 1319(C)(2)(A)'s Knowledge Requirement: Reconciling the Needs of Environmental and Criminal Law*, 23 *ECOLOGY L.Q.* 447, 488-89 (1996); Donald A. Carr, *Prosecutors Out of Control*, *ECO*, June 1993, at 56.

The enforcement community and prosecutors at both the state and federal levels proclaim this shift as healthy and long overdue given the modest impact of civil sanctions on corporate behavior.⁶ Bolstered by developments in areas such as federal sentencing, prosecutors increasingly push for larger fines and stricter penalties, often with success. Industry is uneasy because few firms are in perfect compliance with the myriad of waste, chemical, water and air regula-

6. Under federal sentencing guidelines prescribing the sentence a judge may impose in a particular instance, jail time will be longer and more frequently imposed. See FEDERAL SENTENCING GUIDELINES MANUAL § 8C2.1 (1994) [hereinafter ORGANIZATIONAL GUIDELINES]. Although the Organizational Guidelines penalty schedule does not strictly apply to environmental crimes at this juncture, environment-specific provisions are being considered. In the meantime, courts which used to be extremely reluctant about incarceration in environmental cases are increasingly meting out stiff sentences. The Agency's approach in the prosecution of Morrell for violations of the Clean Water Act exemplifies the trend. See *United States v. John Morrell & Co.*, No. 96-CR-40004 (D.S.D. May 28, 1996), Chiquita Brands International, parent of John Morrell & Co. until December 1996, had reported the violations to the EPA. According to the Agency, the company's disclosure, coupled with its subsequent cooperation, led the government to seek a smaller fine than EPA otherwise would have sought, given the nature of Morrell's conduct. Even so, the fine totaled \$3 million. A representative sampling of cases, such as *United States v. Rudd*, No. CA-6-96-CR28 (E.D. Texas June 13, 1996) (President of road stripping contracting business pled guilty to violations of Clean Water Act and agreed to pay \$250,000 for the benefit of a local ecological education center); *United States v. Rockwell Int'l Corp.*, No. CR96-372-MRP (C.D. Cal. Apr. 8, 1996) (\$6.5 million in connection with criminal hazardous waste charges stemming from a 1994 explosion that killed two workers); *United States v. Consolidated Rail Corp.*, No. CR95-10227-DPW (D. Mass Oct. 23, 1995) (Conrail sentenced to five years probation and ordered to pay a criminal fine of \$2.75 million for the illegal discharge of oil and grease into the Charles River); and *United States v. Regency Cruises, Inc.*, No. 94-245-CR-T-21(C) (M.D. Fla. Mar. 8, 1995) (Regency received a \$250,000 fine for dumping plastic garbage into the Gulf of Mexico in violation of the Act to Prevent Pollution from Ships) further illustrates the pattern. State enforcement priorities are comparable. See, e.g., *Massachusetts v. H.C. Starck, Inc.*, No. 95-2292-001 (Mass. Super. Ct. Jan. 4, 1996) (Massachusetts manufacturing company ordered to pay \$1.37 million in fines for criminal violations of state environmental laws that resulted in a 1993 explosion injuring eleven firefighters and two others); *Arizona v. TRW Vehicle Safety Sys., Inc.*, No. CV95-18901 (Ariz. Nov. 11, 1995) (\$1.7 million fine for violations of hazardous waste management requirements – the biggest corporate criminal fine in the history of the state); see also *Exposures to Medical Waste Draw \$3.3 Million Fine Against Rhode Island Firm*, Daily Env't Rep. (BNA) 71 (Apr. 13, 1995).

tions.⁷ This is especially true of certain sectors of business and of older facilities. Many businesses face a real risk of prosecution, which should genuinely motivate them to clean up their environmental acts and not impose upon the public the health and welfare costs of pollution. While this greater severity is a popular policy, it has several troublesome aspects. To understand them requires a brief review of how the enforcement of environmental law evolved to its present status.

B. The History of the Environmental Crimes Program

Until 1983, there was no organized environmental crimes program at the federal level. In fact, except for a few notable prosecutions such as the James River Kepone case⁸ and in the area of wildlife trade, there was essentially no criminal component to environmental enforcement. There were few U.S. Attorneys Offices with any interest in, or resources for, the area. The Department of Justice's (DOJ) establishment of a fledgling, three-lawyer Environmental Crimes Unit in 1983 was a start. In that year and each of the

7. One commentator goes so far as to characterize the environmental regulatory regime in the U.S. as essentially "compliance proof." William A. Hancock, *Environmental Compliance Programs*, in CORP. COUNSEL GUIDE TO ENVTL. COMPLIANCE & AUDITS 4.001, 4.003 (William A. Hancock ed., 1993). On the complexity of environmental law and the problems this presents for compliance, see Richard F. Chatfield-Taylor, *Environmental Compliance: Negotiating the Regulatory Maze*, 3 MO. ENVTL. L. & POL'Y REV. 3 (1995); *Industry Representatives Claim EPA Too Adversarial, Fault Criminal Sanctions*, Daily Rep. for Executives (BNA) A-30 (Dec. 8, 1995); Marianne Lavelle, *Environmental Vise: Law, Compliance*, NAT'L L.J., 1993 CORP. COUNS. SURVEY, Aug. 30, 1993, at S1; James W. Moorman & Lawrence S. Kirsch, *Environmental Compliance Assessments: Why Do Them, How To Do Them, And How Not to Do Them*, 26 WAKE FOREST L. REV. 97-98 (1991). It is particularly difficult for firms to manage their reporting burdens. See generally Roger M. Klein, *The Continuing Nature of Notification Violations Under Environmental Statutes*, 26 ENVTL. L. 565 (1996). Thus, for example, few observers probably were surprised when, in June of 1996, the EPA had fined forty-two companies with fines totaling \$2 million for failure to report chemical releases to the environment under Section 313 of the Emergency Planning and Community Right To Know Act. See *EPA Fines 42 Firms Total Of \$2 Million For Not Reporting Chemical Releases*, Daily Rep. for Executives (BNA) A-13 (July 16, 1996).

8. See *United States v. Allied Chem. Corp.*, 420 F. Supp. 122 (E.D. Va. 1976).

next two, an average of approximately forty environmental indictments were handed up. Then Fiscal Year (FY) 1987 saw an explosive trebling to 127 indictments. By FY 1994, the EPA had pushed the record for the number of enforcement actions with sanctions in a given year up to 2246. The EPA initiated 525 criminal cases, setting records in other categories, including: (i) 220 criminal case referrals to the DOJ – a 57 % increase over the record of 140 set in 1993; (ii) criminal charges brought against 250 individual and corporate defendants – 55 % more than the record of 161 in 1993; (iii) ninety-nine years of jail sentences imposed – 33 % more than the 74.3 years imposed in 1993; and (iv) \$36.8 million in criminal fines – a 24 % increase over the 29.7 million assessed in 1993.⁹ Also during this period, enthusiasm on the part of state and local prosecutors sparked cooperative arrangements adding still more manpower.

The EPA could point to modest increases in some areas in FY 1995, e.g., criminal case referrals (up to 256 from 220 in FY 1994) and criminal cases initiated (up to 562 from 525 in FY 1994),¹⁰ though the overall figures disappointed many. Some observers pointed to a greater emphasis on case quality (rather than quantity) within the Office of Enforcement & Compliance Assurance, while others blamed the reorganization of the department, (real and threatened) budget reductions, and lack of direction¹¹ for what were thought in many

9. See EPA FY 1994 Enforcement and Compliance Assurance Accomplishments Rep. § 4-1, (1995); see generally *EPA Enforcement Efforts in FY 1994 Break Records for Actions, Fines Levied*, Daily Env't Rep. (BNA) AA-1 (Dec. 1, 1994); *EPA Has "Banner" Year for Enforcement Settlements*, Inside EPA Clean Air Rep. 31 (Dec. 15, 1994).

10. EPA enforcement statistics for FY 1995, widely publicized in the U.S., see generally *EPA Says Criminal, Civil Actions Against Polluters Hits Record High*, Daily Rep. for Executives (BNA) A-17 (July 24, 1996), reported in EPA, FY 1995 ENFORCEMENT AND COMPLIANCE ASSURANCE ACCOMPLISHMENTS REP. (1996).

11. See generally Peter Fairley, *Have Budget Cuts Blunted EPA Enforcement?*, CHEM. WK., Sept. 25, 1996, at 50; *DOJ Presses EPA To Speed Enforcement As Fiscal Year Winds Down*, INSIDE EPA WKLY. REP., Sept. 13, 1996, at 1; *GOP Questions Agency Claims That Budget Hurt Enforcement*, INSIDE EPA WKLY. REP., June 21, 1996, at 17; Kevin Gaynor et al., *supra* note 5, at 2275, 2279; *Regional Reorganizations Said to Be Hurting Enforcement Coordination*, INSIDE EPA WKLY. REP., Jan. 26, 1996, at 7; *EPA Officials Attribute Drop In*

circles to be sub-par numbers. In the words of the EPA's Deputy Administrator Sylvia Lowrance, the "environmental cop" returned to "the beat" in 1996, making over 260 criminal referrals.¹² The period of jail time to which defendants were sentenced during this period totaled 1160 months, up from 860 the previous year. The Agency also assessed \$76,660,670 in criminal fines, as compared with \$23 million in FY 1995.¹³ The numbers, and the pronouncements of Clinton Administration officials,¹⁴ indicate that criminal sanctions will remain a potent weapon in the Agency's enforcement arsenal well into the foreseeable future.¹⁵

Enforcement To New Compliance Policies, INSIDE EPA WKLY. REP. Nov. 3, 1995, at 16; *EPA Officials Fear Declining Enforcement Numbers Underestimate Success*, INSIDE EPA WKLY. REP., Oct. 6, 1995, at 1, 10-11; see also *EPA to Emphasize Rise In Compliance, But Doubts Over Data Remain*, INSIDE EPA WKLY. REP., May 17, 1996, at 14; *New EPA Ranking Scheme To Ensure Strong Criminal Case Selection*, INSIDE EPA WKLY. REP., Nov. 10, 1995, at 9.

12. Quoted in Cheryl Hogue, *Record \$76.7 Million in Criminal Fines Leads EPA Accomplishments for Fiscal 1996*, Daily Executive Rep. (BNA) A-27, A-29 (Feb. 26, 1997).

13. See EPA, FY 1996 ENFORCEMENT AND COMPLIANCE ASSURANCE ACCOMPLISHMENTS REP. § 2-1, at 2-2 – 2-3 (1997).

14. En route to the 1996 Democratic National Convention in Chicago, Illinois, President Clinton called for even greater resources to combat environmental crime, including new legislation that would make it possible to secure assets of environmental criminals more quickly, require stronger penalties for "the worst environmental crimes," and outlaw attempted environmental crimes. See generally *Reno Unveils Bill To Give Prosecutors New Powers To Fight Environmental Crimes*, Daily Rep. for Executives (BNA) AA-1 (Sept. 20, 1996); *Clinton Unveils Aggressive New Environmental Crime Bill*, INSIDE EPA WKLY. REP., Aug. 30, 1996, at 8; *Clinton Unveils \$1.9 Billion Plan To Bolster His Environmental Agenda*, Daily Rep. for Executives (BNA) AA-1 (Aug. 29, 1996); see also *Government Indicting More Officials, Fewer Corporations, Legal Panel Says*, Daily Rep. for Executives (BNA) A7 (Sept. 9, 1996). The text of the environmental proposals released by President Clinton in Kalamazoo, Michigan, August 28, 1996, are reproduced at page M-30 of the August 29, 1996, issue of BNA's Daily Report for Executives. Section by section analysis of the bill, entitled the Environmental Crimes and Enforcement Act of 1996 and unveiled September 19, 1996 by Attorney General Janet Reno, is offered in the Sept. 20, 1996 issue of the BNA Daily Report for Executives at page E-1. After President Clinton's re-election, Attorney General Janet Reno again called for tougher sanctions for polluters. See *Reno Says Administration Will Continue To Push Environmental Crime Legislation*, Daily Rep. for Executives (BNA) A-8 (Jan. 10, 1997).

15. The Agency increased the number of criminal investigators to 151 in Fiscal Year 1996, and planned to have 200 by the end of Fiscal Year 1997. See

The criminalization of environmental law is primarily an American phenomenon,¹⁶ yet a number of other countries have recently invested in enforcement infrastructure and

EPA, FY 1996 ENFORCEMENT & COMPLIANCE ASSURANCE ACCOMPLISHMENTS REP. at § 2-43; see generally Daniel R. Marcus, *A Breath of Fresh Air?*, CORP. COUNS. MAG., Feb. 1997, at 47, 48; *Number of EPA Criminal Investigators To Increase To 170 By End of Fiscal 1996*, Daily Rep. for Executives (BNA) A-11 (July 8, 1996); see also New OECA 'Operating Principles' Stress Traditional Enforcement Actions, INSIDE EPA WKLY. REP., Dec. 13, 1996, at 1.

16. For historical perspective, see generally Joel A. Mintz, *Rebuttal: EPA Enforcement and the Challenge of Change*, 26 *Envtl. L. Rep.* (Envtl. L. Inst.) 10538 (Oct. 1996); Carol E. Dinkins, *Criminal Enforcement of Environmental Regulations: The Genesis of Environmental Enforcement through Criminal Sanction*, in ENVIRONMENTAL CRIMINAL LIABILITY: AVOIDING AND DEFENDING ENFORCEMENT ACTIONS 1-20 (Donald A. Carr ed., 1995); JOEL A. MINTZ, ENFORCEMENT AT THE EPA HIGH STAKES AND HARD CHOICES (1995); JOHN F. COONEY ET AL., ENVIRONMENTAL CRIMES DESKBOOK 5-22 (1995); John F. Cooney et al., *Criminal Enforcement of Environmental Laws*, 25 *Envtl. L. Rep.* (Envtl. L. Inst.) 10,459 (Sept. 1995); David R. Hodas, *Enforcement of Environmental Law in a Triangular Federal System: Can There Not Be A Crowd When Enforcement Authority Is Shared By the United States, the States, and Their Citizens?*, 54 *Md. L. Rev.* 1552 (1995); Eric W. Orts, *Reflexive Environmental Law*, *Nw. U.L. Rev.* 1227, 1340 n.30 (1995); Steve Curran et al., *Environmental Crimes*, 32 *AM. CRIM. L. REV.* 245 (1995); Steven A. Herman, *EPA's Enforcement Priorities for Fiscal Year 1994*, *NAT'L ENVTL. ENFORCEMENT J.*, Feb. 1994, at 3; Daniel Riesel, *Criminal Enforcement and the Regulation of the Environment*, *ENVTL. LITIG.*, 1993, at 869; G. Nelson Smith, III, *Waking the Sleeping Giant: The Use of the Felony Sanctions Under CERCLA to Ensure Compliance with Environmental Laws*, 26 *CREIGHTON L. REV.* 449 (1993); *CORPORATE COUNSEL GUIDE TO ENVIRONMENTAL COMPLIANCE AND AUDITS* 13.001 - 13.053 (William A. Hancock ed., 1993); Helen J. Bruner, *Environmental Criminal Enforcement: A Retrospective View*, 22 *ENVTL. L.* 1315 (1992); Alexa B. Pappas, *The Clean Air Act Amendments of 1990: Enhanced Criminal Liability*, 3 *VILL. ENVTL. L. REV.* 181 (1992); Dick Thornburgh, *Criminal Enforcement of Environmental Laws - A National Priority* 59 *GEO. WASH. L. REV.* 775 (1991); Allan R. Gold, *Increasingly, Prison Term Is the Price for Polluters*, *N.Y. TIMES*, Feb. 15, 1991, at B6; Robert W. Adler & Charles Lord, *Environmental Crimes: Raising the Stakes*, 59 *GEO. WASH. L. REV.* 781 (1991); James P. Calve, *Environmental Crimes: Upping the Ante for Noncompliance with Environmental Laws*, 133 *MIL. L. REV.* 279 (1991); James M. Strock, *Environmental Criminal Enforcement Priorities for the 1990s*, 59 *GEO. WASH. L. REV.* 916 (1991); EPA, ENFORCEMENT FOUR-YEAR STRATEGIC PLAN: ENHANCED ENVIRONMENTAL ENFORCEMENT FOR THE 1990's (1990); F. Henry Habicht II, *The Federal Perspective on Environmental Criminal Enforcement: How to Remain on the Civil Side*, 17 *Envtl. L. Rep.* (Envtl. L. Inst.) 10478 (Dec. 1987); Judson W. Starr, *Countering Environmental Crimes*, 13 *B.C. ENVTL. AFF. L. REV.* 379 (1986).

toughened penalties for non-compliance.¹⁷ The European

17. Other countries are beginning to place a greater emphasis on criminal enforcement. For a survey of recent developments, see generally Rod Hunter & Frederick Hendricks, *EU Nations Step Up Environmental Enforcement: Companies With Facilities in Europe Should Take Measures to Minimize Liability Exposure* NAT'L L.J., Oct. 27, 1997, at B-10. Law Amended to Make Illegal Logging Punishable by Automatic Time in Jail, Daily Env't Rep. (BNA) A-3 (May 14, 1997); *Ruling Imposing Stiffest Penalty Ever For Environment Crime Upheld By High Court*, Int'l Env't Rep. (BNA) 205 (Mar. 5, 1997); *Gummer Says Government To Crack Down On Environmental Crimes Like CFC Smuggling*, Int'l Env't Rep. (BNA) 977 (Oct. 30, 1996); Rachel Mulheron, *Criminal Enforcement Of Environmental Law: Limitations And "Flat Earth Thinking,"* QUEENSLAND L. SOC'Y J., Oct. 1996, at 427; Steven A. Herman & Lawrence I. Sperlign, *Emerging Networks of Environmental Enforcement and Compliance Cooperation in North America and the Western Hemisphere*, and other articles in the June 1996 issue of the National Environmental Enforcement Journal; Sevine Ercmann, *Enforcement of Environmental Law in the United States and European Law: Realities and Expectation*, 26 ENVTL. L. 1213 (1996); Carlos de Miguel & Idoya Aguirre, *Environmental Crimes In Spain: The New Criminal Code*, EUR. ENVTL. L. REV., July 1996, at 206; *Tenfold Increase In Illegal Dumping Fines Planned For Waste Disposal Law Amendments*, Int'l Env't Rep. (BNA) 569 (June 26, 1996) (The Ministry of Health and Welfare in Japan tentatively plans to raise the maximum fine on illegal dumping to at least \$93,400 from the present level of \$9,340); *Prosecutions of Nature Up, Official Says*, Int'l Env't Rep. (BNA) 425 (May 15, 1996) (describing 100% increase in criminal prosecution for violation of nature protection laws since 1990 in Israel); Scott C. Fulton & Lawrence I. Sperlign, *The Network of Environmental Enforcement and Compliance Cooperation in North America and the Northern Hemisphere*, 30 INT'L LAW. 111 (1996) (analyzing the policy and legal challenges encountered in building an international environmental enforcement and compliance cooperation network composed of officials from the U.S., Mexico, and Canada); *Firms Should Be Held Accountable For Crimes Against Environment, U.N. Meeting Concludes*, Int'l Env't Rep. (BNA) 360 (May 17, 1995); David Strubb & Eszter Torok, *New Environmental Legislation in Hungary: Implications for Investors*, 4 EUR. ENVTL. L. REV. 312 (1995); Mario Gutierrez & Mary Ellen Sikabonyi, *Italy: New Fines for Environmental Damage*, 4 EUR. ENVTL. L. REV. 258 (1995); Janey Cohen, *Governments Seen Honing Regulatory Eye, Placing Greater Importance on Enforcement*, Int'l Env't Rep. (BNA) 834 (Nov. 1, 1995); *Asia: Regulatory Climate Seen Changing Focus, Placing More Importance on Enforcement*, Daily Env't Rep. (BNA) 203 (Oct. 20, 1995); Lawrence Pratt, Richard P. Wells, & C. Foster Knight, *The Globalization of Environmental Management: Helping Industry Worldwide Advance Toward Sustainable Development*, 4 REV. OF EUR. COMMUNITY & INT'L ENVTL. LAW 106, 108 (1995) (discussing the efforts of the Federal Environmental Prosecutor's Office in Mexico); S.L. Smith, *An Iron Fist in the Velvet Glove: Redefining the Role of Criminal Prosecution in Creating an Effective Environmental Enforcement System*, 19 CRIM. L.J. 12 (1995) (describing trends in Australia); Jeremy Rowan-Robinson & Andrea Ross, *Enforcement of Environmental Regulation in Britain: Strengthening the Link*, J. PLANNING & ENV'T L., Mar. 1994, at 200; K. Bubna-Litic, *Criminal Liability of Company Di-*

Community's (EC) Fifth Environmental Action Program, for example, highlights enforcement, envisaging the establishment of an implementation and enforcement network composed of environmental inspectors and enforcement bodies of the member states and the EC Commission aided by the European Environment Agency.¹⁸ Other countries may well follow the lead of the U.S. in this area, giving further incentive to firms to develop rigorous corporate compliance programs.

C. Selecting Targets for Environmental Enforcement

The major category of defendants in environmental cases used to be the so-called "midnight dumpers" and others at the seamy edges of commerce. In earlier years, it was often fairly easy to portray the conduct as criminal. Such cases frequently involved defunct or failing businesses in which the corporate entity was insignificant for penalty purposes and incarceration for the individual malefactors was not hugely controversial. Similarly, many of the earlier cases against

rectors for Pollution Damage: A Comparative Approach Between the US and Australia, 4 AUSTRALIA J. CORP. L. 417 (1995); Z. Lipman & L. Roots, *Protecting the Environment Through Criminal Sanctions: the Environmental Offenses and Penalties Act 1989 (NSW)*, 12 ENVTL. & PLAN. L.J. 16 (1995) (New South Wales); Michael J. Penders, *The Third Meeting of the INTERPOL Working Party on Environmental Crime: Working on the Infrastructure of International Environmental Enforcement*, NAT'L ENVTL. ENFORCEMENT J., June 1995, at 41; Antonio Jose L.C. Monteiro & Pinheiro Neto Advogados, *Environmental Regulation in Brazil*, 16 COMP. L. Y.B. OF INT'L BUS. 63, 80 (1994); Kimmo Nuotio, *Finland: Crimes Against the Environment*, 65 INT'L REV. PENAL L. 924 (1994); Marta Bitto & Sandor Fulop, *Crimes Against the Environment*, 65 INT'L REV. PENAL L. 973 (1994); Christina Steen-Sundberg, *Crimes Against the Environment in Sweden*, 65 INT'L REV. PENAL L. 1163 (1994); Barbara A. Boczar, *Toward A Viable Environmental Regulatory Framework: From Corporate Environmental Management To Regulatory Consensus*, 6 DEPAUL BUS. L.J. 291, 300 (1994); George F. Curran III, *Pacific Rim Environmental Regulation: A Western Perspective of Several Countries' Environmental Liability Laws*, 3 J. INT'L L. & PRAC. 47 (1994).

18. *Towards Sustainability: A European Community Program of Policy and Action in Relation to the Environment and Sustainable Development*, 1993 O.J. (C.138) 1. For further background on the Fifth Environmental Program, see generally H.U. Liniger, *EC Environmental Law*, NAT. RESOURCES & ENV'T, Spring 1996, at 61, 63; Julie A. Harms, *The European Community's Development of an Environmental Policy: The Treaty of European Union*, 6 TUL. ENVTL. REV. 397 (1993); Alexandre Kiss & Dinah Shelton, *MANUAL OF EUROPEAN ENVIRONMENTAL LAW* 21-22 (1993).

“respectable” companies involved blatant environmental recalcitrance, such as total disregard of the Clean Water Act, or outright falsification in reporting of environmental data. Again, there was manifestly bad conduct and the defense was hard-pressed to find a sympathetic ear. Cases like this are still prosecuted, of course, and it is clearly important to continue to root out that straightforwardly culpable behavior. With due respect to government investigators,¹⁹ however, today’s defendant is likely to be a Fortune 500 company and/or its officer,²⁰ and the prosecution theory is as likely to be negligence or imputed knowledge that some complex, expensive environmental problem was not fully or timely attended.²¹

Certainly, those who fail to act in good faith with respect to the applicable environmental regulatory scheme should get no moment of safe harbor because they are otherwise upscale or economically productive. To the contrary, those who, with ample means to meet compliance or cleanup costs, deliber-

19. See *Polluters Rarely Ignorant of Law, Seek to Cut Costs, FBI Officials Tell BNA*, Daily Rep. for Executives (BNA) 14 (May 20, 1996).

20. See *Government Indicting More Officials, Fewer Corporations, Legal Panel Says*, Daily Rep. for Executives (BNA) A-7 (Sept. 9, 1996); see generally Jonathan P. Guy, *The Criminalization of Environmental Law in the United States: Is There Any Better Way to Alienate the Regulated Community?*, STAN. ENVTL. L.J., Special Issue 1995, at 113.

21. See generally Kenneth Berlin, *Criminal Liability of Corporate Officers, Directors, and Employees Under U.S. Environmental Laws*, in ENVIRONMENTAL CRIMINAL LIABILITY: AVOIDING AND DEFENDING ENFORCEMENT ACTIONS (Donald A. Carr ed. 1995); JOHN F. COONEY ET AL., ENVIRONMENTAL CRIMES DESKBOOK 22-34 (1995); L.A. Larson, III & J.P.P. Overton, *Representing Corporate and Individual Clients in Criminal Prosecution for Environmental Pollution: A Primer*, 19 TUL. MAR. L.J. 113 (1994); Colleen C. Murnane, *Criminal Sanctions for Deterrence Are a Needed Weapon, but Self-Initiated Auditing Is Even Better: Keeping the Environment Clean and Responsible Corporate Officers Out of Jail*, 55 OHIO ST. L.J. 1181, 1186-92 (1994); Janet S. Kole & Hope S. Lefebber, *The New Environmental Hazard: Prison*, 41 RISK MGMT. 37 (1994); Barry M. Hartman & Charles A. Monaco, *The Present Use of the Responsible Corporate Officer Doctrine in the Criminal Enforcement of Environmental Laws*, 23 ENVTL. L. REP. (Envtl. L. Inst.) 10145 (Mar. 1993); G. Nelson Smith III, *No Longer Just A Cost of Doing Business: Criminal Liability of Corporate Officials for Violations of the Clean Water Act and the Resource Conservation and Recovery Act*, 53 LA. L. REV. 119 (1992); Janet L. Woodka, *Sentencing the CEO: Personal Liability of Corporate Executives for Environmental Crimes*, 5 TUL. ENVTL. L.J. 635 (1992); Frederick W. Addison, III & Elizabeth E. Mack, *Creating an Environmental Ethic in Corporate America: The Big Stick of Jail Time*, 44 SW. L.J. 1427 (1991).

ately choose to maximize their gain by corner-cutting ought to be defendants. Nevertheless, there is a limit beyond which it is no longer realistic or fundamentally fair to criminalize mere mistakes in judgment, such as in the spill reporting requirements area, where there are frequently multiple tenable interpretations. Yet an aggressive prosecutor can often fashion a charge superficially and literally faithful to the negligence standard or even the statutory definition of "knowing."²² This systemic tension is especially pronounced in the context of general DOJ and specific Environment and Natural Resources Division policy guidance in favor of charging responsible individuals along with their firms.²³

D. Growing Corporate Environmental Consciousness

Prosecutors may not realize the extent to which they have succeeded in getting their point across to at least much of corporate management. For a combination of reasons headed by an appropriate aversion to enforcement consequences and complementary concern for valuable materials lost in wastestreams, enterprises have become much better at environmental self-examination and self-correction. As will be discussed in detail below, most major businesses now conduct environmental audits, defined under the EPA policy as "systematic, documented, periodic and objective review[s] by regulated entities of facility operations and practices related to meeting environmental requirements,"²⁴ or employ consultants to critique management systems and regulatory compliance. This salutary development deserves encouragement, as

22. See generally John F. Cooney et al., *Criminal Enforcement of Environmental Laws: Part II – The Knowledge Element in Environmental Crimes*, 25 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 10,525 (Oct. 1995); *Civil Enforcement Fails to Address Causes of Noncompliance, Conference Told*, *Env't Rep. (BNA)* 1402 (Dec. 15, 1995).

23. See discussion *infra* Part II.F.1.

24. U.S. Environmental Protection Agency, *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 *Fed. Reg.* 66,706, 66,710 (Dec. 22, 1995) (see discussion *infra* Part II.F.1.); see also *Restatement of Policies Related to Environmental Auditing*, 59 *Fed. Reg.* 38,455 (EPA 1994); *Environmental Auditing Policy Statement*, 51 *Fed. Reg.* 25,004, 25,006 (EPA 1986).

in the end it is only through self-driven change that significant, across-the-board improvement is likely to occur. Government enforcement will never catch a big fraction of violations. But some Agency officials and government prosecutors, figuring out that voluntary audit documents may candidly reveal infractions and provide, in effect, a road map to indictment, have been too inclined to seek punishment on the basis of information obtained from the self-examination process.²⁵ In the case of Procter & Gamble Manufacturing Co.'s payment of \$381,000 to settle allegations that it was eight years late in installing proper air pollution control equipment to reduce methanol emissions at its Sacramento plant,²⁶ little was made of the fact that the soap maker's lapse was uncovered through the company's own good faith compliance inspection.²⁷ Making "examples" of lawbreakers is much of what enforcement is about, but in such applications the examples are counterproductive. In many cases, the threat that information developed in an audit might be used to found criminal charges against the executive who commissioned it may be sufficient persuasion against undertaking the audit.

Legislators in some states have enacted laws creating a blanket privilege for environmental audit materials as the

25. See, e.g., *United States v. Weyerhaeuser Co.*, No. CR90-298S (W.D. Wash. Nov. 21, 1990). On disclosure risks, see generally Lynn L. Bergeson & Lisa M. Cambell, *Carrot or Stick: The Debate Over Environmental Auditing*, *The Wash. Law.*, Sept. – Oct. 1997, at 38; *Environmental Auditing*, *Cal. Env'tl. Compliance Monitor*, at 1 (May 20, 1996); Elizabeth Kirschner, *Self-Incrimination Remains Major Problem with Environmental Audits*, 72.34 *CHEM. & ENG'G NEWS* (1994), at 13; Patrick J. Ennis, Note, *Environmental Audits: Protective Shields or Smoking Guns?*, 42 *WASH. U. J. URB. & CONTEMP. L.* 389 (1992); K. Warren & Jill Manko, *Environmental Audits: A Cure that Can Kill the Patient*, 1.3 *J. OF ENVTL. REG.* (1992); *Auditing and Criminal Enforcement*, *Env'tl. F.*, Jan.-Feb. 1992, at 36; William N. Farran, III & Thomas L. Adams, Jr., *Environmental Regulatory Objective: Auditing and Compliance or Crime and Punishment*, 21 *Env'tl. L. Rep.* (Env'tl L. Inst.) 10,239 (May 1991); *Environmental Audits: Not for the Halfhearted*, *Env'tl. Mgr.* 3 (1990); and discussion *infra* Part II.F.2.

26. *United States v. Procter & Gamble Mfg. Co.*, CIV-S-96-0634EJGPAN (E.D. Cal. Apr. 16, 1996).

27. See Chris Bowman, *Government Socks P & G for Pollution Violations*, *SACRAMENTO BEE*, Apr. 2, 1996, at B4. Procter & Gamble's practices, deemed by EPA as so worthy of sanction, had previously been approved by the local Air Quality Management District.

answer to such concerns, while lawmakers in other jurisdictions have not, reasoning that such insulation is inappropriate. A consensus appears to be growing, however, in favor of a level of protection against criminal charges for firms that have genuine comprehensive audit systems, where prompt response is made to any environmental violations that are uncovered.²⁸ Yet the balance between providing this incentive for improved compliance, and preventing the manipulative use of “audits of convenience” as cover for violations, has and will continue to be difficult to define and implement. The EPA and DOJ have reduced some of the ambiguity and unfairness of audits through recent initiatives in the enforcement context,²⁹ but the controversy will likely continue well into the foreseeable future.

E. Changing and Inconsistent Concepts of When Pollution Is a Criminal Violation

One of the most agonizing questions in environmental law under the new world order described above concerns when arguable infractions become potential felonies. With federal and state governments dramatically stepping up enforcement over the last several years, most major American corporations as well as foreign businesses with significant activities in the U.S. have prudently devoted more attention and resources to environmental compliance. Their management genuinely intends to live by the rules. Understandably, given the complexity (and opacity) of many of these provisions, management wants to know what level of environmental performance will satisfy the regulators and, at least, keep any adversary action on the civil side of the docket. Thus far, there has been no steady pattern to prosecutorial case selection or conviction which allows confident judgment about what will *not* be within the zone of possible criminal liabil-

28. See Michael Herz, *Environmental Auditing and Environmental Management: The Implicit and Explicit Federal Regulatory Mandate*, 12 CARDOZO L. REV. 1241 (1992).

29. See discussion of the DOJ and EPA guidance documents *infra* Part II.F and Part II.F.1 respectively.

ity.³⁰ How can it be that there is no relatively bright line separating the world of regulatory give-and-take or civil litigation, on the one hand, and the world of indictment and grand juries on the other? Negotiations or civil contests may be rough or have high stakes but they are by definition about respectable disagreements. Being a defendant or target in a criminal case is an entirely different, painful exercise in which the least unpleasant consequence is the threat of ruined careers and reputations. Surely there ought to be some reliable guides to staying a safe distance from the prosecutorial cauldron.

Unfortunately, as Professor Lazarus pointed out, the environmental criminal justice system is in a real state of disorder, and prosecutorial sights are often set on marginal or subjectively negligent conduct, rather than on truly culpable or environmentally significant misbehavior.³¹ There are at least a few reasons for the inconsistencies and anomalies which have developed in the charging practice since the early 1980's. First, the decentralized organizations of both the EPA and the DOJ have impeded coherent review of the comparative significance and merits of environmental prosecutions in real time.³² Thus, there is a striking unevenness in the kinds of cases initiated by the different U.S. Attorneys Offices and

30. Richard J. Lazarus, *Meeting the Demands of Integration in the Evolution of Environmental Law: Reforming Environmental Criminal Law*, 83 GEO. L.J. 2407, 2444-84 (1995) [hereinafter Lazarus].

31. *Id.* at 2454 ("the federal government's choice between prosecuting a case criminally or pursuing a less severe enforcement option has been 'largely a random process'.") (quoting William J. Corcoran ET AL., U.S. DEP'T. OF JUSTICE, INTERNAL REVIEW OF THE DEPARTMENT OF JUSTICE ENVIRONMENTAL CRIMES PROGRAM 83,128 (1994)). The need for reform of the federal civil environmental enforcement program is debated in a series of articles by Bruce Diamond, *Confessions of an Environmental Enforcer*, 26 ENVTL. L. REP. (ENVTL L. INST.) 10,252 (May 1996), and Joel A. Mintz, *Rebuttal: EPA Enforcement and the Challenge of Change*, 26 ENVTL. L. REP. (ENVTL L. INST.) 10,538 (Oct. 1996). The National Environmental Policy Institute exposes the limited utility of the Justice Department's "bean-counting" approach to environmental enforcement in *Getting Back on the Compliance Track* (Fall 1996).

32. See generally Theodore Galacatos, *The United States Department of Justice Environmental Crimes Section: A Case Study of Inter- and Intra-branch Conflict Over Congressional Oversight And The Exercise of Prosecutorial Discretion*, 64 FORDHAM L. REV. 587 (1995).

the EPA regions. Second, because the criminal provisions of the environmental statutes typically contain no real intent requirement or knowledge standard, there are no meaningful boundaries between the civil and criminal arenas.³³ As Professor Lazarus observed,

What Congress did not consider in crafting environmental criminal law was the relevance of those distinctive features of environmental law itself that Congress criminalized by adopting the administrative law model for environmental crime. It never focused on those features in defining the requisite mens rea for criminal conduct, in assigning burdens of proof, or in allowing for possible affirmative defenses or mitigating circumstances. Congress did not consider these issues when it first enacted those criminal provisions, and it ignored them again in the second and third waves of congressional action when, by increasing the associated sanctions and improving the efficacy of enforcement, it made the provisions that much more important. . . . Congress avoided addressing at all what it meant by the mens rea requirements it enacted. By not addressing these issues directly, Congress left them, in effect, to the other two branches of government to resolve; first, to the executive branch, through the exercise of prosecutorial discretion; and second, to the courts, through the application of canons of statutory construction. Both of these branches, however, are ill-equipped to resolve these issues and have done so in a way that can generously be described as haphazard and exacerbating.³⁴

The government has no formal threshold as to when to initiate a criminal or civil case. Such decisions are most often made on an ad hoc, visceral basis. Even minimally exceeding the Clean Water Act discharge requirements or modest transgressions of Resource, Conservation and Recovery Act haz-

33. See Susan F. Mandiberg, *The Dilemma of Mental State in Federal Regulatory Crimes: The Environmental Example*, 25 ENVTL. L. 1165 (1995) (arguing that the current confusion over mental state results from the lack of a coherent judicial framework for federal regulatory crimes); Michael Vitiello, *Does Culpability Matter?: Statutory Construction Under 42 U.S.C. § 6928*, 6 TUL. ENVTL. L.J. 187 (1993).

34. Lazarus, *supra* note 30, at 2453-54.

ardous waste storage requirements may be deemed worthy of prosecution in some cases but treated as administrative civil penalty matters in others. Although Assistant Attorney General Lois Schiffer and her deputy, James Simon, might have us think otherwise,³⁵ it must be recognized that the recent spate of environmental criminal cases is at least in part the product of a political sea-change, which has encouraged many regulators, investigators and prosecutors to make opportunistic examples of polluters even where the alleged misconduct would not have formerly been deemed serious.³⁶

F. Minimizing the Corporate Environmental Crime Profile

An increasing number of companies have attempted to address these intimidating prosecution scenarios by making compliance the central focus of overall environmental management systems.³⁷ A compliance program incorporates and

35. See Lois J. Schiffer & James F. Simon, *The Reality of Prosecuting Environmental Criminals: A Response to Professor Lazarus*, 83 GEO. L.J. 2531 (1995).

36. As Norman Weiner and other commentators describe in a short but revealing article, this opportunism extends to the civil sphere as well. Norman S. Weiner ET AL., *A Case of EPA Overkill*, 25 ENVTL. L. 1127 (1995).

37. A survey of 369 companies performed in 1995 by Price Waterhouse revealed that 75% of respondents had established a program to audit regulatory compliance. See PRICE WATERHOUSE, *THE VOLUNTARY ENVIRONMENTAL AUDIT SURVEY OF U.S. BUSINESS* (1995). The results of the Price Waterhouse survey are consistent with those of another poll in which nearly all of the seventy-eight respondents reported that they regularly perform regulatory compliance audits. See COOPERS AND LYBRAND, *STRATEGIC ENVIRONMENTAL MANAGEMENT PREPAREDNESS FOR ISO 14000 - A SURVEY BY COOPERS AND LYBRAND* (1995). Of this number, slightly more than half had also audited their environmental management systems. See *id.* The number of firms performing audits would undoubtedly increase, however, if information obtained from such efforts were protected from disclosure. *New Survey Shows Enforcement Questions Block Use of Voluntary Audits*, INSIDE EPA WKLY. REP., Apr. 14, 1995, at 4; *Companies Would Perform More Audits If Penalties Were Eliminated, Survey Says*, 25 Env't Rep. (BNA) 1606 (Apr. 14, 1995). EPA efforts to smooth over these concerns have thus far been ineffectual. See generally *Internal Investigations of Offenses Under Environmental Laws*, in ENVIRONMENTAL CRIMINAL LIABILITY: AVOIDING AND DEFENDING ENFORCEMENT ACTIONS 53, 75-86 (Donald A. Carr ed., 1995); *The EPA 1994 Public Meeting: Legislative Answers to the Auditing Quandary*, 4 DICK. J. ENVTL. L. & POL'Y 182 (1995); *Environmental Audits Not Privileged Business Information, EPA Announces*, Daily Rep. for Executives (BNA) A-12 (Apr. 3, 1995); Craig N. Johnston, *An Essay On Environmental Au-*

extends beyond an environmental audit scheme, encompassing an explicit statement of corporate policy, commitment of management and resources, training, response mechanisms, and internal discipline, among other components.³⁸ The EPA policy statements purport to encourage such self-examination³⁹ as does the non-binding statement issued by the DOJ which elaborates points to be considered by prosecutors in charging decisions involving companies which have adopted adequate auditing schemes and taken sufficient corrective action with respect to any violations detected. The Organizational Guidelines similarly allow the harshness of penalties to be mitigated where a firm has implemented a compliance

dit Privileges: The Right Problem, The Wrong Solution, ENVTL. L. 335 (1995); Robert W. Darnell, *Environmental Criminal Enforcement and Corporate Environmental Auditing: Time for a Compromise?*, 31 AM. CRIM. L. REV. 123 (1993); Linda Richendorfer & Neil R. Bigioni, *Going Naked Into The Thorns: Consequences of Conducting an Environmental Audit Program*, 3 VILL. ENVTL. L.J. 71 (1992); Marianne Lavelle, *More Lawyers Expect to Urge Their Clients to Examine Compliance*, NAT'L L.J., Mar. 16, 1992, at S6.

38. See generally Joseph M. Mon, *Compliance Audits: How to Do Them and What to Look For*, 3.1 J. OF ENVTL. REG. (1993), at 23; M. Curran, *Auditing Checklist for Self-Regulation*, 4.4 ENVTL. RESOURCE MGMT. (1993); M. Dennison, *Routine Environmental Audits Keep Firms in Compliance with Regulatory Standards*, 7.18 ENVTL. PROTECTION NEWS (1992).

39. For example, a firm may also elect to institute an environmental compliance program as part of Supplemental Environmental Project (SEP) in order to receive a lower final penalty settlement from the EPA. See Interim Revised EPA Supplemental Environmental Projects Policy Issued, 60 Fed. Reg. 24,856 (EPA 1995); see generally Steven A. Herman, *EPA's Revised Supplemental Environmental Projects Policy Will Produce More Environmentally Beneficial Enforcement Settlements*, NAT'L ENVTL. ENFORCEMENT J., July 1995, at 9. Current SEP practice is discussed in Note, *Supplemental Environmental Projects: Evolution of a Policy*, 2 THE ENVTL. LAW. 462 (1996); Barnett Lawrence, *Supplemental Environmental Projects: A New Approach for EPA Enforcement*, 26 ENVTL. L. REP. (ENVTL. L. INST.) 10,174 (Apr. 1996); Martin Harrell, *Organizational Environmental Crime and the Sentencing Reform Act of 1984: Combining Fines With Restitution, Remedial Orders, Community Service, and Probation to Benefit the Environment While Punishing the Guilty*, 6 VILL. ENVTL. L.J. 243 (1995); Laurie Droughton, *Supplemental Environmental Projects: A Bargain for the Environment*, 12 PACE ENVTL. L. REV. 1141 (1995). The EPA's current RCRA enforcement policy, effective as of April 15, 1996, offers lesser penalties where a company discovers and promptly corrects violations discovered during a self-audit. See EPA, OFFICE OF REGULATORY ENFORCEMENT, HAZARDOUS WASTE CIVIL ENFORCEMENT RESPONSE POLICY (Mar. 15, 1996).

program that meets certain criteria.⁴⁰ To the extent that the EPA expands its multimedia "targeting" approach to emphasize corporate violators with significant noncompliance in more than one state, it could prove even more important that large and medium size firms identify and correct persistent compliance problems at separate facilities.⁴¹ Some of the major enforcement inducements to development of compliance audit programs are discussed below.

1. Department Of Justice Prosecution Discretion

The July 1, 1991 DOJ guidance document on environmental audits and voluntary disclosure, entitled *Factors In Decisions On Criminal Prosecutions For Environmental Violations In the Context of Significant Voluntary Compliance Or Disclosure Efforts By The Violator* [hereinafter *Factors*],⁴² articulates a basic set of principles for federal prosecutors to consider when making charging decisions. It contains helpful hypotheticals to illustrate the concepts intended to control the exercise of prosecutorial discretion.

40. See discussion *infra* Part II.F.2.

41. EPA enforcement trends are forecast in *EPA Drafts First Strategic Plan To Guide Future Enforcement Efforts*, INSIDE EPA WKLY. REP., May 16, 1997, at 13; *EPA Refines Enforcement Priorities For FY98, Targets New Industrial Sectors*, INSIDE EPA WKLY. REP., Nov. 22, 1996, at 1; *EPA Targets Transportation Sector For Significant Enforcement In FY 2000*, INSIDE EPA WKLY. REP., Oct. 25, 1996, at 1 (reprinting draft FY 98/99 Enforcement Priorities); *EPA Documents Show First Inspection Under "National Violators" Program*, INSIDE EPA WKLY. REP., Sept. 27, 1996, at 1; *EPA To Launch Enforcement Campaign Against "National Violators"*, INSIDE EPA WKLY. REP., July 5, 1996, at 10; see generally *EPA Moves to Rate Relative Performance of Facilities Within Sectors*, INSIDE EPA WKLY. REP., May 17, 1996, at 1,2; Stephen A. Herman, *EPA's FY 1996 Enforcement And Compliance Assurance Priorities*, NAT'L ENVTL. ENFORCEMENT J., Mar. 1996, at 3, 5-6; *Enforcement Office Targets Companies with Recurring Violations*, INSIDE EPA WKLY. REP., Jan. 26, 1996, at 7; see also *New EPA Initiative Seeks to Uncover Companies that Elude Regulatory System*, Daily Rep. for Executives (BNA) A-8 (Mar. 15, 1996).

42. U.S. DEPARTMENT OF JUSTICE, *FACTORS IN DECISIONS ON CRIMINAL PROSECUTIONS FOR ENVIRONMENTAL VIOLATIONS IN THE CONTEXT OF SIGNIFICANT VOLUNTARY COMPLIANCE OR DISCLOSURE EFFORTS BY THE VIOLATOR* (July 1, 1991) [hereinafter *FACTORS*]. Since the promulgation of *Factors*, a number of states have followed suit. See, e.g., NEW JERSEY PROSECUTOR'S OFFICE, *VOLUNTARY ENVIRONMENTAL AUDIT/COMPLIANCE GUIDELINES* (Jan. 12, 1992).

Factors represents a serious effort to promote environmental self-policing which proceeds from a sensitive appreciation of the central conundrum faced by major companies: how to investigate performance so thoroughly and systematically as to permit fully informed, cost-effective decisions, yet not have the fruits of the effort become the prosecutor's brief establishing violations and executive knowledge of same. As the drafters of *Factors* plainly recognized, there was an acute need for guidance and consistency in this unsettled area. The 1986 EPA audit policy shed very little light on the scenarios in which the government would request production of audit documents or take enforcement action predicated thereon. Further, the Agency reserved essentially unlimited discretion regarding evidence thought to be relevant to a criminal investigation. This was problematic even then, but the large increase in environmental prosecutions has heightened the tension dramatically. In fact, it may fairly be said that the ambiguities of the 1986 EPA policy were serving as a disincentive to audits in some situations, and prompting modifications which emphasized legal protections rather than management utility in many others.⁴³

Basically, the notion underlying the Department of Justice policy is that companies with sound audit programs that take care of compliance problems on their own should get a full pass, or at least a partial break, in the charging decision. The conceptual requirements for this favorable treatment include: (a) regularized internal and/or external audit procedures; (b) audit integrity safeguards; (c) comprehensive evaluation of all pollution sources; (d) timely implementation of audit recommendations; (e) adequate resource commitment to the audit and follow-up; (f) incorporation of environmental criteria into overall company performance evaluations; (g) adoption of control measures beyond existing law, as a comfort zone to prevent noncompliance events; and (h) a "strong institutional policy" to meet environmental re-

43. See *supra* n.25 and discussion of the risks faced by companies which perform environmental audits *infra* Part II.F.2.

quirements.⁴⁴ These primary factors are complemented by three more: (i) absence of prior pervasive non-compliance; (ii) effective internal disciplinary system; and (iii) effective subsequent (*i.e.*, post-violation event) efforts including efforts to reach compliance agreements with federal and state authorities.⁴⁵ In essence, *Factors* creates a presumption against prosecution – though it is silent on civil enforcement – where the corporate record is positive on each of the above. Credit is also to be afforded for voluntary disclosure⁴⁶ and general cooperation, including the willingness to make all audit materials and other relevant information available to the government.⁴⁷

Not many companies will score 100 on this test all the time. It is not clear how stringent the phrase “fully meets all the criteria” is intended to be. The DOJ apparently anticipates that some will fall short, providing that “[e]ven if satisfaction of the criteria is not complete, still the company may benefit in terms of degree of enforcement response”⁴⁸ In other words, the result may be prosecution on lesser or fewer charges (or, implicitly, in not taking an expansive view of the responsible corporate officer doctrine). Hopefully, over the course of applying this guidance to actual circumstances in real time, the DOJ will show that the price of forbearance is not impossible purity.

2. The EPA Self-Policing Policy

It has long been thought by many that the EPA should want to provide positive inducement for voluntary self-policing, as this would enable the Agency to focus enforcement efforts on those who do not pay as much attention to their environmental record, and to target bad actors more effec-

44. See *FACTORS*, *supra* note 42, at Section II. A & C.

45. See *id.* at Section II. D.

46. In the context of the Clean Water Act, see *DOJ Official Encourages Companies to Report CWA Violations Voluntarily*, *Env't Rep.* (BNA) 1808 (Jan. 26, 1996).

47. See *FACTORS*, *supra* note 42.

48. *Id.*

tively.⁴⁹ After considerable internal debate, the Agency finally announced a new policy on environmental audits and audit-related disclosures in late 1995.⁵⁰ While the policy

49. The EPA has broad discretion to conduct investigations into possible violations of environmental laws. See *Dow Chem. Co. v. United States*, 476 U.S. 227 (1986); see also EPA, *FBI Pledge to Coordinate Investigations of Criminal Activity in Memo of Understanding*, 6 Toxics L. Rep. (BNA) 709 (Nov. 6, 1991). In exercising this discretion, agents are advised not to squander resources on violations that are voluntarily revealed and fully and promptly remedied as part of a corporation's "systematic and comprehensive self-evaluation program . . ." Memorandum from Earl E. Devaney, Director, Office of Criminal Enforcement, U.S. Environmental Protection Agency, to All EPA Employees Working in or in support of the Criminal Enforcement Program regarding "The Exercise of Investigative Discretion" (Jan. 12, 1994) (on file with authors). See generally Judson W. Starr, *Commencement of a Government Investigation*, in *Environmental Criminal LIABILITY: AVOIDING AND DEFENDING ENFORCEMENT ACTIONS* 40 (Donald A. Carr ed., 1995); Steven E. Chester, *Environmental Crime and the EPA's Exercise of Criminal Investigative Discretion*, 73 MICH. BUS L.J. 1064 (1994); Mary Adler, *EPA Criminal Enforcement: Factors for Opening a Probe*, BUS. CRIMES BULL. 6 (July 1994); Nathan A. Fischbach & Paul S. Rosaszewicz, *EPA Finally Is Giving Guidance on Its Probes*, NAT'L L.J., Aug. 22, 1994, at A-21. Some states, e.g., California, have followed suit. An EPA profile-based screening initiative which targets companies based on various factors, e.g., more than 100 employees, standard industry codes (SIC) indicating potential to significantly impact the environment, and financial hardship is proving to be highly controversial. See *SAB Panel Says Sector Index Project Falls Short of Estimating Actual Risk*, Daily Rep. For Executives (BNA) A-4 (Sept. 24, 1997); *Enforcement Office to Adopt Risk-Based Priority Setting*, RISK POL'Y REP., Sept. 19, 1997 at 7; *New EPA Initiative Seeks To Uncover Companies That Elude Regulatory System*, INSIDE EPA WKLY. REP., Mar. 15, 1996, at A-18.

50. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. 66,706. The policy went into effect January 22, 1996. The Office of Enforcement and Compliance Assurance published additional guidance on various interpretive matters in January of 1997. Steven A. Herman, Memorandum to Regional Administrators, and the Assistant Attorney General, Environment and Natural Resources Division, *Issuance of Audit Policy Interpretive Guidance* (Jan. 15, 1997); see generally EPA *Guidance Document Addresses Fine Points of Audit Policy Interpretation*, Daily Rep. for Executives (BNA) A-16 (Jan. 22, 1997). For additional discussion of, and reaction to, the Self-Policing Policy and its interim antecedent see 60 Fed. Reg. 16,875 (1995), see generally Lynn L. Bergeson & Lisa M. Campbell, *Carrot or Stick: The Debate Over Environmental Auditing*, THE WASH. LAW., Sept.—Oct. 1997, at 38; Daniel M. Steinway, *EPA's Auditing Policy: Is It Working?*, METROPOLITAN CORP. COUNS., May 1997, at 15; Ellen Page Delsole, *An Environmental Audit Privilege: What Protection Remains After EPA's Rejection Of the Privilege*, 46 CATH. U.L. REV. 325 (1997); John S. Guttman & Holly Cannon, *Eyes on the Green*, LEGAL TIMES, May 13, 1996, at 41; James T. Banks, *EPA's New Enforce-*

hardly ushered in a new era, it marked an advance of sorts. At least some elements within the EPA now seem to appreciate industry concerns about the potentially punitive impact of environmental audits and compliance management systems,⁵¹ though the impetus for the statement probably had as

ment Policy: At Last, a Reliable Roadmap to Civil Penalty Mitigation for Self-Disclosed Violations, 26 *Env'tl. L. Rep.* (Env'tl L. Inst.) 10227 (May 1996); Jim Gribble, *Can Anything You Find Be Used Against You?*, *BUS. J. - MILWAUKEE*, Mar. 2, 1996, at 21; David J. Freeman & Gregory R. Belcamino, *EPA's Audit Policy: Half a Loaf Is Better Than None*, *N.Y. L.J.*, FEB. 15, 1996, at 1; State Officials Offer Support for EPA's Final Audit Policy, *INSIDE EPA WKLY. REP.*, Jan. 12, 1996, at 5; *EPA Gets Broad Support on Final Audit Policy, Though Concerns Linger*, *INSIDE EPA WKLY. REP.*, Dec. 22, 1995, at 11; 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 B-4; Steven A. Herman, *EPA's New Voluntary Environmental Self-Policing and Self-Disclosure Interim Policy Statement*, *Nat'l Env'tl. Enforcement J.* 15 (Apr. 1995); *EPA Releases Explanatory Document On Audit Policy, Self-Disclosure Cases*, *Daily Rep. for Executives (BNA)* A-13 (Apr. 19, 1995); *Many Violations May Not Qualify For Penalty Reductions Under Audit Policy*, *Daily Rep. for Executives (BNA)* A-31 (Apr. 19, 1995); *EPA: Confess and Pay Less*, *NAT'L L.J.*, Apr. 17, 1995, at A-6; *New Audit Policy Creates Uncertainty Obstacles To Audits, Industry Counsel Says*, *Daily Rep. for Executives (BNA)* A-21 (Apr. 4, 1995). The EPA's policy position on the treatment of small business, 61 *Fed. Reg.* 27,984 (June 3), is reviewed by David R. Berz in *Confidential Treatment of Voluntarily Conducted Corporate Environmental Audits*, *Metropolitan Corp. Counsel*, Dec. 1996, at 13.

51. As of September 1997, more than 211 regulated entities had come forward to disclose environmental violations at more than 500 facilities. Of this number, sixty-seven companies had received credit for their compliance with the self-policing policy. *More than 500 Facilities Report Violations Under EPA Policy: Most Involve Paperwork*, *Daily Rep. For Executives (BNA)* A15 (Sept. 10, 1997). The experiences of firms electing to make disclosures under the policy are discussed in *Denver Firm's Clean Air Penalty Reduced Under EPA "Self-Policing" Policy*, *Daily Env't Rep.* (BNA) A-5 (Jan. 23, 1997); Cheryl Hogue, *Punitive Penalties Waived In Most Cases Involving Firms Using EPA Policy*, *Daily Rep. for Executives (BNA)* A-25 (Jan. 21, 1997); *76 Companies Disclosed Violations Under EPA Audit Policy, Official Says*, *Daily Rep. for Executives (BNA)* A-14 (July 30, 1996); *Fines Against UNOCAL, Marathon Reduced By EPA For Self-Disclosure*, *Daily Env't Rep.* (BNA) B-1 (Nov. 19, 1996); Sara Thurin Rollin, *Deal With Chevron Would Nearly Eliminate Largest Fine Ever, EPA Documents Show*, *Daily Env't Rep.* (BNA) A-4 (Sept. 20, 1996); Sara Thurin Rollin, *Two Companies Pay No Fines In TSCA Settlements With EPA*, *Daily Env't Rep.* at A-10, (Aug. 23, 1996); *Unocal Agrees To Pay \$15,000 To Settle Charges Of Improper Disclosure Of Releases*, *Daily Env't Rep.* (BNA) B-1 (Aug. 13, 1996); *G.E. To Pay Only Amount It Saved By Failing To Install Pollution Controls*, *Daily Env't Rep.* (BNA) A-5 (Aug. 12, 1996). The policy gives compliance management efforts which meet the criteria for "due diligence" the same penalty reduc-

tion as that offered for environmental audits. See Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg., at 66708. The following articles shed light on the EPA/industry dialogue leading up to the expanded scope of the final policy: *Final EPA Audit Policy May Cover Violations Not Currently Eligible*, Daily Rep. for Executives (BNA) A-7 (Nov. 3, 1995); *Final Version Of EPA Audit Policy May Cover Compliance Management Plans*, Daily Rep. for Executives (BNA) A-10 (Sept. 28, 1995); *EPA Official Describes Potential Expansion Of Audit Policy*, Daily Rep. for Executives (BNA) A-14 (Sept. 14, 1995).

Meanwhile, state regulators continue to experiment with self-policing incentives of their own. See generally *Delaware: State To Adopt Penalty Mitigation Policy For Self-Reported Violations*, Official Says, Env't Rep. (BNA) 2253 (Mar. 14, 1997); *Florida: More Than 90 Companies Report In Pilot Project On State's Year-Old Policy*, Daily Env't Rep. (BNA) B-5 (Mar. 3, 1997); *Maryland: State Agency Plans To Adopt Audit Policy Giving Companies Immunity*, Daily Env't Rep. (BNA) B-5 (Mar. 3, 1997); *New Mexico: Draft Policy Expected To Undergo Public Review In Coming Months*, Daily Env't Rep. (BNA) B-6 (Mar. 3, 1997); *Tennessee: DEC Policy Includes Penalty Waiver, No Routine Requests For Audit Reports*, Daily Env't Rep. (BNA) B-7 (Mar. 3, 1997); *Oklahoma: 1995 Policy To Become Final Rule That Takes Effect In July*, Official Says, Daily Env't Rep. (BNA) B-7 (Mar. 3, 1997); *West Virginia: Administrative Policy Awaits Outcome of Pending Legislation*, Daily Env't Rep. (BNA) B-8 (Mar. 3, 1997); *Washington: Department of Ecology Uses Audit Policy Adopted In December 1994*, Daily Env't Rep. (BNA) B-8 (Mar. 3, 1997); *Vermont: State Adopted Policy In December 1996 But No Businesses Take Advantage Of It Yet*, Daily Env't Rep. (BNA) B-8 (Mar. 3, 1997). As of March 3, 1997, audit policies were in effect in eight states, including California, Florida, North Carolina, Oklahoma, Pennsylvania, Tennessee, Vermont, and Washington, and under consideration in four others: Delaware, Maryland, New Mexico, and West Virginia. See *Eight States Have Policies, Four Working on Drafts*, Daily Env't Rep. (BNA) B-1 (Mar. 3, 1997). The Pennsylvania Department of Environmental Protection, for example, purports to encourage ISO 14000-type environmental management systems through its "Policy To Encourage Voluntary Compliance By Means Of Environmental Compliance Audits And Implementation Of Compliance Management Systems," issued September 25, 1996. See generally Linda Casey, *DEP Finalizes Self-Assessment Policy*, EPA BUS. J., Oct. 21, 1996, at 1; see also Lynette Hazelton, *PA's Pollution Prevention Czar Aims for Business Compliance*, PHILADELPHIA BUS. J., March 29, 1996, at 24. After soliciting comments on its draft policy for more than five months, Cal/EPA issued its final policy on environmental auditing and voluntary disclosure July 8, 1996. See Memorandum from Gerald G. Johnston, *Ass't Secretary for Law Enforcement and Counsel*, to Directors, Executive Officers, *Chief Counsel and Enforcement Chiefs*, Cal/EPA Policy on Incentives for Self-Evaluation (July 8, 1996) [hereinafter *Cal/EPA Self-Policing Policy*]. The development of the California policy is recounted by Davina Pujari in *Cal/EPA Issues Final Policy on Environmental Auditing*, CAL. ENVTL. COMPLIANCE MONITOR, Aug. 5, 1996, at 191; see also *California: Guidance Offers Greater Penalty Cuts, Certification, Protections Not In EPA Policy*, Daily Env't Rep. (BNA) B-5 (Mar. 3, 1997); *Environmental Auditing*, Cal. Env'tl. Compliance Monitor (May 20, 1996), at 6-7; *California Unveils*

much if not more to do with developments in state legislatures⁵² and the judiciary,⁵³ fear of congressional preemption,⁵⁴ and nudging by senior Clinton Administration officials.

The non-binding guidance offers three conditional incentives to environmental self-policing and self-disclosure: (i) elimination (or reduction) of gravity-based penalties;⁵⁵ (ii) the EPA restraint in DOJ criminal charge recommendations;⁵⁶ and (iii) the EPA's pledge to refrain from requesting voluntary environmental audits in pre-enforcement investigations.⁵⁷ The first incentive, elimination or reduction of any gravity-based penalty, is conditioned upon a number of factors, including voluntary self-policing (auditing), voluntary⁵⁸

Draft Audit Policy That Expands on U.S. EPA Approach, Daily Rep. for Executives (BNA) A-40 (Feb. 22, 1996).

52. See discussion *infra* Part III.C.2. A number of states have enacted laws affording a limited evidentiary privilege for environmental audits.

53. See, e.g., *Reichhold Chem. Inc. v. Textron, Inc.*, 157 F.R.D. 522 (N.D. Fla. 1994) (shielding environmental audit documents under a qualified privilege of self-critical analysis).

54. See discussion of federal legislation *infra* Part III.C.2.

55. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,707, 66,711. Under the policy, EPA would continue to recover any economic benefit gained from noncompliance. See *id.* at 66,707, 66,712. Compare *Cal/EPA Self-Policing Policy*, *supra* note 51, at 4.

56. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,707, 66,711. Compare *Cal/EPA Self-Policing Policy*, *supra* note 51, at 5.

57. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,708, 66,711. Compare *Cal/EPA Self-Policing Policy*, *supra* note 51, at 6. In an attempt to provide greater confidence to stakeholders that due diligence efforts will meet with beneficial consideration under the policy, Cal/EPA also offers to perform a fee-for-service audit/ due diligence review. See *id.* at 6. Although certification will not provide a guarantee of immunity, it should reduce uncertainty and may ultimately lead to the development of audit/due diligence protocols. See *id.*

58. "The violation must be identified and disclosed by the regulated entity prior to: the commencement of a federal, state or local agency inspection, investigation, or information request; notice of a citizen suit; legal complaint by a third party; the reporting of a violation to EPA by a 'whistleblower' employee; and imminent discovery of the violation by a regulatory agency."

Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,709. Compare *Cal/EPA Self-Policing Policy*, *supra* note 51, at 6-8.

disclosure⁵⁹ of the violations which have “or may have occurred”⁶⁰ within ten⁶¹ days (or shorter period if set by law),⁶²

59. A company need not disclose the violation to state and local authorities but such information would theoretically be discoverable, e.g., under the Freedom of Information Act (FOIA), 5 U.S.C. § 552. (1997). The EPA pledges under the policy, independent of FOIA, to make publicly available any compliance agreements reached under the policy, as well as descriptions of due diligence programs submitted by the entity seeking to benefit under the policy. Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66709. The *Cal/EPA Self-Policing Policy* contains comparable provisions addressing state privacy laws. See *Cal/EPA Self-Policing Policy*, *supra* note 51, at 7-8.

60. Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,709. The EPA wants regulated entities to report when in doubt. The Cal/EPA policy sends a similar message. See *Cal/EPA Self-Policing Policy*, *supra* note 51, at 8.

61. The EPA may accept reports after the reporting period has run where the violation is complex and compliance cannot be determined within that period, provided that the circumstances “do not present a serious threat and that the regulated entity meets its burden of showing that the additional time was needed to determine compliance status. Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66708. See *Cal/EPA Self-Policing Policy*, *supra* note 51, at 7-8. The agency is developing a system to give national companies a “one stop” process for voluntarily disclosing violations. See *EPA To Centralize Reviews Of Multi-Regional Voluntary Audit Disclosures*, INSIDE EPA WKLY. REP., Aug. 16, 1996, at 3.

62. Certain violations would not be covered, e.g., violations that resulted in serious actual harm or which may have presented an imminent and substantial endangerment to public health or the environment, or violations which contravene the specific terms of any judicial or administrative order, or consent agreement. Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,709, 66,712. Moreover, the same or a closely related violation must not have occurred previously within the past three years at the same facility, or be part of a pattern of violations on the regulated entity’s part over the past five years. Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,708, 66,712. Compare *Cal/EPA Self-Policing Policy*, *supra* note 51, at 9. In response to comments filed concerning the interim policy, see *Final EPA Audit Policy May Cover Violations Not Currently Eligible*, Daily Rep. for Executives (BNA) A-7 (Nov. 3, 1995), the final guidance affords lenient treatment even in cases where the company reporting the violation was already required by statute or regulation to disclose the violation. See Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,708. The policy does not, however, encompass violations detected through continuous emissions monitoring, violations of NPDES discharge limits found through prescribed monitoring, and violations discovered through a compliance audit required to be performed by the terms of a consent order or settlement agreement. Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,708. The *Cal/EPA Self-Policing*

prompt correction (within sixty days or as expeditiously as practicable),⁶³ appropriate remediation,⁶⁴ implementation of appropriate measures to avoid repeat violations,⁶⁵ and corporate cooperation.⁶⁶ In determining whether to seek gravity-based penalties, the EPA will evaluate whether the organization discovered the violation through an environmental audit or, alternatively, through “an objective, documented procedure or practice reflecting the regulated entity’s due diligence in preventing, detecting, and correcting violations.”⁶⁷ In order to demonstrate that it has exercised “due diligence” a firm must show that it has:

- in place “compliance policies, standards, and procedures that identify how employees and agents are to meet the requirements of laws, regulations, permits

Policy, see *supra* note 51, at 6-7, is more restrictive, excluding all mandatory reporting requirements.

63. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,709, 66,711. Cal/EPA eschews any specific time limit, requiring firms to correct violations “as expeditiously as possible.” *Cal/EPA Self-Policing Policy*, *supra* note 51, at 8-9.

64. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,709, 66,711. The Cal/EPA policy is comparable. See *Cal/EPA Self-Policing Policy*, *supra* note 51, at 8-9.

65. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,709, 66,711-12. The Cal/EPA policy mirrors the EPA Policy. See *Cal/EPA Self-Policing Policy*, *supra* note 51, at 9.

66. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,711-12. Unlike the federal policy, Cal/EPA’s policy does not require regulated entities to turn over documents subject to the attorney-client privilege. See *Cal/EPA Self-Policing Policy*, *supra* note 51, at 10. Significantly, “cooperation” includes assistance in determining the facts of any related violations suggested by the disclosure, as well as the disclosed violation itself.” 60 Fed. Reg. at 66,709-10, 66,712. Cal/EPA’s policy is comparable. See *Cal/EPA Self-Policing Policy*, *supra* note 51, at 10.

67. *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,711. Companies discovering violations through some other means, or which cannot document due diligence, may still receive a reduction in gravity-based penalties of up to 75% by demonstrating satisfaction of the other conditions, e.g., voluntary discovery, prompt disclosure, expeditious correction and remediation, preventative action to avoid recurrence, the absence of repeat violations, and cooperation. See *id.* at 66,707, 66,711-12. Compare *Cal/EPA Self-Policing Policy*, *supra* note 51, at 2 (allowing the agency, at its discretion, to grant a reduction of up to 90% to companies choosing to invest in pollution prevention programs).

and other sources of authority for environmental requirements”;⁶⁸

- provided for “assignment of overall responsibility for overseeing compliance with policies, standards and procedures, and assignment of specific responsibility for assuring compliance at each facility or operation”;⁶⁹
- developed “mechanisms for systematically assuring that compliance policies, standards and procedures are being carried out, including monitoring and auditing systems reasonably designed to detect and correct violations, periodic evaluation of the overall performance of the compliance management system, and a means for employees or agents to report violations of environmental requirements without fear of retaliation”;⁷⁰
- made an effort to “communicate [its] standards and procedures to all employees and other agents”;⁷¹
- established “appropriate incentives to managers and employees to perform in accordance with the compliance policies, standards and procedures, including consistent enforcement through appropriate disciplinary mechanisms”;⁷² and
- implemented procedures “for the prompt and appropriate correction of any violations, and any necessary modifications to the regulated entity’s program to prevent future violations.”⁷³

68. Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,710.

69. *Id.*

70. *Id.* at 66,711.

71. *Id.*

72. *Id.*

73. *Id.* The Agency recognizes that a variety of compliance management programs may develop under the due diligence criteria, but it seems clear that the larger and more complex the operations of the facility, the greater will be EPA’s expectation that the facility conduct routine and periodic compliance audits that are comprehensive, objective, systematic and documented. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,708 (“Due diligence” encompasses the regulated entity’s systematic efforts, appropriate to the size and nature of its business.). Cal/EPA adopts the EPA’s definition of “due diligence.” See *Cal/EPA Self-Policing Policy*, *supra* note 51, at 2-3. Companies that have developed state-of-the-art comprehensive environmental management systems, e.g., programs certified in the future under ISO 14000, could receive additional benefits under other incentive programs in development, as described *infra* Part III.

The EPA pledges not to recommend criminal prosecution⁷⁴ in cases where the regulated entity uncovers violations through environmental audits or due diligence, promptly discloses and expeditiously corrects those violations, and complies with the other conditions noted above, so long as the violation does not demonstrate or involve "(i) a prevalent management philosophy or practice that concealed or condoned environmental violations; or (ii) high-level corporate officials' or managers' conscious involvement in, or willful blindness to, the violations."⁷⁵ The Agency expressly reserves the right under the policy, however, to recommend criminal prosecution for the criminal conduct of any culpable individual.⁷⁶ The third incentive is a deceptively straightforward reaffirmation of its historic policy to refrain from routing requests for audits.⁷⁷

Whether such limited assurances and immunities will suffice to alleviate industry concerns is doubtful.⁷⁸ The policy

74. When a company has met the conditions for avoiding a recommendation for criminal prosecution under the policy, it will not face civil liability for gravity-based penalties. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,707.

75. *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,711. The Cal/EPA's policy is similar, applying "so long as the violation does not demonstrate or involve . . . knowing or negligent involvement in or deliberate ignorance of the violations by high-level corporate officials or managers." See *Cal/EPA Self-Policing Policy*, *supra* note 51, at 5. As in, for example, *United States v. Hopkins*, 53 F.3d 533 (2d Cir. 1995) (individual could have been convicted of Clean Water Act violations based upon his avoidance of knowledge that samples had been falsified), and *Citizens for a Better Environment-California v. Union Oil*, No. 94-0712, (N.D. Cal., July 8, 1994) (officer convicted of charges of tampering with samples and violated terms of company's discharge permit under the Clean Water Act where court found he had consciously avoided finding out about violations).

76. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,707, 66,711.

77. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,708, 66,711. The policy would not preclude the Agency from requesting audits or compliance management system information where it could point to independent evidence hinting that a violation had occurred. 60 Fed. Reg. at 66,711. The Cal/EPA policy is the same. See *Cal/EPA Self-Policing Policy*, *supra* note 51, at 6.

78. See Daniel M. Steinway, *EPA's Auditing Policy: Is It Working?*, METROPOLITAN CORP. COUNS., May 1997, at 15; Laurence S. Kirsch & J. Walter Veirs, *Although the EPA Recently Issued Its Final Audit Policy on the Confidentiality*

offers some prospect of penalty mitigation but less protection than that afforded under audit privilege statutes enacted in many states⁷⁹ and bills currently under consideration in

of a Company's Environmental Self-Audit, Numerous Questions Remain Unanswered, NAT'L L.J., Mar. 11, 1996, at B5. (Pointing out that companies "that voluntarily disclose violations continue to risk that the EPA and state agencies, as well as private litigants, will use the information disclosed against them."); *House Continues to Work on Audit Legislation with Eye Towards 1997*, INSIDE EPA WKLY. REP., Mar. 8, at 15, *State Officials Offer Support for EPA's Final Policy*, INSIDE EPA WKLY. REP., Jan. 12, 1996, at 5; *EPA Gets Broad Support on Final Audit Policy, Though Concerns Linger*, INSIDE EPA WKLY. REP., Dec. 22, 1995, at 11.

79. See Lynn Bergeson & Lisa Campbell, *Carrot or Stick: The Debate Over Environmental Auditing*, THE WASH. LAW., Sept.— Oct. 1997, at 38. The authors identify states with environmental audit privilege laws as: Arkansas, Colorado, Idaho, Illinois, Indiana, Kansas, Kentucky, Michigan, Minnesota, Mississippi, New Hampshire, Ohio, Oregon, South Carolina, South Dakota, Texas, Utah, Virginia, and Wyoming. *Id.* at 43. States which have enacted legislation providing limited immunity from prosecution for violations discovered through an environmental audit include: Alaska, Colorado, Idaho, Kansas, Kentucky, Michigan, Minnesota, Mississippi, Montana, New Hampshire, New Jersey, Ohio, South Carolina, South Dakota, Texas, Utah, Virginia and Wyoming. *Id.* at 43; see generally John A. Lee & Bertram C. Frey, *Environmental Audit: Environmental Audit Immunity Laws: A State-By-State Comparison*, 21 Chem. Reg. Rep. (BNA) 381 (July 4, 1997). Experience with state audit legislation, and the controversy surrounding such laws, is surveyed in Lynn Holdsworth, *Florida's Environmental Self-Audit Legislation: An Incentive for the Environmentally-Conscientious Business or an Opportunity for the Corporate Polluter to Suppress the Truth?*, 27 STETSON L. REV. 210 (1997); Elizabeth Glass Geltman & Carey Ann Mathews, *Environmental Democracy*, 22 J. CORP. L. 395 (1997); Anna Kathryn Campbell, *The Environmental Audit Privilege: Where Does Louisiana Stand in the Federal v. State Showdown*, 57 LA. L. REV. 1029 (1997); Susan J. Spicer, *Turning Environmental Litigation On Its E.A.R.: The Effects of Recent State Initiatives Encouraging Environmental Audits*, 8 VILL. ENVTL. L.J. 1 (1997); *Audit Challenge*, CHEM. WK., June 4, 1997, at 39 (describing EPA opposition to Louisiana audit privilege legislation); *Natural Resources Department Withdraws Proposal for Environmental Audit Regulation*, Env't Rep. (BNA) 2253 (Mar. 14, 1997); Jim Gribble, *Business Unlikely to Win Amnesty for Environmental Audits*, BUS.-J. — MILWAUKEE, Feb. 23, 1997, at 22; Bebe Raupe, *Ohio Groups Seek Revocation By EPA of State Enforcement Power Due To Law*, Daily Env't Rep. (BNA) AA-1 (Jan. 30, 1997); Tripp Baltz, *Colorado Groups Petition EPA Over State's Audit Privilege Law*, Daily Env't Rep. (BNA) AA-2 (Jan. 30, 1997); Christina Austin, Comment, *State Environmental Audit Privilege Laws: Can EPA Still Access Environmental Audits in Federal Court?*, 26 ENVTL. L. 1241 (1996); Jessica Gavora, *Enviro-Blackmail at the EPA*, J. COM., Nov. 25, 1996 (recounting the nightmare of the Coors brewery in Golden, Colorado, which was socked with a \$1 million fine after reporting infractions uncovered during a voluntary self-audit); *EPA Asked to Use Federal*

Congress.⁸⁰

Authority to Acquire 'Privileged' Corporate Audits, INSIDE EPA WKLY. REP., Nov. 22, 1996; *State Senate Panel Says EPA Comments On Privilege Law Could Have Chilling Effect*, Daily Rep. for Executives (BNA) A-22 (Sept. 5, 1996); *EPA Pressed to Revoke Programs From States With Questionable Audit Laws*, INSIDE EPA WKLY. REP., Aug. 2, 1996, at 1; *Vice President Speaks Out Against Bills to Grant Privilege For Environmental Audits*, Env't Rep. (BNA) 502 (June 28, 1996); *New Audit Environmental Audit Law Provides Limited Immunity For Voluntary Disclosure*, Env't Rep. (BNA) 506 (June 28, 1996) (Describing South Carolina's statute); *EPA Says State Audit Privilege Law Results in Only Interim Approval of Title V Program*, Env't Rep. (BNA) 504 (June 28, 1996); *New Environmental Audit Law Provides Limited Immunity For Voluntary Disclosure*, Env't Rep. (BNA) 506 (June 28, 1996) (describing the South Carolina statute); *Environmental Audit Incentive Bill Advances in Senate*, Cal. Env'tl. Compliance Monitor 24 (June 24, 1996); *Prosecutors Ask Lawmakers To Reject Immunity For Audits*, Daily Rep. for Executives (BNA) A-10 (June 17, 1996); *State Lawmakers Weigh Merits of Environmental Audit Bills*, Daily Env't Rep. (BNA) (Apr. 18, 1996); *Several State Audit Privilege Bills Advance, but Setbacks Affect Bills In Florida, Vermont*, Env'tl. Due Diligence Guide (BNA) 18 (Mar. 1996); *Cheryl Hogue, Environmentalists Considering Challenges To State Delegation Because of Audit Laws*, Daily Rep. for Executives (BNA) A-22 (Mar. 26, 1996); *Arizona Senate Approves Audit Legislation*, Env't Rep. (BNA) 2042 (Feb. 23, 1996); *States Taking Legislative Initiative to Encourage Corporate Environmental Audits*, Daily Rep. for Executives (BNA) C-1 (Mar. 16, 1995); *Idaho Environmental Audit Law Implemented*, Env't Rep. (BNA) 1302 (Dec. 12, 1995); *States Advance Legislation to Protect Audits*, CHEM. WK., Nov. 1, 1995, at 34; *Six Companies Disclose Violations Under New State Audit Privilege Law*, Corp. Couns. Wkly. (BNA) 4-5 (Sept. 30, 1995) (Only six companies sought refuge under the Colorado statute in 1994, causing some to question whether the law is leading to more self-assessments); *More States Consider Laws to Guard Environmental Audits from Disclosure*, Daily Rep. for Executives (BNA) C-1 (Aug. 30, 1995); *Number of States with Laws Granting Audit Privilege Grows to 14 with Texas*, Daily Rep. for Executives (BNA) C-1 (May 30, 1995); *Legislation May Be Answer to Audit Issues, But Scope Should Be Expanded, Lawyers Says*, Daily Rep. for Executives (BNA) A-25 (June 22, 1994); *Clinton J. Elliott, Kentucky's Environmental Self-Audit Privilege: State Protection or Increased Federal Scrutiny?*, 23 N. KY. L. REV. 1 (1995); *Edward Felsenthal, New Laws Make Companies' Self Reviews Less Accessible*, WALL ST. J., Aug. 2, 1994, at B2; *James T. O'Reilly, Environmental Audit Privileges: The Need for Legislative Recognition*, 19 SETON HALL L. REV. 119 (1994).

80. Given its limited scope, the EPA Self-Policing Policy has not brought an end to calls for legislative reform. Senate Majority Leader Trent Lott (R-Miss.) and Senator Kay Bailey Hutchison (R-Texas) introduced S. 866, the Environmental Protection Partnership Act, in June of 1997. The bill seeks to encourage voluntary environmental audit and compliance management systems by granting limited protection from disclosure of voluntary environmental audits, and by granting limited protection for parties that promptly disclose information from audits or compliance management systems and correct any violation discovered as a result of the information. That same month, Rep. Joel Hefley (R-

While some at the EPA may have expressed sentiment for broader reform, their voices were apparently drowned out by those of the enforcement lawyers who feared audits would be used to shelter misconduct or negligence.⁸¹ Many staff

CO) influenced H.R. 1884, the Voluntary Self-Evaluation Act. The Hefley bill is similar in so far as it would establish a limited protection for information contained in any voluntary self-evaluation report and provide limited immunity from prosecution for violations discovered as a result of an audit or environmental compliance management system used by the company. The bill's immunity provision would not apply where the violation was part of a pattern of "significant violations" occurring within the previous three years. The Democrats may also be working on a bill of their own. See *Condit Leads Conservative Democrats Seeking Audit Law Compromise*, State Env'tl. Monitor, May 5, 1997, at 26.

The Clinton Administration has consistently opposed such legislative measures in the past, and will likely continue to do so in the future. See *Vice President Speaks Out Against Bills To Grant Privilege For Environmental Audits*, Env't Rep. (BNA) 502 (June 28, 1996); *Environmental Auditing: Clinton Administration Hardens Opposition to Legislation Granting Privilege, Immunity*, 20 Chem. Reg. Rep. (BNA) 441 (June 28, 1996). The ongoing tug-of-war is recounted in *Official Says GOP Bills Will Deter EPA From Tracking Evidence of Criminal Conduct*, Daily Rep. For Executives (BNA) A-17 (Sept. 11, 1997); *Environmental Audits: Bills Would Offer Protections to Companies that Promptly Fix Violations Found in Audits*, Env't Rep. (BNA) 417 (June 27, 1997); *Environmental Audits: Legislation On Corporate Immunity Rekindles Debate But Faces Rocky Path*, Daily Env't Rep. (BNA) A-2 (June 20, 1997); George Van Cleve & Keith W. Holman, *Promise and Reality in the Enforcement of the Amended Clean Air Act Part II: Federal Enforceability and Environmental Auditing*, 27 Env'tl. L. Rep. (Env'tl. L. Inst.) 10151 (Apr. 1997); *House Democrats Urge Administration to Endorse Audit Legislation*, INSIDE EPA WKLY. REP., May 31, 1996, at 16; *Letter from House Democrats Urges Gore to Support Privilege, Immunity*, Daily Rep. for Executives (BNA) A-17 (May 24, 1996); *Bill Containing Audit Immunity Provisions Opposed as Allowing Crime To Go Unpunished*, Env't Rep. (BNA) 354 (May 24, 1996); *Hatfield Tells Judiciary Panel his Audit Bill Needs Some Improvements*, Daily Rep. for Executives (BNA) A-36 (May 22, 1996); *House Continues to Work on Audit Legislation with Eye Towards 1997*, INSIDE EPA WKLY. REP., Mar. 8, 1996, at 15-16; *Action on House Self-Audit Bill Postponed Until Early Next Year*, INSIDE EPA WKLY. REP., Nov. 10, 1995, at 11. We discuss the federal bills further at *infra* Part III.C.2.

81. The EPA sets forth its reasons for opposing the establishment of a statutory evidentiary privilege in the policy. *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,710 (though its rhetoric is somewhat more moderate in the final policy than in the earlier draft). See generally Lynn L. Bergeson & Lisa M. Campbell, *Carrot or Stick: The Debate Over Environmental Auditing*, THE WASH. LAW, Sept. - Oct. 1997 at 38, 41-42; Marianne Lavelle, *Feds on the Defensive: Audit Privilege Mobilizes EPA*, *Business Bar*, *Four States Now Protect In-House Review of Compliance* NAT'L L.J., Aug. 8, 1994, at A1; David Ronald, *The Case Against an*

Environmental Audit Privilege, 29 CHEM. WASTE LITIG. REP. 167 (1995); see also Jennifer Arlen, *Shielding Audits Will Aggravate Pollution Problems*, NAT'L L.J., Oct. 3, 1994, at A23. Just as it has fought federal legislation, EPA has aggressively sought to derail, or at least curtail, state audit-related legislation. See, e.g., *Environment: Michigan, EPA Agree to Narrow Audit Law, Clearing Way for Final Delegation Approval*, Daily Rep. for Executives (BNA) A-14 (Jul. 3, 1997); *EPA Considers Precedent Setting Case On Audit Immunity*, INSIDE EPA WKLY. REP., June 27, 1997, at 10; *Audit Law Changes Pave Way for State to Run Federal Enforcement Programs*, Chem. Reg. Rep. (BNA) 334 (June 20, 1997); *Louisiana Bill Imperiled by Impasse Over New Public Disclosure Provisions*, Chem. Reg. Rep. (BNA) 297 (June 13, 1997); *Audit Challenge*, CHEM. WK., June 4, 1997, at 39; *Utah: Governor Signs Legislation to Amend State's Environmental Audit Privilege Law*, Env't Rep. (BNA) 2358 (Apr. 4, 1997); *States, EPA Seek Better Collaboration; EPA Official Cites "Serious Disconnects"*, Daily Rep. for Executives (BNA) A-23 (Mar. 24, 1997); *EPA to Withhold Pennsylvania Funds Until Enforcement Dispute Is Settled*, INSIDE EPA WKLY. REP., Feb 21, 1997, at 7; *EPA Moves Against Companies Utilizing Controversial Texas Audit Law*, INSIDE EPA WKLY. REP., Jan 24, 1997, at 1; Cheryl Hogue, *EPA Action on Michigan Air Program Adds to Tension Over State Audit Laws*, Daily Rep. for Executives (BNA) A-30 (Jan. 10, 1997); *Ohio Enacts Audit Privilege, But Actions in Michigan, Idaho, Texas Indicate Tensions, Due Diligence Guide* (BNA) 3 (Jan. 1997); *State Immunity, Privilege Laws Examined for Conflicts Affecting Delegated Programs*, Daily Env't Rep. (BNA) AA-1 (Sept. 18, 1996); *EPA Says State Audit Privilege Law Results in Only Interim Approval of Title V Program*, Env't Rep. (BNA) 504 (June 28, 1996); Peter Fairley, *EPA Defends Policy, Opposes Legislation*, CHEM. WK., May 29, 1996, at 13; John H. Cushman, Jr., *Many States Give Polluting Firms New Protections*, N.Y. TIMES, Apr. 7, 1996, at 1; *EPA To Approve "Interim" Permit Programs Despite Audit Privilege Laws*, INSIDE EPA WKLY. REP., Apr. 5, 1996, at 1; *EPA Convenes Team to Address Delegations to States with Audit Laws*, INSIDE EPA WKLY. REP., Mar. 29, 1996, at 7; *State Privilege-Immunity Laws for Audits Could Hurt Program Delegation, Official Says*, Env't Rep. (BNA) 2253 (Mar. 29, 1996); Tom Alkire, *EPA Region X Concerned About Idaho Law Impact on Clean Air Act Title V Approval*, Daily Rep. for Executives (BNA) A-26 (Mar. 26, 1996)(concerning the impact of Idaho's environmental audit protection law on delegated federal programs); *EPA Considers Blocking Air Permit Delegation to States with Audit Laws*, INSIDE EPA WKLY. REP., Mar. 15, 1996, at 1; Paula C. Murray, *The Environmental Self Audit Privilege: Growing Movement in the States Nixed by EPA*, 24 REAL EST. L.J. 169 (1995). EPA's view of such laws in the context of delegation of authority under various federal statutory programs is set forth in a memorandum from Steven A. Herman, Robert Perciasepe, Mary Nichols, and Timothy Fields, U.S. EPA, to Regional Administrators, *EPA Statement on State Enforcement, Impact of Audit Immunity /Privilege Law* (Feb. 14, 1997).

EPA's strong opposition to such laws likely has much to do with the fact that many environmental organizations are also against such reforms, see *EPA Pressed To Revoke Programs From States With Questionable Audit Laws*, INSIDE EPA WKLY. REP., Aug. 2, 1996, at 1; Cheryl Hogue, *Environmentalists Considering Challenges To State Delegation Because of Audit Laws*, Daily Rep. for Executives (BNA) A-22 (Mar. 26, 1996); see also *EPA Asked To Use Federal*

members were also concerned about the recognition of an overbroad evidentiary privilege that could defeat proper regulatory inquiry, and about the general political appearance of government being cozy with industry and softening the enforcement hammer. Some critics also have the idea that because companies must inevitably develop environmental auditing schemes anyway, the Agency does not need to offer significant inducements. As the risk that audit disclosure will come back to haunt the auditor in a variety of realistic litigation scenarios remains,⁸² many firms will continue to struggle with audit risk/benefit analysis.

3. Federal Sentencing Guidelines

a. Organizational Guidelines

Envisioned as a major step toward deterrence of corporate crime, the Organizational Guidelines use a carrot and stick approach to impose upon the corporation the obligation to deter, detect and prevent corporate crime.⁸³ To compel cor-

Authority To Acquire "Privileged" Corporate Audits, INSIDE EPA WKLY. REP., Nov. 22, 1996. Industry groups are not without their own allies, however. The National Governors' Association, for example, has long advocated pro-environmental audit positions, see *National Governors Association, Committee on Natural Resources, Proposed Changes in Policy* (1996 Annual Meeting); see generally *Governors Seek No Interference In Voluntary Self-Audit Programs*, Daily Rep. for Executives (BNA) C-2 (July 17, 1996), and many state environmental commissioners are resisting the Agency's efforts to leverage the delegation process. See *States Seek To Prevent EPA From Using Audit Laws To Withhold Delegations*, INSIDE EPA WKLY. REP., Feb 7, 1997, at 16; *States To Craft Strategy To Oppose EPA Threats Over Audit Laws*, INSIDE EPA WKLY. REP., Aug. 30, 1996, at 2.

82. Perhaps most troublesome is the fact that third parties would remain free to use audit information disclosed to the government against a company, e.g., in private tort litigation, even when a company had met the conditions of the guidance. See discussion *infra* Part III.C.2. The government's disavowals notwithstanding, one need only peruse public comments filed in connection with the EPA's new Self-Policing Policy to see that the government has obtained audit information and used it against forthcoming companies. See, e.g., EPA Docket # C-94-01, II-E-21, Comments of Timothy J. Mohin, Government Affairs Manager, Environment, Health and Safety, Intel (June 30, 1995); EPA Docket # C-94-01, II-E-12, AT&T's Written Statement for the U.S. EPA's July 27-29, 1994 Public Meeting on U.S. EPA's Auditing Policy (July 28, 1994).

83. See Organizational Guidelines, *supra* note 6, §§ 8B1.1, 8C, and 8D. See generally Joseph G. Block, *Sentencing for Environmental Offenses Under Fed-*

porations to adhere to the law, the guidelines increase the potential criminal fines to four times the illegal gain to the corporation or loss to the victim. On the other hand, to encourage efforts to fight crime, the guidelines provide substantial mitigation of sentence (up to 95%) to those corporations who try to prevent crime, report violations and cooperate with government investigations. Assuming the Organizational Guidelines will govern for many years to come, it is vital for industry to understand how it works and how its often harsh results may be mitigated.⁸⁴ In particular, it is imperative to understand the provisions affording reduction in the severity of sentence for maintaining an "effective program to prevent and detect violations of law."⁸⁵ The defined elements of such a program, as articulated in the Commentary to § 8A1.2 of the Organizational Guidelines, are in some ways studies in ambiguity.

The Organizational Guidelines are closely patterned after those for individuals, but naturally depart from the latter in significant ways. Like the Individual Guidelines, they seek to categorize corporate criminal behavior and then apply a formula to calculate a guideline range for the penalties to be imposed. The sentencing formula takes into account not

eral Guidelines, in ENVIRONMENTAL CRIMINAL LIABILITY: AVOIDING AND DEFENDING ENFORCEMENT ACTIONS (Donald A. Cart ed., 1995); John F. Cooney et al., *Criminal Enforcement of Environmental Laws: Part III - From Investigation to Sentencing and Beyond*, 25 *Env'tl. L. Rep.* (Env'tl. L. Inst.) 10,600 (Nov. 1995); JOHN F. COONEY ET AL., *ENVIRONMENTAL CRIMES DESKBOOK*, 52-57 (1995); JED S. RAKOFF ET AL., *CORPORATE SENTENCING GUIDELINES: COMPLIANCE AND MITIGATION* (1994); Dan K. Webb et al., *Understanding and Avoiding Corporate and Executive Criminal Liability*, 49 *BUS. LAW.* 617 (1994); Ilene H. Nagel & Winthrop M. Swenson, *The Federal Sentencing Guidelines for Corporations: Their Development, Theoretical Underpinnings, and Some Thoughts About Their Future*, 71 *WASH. U. L.Q.* 205 (1993).

84. Although the guidelines penalty schedule does not strictly apply to environmental crimes, and the environment-specific provisions proposed in 1993 by an Advisory Working Group are currently in limbo, it is evident that prosecutors and the courts are being influenced by the salient portions of the Organizational Guidelines. Jed Rakoff and others explain why environmental violations were excluded in *CORPORATE SENTENCING GUIDELINES: COMPLIANCE AND MITIGATION* §§ 8.01[1] - 8.01[2] (1994).

85. *ORGANIZATIONAL GUIDELINES, supra* note 6, § 8A1.2. Commentary 3(k); see *In re Caremark Int'l, Inc. Derivative Litig.*, Sept. 25, 1996, at 34, available in LEXIS 125.

only the crime, but also the corporation's enforcement history and its response to the criminal activity at issue. The Organizational Guidelines also contain other unique provisions:

- The fines imposed on the corporation are to be over and above full restitution to the victims of the criminal activity.
- Any company found to be "primarily criminal" in nature shall have its net assets forfeited in their entirety.
- A company may be placed on probation under court supervision for a period of time to insure that the fines imposed are paid in full, or to insure that an effective compliance program is put into effect.⁸⁶

The formula for determining the sentence is simple in concept, though it requires sophisticated analysis in the final details. The two factors which determine the sentences for corporations are: (i) seriousness of the offense (base fine); and (ii) culpability score. The seriousness of the offense is set by the highest of: (i) the pecuniary gain to the corporation; (ii) the pecuniary loss to the victims, or (iii) a table which converts the standard calculation under the Individual Guidelines into a dollar amount.⁸⁷ Once the seriousness of the offense is established it is multiplied by the culpability score to determine a guideline range for sentencing. The culpability multiplier extends from 0 to 10 points, and is determined by the level of management involvement in the criminal activity, the corporation's history, and the response to the criminal activity.⁸⁸ The corporation starts with a base culpability

86. See Organizational Guidelines, *supra* note 6, § 8D1.4. See, e.g., United States v. Fina Oil & Chem. Co., No. 1:94-CR-65-1 (E.D. Tex. Oct. 31, 1994); United States v. Palm Beach Cruises, No. 94-08049 (S.D. Fla. May 19, 1994); *In re Sara Lee Corp.*, 1993 WL 489798, No. EPCRA/CERCLA H-93-01 (EPA Nov. 4, 1993). Interestingly, the Alberta Environmental Protection Department required ALTA-Prospec Chemicals to become certified under the ISO 14001 EMS standard, discussed *infra* Part III.B, and pay a \$100,000 fine for violation of the Environmental Protection and Enhancement Act. See Robert Abbott et al., *Making ISO Work at Mid-Size Firms: The Prospect Chemicals Ltd. Case*, CORP. ENVTL. STRATEGY, Autumn 1997 at 73; *\$100,000 Fine Levied Against Prospec Chemicals*, ECO-LOG WEEK, Feb. 2, 1996.

87. ORGANIZATIONAL GUIDELINES, *supra* note 6, § 8C2.4.

88. See *id.* § 8C2.5(c).

score of five points (equivalent to a sentence range of 1-2 times the base fine), which may be increased or decreased by a number of factors. Each point of increase or decrease will reflect approximately a 20% change from the base culpability score, leading to a final sentencing range from a maximum of four times the base fine in the worst case, down to 5% of the base fine in the best case.⁸⁹

The culpability score will be increased or decreased based on a set of aggravating and mitigating factors. Aggravating factors include: (i) tolerance of criminal activity by "high-level personnel" or "substantial authority personnel,"⁹⁰ (ii) prior history of similar misconduct by the company, whether criminal, civil or administrative, in the last five and last ten years; (iii) violation of an order of probation; and (iv) obstruction of justice.⁹¹ Reduction in the culpability score will be given for the following mitigating factors: (i) an effective program to prevent and detect crime;⁹² (ii) self-reporting;⁹³ (iii) cooperation with government investigation;⁹⁴ and (iv) acceptance of responsibility.⁹⁵ In short, the sentencing range substantially increases if high-level personnel were involved, or there is a prior history, or obstruction, while the corporation's exposure decreases where there is self-reporting, cooperation, and an effective compliance program.⁹⁶

89. *See id.* § 8C2.6.

90. The presence of this aggravating factor will add to the corporate sentence on a sliding point scale related to the number of employees in the company or unit at issue. The larger the company (50, 200, 1000, 5000 employees), the higher the penalty on the point scale.

91. *See ORGANIZATIONAL GUIDELINES, supra* note 6, § 8C2.5(E).

92. A rebuttable presumption against the deduction exists if there was criminal participation by substantial authority personnel. Further, the deduction is not available if there was "unreasonable delay" in reporting the offense to government authorities.

93. If, prior to an imminent threat of disclosure or government investigation, within a reasonably prompt time after becoming aware of the offense, the corporation reports the offense to appropriate government officials.

94. *See Organizational Guidelines, supra* note 6, § 8C4.1.

95. *See id.* § 8C2.5(g).

96. *See generally* SELECTED PAPERS IN UNITED STATES SENTENCING COMMISSION, CORPORATE CRIME IN AMERICA: STRENGTHENING THE "GOOD CITIZEN" CORPORATION (1996).

The Sentencing Commission intends that these elements be judged according to the context and conditions of each individual company, with three factors being key to the judgment: (i) bigger organizations must be held to more formal and complex compliance policy standards; (ii) organizations whose business involves special risks must have compliance programs which specially address those risks (giving the example of a company with hazardous waste management issues as one needing very specific environmental compliance procedures); and (iii) organizations which have a history suggesting the risk of certain kinds of offenses must make special compliance standards and take precautions in those respects.⁹⁷

Because the Organizational Guidelines only apply to crimes committed by organizations on or after November 1, 1991,⁹⁸ we are just now beginning to acquire some experience in applying them to actual cases. As of June 30, 1995, 208 organizations had been sentenced pursuant to the Organizational Guidelines, with an additional seventy-two organizations sentenced pursuant to former antitrust guidelines.⁹⁹ Approximately 97% of the organizations sentenced under the guidelines as of that time were closely held corporations. Only four of the organizations officially sought credit for having an effective compliance program, and of this number, one

97. Seemingly, this could be stretched by some courts or prosecutors to mean that chemical firms which have experienced significant industrial accidents must have special compliance standards and procedures concentrating on the reduction of negligent accident scenarios.

98. As a result of this limitation, most organizations sentenced during fiscal years 1991 through 1995 were sentenced pursuant to pre-guideline rules.

99. Approximately 12% of the cases sentenced under the guidelines as of June 1995 involved environmental offenses. John Scalia Jr., *Cases Cited Under The Guidelines*, Sept. 8, 1995, at 3 (on file with the author). Some analysts attributed the small number of publicly traded corporations sentenced under the guidelines to (i) the fact that cases against such organizations tend to be larger and more complex and thus, it takes longer for them to wind their way through the system, and (ii) the possibility that some prosecutors may be opting to pursue such cases civilly rather than criminally. *See id.* at 2; *see also* Jed S. Rakoff, *Avoiding Corporate Indictments Under New Sentencing Guidelines*, BUS. CRIMES BULL., Feb. 1994 at 1, 2-4.

received credit.¹⁰⁰ The number of organizations sentenced under the Organizational Guidelines has climbed such that 157 organizations were sentenced under Chapter Eight in 1996; 14.2% of the cases involved environmental offenses.¹⁰¹ Significantly, the largest organizational fine imposed in 1996 (\$25 million) was imposed upon three separate corporations for environmental offenses.¹⁰² None of the organizations sentenced during the period had in place “an effective program to prevent and detect violations of law.”¹⁰³

As noted above, there are some situations in which a hypothetically perfect program will nevertheless be unavailing (e.g., no reduction in the Sentencing Guidelines culpability score will be given). For example, there is no quarter to be given where the organization “unreasonably delayed” reporting the violation to the authorities.¹⁰⁴ Clearly, whether it is advisable for a corporation to make voluntary disclosure will often be an excruciating matter of estimating the benefits and risks, especially insofar as the disclosing company gets no up-front assurance of non-prosecution.

It should also be noted that there is no reduction permitted where any “high-level personnel” (executive officer, director, or others with major supervisory authority) or any person in charge of the compliance program is involved in the offense.¹⁰⁵ This factor disqualified two of the organizations seeking credit for a compliance program in recent years. In one case, a corporation quality assurance department had been established to assure compliance with the EPA testing

100. The company, a small business engaged in the business of selling smoking paraphernalia, received credit for having an “effective” program by showing that it had given employees previous verbal and video instruction on how to comply with drug paraphernalia laws. See Scalia, *Cases Cited Under The Guidelines*, at 5.

101. See UNITED STATES SENTENCING COMMISSION, 1996 ANNUAL REPORT 37 (Oct. 1, 1995 – Sept. 30, 1996) [hereinafter U.S. SENTENCING COMMISSION, 1996 ANN. REP.]; see also UNITED STATES SENTENCING COMMISSION, 1996 SOURCEBOOK OF FEDERAL SENTENCING STATISTICS 70 (June 1997).

102. See U.S. SENTENCING COMMISSION, 1996 ANN. REP., *supra* note 101, at 38.

103. See *id.*

104. See ORGANIZATIONAL GUIDELINES, *supra* note 6, § 8C2.5(g).

105. See *id.* § 8C2.5(b).

regulations; however, because the corporate president was involved in the offense, the court determined the quality assurance program to be ineffective. In another case, the organization argued that it had an effective compliance program because each employee was expected to review training materials containing applicable Occupational Safety and Health Agency and EPA standards for asbestos removal, and senior management conducted surprise inspections to monitor compliance with those standards. The court declined to credit the corporation with having an effective compliance program, however, because the firm's president had known that asbestos was being disposed of improperly yet denied the fact when questioned about it initially by government investigators. A third case differed insofar as the organization had instituted a compliance program consisting of a code of business conduct, a compliance officer, a hotline, regular seminars on antitrust and contract bidding, and procedures to audit contract bids, and there was no evidence that senior management had been involved in the offense. Unfortunately for the organization, however, the illegal conduct occurred at a couple of newly acquired facilities that did not have compliance programs prior to their acquisition. Thus, the court declined to give the company credit under the Organizational Guidelines.¹⁰⁶

b. Draft Environmental Sentencing Guidelines

The issue of sentencing guidelines for corporations found guilty of violations of environmental law continues to be a divisive one within and without the federal enforcement community. The U.S. Sentencing Commission's Advisory Working Group¹⁰⁷ on Environmental Sanctions for organizational offenses (the Advisory Group) issued recommendations in 1993 calling for harsh sentences for corporate violations of

106. See U.S. SENTENCING COMMISSION, 1996 ANN. REP., *supra* note 101, at 125.

107. The Working Group is a panel comprised of two members of the United States Sentencing Commission, as well as fourteen individuals from the U.S. EPA, DOJ, public interest environmental groups, in-house and outside corporate counsel, and academia.

federal environmental laws.¹⁰⁸ The Draft Environmental Sentencing Guidelines prescribe a five-step process for judges to follow in sentencing organizations convicted of environmental crimes:

- *Step I.* A base fine amount is set at the *greater* of: (i) the economic gain plus costs directly attributable to the offense; or (ii) a percentage, derived from a base fine table, of the maximum fine that could be imposed for the offense (*e.g.*, 90-100% for offenses involving knowing endangerment, 60-90% for offenses involving unlawful handling of a hazardous substance resulting in an actual release into the environment).¹⁰⁹
- *Step II.* The base fine amount may be increased or decreased within a yet-to-be fixed percentage range, if one or more aggravating or mitigating factors are present.¹¹⁰ The Guidelines contain ten aggravating, and four mitigating, factors.

Aggravating Factors include: (i) management involvement in the offense, (ii) actual harm or significant risk of material degradation of the environment, (iii) threat to human life or safety, (iv) reckless indifference to legal requirements, (v) prior (within five years) criminal and civil compliance history, (vi) concealment or obstruction of an investigation, (vii) violation of an order, (viii) absence of a compliance program, and (ix) absence of a permit.¹¹¹

Mitigation Factors include: (i) prior commitment to environmental compliance (*see* discussion of step three below), (ii) cooperation and self-reporting, (iii) unintentional conduct, and (iv) prompt action to assist victims.¹¹²

- *Step III.* In determining whether a base fine amount should be decreased because of a corporation's prior commitment to environmental compliance, the Guidelines direct the judge to consider whether all of the fol-

108. *See* 58 Fed. Reg. 65,764 (1993) [hereinafter *Draft Environmental Organizational Guidelines*].

109. *See id.* § 9B2.1.

110. *See id.* § 9C1.1.

111. *See id.*

112. *See id.* § 9C1.2.

lowing factors were "substantially satisfied": (i) line management attention to compliance, (ii) integration of environmental policies, standards and procedures, (iii) auditing, monitoring, reporting and tracking systems, (iv) regulatory expertise, training and evaluation, (v) incentives for compliance, (vi) disciplinary mechanisms, and (vii) provisions for measuring achievement of environmental compliance.¹¹³

- *Step IV.* While a judge generally may not reduce a fine as a result of one or more mitigating factors below the greater of (a) 50% of the base fine calculated in step one or (b) the economic gain from the offense, a judge is allowed to reduce the fine where its imposition would impair the corporation's ability to make restitution to the victim.¹¹⁴
- *Step V.* A court can also impose a term of probation of up to five years upon a corporation under certain conditions.¹¹⁵

The Advisory Group draft follows the general structure of the Organizational Guidelines but differs in a number of significant ways. The Advisory Group draft would have courts calculate the base fine as the greater of: (i) the sum of the economic gain to the offender by avoiding compliance and the quantifiable harms to human health and the environment, or (ii) percentage of the maximum statutory fine for certain offense types ranked subjectively according to seriousness.¹¹⁶ The overall effect of this approach may be to foster erratic sentencing results, skewed to result in much higher fines. To begin with, the recommendations prescribe that offenses involving knowing endangerment or actual release of pollutants into the environment should be sentenced at or near the statutory maximum fine, without meaningfully addressing the prosecutorial tendency to charge multiple counts for each day of release, thereby greatly inflating the total fine.

113. *See id.*

114. *See id.* § 9E1.2(d).

115. *See id.* § 9F1.2.

116. *See id.* at § 9B2.1.

Because quantification of environmental harm involves novel and highly malleable issues, judges will likely resolve them differently according to different prosecutors' and defendants' sentencing presentations. This may thwart the central purpose of reducing the disparity among sentences. In addition, the Advisory Group's approach to the definition of aggravating factors for management involvement – threat to the environment or worker or public safety; scienter (phrased as “at least a reckless indifference to legal requirements”); and prior criminal or civil compliance history – could involve significant “double counting” to the detriment of the defendant. Moreover, provisions on mitigating factors which might reduce a sentence – cooperation and self-reporting; absence of scienter; and remedial or restitutionary assistance – all seem structured to give little benefit to the organization seeking to address environmental problems. This is particularly evident in the limitation on the cumulative effect of mitigating factors, including the leniency value of environmental compliance programs, to no greater than 50% of the base fine.

The Advisory Group seemingly developed its proposals as if it were a stand-alone regime for all infractions against environmental standards, rather than as one component of a comprehensive regulatory framework. The EPA and DOJ administer an extensive scheme of civil remedies designed to remove any economic benefit for corporate regulatory noncompliance and to exact a penalty commensurate with the gravity of the offense. Given the punitive aspect of civil enforcement, criminal prosecutions seem more appropriate in cases where the organization's culpability crosses the threshold deserving heightened stigma. The tension in delineating this threshold is acute because the environmental statutes allow the government the discretion to bring criminal charges without proof of the defendant's intent to violate the law.

The Advisory Group recommendations assign incremental sentencing penalties to all conduct and consequences of noncompliance, creating a duplicative overlay of punitive factors especially unjustifiable where the corporation is being held vicariously responsible for the mistakes or oversights of its employees. This problem is exacerbated by the Advisory

Group's failure to explain why it determined that environmental violations should be punished more severely than other areas under the general sentencing guidelines. For example, as noted above, the Advisory Group puts a 50% ceiling on the mitigating value of an environmental compliance program, no matter how substantial the program or how insignificant the violation. In doing so, however, the Advisory Group articulates no rationale for differing from the Organizational Guidelines' allowance of a reduction of up to 95% for a compliance program in other areas. Nor does it offer a reason for not allowing mitigation or reduction for loss of government contract business attributable to environmental offense-related listing and debarment, as the Organizational Guidelines would allow in other areas of the law.¹¹⁷ Notably, the Advisory Group would also mandate corporate probation under intrusive conditions, compliance audit oversight requirements, and shareholder disclosure well beyond those of the existing guidelines or other applicable law.¹¹⁸ Again, no rationale is offered for the greater harshness in the environmental context.

Former senior government officials, including nearly every Assistant Attorney General for Environment and Natural Resources and the EPA General Counsel in the last four Administrations, submitted written comments asking that the Advisory Group's proposal be fundamentally reconsidered.¹¹⁹ In particular, the group contended that there should be thorough reexamination of those culpable states of mind

117. Federal procurement regulations also give corporate compliance programs weight as a mitigating factor in the decision to take administrative action against a government contractor. See 48 C.F.R. § 9.406-1(a)(1); See generally *Government Contractors Need Internal Audits, Activist Approach To Compliance, Attorney Says*, 24 *Env't Rep. (BNA)* 199 (May 28, 1993). See also U.S. Environmental Protection Agency, *EPA Policies Regarding the Role of Corporate Attitude, Policies, Practices and Procedures, Determining Whether to Remove a Facility From the EPA List of Violating Facilities Following a Criminal Conviction*, 56 *Fed. Reg.* 64,785 (1991).

118. See *Draft Environmental Organizational Guidelines*, *supra* note 108, § 9F1.3.

119. See COMMENTS OF FORMER JUSTICE DEPARTMENT AND EPA OFFICIALS ON DRAFT ENVIRONMENTAL GUIDELINES PREPARED BY ADVISORY WORKING GROUP ON ENVIRONMENTAL SANCTIONS (1993), *reprinted in* ENVIRONMENTAL CRIMINAL LIA-

and types of conduct that are the appropriate targets of deterrence and punishment.¹²⁰ The former EPA and DOJ officials proposed that the factors to be used in setting the base offense level should be: (i) the degree of culpable knowledge of the defendant organization, and (ii) the foreseeability of harm to people or the environment, taking into account the social utility of the defendant's overall conduct.¹²¹ They also argued that the Sentencing Commission should extend normal credit for environmental compliance programs, impose no onerous probation provisions, and authorize a greater reduction if the defendant will incur significant collateral economic loss as a result of being barred from government contracts. The former officials offered alternative base fine scenarios reflecting specific gradations of culpability and a general range of offense levels to be applied to foreseeable harm.¹²²

BILITY AVOIDING AND DEFENDING ENFORCEMENT ACTIONS 377 (Donald A. Carr ed., Bureau of National Affairs, Inc. 1996).

120. See *id.*

121. See *id.*

122. For further commentary concerning the tortured history of the proposed guidelines and their content, see generally Jason M. Lemkin, *Deterring Environmental Crime Through Flexible Sentencing: A Proposal for the New Organizational Environmental Sentencing Guidelines*, 84 CAL. L. REV. 307 (1996); Patrick J. Devine, *The Draft Organization Sentencing Guidelines for Environmental Crimes*, 20 COLUM. J. OF ENVTL. L. 249 (1995); Christopher L. Bell, *ISO 14001: Application of International Environmental Management System Standards in the United States*, 25 ENVTL. L. REP. (ENVTL. L. INST.), 10,678, 10,683 (Dec. 1995) [hereinafter Bell]; Paul E. Fiorelli & Cynthia J. Rooney, *The Environmental Sentencing Guidelines For Business Organizations: Are There Murky Waters In Their Future?*, 22 B.C. ENVTL. AFF. L. REV. 481 (1994); John C. Coffee, Jr., *Environmental Crime and Punishment*, N.Y. L.J., Feb. 3, 1994, at 10; Richard S. Groner, *Environmental Crime and Punishment-New Proposed Guidelines for Evaluating Corporate Culpability*, LOS ANGELES LAW., Oct. 1994, at 20; Chris Carmody, *Proposed Guidelines For Environmental Crimes Irk Business*, NAT'L L.J., May 3, 1993, at 19; *Draft Sentencing Guidelines for Corporate Environmental Crimes*, Daily Rep. for Executives (BNA) A-22 (Nov. 17, 1993); *Environmental Law Sentencing Guidelines Being Rewritten, Commissioner Tells ABA*, Daily Rep. for Executives (BNA) A-174 (Sept. 10, 1993); Barbara Franklin, *Environmental Crimes; Committee Weighs Sanctions for Corporate Polluters*, N.Y. L.J., Apr. 30, 1992, at 5; Ilene H. Nagel & Winthrop M. Swenson, *The Federal Sentencing Guidelines for Corporations: Their Development, Theoretical Underpinnings, and Some Thoughts About Their Future*, 71 WASH. U. L.Q. 205 (1993); Jed Rakoff, *The Ideology of Environmental Sentencing Guidelines*, N.Y. L.J., Sept. 9, 1993, at 3; Jane Barrett, *Sentencing Environmental Crimes Under the United States Sentencing Guidelines - A Sentencing Lot-*

The Sentencing Commission eventually decided not to go forward with the Advisory Group's proposal.¹²³ The recommendations, particularly those bearing on the value of corporate compliance auditing, retain instructive value, however, for they illumine the views of the EPA and DOJ enforcement communities on compliance efforts and the elements of effective compliance programs.¹²⁴ These materials suggest that

tery, 22 ENVTL. L. 1421 (1992); George Van Cleve, *The Changing Intersection of Environmental Auditing, Environmental Law and Enforcement Policy*, 12 CARDOZO L. REV. 1215 (1991); Judson W. Starr & Thomas J. Kelly, Jr., *Environmental Crimes and the Sentencing Guidelines: The Time Has Come . . . and It's Hard Time*, 20 ENVTL. L. REP. (Envtl. L. Inst.), 10,096 (Mar. 1990); James M. Strock, *EPA's Environmental Enforcement in the 1990's*, 20 ENVTL. L. REP. (Envtl. L. Inst.) 10327 (Aug. 1990).

123. See Kenneth D. Woodrow, *The Proposed Federal Environmental Sentencing Guidelines: A Model For Corporate Environmental Compliance Programs*, 25 ENV'T REP. (BNA) 325 (June 17, 1994). Although it was thought at one time that the Sentencing Commission might come forward with a new set of environmental sentencing guidelines for corporate crimes during Summer 1996, *Commission Again Postpones Environmental Sentencing Guidelines*, INSIDE EPA WKLY. REP., Dec 8, 1995, at 15, nothing has been announced as of yet.

124. Additional discussion of the benefits of compliance efforts under various enforcement guidelines and policies, as well as suggestions on program design, may be found in Frode Jensen, III & John E. Davis, *The Growing Importance of Corporate Compliance Programs: A Look at Caremark*, IN-HOUSE PRACTICE & MGMT., May 1997, at 3; Carole Basri, *International Corporate Compliance Programs*, N.Y. L.J., May 12, 1997, at S4; Michael Goldsmith & Chad W. King, *Policing Corporate Crime: The Dilemma of Internal Compliance Programs* 50 VAND. L. REV. 1 (1997); Jay G. Martin, *Implementing Effective Corporate Legal Compliance Programs*, NAT. RESOURCES & ENV'T, Spring 1997, at 14; Mike Moore, *Companies Designing Corporate Compliance Programs Can Profit From Wisdom Gained From Efforts Of Others*, Corp. Couns. Wkly. (BNA) 8 (June 26, 1996); Kevin B. Huff, *The Role of Corporate Compliance Programs In Determining Corporate Criminal Liability: A Suggested Approach*, 96 COLUM. L. REV. 1252 (1996); *Safety and Health Programs for Compliance*, CONCRETE PRODUCTS, Dec. 1, 1996, at 33; *Corporate Compliance Programs As A Defense To Criminal Liability: Can A Corporation Save Its Soul?*, 47 RUTGERS L. REV. 605 (1995); Frank B. Friedman, PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT 133-188 (6th ed. 1995); Frances Cairncross, GREEN, INC. 201-203 (1995); P. Bose, *Anticipatory Compliance and Effective Regulatory Activity*, INT'L REV. L. & ECON. 151 (1995); Stephen L. Kass & Jean M. McCarroll, *Corporate Compliance Audits*, N.Y. L.J., Feb. 24, 1995, at 3, and *Corporate Compliance Audits - II*, N.Y. L.J., Apr. 28, 1995, at 3; Edward F. Novak, *Sentencing The Corporation*, LITIG., Summer 1995, at 31; Kenneth D. Woodrow, *The Proposed Federal Environmental Sentencing Guidelines: A Model For Corporate Environmental Compliance Programs*, 25 ENV'T REP. (BNA) 325 (June 17, 1994); James T. Banks, *Corporate Environmental Compliance Programs: Are We Seeing An Evolution*

companies with salable compliance programs will occupy a more favorable position in an enforcement context than those without them.

We have much yet to learn about how federal sentencing guidelines will be applied to large corporations. Obviously, many companies now have in place some of the sorts of systems envisioned by the Organizational Guidelines. The utility of such programs will ultimately depend largely upon their effectiveness at persuading an inherently skeptical prosecutor who is preparing to indict the company and/or its officers to reconsider on the basis that every possible step had been taken to avoid the alleged offense and that, therefore, he or she should accord the full measure of leniency available in structuring the charge. The presentation of weighty and handsomely bound volumes of company policies and attor-

In Federal Policy?, C964 ALI-ABA 467 (Oct. 20, 1994); Richard S. Groner, *Environmental Crime and Punishment-New Proposed Guidelines for Evaluating Corporate Culpability*, LOS ANGELES LAW., Oct. 1994, at 20; Barbara A. Bocxar, *Toward A Viable Environmental Regulatory Framework: From Corporate Environmental Management To Regulatory Consensus*, 6 DEPAUL BUS. L.J. 291, 300 (1994); Colleen C. Murnane, *Criminal Sanctions For Deterrence Are a Needed Weapon, But Self-Initiated Auditing Is Even Better: Keeping the Environment Clean and Responsible Corporate Officers Out of Jail*, 55 OHIO ST. L.J. 1181 (1994); *Comprehensive Program Being Developed To Assist Industry In Compliance*, EPA Says, 25 Env't Rep. (BNA) 13 (May 24, 1993); Dan K. Webb & Steven F. Molo, *Some Practical Considerations In Developing Effective Compliance Programs: A Framework For Meeting The Requirements Of The Sentencing Guidelines*, 71 WASH. U. L.Q. 375 (1993); Karl A. Groskaufmanis, *Corporate Compliance Programs as a Mitigating Factor*, in ORGANIZATIONAL SENTENCING GUIDELINES (Jed S. Rakoff ed. 1993) [hereinafter GROSKAUFMANIS]; James R. Arnold, *Compliance Auditing 1994: How To Steer A "Course Out Of Harm's Way,"* 832 P.L.I./CORP. 431 (Dec.-Jan. 1993); Michael Bromwich & Doran Banks, *Today is the Day to Implement Compliance Programs*, N.Y. L.J., July 26, 1993, at S-1; Michael A. Chernenkoff, *Environmental Compliance: Assessment And Mitigation*, C732 ALI-ABA 393 (Jan. 16, 1992); Judah Best et al., *Complying With Sentencing Guidelines*, NAT'L L.J., June 8, 1992, at 19; Mary Ellen Kris & Gail L. Vannelli, *Today's Criminal Environmental Enforcement Program: Why You May Be Vulnerable and Why You Should Guard Against Prosecution Through an Environmental Audit*, 16 COLUM. J. ENVTL. L. 227 (1991); George Van Cleve, *The Changing Intersection of Environmental Auditing, Environmental Law and Enforcement Policy*, 12 CARDOZO L. REV. 1215 (1991); Herz, *supra* note 28, at 1215; See Moorman et al., *supra* note 7; Courtney M. Price & Allen J. Danzig, *Environmental Auditing: Developing a "Preventative Medicine" Approach to Environmental Compliance*, 19 LOY. L.A. L. REV. 1189 (1986).

neys' summaries of some applicable areas of the law is not likely to carry the day.¹²⁵ If there is to be a serious prospect of accomplishing the desired result, hard thought must be given to the sorts of things that will look genuine and credible even to a jaundiced prosecutorial eye.

G. Looking Ahead

Many think these EPA, DOJ, and Sentencing Commission standards give rise to a more dense and dangerous fog, further obscuring the shoals of corporate criminal liability for environmental offenses. After all, if full voluntary disclosure is the usual precondition to a charging or sentencing break for the corporation, a strong tendency will develop to err on the side of caution and to disclose even very debatable issues. This ostensibly risk-averse course may lead to an increase in unwarranted scrutiny by prosecutors and regulators who do not ordinarily have an appreciation for real-world situations at industrial facilities. And then there is the specter that such programs may backfire and generate a documentary trail of violations amounting to a road map for an interested prosecutor, as well as a means of identifying senior corporate officers who saw the audit reports and thus putatively had "knowledge" of the problem.

The perils of corporate self-incrimination notwithstanding, many major companies are widening and deepening their compliance audit programs.¹²⁶ Companies outside the Fortune 500 are also beginning to build audit programs, in some cases modeled directly on those developed by other major businesses. The sentencing statistics recounted above, moreover, suggest that smaller enterprises may have a relatively greater need for environmental monitoring and improvement. Because the existing EPA and DOJ policies leave open

125. U.S. Sentencing Commissioner Wayne A. Budd touched on this point in a speech June 3, 1996, emphasizing that compliance efforts that are mere "window dressing" simply "won't cut it." Mike Moore, *Compliance Efforts Keep Companies On The Right Track, Will Become More Crucial*, *Sentencing Commissioner Predicts*, Corp. Couns. Wkly. (BNA) 8 (June 19, 1996).

126. See discussion of recent surveys on the extent of corporate environmental auditing *supra* note 37.

the distinct possibility that audit materials can be subpoenaed, some firms have structured their audit reviews so as to optimize claims of attorney-client privilege and work product doctrine, even though this may impede the core objectives of auditing and even though such claims will seldom prevail. As of yet, however, few oil, chemical, pharmaceutical or other environment-intensive companies appear to have declined to establish or have shut down audit programs out of concern for what the regulators or the prosecutors might do with them. On the contrary, it seems that auditing is now both a practical necessity and an industry standard.

III. Compliance and Environmental Management Strategy

Many firms, especially those with operations outside the U.S. (where the threat of prosecution is less acute), assess environmental performance in order to meet evolving global demand for resource-efficient materials and products rather than simply to avoid liability.¹²⁷ An audit system can be

127. The subject of "beyond compliance" environmental business strategy management is explored in sources cited in *supra* note 124 and the following: Jonathan Naimon et al., *Do Environmental Management Programs Improve Environmental Performance Trends? A Study of Standard & Poor 500 Companies*, ENVTL. QUALITY MGMT., Autum 1997, at 81; Karen Coyne, *Plotting a Profitable Course*, ENVTL SOLUTIONS, July 1, 1997, at 29; James Maxwell et al., *Green Schemes: Corporate Environmental Strategies and Their Implementation*, CAL. MGMT. REV., Mar. 22, 1997 at 188; Joseph Fiksel, *Competitive Advantage Through Environmental Excellence*, Corp. Env'tl. Strategy, Summer 1997, at 55; Stanley J. Feldman & Peter Soyka, *Environmental Management Works*, J. OF COMM., May 13, 1997, at 7A; *Driving Corporate Performance: A Discussion with Susan Voight*, CORP. ENVTL. STRATEGY, Spring 1997, at 32; GRACE H. WEVER, STRATEGIC ENVIRONMENTAL MANAGEMENT (1996); Anton Camarota, *The Balanced Environmental Scorecard: Translating Sustainable Development into Corporate Strategy* (Dec. 15, 1996)(unpublished paper on file with author); *New Imperatives Drive Environmental Performance Efforts*, ECO-LOG WK., Dec. 6, 1996, available in 1996 WL 13363164; Jacqueline Cramer, *Instruments and Strategies To Improve the Eco-Efficiency of Products*, ENVTL. QUALITY MGMT., Winter 1996, at 57; Philip A. Marcus, *Using EH&S Management Systems To Improve Corporate Profits*, ENVTL. QUALITY MGMT., Winter 1996, at 11; Harvey Hartman, *Myths and Realities of the "New" Green Economy*, ENVTL. QUALITY MGMT., Winter 1996, at 47; Andrew Ferguson, *Environmental Risk Management for Business Leaders - a "Wide-Angle" Perspective*, CANADIAN CHEM. NEWS, Nov. 21, 1996, at 25; Paul Miller, *Strategic Environmental Management Pre-*

serves Profitability While Protecting The Environment, ENVTL. SOLUTIONS, Nov. 1, 1996, at S5; John F. Wasik, *Lean, Mean - and Green*, CHICAGO SUN-TIMES, Sept. 5, 1996, at 26; *Leaner, Companies Lean Toward System Integration*, INTEGRATED MGMT. SYS. UPDATE, Apr. 1996, at 1; *The Green Organization: Business Is Leading Itself In Environmental Advances*, OREGON BUS., Jan. 1996, at 30; AUDITING FOR ENVIRONMENTAL QUALITY LEADERSHIP: BEYOND COMPLIANCE TO ENVIRONMENTAL EXCELLENCE (John T. Willig ed. 1996); Ulrich Steger, *The "Greening" of Industry, The Hardest Bit Is Still To Come - The Environment is Now an Important Part of Every Manager's Responsibility*, FIN. TIMES, Jan. 19, 1996, at 7; Steven Pedersen & Christopher H. Stinson, *Finding Business Opportunity in Strategic Environmental Planning*, CORP. ENVTL. STRATEGY, Summer 1996, at 41; Johanna Powell, *Green Sense Makes Good Business Cents*, THE FIN. POST, Nov. 23, 1996, at 49; William Kranenberg III, *Boardroom Environmentalism: Controlling the Potential For Environmental Losses*, CORP. ENVTL. STRATEGY, Summer 1996, at 81; Gordon M. Davidson & Ira R. Feldman, *The Greening of Corporate America*, LEGAL TIMES, Apr. 17, 1995, at 37; *Quality Management Concepts Lead Companies To Perform Environmental Audits, Study Says*, 26 ENV'T REP. (BNA) 782 (Aug. 18, 1995); Janine Darmody & Stuart Hanmer-Lloyd, *Greening New Product Development: The Pathway to Corporate Environmental Excellence?*, GREENER MGMT. INT'L, July 1995, at 73; Karen Blumefeld & Anthony Monratty, *Environmental Strategy - Stepping up to Business Demands*, PRISM, Fourth Quarter 1995, at 78; Michael E. Porter & Claas van der Linde, *Green and Competitive: Ending the Stalemate*, HARV. BUS. REV., Sept.-Oct. 1995, at 120; Peter James, *Quality and the Environment: From Total Quality Management to Sustainable Quality Management*, GREENER MGMT. INT'L, Apr. 1994, at 62; Neil L. Drobny, *Strategic Environmental Management - Competitive Solutions for the Twenty-First Century*, COST ENG'G, Aug. 1994, at 18; Grant Thornton, *Manufacturing Becomes "Greener" as Companies Adopt Environmentally Sound Practices*, Grant Thornton Manufacturing Issues (Winter 1994); D. KEITH DENTON, ENVIRO-MANAGEMENT (1994); *Conference Proceedings, Global Environmental Management Initiative*, ENVIRONMENTAL MANAGEMENT IN A GLOBAL ECONOMY (Mar. 16-17, 1994); Frank B. Friedman & David A. Giannotti, *Environmental Self-Assessment*, in LAW OF ENVIRONMENTAL PROTECTION § 7.05 (Sheldon M. Novick et al. eds., 1994); ROGENE A. BUCHOLTZ, PRINCIPLES OF ENVIRONMENTAL MANAGEMENT THE GREENING OF BUSINESS (1993); STEVEN J. BENNETT ET AL., CORPORATE REALITIES & ENVIRONMENTAL TRUTHS (1993); ENVIRONMENTAL STRATEGIES FOR INDUSTRY (Kurt Fischer & Johan Schot eds., 1993); Cornelius C. Smith, Jr., *Moving From Managing for Environmental Compliance to Managing for Prevention and Environmental Excellence* and other selected papers in, *Global Environmental Management Initiative*, CORPORATE QUALITY ENVIRONMENTAL MANAGEMENT III: LEADERSHIP-VISION TO REALITY 24-25 (1993); Robert R. Morton, *Environmental Leadership - The Way to Compliance and Beyond?*, J. OF ENVTL. REG., Autumn 1993, at 33; John Slavich, *Beyond Permitting: Environmental Compliance Management Challenges for the 1990s*, J. OF ENVTL. PERMITTING, Autumn 1993, at 525; Tony Lent & Richard Wells, *Corporate Environmental Management: Study Shows Shift From Compliance to Strategy*, 1 TOTAL QUALITY ENVTL. MGMT. 4 (1992); Johan Schot, *Credibility and Markets as Greening Forces for the Chemical Industry*, BUS. STRATEGY & THE ENV'T, Spring 1992, at 35; J. Ladd Greeno & S.

designed, for example, to illumine improvements (or deficiencies) in such areas as: (i) the "environmental friendliness" of production processes; (ii) the effectiveness of management; (iii) employee training; (iv) progress toward corporate goals; and (v) the adequacy of internal policies and standards.¹²⁸

Noble Robinson, *Rethinking Corporate Environmental Management*, COLUM. J. W. BUS., Fall-Winter 1992, at 222; BRUCE SMART, BEYOND COMPLIANCE: A NEW INDUSTRY VIEW OF THE ENVIRONMENT (1992); John R. Beaumont, *Managing The Environment: Business Opportunity and Responsibility*, FUTURES, Apr. 1992, at 191; S. Rothenberg & J. Maxwell, *Issues in the Implementation of Protective Environmental Management Strategies*, 1.4 BUS. STRATEGY AND THE ENV'T, Winter 1992, at 1; ARTHUR D. LITTLE, INC., STATE OF THE ART ENVIRONMENTAL, HEALTH AND SAFETY PROGRAMS: HOW DO YOU COMPARE? (1990); *Union Carbide: Moving Beyond Compliance*, ENVTL. MGR., June 1990, at 6.

128. Some firms have even developed programs to audit the environmental management practices of their suppliers. See *Toshiba Turns Eye Toward Asia - Pacific In Bid For Worldwide ISO 14000 Certification*, Int'l Env'tl Rep. (BNA) 928 (Oct 1, 1997). For a discussion of various types of environmental audits, including audits of environmental management systems, see generally Anton Camarota, *EMS Auditing and Management Review*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 167 (Tom Tibor & Ira Feldman eds., 1997); GREGORY P. JOHNSON, ISO 14000 EMS AUDIT HANDBOOK (1997); G.C. Shah, *Use Environmental Audits to Improve Facility-Wide Compliance*, Hydrocarbon Processing, Nov. 1, 1996, at 83; ELIZABETH GLASS GELTMAN, A COMPLETE GUIDE TO ENVIRONMENTAL AUDITS (1996); David J. Hayes, *The Business Risk Audit*, ENVTL. F., Nov. - Dec. 1996, at 19; AUDITING FOR ENVIRONMENTAL QUALITY LEADERSHIP: BEYOND COMPLIANCE TO ENVIRONMENTAL EXCELLENCE (John T. Willig ed. 1996); Sangeeta Bhargava & Richard Welford, *Environmental Auditing*, in CORPORATE ENVIRONMENTAL MANAGEMENT 118 (Richard Welford ed. 1996); *Moving Beyond In-Plant Audits*, COATINGS, Sept. 19, 1996, at 91; *Environmental Manager*, CHEM. ENG'G, June 1, 1996, at 143; Maryellen McPhee Franley, *Environmental Audit Protocols For Global Business*, CORP., ENVTL. STRATEGY, Summer 1996, at 76; Lawrence B. Cahill & Lori Benson Michelin, *Achieving Quality Environmental Audits: Twenty Tips for Success*, TOTAL QUALITY ENVTL. MGMT. Spring 1996, at 61; W. LEE KUHRE, ISO 14010S ENVIRONMENTAL AUDITING 3-5 (1996); TOM TIBOR, ISO 14000: A GUIDE TO THE NEW ENVIRONMENTAL MANAGEMENT STANDARDS 93-112 (1996); FRANK B. FRIEDMAN, PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT 133-53 (6th ed. 1995); *Environmental Auditing At The Crossroads: The Environmental Roundtable's Response to ISO 14000*, 4 TOTAL QUALITY ENVTL. MGMT. Autumn 1995, at 21; Mort Dittenhofer, *Environmental Accounting and Auditing*, 10 MANAGERIAL AUDITING J. 40 (1995); Stephen D. Willits & Ron Giuntini, *Helping Your Company Go Green*, MGMT. ACCOUNTING, Feb. 1994, at 43; M. Posson & C. Barney, *Environmental Auditing and Continuous Improvement at Lockheed*, 2.3 TOTAL QUALITY ENVTL. MGMT. (1993); ECO-MANAGEMENT AND ECO-AUDITING (Linda S. Spedding, et al., eds., 1993); Richard S. Greenberg & Cynthia A. Unger, *Environmental Management, Internal Control, and TQM*, 3.2 MGMT. Winter 1993-1994, at 223; *Toward Ef-*

Increasingly, companies also perform some form of environmental self-evaluation as part of a strategy to secure environmental insurance and investment capital.¹²⁹

fective Environmental Auditing at the TVA: Management Audits Versus Compliance Audits, 3.2 TOTAL QUALITY ENVTL. MGMT., Winter 1993-1994, at 169; Neil Gunningham & James Priest, *Environmental Audit as a Regulatory Strategy: Prospects and Reform*, 15 SYDNEY L. REV. 492 (1993); G. LEDGERWOOD ET AL., *THE ENVIRONMENTAL AUDIT AND BUSINESS STRATEGY* (1992); ARTHUR D. LITTLE, *ENVIRONMENTAL AUDITING: AN OVERVIEW* (1989).

129. See generally Anthony Michaels et al., *Climate Science and Insurance Risk*, NATURE, Sept. 18, 1997, at 225; Douglas A. Henderson, *Lending Abroad: the Role of Voluntary International Environmental Management Standards*, J. OF COMM. LENDING, July 1, 1997, at 47; Judy Greenwald, *Partnership Seeks To Link Profits, Pollution Prevention: Projects Aim To See If Environmental Management Systems Offer Financial Benefits*, BUS. INS., June 9, 1997, at 22; John M. Scagnelli, *World Bank Issues Draft Environmental Guidelines*, N.Y.L.J., May 27 1997, at 9; Dave Lenckus, *Taking Initiative To Prevent Pollution Can Reduce Premiums*, BUS. INS., Nov. 11, 1996, at 30; Dave Lenckus, *EPA Effort Aims To Boost Pollution Prevention While Lowering Costs*, BUS. INS., Nov. 11, 1996, at 3; Paul I. Kay Onifade, *Environmental Impacts and the Role of Banks in the European Union: A Survey*, EUR. ENVTL. L. REV., Aug.- Sept. 1996, at 252; *Financiers Must "Change Priorities" To Move Markets Toward Sustainability*, Int'l Env't Rep. (BNA) 508 (June 12, 1996); Alan M. Levin & Jonathan Godown, *Environmental Liability and the Strength of the Insurance Industry: The Next Thirty Years*, CORP. ENVTL. STRATEGY, Summer 1996, at 13; Deborah E. Vorhies, *United Nations Environment Program's Effort To Increase Environmental Responsibility In Banking, Investment Sectors*, Int'l Env't Rep. (BNA) 294 (Apr. 3, 1996); *Environmental Management Systems*, COMM. POL'Y GUIDE, Apr. 1, 1996, at 2 (describing collaborative initiative to explore how insurers can provide incentives to EMSs, managed by Business in the Environment, the Loss Prevention Council, ERM Certification and Verification Services Ltd. and the Imperial College Center for Environmental Technology); Lynn Johansson, *Questions & Answers - Greening the Zebra: The Role of Financial Institutions in Promoting Sustainable Development*, TOTAL QUALITY ENVTL. MGMT., Spring 1996, at 121; Sven M. Hansen, *Sustainable Banking: A Swiss Banker's Perspective*, CORP. ENVTL. STRATEGY, Spring 1996, at 67; *Insurance Savings Seen With ISO 14001 Certification - But Not Without Compliance Evidence*, INT'L ENVTL. SYS. UPDATE, Feb. 1996, at 9; STEPHEN SCHMIDHEINY & FEDERICO J.L. ZORAQUIN, *FINANCING CHANGE: THE FINANCIAL COMMUNITY, ECO-EFFICIENCY, AND SUSTAINABLE DEVELOPMENT* (1996); Karen Fossli, *Big Insurers Unveil Pact on Environmental Risks*, FIN. TIMES, Mar. 30, 1995, at 4; Karen Fossli, *Environment Conference: Insurers Turn Eco-Friendly*, FIN. TIMES, Mar. 30, 1995; Ann Deering & Stephen P. Leatherman, *Insurers Must Do More to Survive Disasters*, BEST'S REV. - PROP.-CASUALTY INS. ED., Mar. 1, 1995, at 66; Don Lewis Kirk, *Pact to Initiate Change*, BUS. INS., Dec. 4, 1995, at 63; *Environmental Concerns To Be Incorporated Into Risk Management Practices, Insurers Say*, Int'l Env'tl. Rep. (BNA) 912 (Nov. 29, 1995); GREENING FINANCIAL MARKETS (Scott Vaughan ed., 1995); *UNEP Insurers' Environment Statement*, ENVTL. LIA-

AT&T, 3M, Eastman Kodak Company, and other leading firms are discovering new ways to prevent pollution at the source through benchmarking,¹³⁰ life-cycle analysis,¹³¹ and

BILITY REP., Nov. 1, 1995, at 16; Daniel C. Esty, *Private Sector Foreign Investment and the Environment*, 4 REV. OF EUR. COMMUNITY & INT'L ENVTL. L. 99 (1995); Meg Fletcher, *Focus Is Now On Pollution Prevention, Not Control: Effective Risk Management Helps Avoid Problems*, BUS. INS., Oct. 2, 1995, at 3; *UNEP Survey of Banks Projects Increase In Environmental Investments, Lending*, Int'l Env't Rep. (BNA) 47,48 (Jan. 25, 1995); *Banks Form Risk Assn. On Environment*, NAT'L UNDERWRITER, Feb. 21, 1994, at 11; Scott Vaughan, United Nations Environment Program, *Environmental Risks and Commercial Banks: Discussion Paper* (Sept. 1994) (copy of paper on file with authors); DAVID R. SMITH, ENVIRONMENTAL RISK: CREDIT APPROACHES AND OPPORTUNITIES (1994) (copy of paper on file with authors); Evelyn Gilbert, *Insurers, Green Groups Cite Common Interests*, NAT'L UNDERWRITER PROP. & CASUALTY-RISK & BENEFIT MGMT. Feb. 28, 1994, at 9; Christopher Flavin, *Storm Warnings: Climate Change Hits the Insurance Industry*, WORLD WATCH, Nov. - Dec. 1994, at 10; David Sarokin & Jay Schulkin, *Environmental Concerns and the Business of Banking*, J. COM. BANK LENDING, Feb. 1991, at 7.

130. The practice of benchmarking, the technique of comparing a company's processes or products to a "best-in-class" example, is examined in Kenneth M. Karch, *Getting Organizational Buy-In for Benchmarking at Environmental Management at Weyerhaeuser*, 3 TOTAL QUALITY MGMT., 1996, at 297-308; B.M. Kleiner, *Benchmarking For Continuous Performance Improvement: Tactics For Success*, TOTAL QUALITY ENVTL. MGMT., Spring 1994, at 283; GLOBAL ENVIRONMENTAL MANAGEMENT INITIATIVE, BENCHMARKING: THE PRIMER (1994); Brenda A. Klafter et al., *Environmental Benchmarking: AT&T and Intel's Project to Determine the Best-in-Class Corporate Pollution Prevention Programs*, in QUALITY ENVIRONMENTAL MANAGEMENT III: LEADERSHIP-VISION TO REALITY (1993); ROBERT C. CAMP, BENCHMARKING: THE SEARCH FOR INDUSTRY BEST PRACTICES THAT LEAD TO SUPERIOR PERFORMANCE (1989).

131. Life-cycle analysis, or assessment, involves the consideration of environmental effects throughout the life of products and services. Business practice in this area is reviewed in Laurence Weinberg & Patrick Eagan, *Introducing Design for the Environment at Boeing Defense and Space Group through the Application of Abridged Life-Cycle Analysis*, ENVTL. QUALITY MGMT., Autumn 1997, at 71; Agis D. Veroutis et al., *Achieving Competitive Advantage Through Product Stewardship and LCA*, ENVTL. Q. MGMT., Winter 1996, at 67; Teresa M. Shaft et al., *A Framework for Information Systems in Life-Cycle Oriented Environmental Management*, J. OF INDUS. ECOLOGY, Spring 1997, at 135; John R. Ehrenfeld, *The Importance of LCAs - Warts and All*, J. INDUS. ECOLOGY, Spring 1997, at 41; J.W. Owens, *Life-cycle Assessment: Considerations on the Feasibility of Moving from Inventory to Impact Assessment*, J. OF INDUS. ECOLOGY, Winter 1997, at 39; Thomas E. Graedel, *The Grand Objectives: A Framework for Prioritized Grouping of Environmental Concerns in Life-Cycle Assessment*, J. INDUS. ECOLOGY, Spring 1997, at 51; James A. Fava et al., *What Are the Fundamental Differences in Environmental Impact Assessment, Risk Assessment and Life Cycle Impact Assessment?*, INT'L ENVTL. SYS. UPDATE,

June 1997, at 15; James A. Fava, *LCA: Concept, Methodology, or Strategy?*, J. OF INDUS. ECOLOGY, Spring 1997, at 8; Will Gibson, *A Practical View of Life-Cycle Assessment*, in IMPLEMENTING ISO 14000 445 (Ira Feldman & Tom Tibor eds. 1997); DESIGN FOR THE ENVIRONMENT: CREATING ECO-EFFICIENT PRODUCTS AND PROCESSES (Joseph Fiksel ed. 1996); Robert J. Kainz et al., *Industry Cases and Practices: Life-Cycle Management at Chrysler*, in MOVING AHEAD WITH ISO 14000: IMPROVING ENVIRONMENTAL MANAGEMENT AND ADVANCING SUSTAINABLE DEVELOPMENT 279 (Philip A. Marcus & John T. Willig ed., 1996); Richard Welford, *Life Cycle Assessment*, in CORPORATE ENVIRONMENTAL MANAGEMENT 140 (Richard Welford ed. 1996); Stanley P. Rhodes & Linda G. Brown, *Putting Life-Cycle Assessment to Work in the Marketplace: Modern Environmental Labeling Applications*, in MOVING AHEAD WITH ISO 14000: IMPROVING ENVIRONMENTAL MANAGEMENT AND ADVANCING SUSTAINABLE DEVELOPMENT 267 (Philip A. Marcus & John T. Willig ed. 1996); GRACE WEVER, STRATEGIC ENVIRONMENTAL MANAGEMENT 190-96 (1996); Sean Milmo, *The Way to Uniformity: European Quality Standards Are Assuming A Larger Role, and Companies Are Experimenting With Far-Reaching Systems*, CHEM. MARKETING REP., Apr. 8, 1996, at SR12; Agis D. Veroutis et al., *Achieving Competitive Advantage Through Product Stewardship and LCA*, ENVTL. QUALITY MGMT., Winter 1996, at 67; Fred Wilson, *A Tool For Finding and Reducing Environmental Costs*, CENTRAL N.Y. BUS. J., Sept. 16, 1996, at 7B; Linda G. Brown et al., *Using New LCA Performance Metrics: Getting the Most Out of Your EMS*, ENVTL. QUALITY MGMT., Autumn 1996, at 3; David J. Hunkeler & Ellen A. Huang, *LCA in Japan: A Survey of Current Practices and Legislative Trends and Comparison to the United States*, ENVTL. QUALITY MGMT. Autumn 1996, at 81; R.J. Ollershaw, *Life Cycle Analysis: A Route to Sustainable Development?*, POLYMERS PAINT COLOUR J., May 1, 1996, at 28, and June 1, 1996, at 25; Bob Ferrone, *Point of View – Environmental Life-Cycle Management Emerges*, TOTAL QUALITY ENVTL. MGMT., Spring 1996, at 107; T.E. Graedel et al., *Matrix Approaches to Abridge Life Cycle Assessment*, ENVTL. SCI. & TECH., Vol. 29, 1996, at 134A-139A; TOM TIBOR, ISO 14000 A GUIDE TO THE NEW ENVIRONMENTAL MANAGEMENT STANDARDS 131-50 (1996); Ellen A. Huang & David J. Hunkeler, *Using Life-Cycle Assessments in Large Corporations: A Survey of Current Practices*, in MOVING AHEAD WITH ISO 14000: IMPROVING ENVIRONMENTAL MANAGEMENT AND ADVANCING SUSTAINABLE DEVELOPMENT 239 (Philip A. Marcus & John T. Willig ed. 1996); R.U. Ayres, *Life Cycle Analysis: A Critique*, 14 RESOURCES, CONSERVATION & RECYCLING 199 (1995); Thomas Gloria et al., *Life Cycle Assessment: A Survey of Current Implementation*, 4 TOTAL QUALITY MGMT., 1995, at 33-50; P. Hindle, et al., *Promoting the Use of Lifecycle Assessment in Product and Service Design in Public Policy*, 4 REV. OF EUR. COMMUNITY & INT'L ENVTL. L. 155 (1995); Keith A. Weitz et al., *Developing a Decision Support Tool for Life-Cycle Cost Assessments*, 4 TOTAL QUALITY ENVTL. MGMT. 107 (1994), at 107; Sally Pidgeon & David Brown, *The Role of Lifecycle Analysis In Environmental Management: General Panacea or One of Several Useful Paradigms*, GREENER MGMT. INT'L, July 1994, at 67; H. Baumann & T. Rydberg, *Life Cycle Assessment: A Comparison of Three Methods for Impact Assessment and Evaluation*, 2.1 J. CLEANER PRODUCTION 13 (1994); F. Berkhout, *Life Cycle Assessment and Innovation in Large Firms*, 5 BUS. STRATEGY & THE ENVIRONMENT 145 (1994); T. Baumgartner & F. Rubik, *Evaluating Techniques for Eco-Balances and Life-*

greater resource productivity.¹³² This trend may continue as regulators experiment with more flexible, innovation-friendly approaches to environmental regulation, as envisioned under the President's Council on Sustainable Development's (PCSD) report, *Sustainable America: A New Consensus for Prosperity, Opportunity, and a Healthy Environment for the Future*.¹³³ Creative companies may find ways to avoid some

Cycle Assessment, EUR. ENV'T, June 1993, at 18; F. Arnold, *Life Cycle Doesn't Work*, ENVTL. F., Sept.-Oct. 1993, at 19-23; C.L. Henn & J.A. Fava, *Life Cycle Analysis and Resource Management*, in ENVIRONMENTAL MANAGEMENT STRATEGIES 542-641 (1993); C. Charlton & B. Howell, *Life Cycle Assessment: A Tool for Solving Environmental Problems?*, EUR. ENV'T, Apr. 1992, at 2.

132. Close-up accounts of the efforts of a diverse group of firms, including Nissan Motor Manufacturing Corp., Exxon, Wal-Mart, Lufthansa Airlines, Hitachi, Ltd., Alcatel N.V., Howe Sound Pulp and Paper, Black Photo Corp., Inter-Continental Hotels, and Buena Vista Winery can be found in FRANCES MCINERNEY & SEAN WHITE, *THE TOTAL QUALITY CORPORATION* (1995).

133. The PCSD Report, touted as a blueprint for future regulatory reform by President Clinton, advocates reforming the regulatory system to give companies greater operating flexibility in exchange for the achievement of superior environmental performance. See *PCSD Report Recommends Linking Economy With Environmental Policy*, INSIDE EPA WKLY. REP., July 5, 1996, at 15; *White House Creates New Interagency Group On Sustainable Development*, INSIDE EPA WKLY. REP., Mar. 29, 1996, at 4; *Clinton Receives Advisory Council Recommendations on New Policy Directions*, Daily Rep. for Executives (BNA) A-18 (Mar. 11, 1996); Amy Porter, *Council Members Say Recommendations on Regulatory Reform Not Rollbacks*, Daily Rep. for Executives (BNA) A-12 (Feb. 16, 1996); Susan Bruninga, *Presidential Panel Recommends Framework for Reforming Environmental Regulations*, Daily Rep. for Executives (BNA) A-45 (Feb. 13, 1996); John H. Cushman Jr., *Adversaries Back Pollution Rules Now On The Books*, N.Y. TIMES, Feb. 12, 1996, at A1.

Has the shift from "command and control" to voluntary, market-incentive, and information-based regulatory strategies finally begun? Opinions vary widely See generally Camilla Day Buczek, *EPA Moves to Cooperative Approach*, NAT'L L.J., Oct. 14, 1996, at C-13; Timothy Noah, *Both Parties Paint Themselves Green, but Trend Of Looser Environment Rules Is Seen Continuing*, WALL ST. J., Sept. 9, 1996, at A18; Elizabeth Rensch, *Resource Development Council: Some Thoughts on Environmental Regulation*, ALASKA J. OF COM., July 15, 1996, at 21; Daniel J. Fiorino, *Toward A New System of Environmental Regulation: The Case For An Industry Sector Approach*, 26 ENVTL. L. 457 (1996); *Eco-Efficiency' Cited At Alternative to Policies Based on Command and Control*, Int'l Env't Rep. (BNA) 383 (May 1, 1996)(the U.N. Commission on Sustainable Development Embraces Alternative Policies based on "eco-efficiency"); Ken Fouhy, *Europe Breaks with Command and Control*, CHEM. ENG'G, Apr. 1, 1996, at 37; *A New Tune for Protecting The Environment, In Harmony*, CHEMICOLOGY, Mar.-Apr. 1996, at 2; *New Hampshire Creating Alternative Compliance Regulatory Program*, Mar. 28, 1996, at 1; Aaron Derfel, *The Age of Self-Cleaning; Quebec is*

of the burdens of regulation, gaining an edge over the competition. Yet legal compliance assessment remains a fundamental part of the environmental management strategies of even the greenest firms.¹³⁴ By carefully studying the applica-

Planning to Scrap Environmental Regulations and Entrust Standards and Cleanup to Industry, MONTREAL GAZETTE, at B1; FRANCES CAIRNCROSS, GREEN, INC. 189-99 (1995) (sounding a cautionary note for policymakers); 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, 513-17 (1995); Eric W. Orts, *Reflexive Environmental Law*, NW. U.L. REV. 1227 (1995); Michael E. Porter & Claas van der Linde, *Green and Competitive: Ending the Stalemate*, HARV. BUS. REV., Sept.- Oct. 1995, at 120; Michael E. Porter & Claas van der Linde, *Toward a New Conception of the Environment-Competitiveness Relationship*, J. OF ECON. PERSP., Fall 1995, at 9; Barbara A. Boczar, *Toward a Viable Environmental Framework: From Corporate Environmental Management to Regulatory Consensus*, 6 DEPAUL BUS. L.J. 291 (1994); CURTIS MOORE & ALAN MILLER, GREEN GOLD (1994); Noah Whalley & Bradley Whitehead, *It's Not Easy Being Green*, HARV. BUS. REV., May-June 1994, at 46; Michael Porter, *America's Green Strategy*, SCI. AM., Apr. 1991, at 168; see also *President's Economic Report to Congress Says Least Burdensome Regulations Sought*, ENV'T REP. (BNA) (Feb. 23, 1996); Jessica Matthews, *Business Goes Green*, WASH. POST, Feb. 12, 1996, at A19.

The pace of "reinvention" of regulation under the Clinton Administration has been plodding, at best. See U.S. GENERAL ACCOUNTING OFFICE, ENVIRONMENTAL PROTECTION: CHALLENGES FACING EPA'S EFFORTS TO REINVENT ENVIRONMENTAL REGULATION (1997) (finding that EPA should define exactly what it means by "cleaner, cheaper, smarter" environmental protection); MAJORITY STAFF OF THE HOUSE COMM. ON TRANSPORTATION AND INFRASTRUCTURE, AN ASSESSMENT OF EPA'S REINVENTION (Sept. 1996); see generally William H. Miller, *Washington Wreck*, INDUS. WK., Aug 18, 1997, at 116; GAO *Recommends Broad Review Of EPA Reinvention Initiative*, INSIDE EPA WKLY. REP., Aug. 8, 1997, at 2; *Little Progress at CSI*, GAO SAYS; *Just Give Us Time, EPA Responds*, Daily Rep. for Executives (BNA) A-15 (July 22, 1997); *New Industry-Sponsored Report Blasts EPA Voluntary Programs*, INSIDE EPA WKLY. REP., Oct. 18, 1996, at 13; *House Republicans Take Aim At EPA Regulatory "Reinvention" Efforts*, INSIDE EPA WKLY. REP., Sept. 20, 1996, at 14; *EPA Reinvention Effort Falls Short Report Says; Agency Decries Findings*, Daily ENV'T REP. (BNA) A-13 (Sept. 18, 1996); *Report Shows Rising Corporate Skepticism Over Voluntary Programs*, INSIDE EPA WKLY. REP., Sept. 13, 1996, at 5. See also *States Charging USEPA Bungled Project XL, Set Up Reform Group*, STATE ENVTL. MONITOR, Oct. 4, 1996, at 3.

134. Compliance audits also inform government reporting, securities disclosure, and other types of communication with the public. Various approaches to environmental disclosure in the securities context are surveyed in Joseph J. Armao & Brian J. Griffith, *The SEC's Increasing Emphasis on Disclosing Environmental Liabilities*, NATURAL RESOURCES & ENV'T, Spring 1997, at 31; Stephen L. Kass & Jean M. McCarroll, *Environmental Disclosure in Securities and Exchange Commission Filings*, ENV'T, Apr. 1, 1997, at 4; Donald Carr & Chuca

ble laws and regulations as well as the firm's ability to exceed them, firms can gain needed insights into costs and efficiencies which can later be used to inform product design and manufacturing strategy. A firm cannot comprehensively improve its performance without being able to measure its compliance with corporate policies, principles, and standards, as well as applicable laws and regulations. Companies which understand the impact of regulation in a particular industry may also be better positioned to satisfy customer expectations in those sectors.

Meyer, *Publicly Traded Securities*, in ENVIRONMENTAL DUE DILIGENCE GUIDE (1996); ELIZABETH A.G. GELTMAN, SECURITIES DISCLOSURE OF CONTINGENT ENVIRONMENTAL LIABILITIES (1995); John W. Bagby et al., *How Green Was My Balance Sheet?: Corporate Liability and Environmental Disclosure*, 14 VA. ENVTL. L.J. 287 (1995); S.H.T. Denstedt & S.R. Miller, *Due Diligence in Disclosing Environmental Information for Securities Transactions*, 33 ALTA. L. REV. 231 (1995); Robert H. Feller, *Environmental Disclosure and the Securities Laws*, 22 B.C. ENVTL. AFF. L. REV. 225 (1995); Symposium, *Disclosure of Environmental Liability in SEC, Financial Statements, and Debt Instruments*, 5 VILL. ENVTL. L.J. 315 (1994); Mark A. Stach, *Disclosure of Existing and Contingent Superfund Liability Under the Reporting Requirements of the Federal Securities Laws*, 18 U. DAYTON L. REV. 355 (1993); Resa Vetri Ferman, Note, *Environmental Disclosures and SEC Reporting Requirements*, 17 DEL. J. OF CORP. L. 483 (1992); Elizabeth A.G. Geltman, *Disclosure of Contingent Environmental Liabilities by Public Companies Under the Federal Securities Laws*, 16 HARV. ENVTL. L. REV. 129 (1992); Rabinowitz & Murphy, *Environmental Disclosure: What the SEC Requires*, ENVTL. FIN., Spring 1991, at 31; James G. Archer et al., *SEC Reporting of Environmental Liabilities* 20 ENVTL. L. Rep. (Envtl. L. Inst.) 10105 (Mar. 1990); *Companies Tackle Environmental Disclosures*, INVESTOR'S DAILY, May 30, 1990, at 1. Following the lead of Monsanto and Norsk Hydro, more than a hundred companies worldwide publish some amount of environmental information. FRANCES CAIRNCROSS, GREEN, INC. 203 (1995). See generally Douglas J. Lober, *What Makes Environmental Reports Effective: Current Trends in Corporate Reporting*, CORP. ENVTL. STRATEGY, Winter 1997, at 15; Fred Wilson, *Proactive Companies Adopt External Reports and Enviro Audits*, CENTRAL N.Y. BUS. J., Sept. 16, 1996, at 3B; Global Environmental Management Initiative, *Environmental Reporting and Third Party Statements* (Mar. 1996).

For further information on the implementation of audit data in environmental reporting, see GREEN LEDGERS: CASE STUDIES IN CORPORATE ENVIRONMENTAL ACCOUNTING (Daryl Ditz et al. eds., 1995); Trevor Russel, *Corporate Environmental Disclosure: Is Business Measuring Up to Its Responsibilities?*, 4 REV. OF EUR. COMMUNITY & INT'L ENVTL. L. 137 (1995); FRANCES CAIRNCROSS, GREEN, INC. 204-10 (1995); Mark A. Campandale, *Green Investment: Incentive for Disclosure*, 3 REV. OF EUR. COMMUNITY & INT'L ENVTL. LAW 43 (1993).

Nascent national, regional, and international EMS standards regimes affirm the importance of compliance auditing for sound environmental management. Voluntary environmental management standards are currently in effect or in development in countries around the world;¹³⁵ each examine an organization's commitment to compliance.¹³⁶ Of the various standards presently under development, the ISO 14000 series crafted by the International Organization for Standardization (ISO) may ultimately gain the widest acceptance. The ISO 14000 series, encompassing all aspects of EMS design, and composed of both organization or process standards and product-oriented standards, gives organizations of all types and sizes the tools to voluntarily raise their levels of environmental responsibility worldwide.¹³⁷

A. The ISO 14000 Series of International Environmental Management Standards

The International Organization for Standardization, a federation of more than 100 national standards bodies from countries around the world, introduced its ISO 14000 series of international standards little more than a year ago. The

135. See Hank Barnette, *Meeting Quality Standards: ISO 9000, 9002, 1400 and QS 9000*, NEW STEEL, June 1, 1996, at 112; Jennifer Nash & John Ehrenfeld, *Code Green: Business Adopts Voluntary Environmental Standards*, ENV'T, Jan. - Feb. 1996, at 16. It is significant that, in the quality context, ISO 9000 certification is considered a prerequisite for many firms doing business in Europe, see PERRY L. JOHNSON, ISO 9000: MEETING THE NEW INTERNATIONAL STANDARDS 9 (1993), and the United States, see Charles W. Thurston, *Quality is a Global Affair: Worldwide Adoption of International Organization for Standardization Program, Quality '94*, 246 CHEM. MARKETING REP., Oct. 31, 1994, at SR10. Currently, there are no plans to create a single registration standard for quality and environmental management. See *No ISO Combo*, CHEM. WK., July 16, 1997, at 36.

136. See 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, 488 (1995) ("standards development has two objectives: (1) proactive - aimed at streamlining regulations, fostering commerce, and improving performance; and (2) defensive - aimed at facilitating legal compliance while avoiding more onerous mandatory environmental requirements.").

137. See generally Johanna Powell, *ISO 14000 Standards Aim at a Greener World*, FIN. POST, Aug. 23, 1996, at 13; Jonathan Scott, *Environment Experts from Memphis Set Standards*, MEMPHIS. BUS. J., July 29, 1996, at 16.

ISO standards encompass various aspects of EMS design and provide organizations of varying types and sizes with a set of tools to voluntarily raise levels of environmental performance.¹³⁸ Although some trace the genesis of the standards as far back as the 1972 United Nations (UN) Conference on Human Environment in Stockholm, Sweden,¹³⁹ it is as likely to be found in what Frances Cairncross has described as “the favorable change of attitude among many companies to environmental policy” which occurred during the years leading up to the 1992 UN Conference on Environment and Development (UNCED), or Earth Summit, in Rio de Janeiro, Brazil.¹⁴⁰

138. See generally Johanna Powell, *ISO 14000 Standards Aim at a Greener World*, FIN. POST, Aug. 23, 1996, at 13; Jonathan Scott, *Environment Experts from Memphis Set Standards*, MEM. BUS. J., July 29, 1996, at 16.

139. John Wolfe, *Drivers for International Integrated Environmental Management*, in ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION 15, 18 (Ruth Hillary ed. 1997); THE ISO HANDBOOK 11 (Joseph Cascio ed. 1996). On the Stockholm conference, see Andronico O. Adede, *The Treaty System From Stockholm (1972) To Rio De Janeiro (1992)*, 13 PACE ENVTL. L. REV. 33 (1995); Louis Sohn, *The Stockholm Declaration on the Human Environment*, 14 HARV. INT'L L.J. 423 (1973).

140. See FRANCES CAIRNCROSS, *COSTING THE EARTH XII* (1991). A number of events and participants contributed to the development of the ISO 14000 series. Naomi Roht-Arriaza, in her excellent 1995 article, *Shifting the Point of Regulation: The International Organization for Standardization and Global Lawmaking on Trade and the Environment*, isolates the principle “stage setting” events leading up to the drafting of the ISO 14000 standards:

First, the European Community's recently adopted approach to technical regulation, coupled with other European initiatives in the areas of eco-auditing and in labeling or banning certain products for environment-related reasons, propelled ISO into the environmental arena to prevent unwanted competitive effects on global industry. Second, the negotiation of the Uruguay Round of the [GATT], together with emerging controversy over the role of trade agreements in environmental protection, raised questions about harmonization of standards. Third, as uncoordinated schemes proliferated, business and consumer policy groups asked ISO to study them. . . . Fourth, the success of the ISO's series 9000 quality control standards became a viable model for designing and implementing environmental management standards. Finally, in response to requests during preparation for [UNCED], the ISO began exploring a possible role in sustainable development.

22 ECOLOGY L.Q. 479, 490-91 (1995). For further background, and a description of the ISO standard-setting process, see generally IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO ENVIRONMENTAL MANAGEMENT

In the period leading up to UNCED, Maurice Strong, Secretary General of the Earth Summit, enlisted the support for, and participation of business in, the conference through his advisor, Swiss businessman Stephan Schmidheiny. Mr. Schmidheiny formed the Business Council for Sustainable Development (BCSD)¹⁴¹ for this purpose and, among other actions, approached ISO and another organization, the International Electrotechnical Commission (IEC), to explore the possibility of a set of global environmental management standards building on ISO's experience with ISO 9000.¹⁴² ISO and IEC established the Strategic Advisory Group on the Environment (SAGE) in August of 1991 to evaluate the practica-

STANDARDS 15-33 (Timbor & Ira Feldman eds., 1997); Oswald A. Dodds, *An Insight into the Development and Implementation of the International Environmental Management System ISO 14001*, in ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION 15 (Ruth Hillary ed. 1997); John Wolfe, *Drivers for International Integrated Environmental Management*, in ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION 15 (Ruth Hillary ed., 1997); Dick Hortensius & Mark Barthel, *Beyond ISO 14001: An Introduction to the ISO 14000 Series*, in ISO 14001 AND BEYOND: ENVIRONMENTAL MANAGEMENT SYSTEMS IN THE REAL WORLD 19 (Christopher Sheldon ed. 1997); ISO 14000 QUESTIONS AND ANSWERS (Mark B. Baker & Mary McKiel eds., 4th ed. 1997); Kerry E. Rodgers, *The ISO Environmental Standards Initiative*, 5 N.Y.U. ENVTL. L.J. 181, 191-204 (1996). See also *Heads of U.S., Dutch ISO Delegations Reflect On OSLO Meeting*, Int'l Envtl. Rep. (BNA) 555 (July 12, 1995).

141. See FRANCES CAIRNCROSS, GREEN, INC. 178 (1995). On the views of BCSD heading into UNCED, see generally STEPHAN SCHMIDHEINY, CHANGING COURSE: A GLOBAL BUSINESS PERSPECTIVE ON DEVELOPMENT AND THE ENVIRONMENT (1992).

142. See Dick Hortensius & Mark Barthel, *Beyond ISO 14001: An Introduction to the ISO 14000 Series*, in ISO 14001 AND BEYOND: ENVIRONMENTAL MANAGEMENT SYSTEMS IN THE REAL WORLD 19 (Christopher Sheldon ed. 1997). As Grace Wever explains, ISO 14001 is rooted in ISO 9000, *Quality Management and Quality Assurance Standards: Guidelines for Selection and Use*, which itself was patterned after the Plan-Do-Check cycle developed by quality guru W. Edwards Deming, rather than on the quality framework found in the criteria for Malcolm Baldrige National Quality Award. GRACE H. WEAVER, STRATEGIC ENVIRONMENTAL MANAGEMENT 21 (1996); see Robert Clifford, *ISO 14001 Has Its Roots In TQ Management*, CAP. DISTRICT BUS. REV., Sept. 9, 1996, available in 1996 WL 11471475; and Maureen Patterson, *For Many, ISO Identifies Quality Products and Services*, BUILDINGS, June 1, 1996, at 106. See also Peter James, *Quality and the Environment: From Total Quality Management to Sustainable Quality Management*, GREENER MGMT. INT'L, Apr. 1994, at 62. Appendices to ISO 14001 chart the corresponding elements of the environmental and quality management standards.

bility of such standards.¹⁴³ The SAGE reviewed ISO's experience with ISO 9000 and studied various national EMS standards schemes, including BS7750, before issuing a set of recommendations on environmental management for consideration during preparations for the Earth Summit. According to John Wolfe, SAGE's "call for better environmental management" became a key element of the two principal UNCED documents, the Rio Declaration and Agenda 21, the global environmental action plan for sustainable development.¹⁴⁴ In October of 1992, SAGE called on ISO and IEC to organize a new technical committee responsible for the development of a set of international environmental management standards.¹⁴⁵ ISO promptly did so, creating Technical Committee 207 (TC 207) in 1993 and charged it with the mission of "standardization in the field of environmental management tools and systems."¹⁴⁶ Standards bodies within various coun-

143. See Dick Hortensius & Mark Barthel, *Beyond ISO 14001: An Introduction to the ISO 14000 Series*, in ISO 14001 AND BEYOND: ENVIRONMENTAL MANAGEMENT SYSTEMS IN THE REAL WORLD 19 (Christopher Sheldon ed. 1997); John Wolfe, *Drivers for International Integrated Environmental Management*, in ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION 15, 19 (Ruth Hillary ed. 1997). The U.S. representative to ISO is ANSI. See generally Sergio Mazza, *Who Develops The ISO Standards?*, BUS. WK., OCT. 28, 1996, at 16; TOM TIBOR, ISO 14000 A GUIDE TO THE NEW ENVIRONMENTAL MANAGEMENT STANDARDS 27-29 (1996).

144. See John Wolfe, *Drivers for International Integrated Environmental Management*, in ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION 15, 20 (Ruth Hillary ed., 1997). The significance of UNCED is assessed in Peter H. Sand, *International Environmental Law After Rio*, 4 EUR. J. INT'L L. 377 (1993); Stephen Tromans, *International Law and UNCED: Effects on International Business*, 4 J. ENVTL. L. 190 (1992); A. Gouldson, *UNCED Round-Up*, EUR. ENV'T, June 1992, at 1.

145. See generally John Wolfe, *Drivers for International Integrated Environmental Management*, in ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION 15, 19 (Ruth Hillary ed., 1997); THE ISO HANDBOOK 11 (Joseph Cascio ed. 1996).

146. Six TC 207 subcommittees and one working group cover the following focus areas: (i) environmental management systems (SC1); (ii) environmental auditing and related environmental investigations (SC2); (iii) environmental labeling (SC3); (iv) environmental performance evaluation (SC4); (v) life-cycle assessment (SC5); (vi) terms and definitions (SC6); and (vii) environmental aspects in product standards (WG1). See W.M. VON ZHAREN, UNDERSTANDING THE ENVIRONMENTAL STANDARDS 9-10 (1996). Additional background concerning TC 207 is provided in TOM TIBOR, ISO 14000 A GUIDE TO THE NEW ENVIRONMENTAL MANAGEMENT STANDARDS 32-38 (1996).

tries subsequently formed parallel technical advisory groups, e.g., the U.S. TAG formed by ANSI, as well as sub-technical advisory groups (each with their own working group) for the various international subcommittees,¹⁴⁷ in order to help them forge a national consensus on content and application of the standards for advocacy at the international level.¹⁴⁸

ISO published the EMS specification, ISO 14001, "Environmental Management Systems – Specification With Guidance For Use," an interpretive guidance document, ISO 14004, "Environmental Management Systems – General Guidelines on Principles, Systems and Supporting Techniques," and three environmental auditing standards, ISO 14010, ISO 14011/1, and ISO 14012 in the fall of 1996, slightly more than three years after TC 207's inaugural plenary session of June 1993.¹⁴⁹ ISO released the first in a series of life cycle assessment standards, ISO 14040, "Environmental Management – Life Cycle Assessment – Principles and Framework" almost one year later.¹⁵⁰ The ISO 14000 series will ultimately include additional guidance standards designed to facilitate EMS implementation and inform the analysis and characterization of the environmental attributes of products. Additional standards on life-cycle analysis, as well as standards dealing with eco-labeling, are expected to become final in the years ahead.¹⁵¹ Though quite

147. Members in the U.S. TAG include representatives from: (i) government organizations, e.g., Defense, Energy, and EPA; (ii) industry, i.e., Fortune 500 companies in the petroleum, electronics, communication, and chemical industries; (iii) consultants; (iv) registrars, auditors, and standards bodies; and (v) public interest organizations.

148. See VON ZHAREN, W.M. VON ZHAREN, UNDERSTANDING THE ENVIRONMENTAL STANDARDS 11 (1996). (The U.S. TAG is to have "the opportunity to review, comment, and recommend how the U.S. will vote on all new work item proposals.") (quoting the U.S. TAG Operating Procedures).

149. ISO issued ISO 14001 and ISO 14004 in September 1996. Publication of the auditing standards came one month later. Copies of ISO documents may be purchased from the *American National Standards Institute*, 11 West 42nd Street, New York, New York, 10036; Tel: 212-642-4900; Fax: 212-398-0023.

150. See generally *First LCA Standard Published*, INT'L ENVTL. SYS. UPDATE, Aug. 1997, at 1.

151. See *Benchmarks On Life-Cycle Assessment, Ecolabeling, Said Years From Completion*, Daily Rep. for Executives (BNA) A-15 (Mar. 14, 1996). Occupational health and safety standards may eventually follow. See *Background*

new, the ISO 14000 series seems to have captured the goodwill, if not the imprimatur, of regulatory officials in North America, Asia, Latin America and Europe,¹⁵² and comes closest to offering companies an international vehicle to project the sincerity and credibility of their commitment to environmental protection, as well as an overarching framework within which to integrate their regulatory compliance programs.¹⁵³

on *Potential International OHSMS Standard*, INTEGRATED MGMT. SYS. UPDATE, Apr. 1996, at 12. Marilyn Hernandez takes up the issue of whether such standards are necessary in *International Standardization of Occupational Health And Safety Management Systems - Is There a Need?*, INTEGRATED MGMT. SYS. UPDATE, Apr. 1996, at 27. CEEM Information Services' publication *International Environmental Systems Update* updates the status of work on the standards in the ISO 14000 series on a monthly basis.

152. Levels of acceptance worldwide are surveyed in *ISO 14000 Catches On In Brazil*, CHEM. WK., Sept. 24, 1997, at 88; Alex Scott, *Registration Doubles in Japan*, CHEM. WK., Sept. 24, 1997 at 86; Susan Rost, *ISO 14001 Global Progression Chart*, INT'L ENVTL. SYS. UPDATE, June 1997 (special supplement); Kara Sissell, *Around the World with ISO 14000*, CHEM. WK., Sept. 25, 1996, at 54; Kara Sissell, *Acceptance Varies Worldwide*, CHEM. WK., Sept. 25, 1996, at 53; Pamela J. Bridgen, *ISO 14000: The Worldwide Reaction of Industry and Governments*, ENVTL. QUALITY MGMT., Autumn 1996, at 45; Susan Rost, *Special Report: Global ISO 14001 Progression Evident*, INT'L ENVTL. SYS. UPDATE, Oct. 1996, at 1; Helga Tilton, *The Dawn of ISO 14000: The New Environmental Management System Sparks Considerable Interest, But There Is Relatively Little Action Among Domestic Players*, CHEM. MARKETING REP., Apr. 8, 1996, at SR5; *Special Report: Nations Taking Steps Now In Preparation For International Standards Organization's ISO 14000*, Int'l Env'tl. Rep. (BNA) 128 (Feb. 8, 1995).

153. The drafters of ISO 14001 suggest that demonstration of successful implementation of the specification can be used, for example, for any of the following purposes: to demonstrate compliance with environmental laws and regulations; to assure customers of their commitment to demonstrable environmental management; to satisfy investor criteria and improve access to capital; to obtain insurance at reasonable cost; enhance image and market share; to meet vendor certification criteria; to improve relations with the government; and to demonstrate reasonable care. See generally *Implementing ISO 14000*, CAL. ENVTL. COMPLIANCE MONITOR, Sept. 9, 1996, at 1, 2; *ISO 14001: Performance Through Systems?*, ENVTL. F., Nov.-Dec. 1995, at 36, 38; Joe Cascio, *International Environmental Management Standards (ISO 9000's Less Tractable Siblings)* in CONFERENCE PROCEEDINGS, GLOBAL ENVIRONMENTAL MANAGEMENT INITIATIVE, ENVIRONMENTAL MANAGEMENT IN A GLOBAL ECONOMY (Mar. 16-17, 1994), at 11, 13; Linda Spedding, *Environmental Auditing and International Standards*, 3 REV. OF EUR. COMMUNITY & INT'L ENVTL. L. 14 (1993); Gordon Belle et al., *International, North American, and National Standards for Environmental Management Systems*, in GLOBAL ENVIRONMENTAL MANAGEMENT INI-

B. The ISO 14001 Environmental Management System

ISO developed the EMS specification, ISO 14001, as a means to provide organizations of all sizes and types¹⁵⁴ with

TIATIVE, CORPORATE QUALITY ENVIRONMENTAL MANAGEMENT III: LEADERSHIP-VISION TO REALITY (Mar. 24-25, 1993), at 125. As one observer aptly observed: ISO 14001 will not be a "stand alone" document that, by itself, will improve environmental protection or performance. It must be read together with local, state, and federal laws that establish actual compliance obligations. It will, however, provide a comprehensive management platform on which compliance, pollution prevention, and environmental performance activities can take place.

Bell, *supra* note 122. For this and other reasons, many consider the standards to be "of extreme importance to the industrial community." *House Committee on Science, Subcommittee on Technology, The Increasing Importance of International Standards to the U.S. Industrial Community and the Impact of ISO 14000* (June 4, 1996)(opening statement of Rep. Constance Morella (R-Md)).

154. As used in the standards, the term "organization" means a "[c]ompany, corporation, firm, enterprise or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration." ISO 14001 § 3.12. For "organizations with more than one operating unit," a "single operating unit" may be defined as an organization. *Id.* The standard is intended to cover all types and sizes of organizations wherever they may be located, and to reach both the service and manufacturing sectors. See generally *Series Suits Many Types of Business*, S. CHINA MORNING POST, Sept. 10, 1996, available in 1996 WL 3767357.

It is yet unclear whether small and medium sized firms will find the hurdles to certification insurmountable. Although ISO 14001 is ostensibly applicable to all types and sizes of organizations, many companies will undoubtedly find implementation expensive. Just how much it will cost to implement ISO 14001 depends in part upon the state of the organization's present system. Sample cost estimates are given in Daniel M. Steinway, *ISO 14000: The Pros and Cons of Certification*, METROPOLITAN CORP. COUNS., Sept. 1997, at 6 ("One of the chief practical concerns is obviously the administrative costs and burdens imposed in becoming ISO 14001 certified. By some estimates, these costs may range from \$100,000 to \$1 million for large multi-national companies and as much as \$10,000 to \$100,000 for medium-size concerns"); Patrick A. Toensmeier, *ISO Certification Doesn't Need To Be Expensive for Small Processors*, MOD. PLASTICS, Sept. 1, 1997, at 40; *Singapore Launching Program To Help SMEs Understand Requirements of ISO 14000 Series*, Int'l Env't Rep. (BNA) 1013 (Nov. 13, 1996); *Cash Grants To Help SMEs Get ISO*, BUS. TIMES (Singapore), May 29, 1996, available in 1996 WL 6292631; Raymond Martin, *What Are The Developmental and Implementation Costs Associated With An ISO 14001 EMS?*, INT'L ENVTL. SYS. UPDATE, Nov. 1996, at 16; Susan Rost, *ISO 14001 Cost-Benefit Analysis*, INT'L ENVTL. SYS. UPDATE, Aug. 1996, at 27; Tim Triplett, *Is Environmental Certification Worth The Cost?* INDUS. PAINT & POWDER, June 1, 1996, at 60; *Hearings before the U.S. House of Representatives, Subcomm. on Technology*, Committee on Science (June 4, 1996)(statement of Steven A. Bold, estimating the cost of becoming ISO 14000 certified at between

\$30,000 and \$100,000 per facility). The development of EMS systems by small and medium-sized organizations is considered in *EU Environmental Policy, Voluntary Mechanisms and the Eco-Management and Audit Scheme*, in ENVTL. MGMT. SYS. & CLEANER PRODUCTION 129, 135-40 (Ruth Hillary ed., 1997); Vittorio Biondi & Marco Frey, *EMAS Adoption by an SME in the Chemical Sector*, in ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION 319 (Ruth Hillary ed., 1997); Ken Jordan, *The Practical Implementation of BS 7750, EMAS and ISO 14001 Within a Medium-Sized Manufacturing Site*, in ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION 337 (Ruth Hillary ed., 1997); David H. Kiel, *Comparing EQM Practices of Small and Large Companies*, ENVTL. QUALITY MGMT., Winter 1996, at 31; Gary C. Roper, *Why Would a Medium-Sized Manufacturing Facility Become ISO 14001 Certified?*, INT'L ENVTL. SYS. UPDATE, Dec. 1996, at 13; *Environmental Agency Program To Encourage Small Entities, Public Sector To Use ISO 14000*, Int'l Env't Rep. (BNA) 930 (Oct. 16, 1996); *SME Project Group Establishes Timetable*, INT'L ENVTL. SYS. UPDATE, Aug. 1996, at 12; *International Chamber Offers SME Training Tool*, INT'L ENVTL. SYS. UPDATE, Aug. 1996, at 16; *Canberra Takes Action On Standards*, AUSTRALIAN FIN. REV., July 15, 1996, at 1 (chronicling the government's decision to remove the ruling requiring Australian companies to comply with global standards when tendering Commonwealth contracts so as not to disadvantage small and medium-sized businesses); Diane Norman, *IPC Asks Congress For Aid to Meet ISO 14000 Standard*, ELECTRONIC BUYER'S NEWS, June 17, 1996, at 26; THE ISO HANDBOOK 107-33 (Joseph Cascio ed. 1996); Paula D. Rice, *Integrating Management Systems On a Small Budget*, INTEGRATED MGMT. SYS. UPDATE, Apr. 1996, at 26; Mark Haveman, *Small Business Caveats and Cautions*, ENVTL. F., Nov.- Dec. 1995, at 42; Lynn Winter & Grant Ledgerwood, *Motivation and Compliance in Environmental Performance for Small and Medium-sized Businesses: A Model Based on Empirical Evidence From a Pilot Investigation of Small Businesses in the English West Midlands*, GREENER MGT. INT'L, July 1994, at 36; RICHARD WELFORD & ANDREW GOULDSON, ENVIRONMENTAL MANAGEMENT AND BUSINESS STRATEGY 176-88 (1993).

Many countries, including Australia, provide financial assistance to small and medium-sized firms seeking to implement or improve environmental management systems. See Brian O'Neill, *Cleaner Production and Environmental Management Systems in Australia*, in ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION 117, 119-20 (Ruth Hillary ed. 1997). A program sponsored by Japan's Environment Agency similarly assists small and medium-sized firms with ISO 14000 implementation tasks. See *Agency Initiating Program To Urge Public Companies To Use Management Standards*, Daily Env't Rep. (BNA) B-3 (Oct. 10, 1996). In the EMAS context, the Commission is searching for ways to make the European scheme more accessible, especially to small business. See *Commission Calls For Proposals On Areas Where EMAS Rule Can Be Extended*, Int'l Env't Rep. (BNA) 259 (Apr. 3, 1996); *SCEEMAS Explained*, ENV'T BUS., Jan.- Feb. 1996, at 31; UK DEPT. OF THE ENV'T, SCEEMAS: THE SMALL COMPANY ENVIRONMENTAL AND ENERGY MANAGEMENT ASSISTANCE SCHEME USER GUIDE (1996).

Private actors have also developed an array of helpful EMS implementation tools for SMEs. The United Nations Environment Program, the International Chamber of Commerce, and the International Federation of Consulting

the elements of an effective environmental management system "which can be integrated with other management requirements to assist organizations to achieve environmental and financial goals."¹⁵⁵ ISO 14001 neither mandates particular technologies nor requires an organization to meet certain emission restrictions.¹⁵⁶ Rather, the ISO EMS is an organizing framework that firms should monitor and periodically review to ensure effective direction of their environmental activities in response to changing internal and external factors. ISO 14004 offers guidance on the implementation of the ISO EMS, defined as that part of the overall management system (which includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources) "for developing, implementing, achieving, reviewing and maintaining" the firm's environmental policy.¹⁵⁷ The writers of the standards view such systems as "essential to an organization's ability to anticipate and meet its environmental objectives and to ensure ongoing compliance with national and/or international requirements."¹⁵⁸ The requirements of the specification may be objectively audited for certi-

Engineers offer a resource kit for small and mid-sized companies interested in learning about how to implement an ISO 14001 EMS. Copies of the kit may be ordered at a cost of \$190 from the International Chamber of Commerce, 38 Cours Albert 1er - 75008 Paris, France, tel. (33 1) 49 53 29 26, fax (33 1) 49 53 29 42. Examples of EMS elements, sample worksheets, forms and procedures to assist organizations with implementation may also be found in PHILLIP J. STAPLETON ET AL., NSF INTERNATIONAL, ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS (Nov. 1996) (available from NSF at 1-800-NSF-MARK); see generally NSF's *New EMS Implementation Guide for Small and Medium-sized Organizations*, ENVTL. QUALITY MGMT., Summer 1997, at 21.

155. Introductory preamble to ISO 14001. See Leslie Broberg, *ISO Certification Useful to Impress Competition*, PROVIDENCE BUS. NEWS, Jan. 15, 1996, at 15; David Ling, *A Fork in the ISO 14000 Registration Road*, AM. METAL MARKET, Dec. 1, 1995, at 14A.

156. See Daniel W. Gottlieb, *ISO 14000 Standards Ready For Launching*, PURCHASING, July 11, 1996, at 78.

157. See ISO 14001 § 3.5. The Guide contains practical suggestions on EMS implementation, performance measurement, and system review, building on the core elements of ISO 14001. See *id.*

158. ISO 14004 § 0.1.

fication and/or self-declaration purposes.¹⁵⁹

The core themes of ISO 14001 are: (i) environmental policy; (ii) planning; (iii) implementation and operation; (iv) checking and corrective action; and (v) management review. The specification is designed to ensure that a company gives thought to the environmental impacts of its operations, products and services, and then frames a policy and establishes a plan to address impacts identified during the process. Once its policy and plan are in place, each company should audit performance and push ever onward for improvement. The basic elements of the ISO EMS model are elaborated on below.¹⁶⁰

159. There is no "one way" to determine conformance with ISO 14001. Generally, organizations implementing the specification may either self-declare conformance or seek certification by an accredited "registrar/certification body." See generally Scott Foster, *Registrars, Accreditation, and ISO 14001*, ENVTL. QUALITY MGMT., Autumn 1996, at 63. The terms "registration" and "certification" are used interchangeably in this context to describe the process by which an organization applies for placement on a public list of entities that conform to ISO 14001. A "registrar," or "certification body," is the entity that accepts the registration after making a judgment that the organization's EMS meets the requirements of the specification.

160. Anyone interested in learning more about the standards and the implementation process is encouraged to consult the growing body of material on implementation of ISO 14001. To learn about ISO 14000 resources on the web, see Rafe Petersen, *ISO 14000 Internet Databases*, 3 ENVTL. LAW. 613 (1997), and ENVIRONMENTAL GUIDE TO THE INTERNET (3d ed. 1997).

Of the works from 1997, we commend, in particular: Marc J. Epstein & Marie-Josée Roy, *Using ISO 14000 for Improved Organizational Learning and Environmental Management*, ENVTL. QUALITY MGMT., Autumn 1997, at 21; Danja van der Veldt, *Case Studies of ISO 14001: A New Business Guide for Global Environmental Protection*, ENVTL. QUALITY MGMT., Autumn 1997, at 1; DENNIS SASSEVILLE ET AL., *ISO 14000 ANSWER BOOK: ENVIRONMENTAL MANAGEMENT FOR THE WORLD MARKET* (1997); ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION (Ruth Hillary ed., 1997); MOVING AHEAD WITH ISO 14000: IMPROVING ENVIRONMENTAL MANAGEMENT AND ADVANCING SUSTAINABLE DEVELOPMENT (Philip Marcus & John Willig eds. 1997); Burton Hamner, *A Strategic Approach to ISO 14000*, CORP. ENVTL. STRATEGY, Winter 1997, at 47; Lynn L. Bergeson & Jill M. Palmer, *ISO 14001: A Checklist for Counseling Clients*, CORP. LEGAL TIMES, May 1997, at 26; ISO 14001 AND BEYOND: ENVIRONMENTAL MANAGEMENT SYSTEMS IN THE REAL WORLD (Christopher Sheldon ed., 1997); Riva Krut, *ISO 14001: Strategic Issues for Corporate Environmental Leaders*, CORP. ENVTL. STRATEGY, Spring 1997, at 61; Ted D. Polakowski & Laurence Mach, *ISO 14000 Certification: Lucent Technologies Microelectronics Group's Strategic Choice*, CORP. ENVTL. STRATEGY, Winter 1997, at 55; Phil Riebel, *EMS and ISO 14000*, PULP & PAPER CANADA, Jan. 1, 1997, at 83; Micheal D. McIn-

tyre et al., *New Cutting Edge Environmental Management Standard – ISO 14001*, ADVOCATE, June 1997, at 36; GREGORY P. JOHNSON, ISO 14000 EMS AUDIT HANDBOOK (1997).

Of the works from 1996: Deborah A. Tansey & Marc H. Wendell, *ISO 14001 EMS Implementation Planning*, ENVTL. QUALITY MGMT., Winter 1996, at 1; THE ISO 14000 HANDBOOK (Joseph Cascio ed., 1996); Anton G. Camarota & Mary S. Dymond, *ISO 14001: A Systems Approach to Managing Environmental Risk*, ENVTL. QUALITY MGMT., Winter 1996, at 23; MARILYN R. BLOCK, AMERICAN SOCIETY FOR QUALITY CONTROL, IMPLEMENTING ISO 14001 (1996); GRACE H. WEVER, STRATEGIC ENVIRONMENTAL MANAGEMENT (1996); Christina C. Benson, *ISO 14000 International Standards: Moving Beyond Environmental Compliance*, N.C. J. INT'L L. & COM. REG. 307 (1996); Kerry E. Rodgers, *The ISO Environmental Standards Initiatives*, 5 N.Y.U. ENVTL. L.J. 181, 191-204 (1996); Carey A. Matthews, *The ISO 14001 Environmental Management System Standard: An Innovative Approach to Environmental Protection*, 2 ENVTL. L. 817 (1996); SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM (1996); John A. Foster & Doug Jagger, *ISO 14000: Standards for Environmental Management*, in ENVIRONMENTAL MANAGEMENT AND COMPLIANCE (1996); JOSEPH CASCIO ET AL., ISO 14000 GUIDE (1996); BUSINESS & LEGAL REPORTS, INC., ENVIRONMENTAL MANAGER'S GUIDE TO ISO 14000 (1996); JAMES L. LAMPRECHT, ISO 14000: ISSUES AND IMPLEMENTATION GUIDELINES FOR RESPONSIBLE ENVIRONMENTAL MANAGEMENT (1996); *ISO 14000 Standards Make Official Debut*, N.Y. L.J., Oct., 1996, at S3; Craig D. Galli, *ISO 14000 and Environmental Management Systems in a Nutshell*, UTAH B.J., Dec. 1996, at 15; Stephen A. Watson, *Business Implications of Implementing ISO 14000*, ENVTL. QUALITY MGMT., Autumn 1996, at 51; Charles M. Denton, *Environmental Management Systems: ISO Standard 14000*, Int'l Env't Rep. (BNA) 715 (Aug. 7, 1996); Pete Millard, *More Environmental Hoops*, CORP. REP. Wis., July 1, 1996, at 42; RICHARD B. CLEMENTS, COMPLETE GUIDE TO ISO 14000 (1996); Stephanie Rajendram, *What ISO 14000 Means for Big Organizations*, NEW STRAITS TIMES, July 16, 1996, at 10; Noella Kertes, *ISO 14000 Standards Likely to Affect All*, AM. METAL MARKET, June 11, 1996, at 6; Justin Zubrod et al., *International Quality Standards: Going Beyond Quality to Results*, TRANSP. & DIST. June 1, 1996, at 50; Mary Buckner Powers, *Companies Await ISO 14000 As Primer For Global Eco-Citizenship*, ENG'G NEWS-RECORD, May 29, 1996, at 30; W.M. VON ZHAREN, ISO 14000 UNDERSTANDING THE ENVIRONMENTAL STANDARDS (1996); Henry R. Balikov & Patrick O. Cavanaugh, *What We Need To Know About ISO 14000*, 10 NAT. RESOURCES & ENV'T 64 (Spring 1996); TOM TIBOR, ISO 14000 A GUIDE TO THE NEW ENVIRONMENTAL MANAGEMENT STANDARDS (1996); Carey A. Matthews, *ISO 14001 Environmental Management System Standard: An Innovative Approach To Environmental Protection*, 2 ENVTL. L. 817 (1996); Michael Silverstein, *New Global Environmental Standards With a New Jersey Twist*, NEW JERSEY BUS., March 1996, at 22; *One Size Fits All: Unifying ISO Management*, CHEM. WK., Apr. 3, 1996, at 27; JAMES L. LAMPRECHT, ISO 14000: ISSUES AND IMPLEMENTATION GUIDELINES FOR RESPONSIBLE ENVIRONMENTAL MANAGEMENT (1996); Craig P. Diamond, *Voluntary Environmental Management System Standards: Case Studies in Implementation*, TOTAL Q. ENVTL. MGMT., Winter 1995-96, at 9; Wayne Tusa, *Understanding and Implementing ISO 14000 – Part I*, 7 N.Y. ENVTL. L. 37 (1996); Dennis A.

- An organization should define its environmental policy and ensure commitment to its EMS.¹⁶¹
- ISO 14001 § 4¹⁶² requires the top management of the

Rondinelli & Gyula Vastag, *International Environmental Standards and Corporate Policies: An Integrative Framework*, CAL. MGMT. REV., Sept. 1, 1996, at 106; William C. Fulkerson, *ISO 14000 Standard Summary*, GRAND RAPIDS BUS. J., Apr. 8, 1996, at B1; Vivian Bertrand, *ISO 14000 and Business Strategy: An Annotated Bibliography*, Conference on ISO 14000 - Environmental Management and Sustainable Development, Beijing China, Nov. 5-7, 1996 (on file with the author); DON SAYRE, *INSIDE ISO 14000: THE COMPETITIVE ADVANTAGE OF ENVIRONMENTAL MANAGEMENT* (1996); AMY ZUCKERMAN, *INTERNATIONAL STANDARDS DESK REFERENCE* (1996).

Of works from previous years: Benchmark Environmental Consulting, *ISO 14001: An Uncommon Perspective* (Nov. 1995); W. Lee Kuhre, *ISO 14001 Certification: Environmental Management Systems In Accordance with the ISO's Draft Standards Is Not Necessarily Costly, and Could Yield Other Benefits As Well*, NAT'L L.J., July 24, 1995, at B5; Kathy Abusow, *ISO 14000: Global Standard for Environmental Management Practices*, CANADIAN PAPERMAKER, Jan. 1, 1995, at 30; BRIAN ROTHERY, *ISO 14000 AND ISO 9000* (1995); Marc E. Gold, *ISO 14000: A New Global Business Benchmark*, 10 ENVTL. COMPLIANCE & LITIG. STRATEGY, May 1995, at 1; Christopher R. Bell, *ISO 14001: Application of International Environmental Management Systems Standards in the United States*, 25 ENVTL. L. REP. (Envtl. L. Inst.) 10,678 (1995); Christopher Bell, *Environmental Management Systems and ISO 14001: A U.S. View*, ENV'T WATCH W. EUR., Dec. 1, 1995, available in WESTLAW, EWWE database; *ISO 14001: Performance Through Systems?*, ENVTL. F., Nov. - Dec. 1995, at 36; *Environmental Consultant Advises Firms of Key Elements to Consider About ISO 14001*, Nat'l Env'tl. Daily (BNA) (Nov. 14, 1995), at 14; Michael D. Flanagan, *ISO 14000: A New Environmental Standard With Ramifications for Wisconsin and the World*, CORP. REP. WISCONSIN, Sept. 1995, at 34; Helen Gillespie, *ISO 14000: What's Driving the New Environmental Standard?*, R & D, Aug. 1995, at 29; Jennifer Ouelette, *9000's Heir Apparent: ISO 14000 Quality Standards Are Near Completion, Adding Environmentalism to Quality Management*, CHEM. MARKETING REP., Apr. 10, 1995, at SR13; *ISO 14001 Standard on its Way*, QUALITY SYS. UPDATE, SPECIAL REP., July 1995, at SR-1, SR-5; Gabriel G. Crognale, *Environmental Management: What ISO 14000 Brings to the Table*, TOTAL Q. ENVTL. MGMT., Summer 1995, at 5; Mary Bruckner Powers, *Companies Await ISO 14000 as Primer for Global Eco-Citizenship*, ENG'G NEWS-RECORDS, May 29, 1995, at 30; Stewart Anderson, *Introducing ISO 14000: New Standards Which Will Help Business Manage Environmental Performance*, Canadian Packaging, March 1, 1995, at 34; and Alison Lucas & Michael Roberts, *Environmental Management Standard Set for 1995 Debut*, CHEM. WK., Nov. 9, 1994, at 33; See also Christopher L. Bell & James L. Connaughton, *New Global Standards May Guide Industry on Environmental Issues*, NAT'L L.J., Sept. 6, 1993, at S2. Robert J. Fowler discusses the need for such standards in *International Environmental Standards for Transnational Corporations*, 25 ENVTL.L. 1 (1995).

161. See ISO 14004 § 4.1.

162. Cf. ISO 9001 § 4.2.1; NATIONAL INSTITUTE OF STANDARDS, MALCOM BALDRIDGE NATIONAL QUALITY AWARD CRITERIA § 1.1 (Dept. of Commerce 1995).

organization to prepare a written environmental policy and ensure that it: (i) is appropriate to the nature, scale and environmental impacts of the organization's activities, products or services; (ii) includes a commitment to continual improvement and prevention of pollution;¹⁶³ (iii) includes a commitment to comply with relevant environmental legislation and regulations and other requirements;¹⁶⁴ (iv) provides a framework for setting and reviewing environmental objectives¹⁶⁵ and targets;¹⁶⁶ (v) is implemented, maintained, and communicated to all employees; and (vi) is available to the public.¹⁶⁷ As ISO 14004 § 4.1.2 makes clear, it is criti-

163. The specification requires continual improvement of the management system, not of environmental performance directly. The concepts of "continual improvement" and "pollution prevention" are explored by David Freeman and Leonardo J. Cardenas in *Defining Continual Improvement*, INT'L ENVTL. SYS. UPDATE, July 1996, at 39, and *Is Pollution Prevention the Same as Prevention of Pollution*, INT'L ENVTL. SYS. UPDATE, Sept. 1996, at 20, respectively.

164. See generally Greg Hansa et al., *Commitment to Compliance: How Far is Enough?*, INT'L ENVTL. SYS. UPDATE, Aug. 1996, at 24.

165. The term "environmental objective" is defined in ISO 14001 § 3.7 as the "[o]verall environmental goal, arising from the environmental policy, that an organization sets itself to achieve, and which is quantified where practicable."

166. The term "environmental target" is defined in ISO 14001 § 3.10 as a "[d]etailed performance requirement, qualified where practicable, applicable to the organization or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives."

167. See ISO 14001 § 4.2.F and Annex A § A.2. Practical advice on preparation of environmental policies is offered at ISO 14004 § 4.1.4. The elements of an effective environmental policy statement are discussed in W. LEE KUHRE, *ISO 14010S ENVIRONMENTAL AUDITING* 39, 40-57 (1996) (policy statements should: (i) be relevant and straightforward; (ii) express the organization's commitment to continued improvement of environmental performance and compliance with laws and regulations; (iii) specify which organizational activities are covered by the statement; (iv) signal environmental objectives and targets; and (v) provide a framework for assessing progress) and the Global Environmental Management Initiative, *ISO 14001 Environmental Management System Self-Assessment Checklist* (Mar. 1996), at 38-40; PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT, *supra* note 124, at 82-90, 154 (policies should include: (i) a commitment to compliance with applicable environmental laws, regulations, and standards, as well as to make the expenditures necessary for implementation; (ii) a statement of core principles and philosophy, mandate development, implementation, and maintenance of management systems; (iii) an indication that employees will be held accountable for environmental performance and compliance; (iv) a requirement concerning the development of a self-monitoring environmental assessment program to ensure compliance; (v) a promise to train employees to identify issues of environmental concern, emphasizing individual

cal that the organization secure the commitment of top management, and that these leaders remain committed to the system over time.

- An organization should formulate a plan to fulfill its environmental policy.¹⁶⁸
- Specifically, ISO 14001 § 4.3¹⁶⁹ requires the organization to: (i) establish and maintain a procedure to identify its environmental aspects, namely those elements

responsibilities; and (vi) encouraging statements regarding process innovation). Other pointers are offered in Reeva I. Schiffman et al., "ISO 14001 Implementation-Getting Started," in *Implementing ISO 14000: A Practical, Comprehensive Guide to the ISO 14000 Environmental Management Standards* 37, 45-47 (Tom Tibor & Ira Feldman eds., 1997); Suzan L. Jackson, *ISO 14000 Implementation Guide: Creating an Integrated Management System* 47-52 (John Wiley & Sons Inc. 1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 14-15 (NSF International, Nov. 1996); Michael Brophy, *Environmental Policies, in Corporate Environmental Management* 92-103 (Richard Welford ed., Earthscan 1996); *Have You Got a Policy*, CABINET MAKER, Dec. 13, 1996, at 24; "An Excellent Example": *Carson Office Furniture Systems Policy*, CABINET MAKER, Dec. 13, 1996, at 26; William Smith, *How Do I Structure My ISO 14001 Policy*, INT'L ENVTL. SYS. UPDATE, Sept. 1996, at 22; THE ISO HANDBOOK 95-105 (Joseph Cascio ed. 1996); TOM TIBOR, ISO 14000 A GUIDE TO THE NEW ENVIRONMENTAL MANAGEMENT STANDARDS 52-54 (1996); Nick Cottam, *A Green Policy Committed To Print: Kyocera's Cartridge-Free Laser Printer*, GREENER MGMT. INT'L, Jan. 1994, at 61; David M. Zornow & Dana H. Freyer, *Corporate Compliance Programs: Implementation Rationale and Methodology*, C900 ALI-ABA 537, 551 (Jan. 20, 1994); James T. Banks, *Corporate Environmental Programs: Are We Seeing an Evolution in Federal Policy*, C964 ALI-ABA 467, 479-80 (Oct. 20, 1994); GROSKAUFMANIS *supra* note 124, at § 5.08[1]-[12] (Jed S. Rakoff ed. 1993); Johan Schot & Kurt Fischer, *The Greening of the Industrial Firm, in ENVIRONMENTAL STRATEGIES FOR INDUSTRY: INTERNATIONAL PERSPECTIVES ON RESEARCH NEEDS AND POLICY IMPLICATIONS* 8-9 (Johan Schot & Kurt Fischer eds., 1993); William A. Hancock, *Environmental Compliance Programs, in Corporate Counsel's Guide to Environmental Compliance and Audits* 4.006, 4.009 - 4.01606 (William A. Hancock ed., 1993); Dan K. Webb & Steven F. Molo, *Some Practical Considerations in Developing Effective Compliance Programs: A Framework for Meeting the Requirements of the Sentencing Guidelines*, 71 WASH. U.L.Q. 375, 384, 388-89 (1993); Jennifer L. Hernandez & Robert A. Bryan, *A Practical Guide to Preparing a Model Corporate Environmental Policy*, and samples in *COMPANY POLICY STATEMENTS* 1501-59 (2 vols.) (William A. Hancock ed., 1992); Margaret Flaherty & Ann Rappaport, *Multinational Corporations and the Environment: A Survey of Global Practices* (1991); FRANCES CAIRNCROSS, *COSTING THE EARTH* 282-83 (1991); ARTHUR D. LITTLE, INC., *CENTER FOR ENVIRONMENTAL ASSURANCE, ENVIRONMENTAL HEALTH AND SAFETY POLICIES: CURRENT PRACTICES AND FUTURE TRENDS* (1988).

168. ISO 14004 § 4.2; 1995 Baldrige Criteria §§ 3.1 and 3.2.

169. Cf. ISO 9001 § 4.2.3.

of the "organization's 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 can have significant impacts on the environment,"¹⁷⁰ and to ensure that the aspects related to these significant impacts¹⁷¹ are considered in setting its environmental objectives; (ii) establish and maintain a procedure to identify, have access to and understand all legal and other requirements directly applicable to the environmental aspects of its activities, products or services;¹⁷² (iii) establish and maintain documented environmental objectives and targets at each relevant function and level within the organization,¹⁷³ and (iv)

170. ISO 14001 § 4.3.1. See ISO 14001 Annex A § A.3.1; ISO 14004 § 4.2.2. The environmental aspects of an organization's activities create environmental impacts, and can be identified by, for example, working backward from legal or other requirements or points of business exposure that affect the organization's activities, or by focusing on products or services that affect the environment. The term "environment" is defined as the "[s]urroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interaction." ISO 14001 § 3.2. See generally Reeva I. Schiffman et al., *ISO 14001 Implementation-Getting Started*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 37, 48-50 (Tom Tibor & Ira Feldman eds., 1997); SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 53-64 (1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 16-19 (1996).

171. ISO 14001 § 4.3.1. See ISO 14001 Annex A § A.4.2.1. An "environmental impact" is "[a]ny change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products or services." ISO 14001 § 3.4.

172. ISO 14001 § 4.3.2. See ISO 14001 Annex A § A.3.2. On implementation in light of this requirement and the definition of "legal and other requirements," see Donald A. Carr & William L. Thomas, *ISO 14001 Sets a Global Environmental Standard*, NAT'L L.J., July 8, 1996, at C2.

173. ISO 14001 § 4.3.3. See ISO 14001 Annex A § A.3.3. See generally Reeva I. Schiffman et al., *ISO 14001 Implementation-Getting Started*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 37, 52-53 (Tom Tibor & Ira Feldman eds., 1997); SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 69-76 (1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 22-24 (1996). Examples of objectives include commitments to: (i) reduce waste; (ii) eliminate releases of pollutants into the environment; and (iii) design products to minimize their environmental impact in production, use and disposal. Once an organization has identified a worth-

establish and maintain a program, or programs, for achieving its objectives and targets.¹⁷⁴

- For effective implementation an organization should develop the capabilities and support mechanisms necessary to achieve its environmental policy, objectives, and targets.¹⁷⁵
- When beginning implementation, an organization must give seven areas special attention: (i) structure and responsibility;¹⁷⁶ (ii) training, awareness and compe-

while set of objectives, it should set specific and measurable targets to achieve them within a specified time frame. An organization could use such measures as the quantity of raw material or energy used, the quantity of emissions, percentage of waste recycled, or other comparable indicators. See ISO 14004 § 4.2.5.

174. ISO 14001 § 4.3.4. See ISO 14001 Annex A § A.3.4. The organization must formulate an environmental management program that addresses all of its environmental objectives. Such a program should be designed to identify specific actions in order of priority to the organization, and might include actions dealing with individual processes, projects, products, services, sites, or facilities within a site. See ISO 14004 § 4.2.6. See generally PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 25-26 (1996); REEVA I. SCHIFFMAN ET AL., *ISO 14001 Implementation-Getting Started*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 37, 53 (Tom Tibor & Ira Feldman eds., 1997); SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 77-81 (1996).

175. See ISO 14004 § 4.3.

176. See ISO 14001 § 4.4.1 and Annex A § A.4.1. See generally Reeva I. Schiffman et al., *ISO 14001 Implementation-Getting Started*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 37, 54-56 (Tom Tibor & Ira Feldman eds., 1997); SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 85-94 (1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 27-30 (1996).

tence;¹⁷⁷ (iii) communications;¹⁷⁸ (iv) EMS documentation;¹⁷⁹ (v) document control;¹⁸⁰ (vi) operational control;¹⁸¹ and (vii) emergency preparedness and re-

177. See ISO 14001 § 4.4.2 and Annex A § A.4.2; Compare ISO 9001 § 4.18; 1995 Baldrige Criteria § 4.1.3. See generally Andy Wells, *Training and Environmental Management Systems*, in ISO 14001 AND BEYOND: ENVIRONMENTAL MANAGEMENT SYSTEMS IN THE REAL WORLD 183-97 (Christopher Sheldon ed. 1997); Gabriele Crognale, *Training: Preparations for Maintaining Effective Environmental Management Systems*, in ISO 14001 AND BEYOND: ENVIRONMENTAL MANAGEMENT SYSTEMS IN THE REAL WORLD 293-308 (Christopher Sheldon ed. 1997); W. Gary Wilson, *Employee Training and Awareness*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 75-94 (Tom Tibor & Ira Feldman eds., 1997); SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 95-104 (1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 31-33 (1996).

178. See ISO 14001 § 4.4.3 and Annex A § A.4.3. See generally Reeva I. Schiffman et al., *ISO 14001 Implementation-Getting Started*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 37, 58-60 (Tom Tibor & Ira Feldman eds., 1997); SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 105-110 (1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 34-35 (1996).

179. See ISO 14001 § 4.4.4 and Annex A § A.4.4. See generally W.D. Anderson, *Environmental Management System Documentation*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 95-108 (Tom Tibor & Ira Feldman eds., 1997); SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 111-25 (1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 35-37 (1996).

180. See ISO 14001 § 4.4.5 and Annex A § A.4.5. See generally Reeva I. Schiffman et al., *ISO 14001 Implementation-Getting Started*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 37, 63-64 (Tom Tibor & Ira Feldman eds., 1997); SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 125-142 (1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 38-39 (1996).

181. See ISO 14001 § 4.4.6. See generally REEVA I. SCHIFFMAN ET AL., *ISO 14001 Implementation-Getting Started*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 37, 64-66 (Tom Tibor & Ira Feldman eds., 1997); SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 143-150 (1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 40-42 (1996).

response.¹⁸² Although most of these subjects are self-explanatory, it is worth noting that the specification requires that an organization define, document, and communicate the roles, responsibilities, and authorities of its personnel, from the highest levels on down. It is also significant that the specification requires the organization to make available the human, physical (e.g., equipment), and financial resources necessary to ensure the EMS is effective.¹⁸³

- The drafters of the specification envision that an organization will identify the knowledge and skills necessary to achieve its environmental objectives and give such matters their due when designing appropriate recruitment and training programs. The organization must ensure that personnel whose conduct may create a “significant impact on the environment” receive appropriate training,¹⁸⁴ and establish and maintain procedures to make employees aware of: (i) the importance of conformance with the organization’s environmental policy and procedures and with the requirements of the EMS; (ii) the significant environmental impacts of their work activities and the environmental benefits of improved performance; (iii) their roles and responsibilities; and (iv) the potential consequences of departing from specified operating procedures.¹⁸⁵ Companies which fail to sustain these commitments over time will risk losing ISO certification.

182. See ISO 14001 § 4.4.7. See generally SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 151-56 (1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 43-44 (1996).

183. See ISO 14001 § 4.4.1 and Annex A § A.4.1; ISO 14004 § 4.3.2.1; see generally Wayne Tusa, *How Do I Determine the Resources Needed To Implement an ISO 14001 Compliant EMS*, INT’L ENVTL. SYS. UPDATE, Oct. 1996, at 23; see W. LEE KUHRE, ISO 14010s ENVIRONMENTAL AUDITING 39 (1996) (“Certain resources will need to be obtained early in the process,” including financial, personnel, training resources, supplies and equipment); Christopher R. Bell, *ISO 14001: Application of International Environmental Management Systems Standards in the United States*, 25 Env’tl. L. Rep. (Env’tl. L. Inst.) 10,681 (1995).

184. See ISO 14001 § 4.4.2; ISO 14004 § 4.3.2.5.

185. See ISO 14001 § 4.4.2. Employees at all levels should be held accountable. See ISO 14004 § 4.3.2.3.

- An organization should measure, monitor and evaluate its environmental performance.¹⁸⁶
- Under the ISO EMS model, an organization must measure, monitor, and evaluate the system to ensure that the organization is performing in accordance with its environmental management program. Generally, ISO 14001 calls on each organization to implement a documented system for measuring and monitoring actual performance against its environmental objectives and targets in the areas of management systems and operational processes, including compliance with relevant environmental legislation and regulations.¹⁸⁷ The organization's procedures must cover "the recording of information to track performance, relevant operational controls and conformance with the organization's objectives and targets."¹⁸⁸ The organization must establish and maintain a documented procedure for periodically evaluating compliance with relevant environmental legislation and regulations,¹⁸⁹ and also maintain up-to-date environmental records.¹⁹⁰ Any findings, conclusions, and recommendations arrived at as part of checking and corrective action should be documented.¹⁹¹

186. See ISO 14004 § 4.4.

187. See ISO 14001 § 4.4; ISO 14004 § 4.4.2. See generally JEAN McCREARY & LIBBY FORD, *Checking A Corrective Action*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 127-144 (Tom Tibor & Ira Feldman eds., 1997); Reeva I. Schiffman et al., *ISO 14001 Implementation-Getting Started*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 37, 67-69 (Tom Tibor & Ira Feldman eds., 1997); SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 159-172 (1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 45-48 (1996).

188. ISO 14001 § 4.5.1.

189. ISO 14001 § 4.5.1; see ISO 14004 § 4.4.2.

190. ISO 14001 § 4.5.3. Environmental records include "training records and the results of audits and reviews", as well as records concerning legislative and regulatory requirements, incident reports, environmental audits and reviews, and emergency response records. See id. See generally SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 187-196 (1996); PHILIP J. STAPLETON ET AL., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 51-52 (1996).

191. ISO 14001 § 4.5.1; ISO 14004 § 4.4.3.

Objective and impartial internal personnel, or an outside party, are required periodically to audit the EMS in order to determine whether the EMS conforms to planned arrangements for environmental management including the requirements of the specification, and has been properly implemented and maintained.¹⁹² The results of this ongoing assessment of environmental performance¹⁹³ can then be used to

192. See ISO 14001 § 4.5.4 and Annex A § A.5.4; ISO 14004 § 4.4.5; cf. ISO 9001 § 4.17; 1995 Baldrige Criteria § 5.4. On EMS auditing, see generally Reeva I. Schiffman et al., *ISO 14001 Implementation-Getting Started*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 37, 69-71 (Tom Tibor & Ira Feldman eds., 1997); SUZAN L. JACKSON, *ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM* 197-214 (1996); PHILIP J. STAPLETON ET AL., *ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS* 53-56 (1996).

193. See ISO 14001 § 3.8 (defining "environmental performance" to mean the "[m]easurable results of the environmental management system, related to an organization's control of its environmental aspects, based on its environmental policy, objectives and targets"). The following sources provide practical guidance on environmental performance measurement: GLOBAL ENVIRONMENTAL MANAGEMENT INITIATIVE, *MEASURING ENVIRONMENTAL PERFORMANCE: A PRIMER AND SURVEY OF METRICS IN USE* (1997); Polly T. Strife, *Measurement Moves Into Normal Practice*, THE ENVTL. F., Sept.-Oct.1997, at 12; Marc J. Epstein & Marie-Josée Roy, *Integrating Environmental Impacts into Capital Investment Decisions*, GREENER MGMT. INT'L, Spring 1997, at 69; *Green Metrics: Understanding Corporate Environmental Performance Indicators*, ENVTL. PERSPECTIVES, Apr. 1997, at 1; William G. Russell & Guido F. Sacchi, *Business-Oriented Environmental Performance Metrics: Building Consensus for Environmental Management Systems*, ENVTL. QUALITY MGMT., Summer 1997, at 11; Joseph Fiksel, *Practical Issues in Environmental Performance Evaluation*, IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 145-66 (Tom Tibor & Ira Feldman eds., 1997); C. William Young, *Measuring Environmental Performance*, in CORPORATE ENVIRONMENTAL MANAGEMENT 150-176 (Richard Welford ed., 1996); Howard N. Apsan, *ISO 14000 and Environmental Performance Evaluation*, in MOVING AHEAD WITH ISO 14000: IMPROVING ENVIRONMENTAL MANAGEMENT AND ADVANCING SUSTAINABLE DEVELOPMENT 171-76 (Philip A. Marcus & John T. Willig eds., 1996); MARC J. EPSTEIN, *MEASURING CORPORATE ENVIRONMENTAL PERFORMANCE* (1996); Kim Metcalf et al., *Environmental Performance Management: A Case Study*, ENVTL. QUALITY MGMT., Autumn 1996, at 27; Scott D. Johnson, *Environmental Performance Evaluation: Prioritizing Environmental Performance Objectives*, CORP. ENVTL. STRATEGY, Autumn 1996, at 17; Stewart Anderson, *Evaluating Environmental Performance*, CANADIAN PACKAGING, Nov. 1 1996, at 30; G. Azzone & R. Manzini, *Measuring Strategic Environmental Performance*, BUS. STRATEGY & THE ENV'T, Spring 1994, at 1; Peter James, *Business Environmental Performance Measurement*, 3.2 BUS. STRATEGY & THE

determine areas of success and identify needed corrective action.¹⁹⁴

- An organization should review and continually improve its environmental management system, with the objective of improving its overall environmental performance.¹⁹⁵
- ISO 14001 § 4.6 requires top management to review the EMS at regular intervals in order to “ensure its continuing suitability, adequacy and effectiveness.” Management reviews should encompass: (i) audit results; (ii) the extent to which objectives and targets have been met; (iii) the continuing suitability of the EMS in relation to changing conditions and information; and (iv) concerns amongst relevant interested parties.¹⁹⁶ This review must be documented.¹⁹⁷

Joseph Cascio, über ISO negotiator, explained the linkage between regulatory compliance and ISO 14001 in testimony before the U.S. House of Representatives:

ENV'T, 1994, at 59; M. Charter, *Scott Limited: Measuring Environmental Performance*, GREENER MGMT. INT'L, Jan. 1993, at 72; C. Fitzgerald, *Selecting Measures for Corporate Environmental Quality*, GREENER MGMT. INT'L, Jan. 1993, at 25; MEASURING ENVIRONMENTAL PERFORMANCE: SELECTING MEASURES, SETTING STANDARDS AND ESTABLISHING BENCHMARKS (1993); Richard Wells et al., *Measuring Environmental Success*, TOTAL QUALITY ENVTL. MGMT., Summer 1992, at 315.

194. See ISO 14004 § 4.4.2. See generally SUZAN L. JACKSON, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 173-186 (1996). The organization must be prepared to correct problems and prevent their recurrence.

195. See ISO 14004 § 4.5.

196. See ISO 14001 4.6 and Annex A § A.6; ISO 14004 § 4.5.2. See generally Anton Camarota, *EMS Auditing and Management Review*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 167-88 (Tom Tibor & Ira Feldman eds., 1997); Reeva I. Schiffman et al., *ISO 14001 Implementation-Getting Started*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 37, 71-72 (Tom Tibor & Ira Feldman eds., 1997); Suzan L. Jackson, ISO 14000 IMPLEMENTATION GUIDE: CREATING AN INTEGRATED MANAGEMENT SYSTEM 215-224 (1996); Philip J. Stapleton et al., ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 57-58 (1996).

197. See ISO 14001 § 4.6.

ISO 14001 is expected to promote the development of processes to maintain environmental compliance. While compliance with environmental laws may be difficult or elusive in many countries, ISO expects organizations to implement processes to maintain such compliance. In countries where enforcement is strict, compliance processes are part of doing business and can simply be integrated into the overall management system. In countries where enforcement is either lacking or ineffectual, ISO 14001 will provide the needed (and some cases only) impetus to develop processes to reach and maintain compliance.¹⁹⁸

Later in his remarks, Mr. Cascio clarified that, "under ISO 14001, no proof of actual compliance is required for an organization to obtain registration. ISO 14001 requires only evidence of working processes that are designed to maintain compliance."¹⁹⁹ Mr. Cascio and others are undoubtedly correct that ISO 14001 audits will focus on an organization's EMS rather than its compliance record per se, but that will not relieve firms of the obligation to "establish and maintain a procedure to identify and have access to legal, and other requirements to which the organizations subscribes directly applicable to the environmental aspects of its activities, products or services."²⁰⁰

We are a bit less sanguine about the legal risks of ISO certification than Mr. Cascio, whose primary concern seems

198. *Regulatory Compliance and ISO 14001, Testimony Before the U.S. House of Representatives, Committee on Science, Subcommittee on Technology (June 4, 1996)* (statement of Joseph Cascio, ISO Negotiator).

199. *Id.* He adds that it "is certainly a great desire and expectation that, over time, efforts to implement such processes will lead to more consistent compliance and more supportive infrastructures where they are needed." *Id.*

200. ISO 14000 § 4.3.2. With regard to the issue of whether the specification requires organizations to set compliance-related objectives and targets, see Cheryl Hogue, *ISO 14001 Certification Does Not Require Compliance as Goal, Draft Clarification Says*, Daily Rep. for Executives (BNA) A-15 (Aug. 8, 1997). We share Christopher Bell's view that ISO 14001 "is crystal clear on the commitment to compliance." Cheryl Hogue, *ISO 14001 Requires Overall Commitment To Compliance, Not Explicit Objective, Target*, Daily Env't Rep. (BNA) A-7 (Aug. 12, 1997). Accordingly, the firm's objectives and targets must be consistent with its overall compliance commitment.

to be that of increased "administrative noncompliance" as employees learn the ropes.²⁰¹ Evaluation of a firm's compliance system, and the generation of materials during the course of such a review, may well lead to broader disclosure risks than many currently contemplate.²⁰²

C. Interrelationship of ISO 14000 and Other Voluntary Standards Regimes

Most large companies, especially those in heavily regulated industries in the U.S., Asia and Europe, will likely recognize many of these management principles. One issue to watch closely, however, is how individual countries will tailor or revise their own standards regimes in light of the ISO standards, and whether participation becomes mandatory as a matter of fact or law in some jurisdictions.²⁰³ Great Britain has already withdrawn its EMS standard, BS 7750, "British

201. See Cascio, *supra* note 4, at 35, 36, stating: "the diffusion of environmental responsibility from the environmental engineering function to all employees of the enterprise will be the biggest challenge and one that, in the short term, may carry some risk of administrative noncompliance as employees learn documentation and other record keeping tasks." *Id.*

202. See discussion at *infra* Part III.C.2.

203. Some commentators think it possible that certain elements of the standards could become mandatory in the next decade. See Roht-Arriaza, *supra* note 133, at 515. Current trends are assessed in *Five Emerging Economies Expect ISO 14001 Adoption*, INT'L ENVTL. SYS. UPDATE, Sept. 1996, at 19; *Australian Government Nixes Global Standards Requirement*, INT'L ENVTL. SYS. UPDATE, Sept. 1996, at 1; *Malaysian EMS Pilot Targets Impact Reduction* INT'L ENVTL. SYS. UPDATE, Sept. 1996, at 13; THE ISO HANDBOOK, *supra* note 139, at 467-81; Tom Donlon, *Pilots, Workshops, Seminars, Mandates: Asia is Rife With ISO 14000 Interest*, INT'L ENVTL. SYS. UPDATE, Apr. 26, 1996, at 21, 22. At a minimum, many firms view ISO implementation as a key to obtaining, or retaining, market access worldwide. See generally Long Hui Ching, *Businessmen Concerned Over Non-Trade Issues*, NEW STRAITS TIMES, Dec. 6, 1996, at 25; United Nations Conference on Trade and Development Commodities Division, *ISO 14001 International Environmental Management Systems Standard: Five Key Questions for Developing Country Officials* (Geneva 1996) (Draft); ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS AND IMPLICATIONS FOR EXPORTERS TO DEVELOPED MARKETS, UNDER PRIVATE SECTOR DEVELOPMENT PROGRAMME (1996); *Developing Nations See ISO 14000 As Way To Expand Into Global Market*, Daily Rep. for Executives (BNA) A-6 (Sept. 16, 1996); *Environmental Market in Developing Industrial Economies*, Instrument Bus. Outlook, Apr. 15, 1996. See discussion of the international trade implications of the standards *supra* Part IV.

Standards Institution, Specifications for Environmental Management Systems, BS 7750," replacing it with ISO 14001 on March 31, 1997.²⁰⁴ The primary competition for ISO 14001 is the European Union Eco-Management and Audit Scheme (EMAS), which went into effect on April 10, 1995. Companies²⁰⁵ seeking registration of a particular site²⁰⁶

204. BS 7750 and ISO 14001 are quite similar. For background on the BS 7750 environmental management system, see generally Dick Hortensius et al., *ISO 14001/BS 7750/EMAS - A Comparison*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 287 (Tom Tibor & Ira Feldman eds., 1997); R. Holmes, *The Accreditation System for BS7750 and the Eco-Management and Audit Scheme in the United Kingdom*, 7 *Env'tl. Claims J.* 133 (1995); Ridgway M. Hall, Jr. & Kristine A. Tockman, *International Corporate Environmental Compliance and Auditing Programs*, 25 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 10395 (Aug. 1995); G.A. Bohoris & E. O'Mahony, *BS 7750, BS 5750 and the EC's Eco Management and Audit Scheme*, 94 *INDUS. MGMT. & DATA SYS.* 3 (1994); Michael Wright & Gary Kennedy, *Getting Value from BS7750: Lessons Learnt from Quality Management*, *ECO-MGMT. & AUDIT*, Spring 1994, at 14; Brian Rothery, *BS 7750: IMPLEMENTING THE ENVIRONMENTAL MANAGEMENT STANDARDS AND THE EC ECO-MANAGEMENT SCHEME* (1993); Michael Gilbert, *BS7750 and the Eco-Management and Audit Regulation*, *ECO-MGMT. & AUDIT*, Spring 1994, at 6; Michael Gilbert, *ACHIEVING ENVIRONMENTAL MANAGEMENT STANDARDS: A STEP-BY-STEP GUIDE TO MEETING BS7750* (1993); D. Fleming, *Profile: BS 7750: Environmental Management Systems*, *EUR. ENV'T*, June 1992, at 12.

205. The term "company" is defined as "the organization which has overall management control over activities at a given site." EMAS, Article 3(i). The voluntary scheme is open to companies participating in any activity listed under sections C (Mining and Quarrying) and D (Manufacturing) of the classification of economic activities in the European Community (NACE rev. 1) as established by Council Regulation (EEC) NO. 3037/90 (OJ No. L, 24.10 1990, at 1), with the addition of electricity, gas, steam, and hot water production and the recycling, treatment, destruction or disposal of solid liquid waste. EMAS, Article 2(i). The regulation left open the possibility that other activities, e.g., the distributive trades and public service, might subsequently be included under the scheme. See EMAS, Article 14; see also *Commission Calls For Proposals on Areas Where EMS Rule Can Be Extended*, *Int'l Env'tl Rep. (BNA)* 259 (Apr. 3, 1997). Germany announced plans to extend the scheme to include financial services, public utilities, power plants, the transport sector, and mail-order businesses earlier this year. See *Germany to Expand Eco-Audit Scheme*, *ENV'T WATCH: WESTERN EUR.*, May 2, 1997, at 6. Consistent with the mandate of Article 13, the Commission has pursued a number of strategies designed to increase the participation of small and medium-sized firms in EMAS.

206. Under a EMAS, the term "site" is used to describe all land on which the industrial activities under the control of a company at a given location are carried out, including any connected or associated storage of raw materials, products, and waste material as well as any equipment and infrastructure involved in the activities. EMAS, Article 2(k). It is the site which is registered under

under EMAS must fulfill the requirements of Council Regulation EEC No. 1836/93 of 29 June 1993 Allowing Voluntary Participation By Companies in the Industrial Sector in a Community Eco-Management and Audit Scheme, or simply, "the Regulation."²⁰⁷ Participants in the voluntary, site-based scheme must establish a written environmental policy, conduct an initial environmental review of the site, and use that review to inform the development of an environmental program aimed at the achievement of the commitments articulated in the company's environmental policy. In addition, the company must implement an environmental management system applicable to all activities of the site and audit the system's effectiveness. In order to be registered, companies must publish an environmental statement containing a description of activities at the site, an assessment of relevant, significant environmental issues and information on other aspects of their environmental performance at the site. The company's statement must be validated, and its environmental policy, program, EMS, and review or audit procedure verified, by an accredited verifier.²⁰⁸

EMAS rather than the company. See Ruth Hillary, *Environmental reporting Requirements Under the EU: Eco-Management and Audit Scheme (EMAS)*, 15 THE ENVIRONMENTALIST at 293,294 (1995).

207. Council Regulation EEC No. 1836/93 of 29 June 1993, *Allowing Voluntary Participation By Companies in the Industrial Sector in a Community Eco-management and Audit Scheme*, 1993 O.J. (168), 1.

208. For further analysis of the requirements of EMAS and advice on implementation, see ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION (Ruth Hillary ed., 1997); Tom Tibor & Ira Feldman, *Overview of the Eco-Management and Audit Scheme*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 269 (Tom Tibor & Ira Feldman eds., 1997); Matthias Gelber et al., *EMAS Implementation at Hipp in Germany*, in ISO 14001 AND BEYOND: ENVIRONMENTAL MANAGEMENT SYSTEMS IN THE REAL WORLD 279 (Christopher Sheldon ed.1997); *European Commission, The Community Eco-Management and Audit Scheme: An Overview, Progress to Date and Current Issues* (Directorate General XI; Brussels, Belgium 1996); Paola Amadei, *The How, What, Why: EMAS Pilots Projects in Italy*, 7 EUR. ENVTL. MGMT. ASS'N REV., May 1996, at 13; Ruth Hillary, *Environmental Reporting Requirements Under the EU: Eco-Management and Audit Scheme (EMAS)*, 15 THE ENVIRONMENTALIST 293 (1995); *Eco-Management and Audit Scheme: Enhancing the Impact of Environmental Management?*, INST. OF ENVTL. MGMT., Dec. 1995, at 6; Robert Holmes, *The Accreditation System for BS 7750 and the Eco-Management and the Audit*

Companies seeking an independent imprimatur for sites located in Europe may pursue ISO 14001 certification, EMAS registration, or use ISO 14001 as a route to EMAS registration.²⁰⁹ As even the less-than-detailed summaries given above make clear, ISO 14001 and EMAS, though generally similar, differ in certain material respects.²¹⁰ For example, the ISO specification does not require an initial environmental review of the company's environmental performance.²¹¹ More importantly, and in contrast to ISO 14001, the EMAS

Scheme in the United Kingdom, 7 ENVTL. CLAIMS J. 133 (1995); Eco Management Guide (Euro Info Centers 1995); Juan Xiberta, *The Eco-Management and Audit Scheme*, EUR. ENVTL. L. REV., Mar. 1994, at 85; Ana Barreira, *The EC Eco-Management and Audit Scheme in Spain: Development of Initial Stages*, GREENER MGMT. INT'L 83, (Oct. 1994); Rozsell Hunter, *EU Eco-Management and Auditing Regulation*, Int'l Env'tl. Rev. (BNA) 142 (Feb. 9, 1994); Ruth Hillary, ECO-MANAGEMENT AND AUDIT SCHEME: THE PRACTICAL GUIDE (Stanley Thornes 1994); ECO-MANAGEMENT AND ECO-AUDITING 21-39 (Linda S. Spedding et al. eds., 1993 Chancery Law Pub. 1993). One of the best sources of recent information on EMAS implementation is *European Partners for the Environment's Report from EMAS to SMAS: Charting the Course of Environmental Management and Auditing to Sustainability*, (1996).

209. Various approaches to EMAS registration are lucidly described in the EMS HANDBOOK: A GUIDE TO THE BS EN ISO 14000 SERIES 7-8 (British Standards Institution 1996).

210. The following sources compare and contrast EMAS and ISO with painstaking care. See e.g., Comite Europeen de Normalisation Report Nos. CR 12968 (1997) and CR 12969 (1997); Tom Tibor & Ira Feldman, *Overview of the Eco-Management and Audit Scheme*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 269, 273-78 (Tom Tibor & Ira Feldman eds., 1997); Dick Hortensius et al., *ISO 14001/BS 7750/EMAS - A Comparison*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 287 (Tom Tibor & Ira Feldman eds., 1997); Manuela Palomares-Soler & Peter M. Thimme, *Environmental Standards: EMAS and ISO 14001 Compared*, EUR. ENVTL. L. REV. at 247 (Aug-Sept. 1996); Answer given by Mrs. Bjerregaard on behalf of the Commission, 1996 O.J. 42 (July 26, 1996); JOSEPH CASCIO ET AL., ISO 14000 GUIDE, 25-30 (McGraw Hill 1996); *European Firms Likely To Adhere To EMAS Over ISO 14001 In Long Term*, Says Consultant, Int'l Env't Rep. (BNA) 544 (June 26, 1996); Tom Tibor, ISO 1400 A GUIDE TO THE NEW ENVIRONMENTAL MANAGEMENT STANDARDS 89-91 (Irwin Prof. Pub 1996); *Task Force Outlines Differences Between EMAS, ISO 14001 Standards*, Daily Rep. For Executives (BNA) A-25 (Sept. 27, 1995); see also Ruth Hillary, *EU Environmental Policy, Voluntary Mechanisms and Eco-Management and Audit Schemes in ENVIRONMENT MANAGEMENT SYSTEMS AND CLEANER PRODUCTION* 129, 135-36 (Ruth Hillary ed. 1997).

211. See Alex Scott, *Europe Weighs Its Standards Options*, CHEM Wk. Apr. 2, 1997, at 33.

Regulation requires preparation of a public environmental statement including, among other information: (i) an assessment of all significant environmental issues of relevance; (ii) a summary of figures on pollutant emissions, waste generation, consumption of raw material, energy and water, noise, and other significant environmental aspects; and (iii) other factors regarding environmental performance. EMAS, unlike ISO 14001, also requires external verification of the environmental policy, program, management system, review or audit procedure and environmental statement(s).²¹²

The difference between ISO 14001 and EMAS reflects carefully constructed compromises, primarily between the U.S. and European delegations to ISO's TC 207.²¹³ Given the more prevalent threat of criminal prosecution and toxic tort litigation in the U.S., the American delegation sought a flexible, procedural standard, whereas the Europeans tended to favor a more substantive approach in keeping with their EMAS experience and objectives.²¹⁴ When it became clear that the U.S. delegation would not concede on a number of key points, controversial requirements such as a fixed set of mandatory improvements in environmental performance, a specific level of pollution control technology, an environmental effects register, and publication of environmental impact data fell by the wayside.²¹⁵ Even so, firms bent on using ISO 14001 certification to leverage registration under EMAS will

212. Companies should consider these points when evaluating which of the two approaches to pursue.

213. See Paula C. Murray, *The International Environmental Management Standard, ISO 14000: A Non-Tariff Barrier Or A Step To An Emerging Global Environmental Policy?*, 18 U. PA. J. INT'L ECON. L. 577, 593-599 (1997); 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, 502-510 (1995). On the positions staked out by the U.S. delegation, see generally *ISO 14001 Standard on its Way*, QUALITY SYS. UPDATE, SPECIAL REP., July 1995 at SR-1, SR-5.

214. See Paula C. Murry, *The International Environmental Management Standard, ISO 14000: A Non-Tariff Barrier Or A Step To An Emerging Global Environmental Policy?*, 18 U. PA. J. INT'L ECON L. 577, 593 (1997).

215. See 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, 502-10 (1995).

be required to ensure that their management systems address the different or additional requirements of the EMAS Regulation, as outlined in the "bridging document" prepared by Europe's standard body, the Comite Europeen de Normalisation.²¹⁶

Companies motivated to pursue compliance auditing as part of implementation of an environmental management system standard should carefully evaluate whether it is better to participate in one of the national or regional programs or the ISO 14001 initiative.²¹⁷ Companies also have to make

216. Article 12 of the EMAS Regulation allows for the recognition of other management systems (whether national, European, or international) as a route to EMAS registration, see Manuela Palomares-Soler & Peter M. Thime, *Environmental Standards: EMAS and ISO 14001 Compared*, Eur. Env'tl. L. Rev. (Aug.-Sept. 1996), at 247, 248. The Commission formally recognized ISO 14001 on April 22, 1997. See O.J. No. L104; see generally *Two Decisions Officially Recognize ISO 14001 As Covering Majority Of EMAS Rule*, 21 Chem. Reg. Rep. (BNA) 187 (1997); Alex Scott, *ISO 14000 Approaches EMAS Status*, Chem Wk., Apr. 16 1997; *EU Officially Recognizes Equivalence of ISO 14001 with EMAS*, Env't Watch: Western Eur., May 2, 1997, at 5. Article 12 also allows accredited verifiers to accept certificates of compliance with standards as denoting compliance with elements of EMAS. Companies using ISO 14001 to participate in EMAS must hold a current certificate issued by a third party certification body using certification procedures recognized by European Commission. Mere self-declaration to conformity with ISO 14001 will not suffice. The development of the CEN bridging document is examined in *EMAS Bridging, Comparison Documents Issued By European Standardization Unit*, Int'l Env't Rep (BNA) 911 (Oct 1, 1997); *EMAS Bridging Documents Enter Final Stretch*, INT'L ENVTL. SYS. UPDATE, Aug. 1996, at 8; *ISO 14001/EMAS Bridge On Hold*, INTERGRATED MGMT. SYS. UPDATE, June 1996, at 7; *European Bridge to ISO 14001 Due Out by Late June 1996*, INT'L ENVTL. SYS. UPDATE, Apr. 1996, at 11.

217. See David Shillito, *Environmental Management - ISO or EMAS*, POLYMERS PAINT COLOUR J., Apr. 1, 1997, at 14. Many firms in Europe appear satisfied with EMAS certification for now. See *U.K Firms Certified Under ISO 14001, EMAS May Rise Even More Under Commission Decision*, Int'l Env't Rep. (BNA) 573 (June 11, 1997); *EMAS Implemented: German Style*, INT'L ENVTL. SYS. UPDATE, Aug. 1996, at 17, though there are signs that the scales are beginning to tip in favor of ISO 14001. See *Businesses in Number of European Countries Favoring ISO 14000 Over EMAS, F.O.E. Report Finds*, Int'l Env't Rep. (BNA) 1016 (Oct. 9, 1997); Alex Scott, *Environmental Management ISO 14000: Europe's Top Standard*, Chem. Wk., Sept. 24, 1997, at 84. See also *ISO Shock*, J. OF BUS. STRATEGY, Mar.-Apr. 1996, at 5 ("One of the more confusing aspects of an international environmental standard will be rationalizing it with existing national and regional standards."); *Netherlands Committee Seeks Consistency*, INT'L ENVTL. SYS. UPDATE, Aug. 1996, at 18; Leslie Webb, *A Complex Environment for Regulation*, PULP & PAPER INT'L, Dec. 1995, at 37.

decisions about how implementation fits with other business strategies and commitments, e.g., in areas such as quality²¹⁸ and product stewardship.²¹⁹ Perhaps most significantly,

218. The relationship between the ISO 9000 and the 14000 series of standards is examined in Dennis R. Sasseville, *Comparison of ISO 9000 and ISO 14000 for SMEs* (Sept. 1997) (unpublished paper on file with authors); Michael A. Ross, *The Value of Registration*, ASTM STANDARDIZATION NEWS, Sept. 1997, at 24; Ron Black, *ISO 14000/ISO 9000: Integration, Conformity Assessment, and Auditing Skills*, in *IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS* 241 (Tom Tibor & Ira Feldman eds., 1997); SUBHASH C. PURI, *STEPPING UP TO ISO 14000: INTEGRATING ENVIRONMENTAL QUALITY WITH ISO 9000 AND TQM* (1996); Grace H. Wever, *STRATEGIC ENVIRONMENTAL MANAGEMENT* 22-32 (1996); RICHARD B. CLEMENTS, *COMPLETE GUIDE TO ISO 14000* 119-182 (1996) (discussing implementation of ISO 14000 using ISO 9000 as a guide, and offering examples of implementation of ISO 14000 with and without ISO 9000); Judith A. Cichowicz, *Should ISO 14000 Be Linked with ISO 9000?*, ENVTL. Q. MGMT., ENVTL. Q. MGMT., Autumn 1996, at 77; *A New ISO Standard To Deal With ISO 14000*, ADHESIVE AGE, July 1, 1996, at 38; Stephany Romanow-Garcia, *Is HPI ready for ISO 14000?*, HYDROCARBON PROCESSING, June 1, 1996, at 15; Yahya Mohd Nor, *ISO 14000: The Next Paradigm Shift*, NEW STRAITS TIMES, Aug. 14, 1996, at 12; Joseph Cascio et al., *ISO 14000 GUIDE* 22-24 (1996) (comparing ISO 14000 and ISO 9000); Michael Ross, *EMS Operational Control and ISO 9000*, INT'L ENVTL. SYS. UPDATE, Apr. 26, 1996, at 25; BRIAN ROTHERY, *ISO 14000 AND ISO 9000* (1995); A.L. Young, *An Overview of ISO 9000 Application to Drug, Medical Device and Environmental Management Issues*, 49 *FOOD DRUG L.J.* 469 (1994); Chris Roerden & Pat Meller, *Beyond ISO 9000: Environmental Management*, *TOTAL QUALITY REV.*, July-Aug. 1994, at 57. For a review of the ISO 9000 basics, see generally Hank Barnette, *Meeting Quality Standards: ISO 9000, 9002, 14000 and QS 9000*, *NEW STEEL*, June 1, 1996, at 112; GURMEET NAROOOLA & ROBERT MACCONNELL, *HOW TO ACHIEVE ISO 9000 REGISTRATION ECONOMICALLY AND EFFICIENTLY* (1996); MAUREEN A. DALFONSO, *ISO 9000: ACHIEVING COMPLIANCE AND CERTIFICATION* (1995); KENNETH L. ARNOLD, *THE MANAGER'S GUIDE TO ISO 9000* (1994); ROBERT W. PEACH, *THE ISO 9000 HANDBOOK* (2d ed., 1994) S.P. Batra et al., *Roadmap to Successful ISO 9000 Registration*, *INDUS. ENG'G*, Oct. 1993, at 54; PERRY L. JOHNSON, *ISO 9000: MEETING THE NEW INTERNATIONAL STANDARDS* 9 (1993); see also Cynthia Ryans, *Resources (ISO 9000 Bibliography)*, *J. SMALL BUS. MGMT.*, Jan. 1, 1997, at 58. 3M Company's experience integrating ISO 9000 and 14000 is discussed in *3M Plant Builds on ISO 9000 as First US-Based Firm To Gain ISO/DIS 14001 Certification*, *INT'L ENVTL. SYS. UPDATE*, July 1996, at 28. Some speculate that ISO 14000 certification could become a prerequisite to ISO 9000 certification. See Kerry E. Rodgers, *The ISO Environmental Standards Initiative*, *N.Y.U. ENVTL. L.J.* 181, 182 n.7 (1996).

219. See Patricia S. Dillon & Michael S. Baram, *Forces Shaping the Development and Use of Product Stewardship in the Private Sector*, in *ENVIRONMENTAL STRATEGIES FOR INDUSTRY* 329 (Kurt Fischer & Johan Schot eds., 1993). Perhaps the best known product stewardship program is the Chemical Manufac-

firms must decide whether to pursue a certification or self-declaration strategy – a point which will turn in no small part on the regulatory and legal considerations described below.²²⁰

turers Association's Responsible Care initiative. The Responsible Care Program is reprinted in JOHN R. SALTER, CORPORATE ENVIRONMENTAL RESPONSIBILITY: LAW AND PRACTICE 268 (1992), and its elements described in, among other sources, Peter Fairley, *Responsible Care: Communication Challenge Remains*, CHEM. WK., Dec. 4, 1996, at 27; Michael Roberts, *Communications Tops Europe's Agenda: U.K. Pilots HSE Management Systems*, CHEM. WK., Dec. 4, 1996, at 38; *CMA Pilot Shows Responsible Care Verification May Be Sufficient To Assure Good Management*, INT'L ENVTL. SYS. UPDATE, July 1996, at 26; Michael Roberts & Judy Stringer, *All Systems Go for Third-Party Verification: But Uncertainty Remains*, July 10, 1996, at 52 (on the debate within CMA over the combination of its new third-party audit program, MSV, and ISO 14000); Judy Stringer, *Responsible Care: CMA Members Struggle With Verification*, CHEM. WK., May 6, 1996, at 52; Barbara Kanegsberg, *Quality Means Business*, CHEM. MARKETING REP. SR5 (Apr. 8, 1996); Patricia Van Arnum, *Responsible Care; Chemical Industry Program for Environmental Issues; Chemical Outlook '96*, CHEM. MARKETING REP. SR9 (Jan. 15, 1996); W. David Gibson, *R. Care, TQM Intersect*, CHEM. MARKETING REP. SR8 (Apr. 10, 1995); Peter Simmons & Brian Wynne, *Responsible Care: Trust, Credibility, and Environmental Management*, ENVIRONMENTAL STRATEGIES FOR INDUSTRY: INTERNATIONAL PERSPECTIVES ON RESEARCH NEEDS AND POLICY IMPLICATIONS 201-226 (Kurt Fischer & Johan Schot eds., 1993). For tips on integrating Responsible Care with ISO 14001, see generally Stuart Aaron, *The Integrated Approach: the Chemical Industries Association's Responsible Care in ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION*, 205 (1997); John McVaugh, *Integrating the ISO 14001 Environmental Management System with the Chemical Manufacturers Association's Responsible Care*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 261-68 (Tom Tibor & Ira Feldman eds., 1997); THE ISO 14000 HANDBOOK 505-509 (Joseph Cascio ed., 1996).

220. See generally Daniel M. Steinway, *ISO 14000: THE PROS AND CONS OF CERTIFICATION*, METROPOLITAN CORP. COUNS., Sept. 1997, at 6; Matt Cristy, *ISO Environmental Standard Proposed*, JACKSONVILLE BUS. J., Dec. 20, 1996, available in 1996 WL 13558570; Kara Sissell, *ISO 14000*, CHEM. WK., Oct. 9, 1996, at 52; Ronald Begley, *Is ISO 14000 Worth It?*, J. OF BUS. STRATEGY, Sept. 1, 1996; Jim Harger, *Hidden Benefits of ISO Rating Worth Cost*, GRAND RAPIDS PRESS, Aug. 18, 1996, at F-1; Carey A. Mathews, Note, *The ISO 14001 Environmental Management System Standard: An Innovative Approach To Environmental Protection*, 2 ENVTL. L. 817, 826 (1996); Kerry E. Rogers, *The ISO Environmental Standards Initiative*, N.Y.U. ENVTL. L.J. 181, 185-186 (1996); Glenn C. Hourhan, *ISO 14001: More Prose Than Cons*, APPLIANCE MFG. Aug. 1, 1996, at 72; Paul Merrion, *14000 Ways To Play Safe*, CRANE CHICAGO BUS., Apr. 15, 1996, at 15; John Wilson and Ronald McClean, *Is ISO 14001 Certification for You? (Part 2)*, INT'L ENVTL. SYS. UPDATE, Apr. 26, 1996, at 27; Helga Tilton, *The Dawn of ISO 14000: The New Environmental Management System Sparks Considerable Interest, But There Is Relatively Little Action Among Domestic*

1. Regulatory and Legal Considerations

a. Regulatory Initiatives Involving ISO 14001

During this early phase, companies should also monitor governmental efforts to utilize the ISO 14000 standards as a complement to traditional "command-and-control" regulation.²²¹ Although the Agency has yet to formally endorse the

Players, CHEM. MARKETING REP., Apr. 8, 1996, at SR5; Pamela Sebastian, *Business Bulletin*, WALL ST. J., Mar. 21, 1996, at A1 (Coopers & Lybrand maintains that US firms should not necessarily attempt to conform with ISO 14000); Erika Gonzalez, *Is It Time TO Upgrade? How International Standards Are Designed to Further Protect the Environment*, RICHMOND TIMES DISPATCH, Mar. 1, 1996, at 23; John S. Wilson and Ronald A.N. McClean, *ISO 14001: Is It for You?*, PRISM (Arthur D. Little, Inc., First Quarter 1996); Douglas M. Rode, *ISO Standards' Bottom-Line Impact*, ELECTRICAL WORLD, Sept. 1995, at 56.

Ted D. Polakowski and Laurence Mach explain Lucent Technologies' election in *ISO 14000 Certification: Lucent Technologies Microelectronics Group's Strategic Choice*, CORP. ENVTL. STRATEGY, Winter 1997, at 55. A smaller firm's decision is described in Gary C. Roper, *Why Would a Medium-Sized Manufacturing Facility Become ISO 14001 Certified?*, INT'L ENVTL. SYS. UPDATE, Dec. 1996, at 13. Both of these firms considered certification relevant to their business objectives. In this regard, it is significant that in a recent survey of U.S. companies conducted by the National Association of Environmental Management, 37% of companies surveyed said that they expected ISO 14000 to be necessary for conducting business beginning in 1996, but only 15% of those companies have begun to pursue certification. Survey results on corporate interest in EMSs and, in particular ISO 14000, are reported in Melissa J. Rolla, *ISO 14000 Needs Assessment Survey Report* (Jun. 24, 1996) (copy on file with authors); *Surveys Show Interest in EMS and Integration Despite Impediments*, INTEGRATED MGMT. SYS. UPDATE, Feb. 1996, at 1; Kara Sissell, *Survey: High Regard for ISO 14000*, CHEM. WK., Nov. 8, 1995, at 42 (of 115 large companies surveyed by the Arthur D. Little consulting firm, 62% of the respondents expected ISO 14001 implementation to be essential to business success).

221. See generally Robert Anthony Reily, *The New Paradigm: ISO 14000 and Its Place in Regulatory Reform*, 22 J. CORP. L. 535 (1997); Timothy J. Mohin, *The Alternative Compliance Model: A Bridge to the Future of Environmental Management*, 27 Env'tl. L. Rep. (Env'tl. L. Inst.) 10345 (1997); Cheryl Hogue, *EPA Devising Ways to Measure Changes in Compliance, Performance Due to EMS*, Daily Rep. for Executives (BNA) 19 (Feb. 10, 1997); *EPA Policy in 1997 Expected to Reflect Evolution of Reinvention Efforts*, Daily Rep. for Executives (BNA) S2 (Jan. 21, 1997); Henry R. Balikov & Kathleen M. Whitby, *Will Governmental Involvement with ISO 14000 Add Value to the Process?* ENVTL. QUALITY MGMT., Summer 1997, at 79; Howard N. Apsan, *Strategic Environmental Management: Regulators Take Notice*, ENVTL. QUALITY MGMT., Summer 1997, at 91; John Pendergrass, *ISO No Substitute For A Permit*, ENVTL. FORUM, Sept.-Oct. 1996, at 6; Henry P. Baer, Jr., Note, *ISO 14000: Potential Compliance And Prevention Guidelines For EPA and DOJ*, 7 FORDHAM ENVTL. L.J. 927 (1996); *Regulatory Compliance Chief Factor*, SOUTH CHINA MORNING POST,

ISO initiative,²²² the EPA's Office of Enforcement and Compliance (OECA) set up a task group in June 1996 to examine the relationship between environmental management systems, ISO 14000 and regulatory enforcement and compliance.²²³ The working group is compiling a set of metrics which can be used for pilot projects in agency programs in order to assess the extent to which an EMS can improve performance in these areas.²²⁴

Sept. 10, 1996, available in 1996 WL 3767355; Polly T. Strife, *So Now, People Are Afraid of Flexibility?*, ENVTL. FORUM, Sept.- Oct. 1996, at 9; *Companies Accredited Under ISO 14000 Might Get Credit Under Sentencing Rules*, 25 ENV'T Rep. (BNA) 1510 (Dec. 2, 1994).

222. See Pam Parry, *EPA Network Values Voluntary Standards, Including 14001*, INT'L. ENVTL. SYS. UPDATE, Aug. 1997, at 10.

223. See Memorandum from Steven A. Herman, Assistant Administrator, U.S. EPA Office of Enforcement and Compliance Assurance, to Addressees, Enforcement and Compliance Policy Toward ISO 14001 and Establishment of the OECA ISO 14001/EMS Task Group (June 25, 1996). The working group includes representatives from various OECA offices (Office of Compliance (OC), Office of Planning and Policy Analysis, Office of Regulatory Enforcement, Federal Facilities Enforcement Office, Office of Federal Activities and the Office of Criminal Enforcement) and other offices, including Office of Prevention, Pesticides and Toxic Substances, Office of Audits, Office of Policy Planning and Evaluation, Office of Solid Waste and Emergency Response, Office of Water, Office of Air and Radiation and participants from eight Regional Offices. The DOJ is also represented. The group also began with representation from various states, including Arkansas, Arizona, California, Colorado, Delaware, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Tennessee, Washington and Wisconsin, some of which are also conducting independent assessments of environmental management systems.

224. The working group submitted its metrics for outside review in the spring of 1997. Although the draft metrics have not been widely disseminated to the public, published reports claim that the metrics target such issues as: (i) whether an EMS affects the number, nature and seriousness of a facility's violations, and the promptness with which violations are reported and corrected; (ii) whether an EMS will reduce the volume of pollutants released to the air, water and land; and (iii) whether the frequency of auditing and training leads to improved environmental performance. See *EPA Drafts Measure To Gauge The Merits Of Environmental Management System*, INSIDE EPA WKLY. REP., Apr. 18, 1997, at 5. The EPA intends to use the data to inform its understanding of whether EMSs produce "beyond compliance" results. See Office of Enforcement and Compliance Assurance, *Briefing on EPA/State ISO 14001/EMS Task Group and Proposed Metrics for Evaluating Environmental Performance in Facilities Participating in EMS/ISO 14001 Experiments* (July 1997) (on file with authors).

The ISO 14000 standards have already come into play (explicitly or implicitly) in two of the EPA's reinvention initiatives, Project XL and the Environmental Leadership Program (ELP).²²⁵ Of the Project XL²²⁶ pilots currently in the

225. There may also be a place for ISO 14001 in the Common Sense Initiative (CSI). CSI, announced by the EPA July 20, 1994, is an effort to customize environmental regulations across all media for a particular industry sector, emphasizing pollution control and prevention strategies. See 59 Fed. Reg. 55,117 (Nov. 3, 1994); see also Susan Bruninga, *Automotive Sector of CSI Trying To Regroup, Focus On Moving Forward*, Daily Rep. for Executives (BNA) A-17, (Aug. 21, 1996); Susan Bruninga, *Common Sense Initiative Workgroup Seeks Transition from Pilot Projects to Policy*, Daily Rep. for Executives (BNA) A-42 (Dec. 18, 1995). Industries participating in the CSI pilot phase include auto manufacturing, computers and electronics, iron and steel, metal finishing and plating, petroleum refining, and printing. Carol M. Browner, *The Common Sense Initiative: A New Generation of Environmental Protection*, Address at the Center for National Policy Newsmaker Luncheon (July 20, 1994); see generally *CSI Team Calls On Automakers To More Carefully Consider 'Life Cycle' Impacts*, INSIDE EPA WKLY. REP., Dec. 20, 1996, at 13; Daniel J. Fiorino, *Toward A New System of Environmental Regulation: The Case For An Industry Sector Approach*, 26 ENVTL. L. 457, 470-72 (1996). ISO standards could be used in establishing a new multi-media permitting strategy or as a basis for a pollution prevention program, see *ISO 14000 May Be Used In Common Sense, Environmental Leadership Programs of EPA*, Int'l Env't Daily (BNA) D-5 (May 23, 1995), as the CSI program is expanded, see *EPA Considers Future Expansion of CSI to New Industrial Sectors*, INSIDE EPA WKLY. REP., Apr. 26, 1996, at 1, provided the agency can secure the necessary funding, see *Tight Budgets Squeeze CSI Projects; EPA Tells Groups To Set Priorities*, Daily Rep. for Executives (BNA) A-27 (May 24, 1996), and implementation problems can be worked out. On the troubled CSI program, see *Metal Finishers Seek Regulatory Flexibility to Meet Environmental Goals*, INSIDE EPA WKLY. REP., Apr. 18, 1997, at 14; *Common Sense Initiative Considers Involvement in Broader Environmental Issues*, Env't. Rep. (BNA) 2177 (Feb. 28, 1997); Susan Bruninga, *EPA "Common Sense" Council To Reassess in Light Of Setbacks*, Daily Rep. Executives (BNA) S-17 (Jan. 21, 1997); Susan Bruninga, *Incremental Reforms Expected in Congress; EPA Seeks to Resolve Issues with CSI, XL*, Daily Rep. Executives (BNA), Jan. 21, 1997 at S-17; *Common Sense Initiative, Other Partnership Programs Seen as Facing Major Obstacles*, PESTICIDE & TOXIC CHEM. NEWS, Nov. 13, 1996, available in 1996 WL 8853296.

226. Project XL, a principal component of the Clinton Administration's regulatory re-invention effort, offers the exercise of regulatory flexibility by EPA in exchange for a commitment on the part of "responsible companies" to achieve better environmental results than would have been attained through mere regulatory compliance. See EPA Regulatory Reinvention (XL) Pilot Projects, 60 Fed. Reg. 27,282 (1995); and Notice of Modifications, 62 Fed. Reg. 19,872 (Apr. 23, 1997) (attempting to clarify the concepts, definitions and boundaries of superior environmental performance, regulatory flexibility and stakeholder involvement); Memorandum from David Gardiner, Assistant Administrator, U.S.

implementation and evaluation phase,²²⁷ two involve ISO

EPA, OPPE, on Draft Principles for Development of Project XL Final Project Agreements (Dec. 1, 1995) (copy on file with authors); see generally Rena I. Steinzor, *Regulatory Reinvention and Project XL: Does the Emperor Have Any Clothes?*, 26 *Envtl. L. Rep. (Envtl. L. Inst.)* 10527 (Oct. 1996); William H. Freedman & Karen A. Caffee, *EPA's Project XL: Regulatory Flexibility*, 10 *NAT. RESOURCES & ENV'T* 59 (1996); Beth S. Ginsberg & Cynthia Cummis, *EPA's Project XL: A Paradigm for Promising Regulatory Reform*, 26 *Envtl. L. Rep. (Envtl. L. Inst.)* 10059 (Feb. 1996) (describing the various projects under the initiative); Marianne Lavelle, *Bending the Rules*, *NAT'L L.J.*, June 10, 1996, at A1. The program has not been without its troubles. For a discussion of the program's strengths and weaknesses and further background, see generally William H. Miller, *Washington Wreck*, *Indus. Wk.*, Aug. 18, 1997, at 116; Timothy J. Mohin, *The Alternative Compliance Model: A Bridge to the Future of Environmental Management*, 27 *Envtl. L. Rep. (Envtl. L. Inst.)* 10345 (July 1997); Industry, *Public Interest Groups Seek Middle Ground On Project XL Process*, *Daily Rep. for Executives (BNA)* (Jan. 14, 1997); *EPA's Project XL In Need Of Adjustments To Ease Participation, Forum Participants Assert*, 27 *ENV'T. REP.* 1839 (1997); *Environmentalists Slam Project XL In Meeting With EPA Officials*, *INSIDE EPA WKLY. REP.*, Dec. 20, 1996, at 1; Susan Bruninga, *Project XL Has As Many Problems As Benefits, Speakers At Forum Say*, *Daily Rep. for Executives (BNA)* A-23 (Dec. 20, 1996); Susan Bruninga, *Weyerhaeuser Project XL Proposal May Become Final Soon, EPA Official Says*, *Daily Rep. for Executives (BNA)* A-32 (Dec. 19, 1996); *EPA, States Seek Rules For Reinvention Projects Outside XL*, *INSIDE EPA WKLY. REP.*, Nov. 8, 1996, at 1; *Park Service Drops Objections To High-Profile Project XL Proposal*, *INSIDE EPA WKLY. REP.* Oct. 25, 1996, at 8; *EPA To Rewrite Guidelines For Community XL Projects*, *INSIDE EPA WKLY. REP.*, Sept. 27, 1996, at 11; *EPA Poised to Approve Intel XL Permit Despite Environmentalist Complaints*, *INSIDE EPA WKLY. REP.*, Sept. 20, 1996, at 8; *State Officials Create New Group To Suggest Project XL Reforms*, *INSIDE EPA WKLY. REP.*, Sept. 13, 1996, at 1; Cheryl Hogue, *Frustrated By Pace Of Project XL, States Drafting Federal Legislation*, *Daily Rep. for Executives (BNA)* A-10 (Sept. 9, 1996); *EPA Drafts New Process For Developing XL Pilot Projects*, *INSIDE EPA WKLY. REP.*, Aug. 30, 1996, at 3; *EPA To Seek Public Comment On Environmental Goals For XL Projects*, *INSIDE EPA WKLY. REP.*, Aug. 23, 1996, at 1; *EPA Is Considering Possible Performance Tests For XL Projects*, *INSIDE EPA WKLY. REP.*, Aug. 16, 1996, at 5; *EPA Creates New High-Level Position To Oversee "Project XL" Initiative*, *INSIDE EPA WKLY. REP.*, Aug. 9, 1996, at 2; *Environmentalists Raise New Concerns As "XL" Pilot Projects Go Final*, *INSIDE EPA WKLY. REP.*, July 19, 1996, at 1; *Stakeholder Involvement Remains Concern In Talks on Alternative Compliance Plans*, *Env't Rep. (BNA)* 229 (May 10, 1996); Peter Fairley, *Clinton Unveils First Round of XL Projects*, *CHEM. WK.*, Nov. 15, 1995, at 12; *EPA Seeks Participants For "Project XL" Pilot From Industry, Government Agencies*, *Daily Rep. for Executives (BNA)* A-17 (May 23, 1995) (summarizing the requirements of the program).

227. The Agency divides Project XL pilots into three phases: (i) a proposal phase, in which the sponsors propose the project to EPA, which then reviews the proposal in collaboration with the appropriate state; (ii) a development phase, in which the project sponsors develop a final project agreement (FPA),

14001.²²⁸ The Final Project Agreement (Agreement) for Weyerhaeuser's Flint River facility in Oglethorpe, Georgia commits the company to continue its policy of "Minimum Impact Manufacturing."²²⁹ The Agreement, reached with EPA's Region 4 and the Georgia Department of Natural Resources in January 1997, includes the goal of revising the company's current EMS to conform with ISO 14001.²³⁰ The company

working with public stakeholders and regulatory agencies; and (iii) an implementation and evaluation phase, in which the project is implemented at participating facilities and evaluated by project sponsors, stakeholders, regulatory agencies, and third parties.

228. The EPA, the State of Minnesota, and 3M Co. sought, without success, to negotiate a multimedia permit under the Project XL Program. This alternative permit would have authorized 3M to construct, modify and operate a tape and coating manufacturing facility, provided that the permittee implemented an EMS, operated and maintained the facility consistent with the EMS, conducted regular EMS audits, and subjected itself to independent audits by a third party. Talks stalled and eventually broke down, however, when 3M would not agree to make an up-front guarantee of "superior environmental performance." See *3M Withdraws From Project XL, Tells EPA Business Interests Forced Move*, Daily Rep. for Executives (BNA) A-6 (Sept. 12, 1996); Susan Bruninga, *3M's Project XL Proposal Suspended Due To EPA Inflexibility, Minnesota Says* Daily Rep. for Executives (BNA) A-21 (Sept. 3, 1996); *Minnesota Abandons Leading XL Project In Dispute Over EPA Requirements*, INSIDE EPA WKLY. REP., Aug. 30, 1996, at 1.

Lucent Technologies' XL project incorporating ISO 14000 is currently in the development phase. For background on the company's EMS, see generally Denise St. Ours, *Lucent's Microelectronics Group Earns "Umbrella" Certification*, INT'L ENVTL. SYS. UPDATE, July 1997, at 1; Ted D. Polakowski & Laurence Mach, *ISO 14000 Certification: Lucent Technologies Microelectronics Group's Strategic Choice*, CORP. ENVTL. STRATEGY 55 (Winter 1997); Susan Bruninga, *EPA Audit Policy May Determine Success of Company's Project XL Proposal*, Daily Rep. for Executives (BNA) A-15 (Aug. 19, 1996).

229. EPA, Weyerhaeuser Flint River Operations Project XL: Final Project Agreement (Jan. 1997) (on file with the authors); see generally Ken Fouhy, *CPI Company Signs Up With New EPA Regulation Program*, CHEM. ENG'G, Feb. 1, 1997, at 23. Information on Project XL proposals and agreements can be obtained from the Project XL Fax-On-Demand Line (202-260-8590) or from the EPA Project XL Website on the Internet at <<http://www.epa.gov/Projectxl/>>.

230. The Weyerhaeuser plant in Georgia also received regulatory relief from the pulp and paper cluster rule which sets maximum achievable control technology (MACT) standards under the Clean Air Act. This rule would be waived if the company could achieve pollutant reductions by other means such as emissions control equipment, pollution prevention or innovative technology. The EPA and Weyerhaeuser expect the alternative compliance plan to produce superior environmental results than would adherence to the MACT rule and if they found this would not be the case then EPA could still require the company

and agencies expect the ISO 14001 management system to help the facility continually improve environmental performance by such means as reduction of solid and hazardous waste generation and reduction of daily bleach plant flow. A second firm, Jack M. Berry, Inc., reached an XL agreement with EPA Region 4, Florida Department of Environmental Protection, and the South Florida Water Management District in July of 1996.²³¹ In the agreement, Berry committed to institute an ISO 14001 environmental management program which is expected to lead to superior environmental performance in a number of areas including increased re-use of wastewater, decreased water consumption, decreased VOC and nitrous oxide emissions, a reduction in solid waste produced, and an increase in scrap metal recycled.²³²

The Agency also built heavily on the ISO EMS specification in designing the environmental management system for its Environmental Leadership Program (ELP).²³³ The Gil-

to adhere to the MACT standard. The Weyerhaeuser plan implements programs that would also improve water quality and cut the amount of solid waste generated. See *Weyerhaeuser Proposal Under Project XL May Become Final Soon*, EPA Officials Say, 27 ENV'T REP. 1840 (1997).

231. See EPA, Final Project Agreement Berry XL Project (July 1996) (on file with the authors).

232. The Berry XL agreement also allows the facility to consolidate its seven operating permits under a single Comprehensive Operating Permit, thereby accelerating the company's permit application process. The seven permits will henceforth be evaluated collectively every five years. See Susan Bruninga, *Florida Citrus Company Becomes First to Implement Project XL One-Stop Permit*, Daily Env't Rep. (BNA) 596 (July 19, 1996).

233. ELP offers recognition to companies and facilities demonstrating leadership through a statement of corporate commitment, openness to public scrutiny, model compliance records, and measurable reductions of the environmental impacts of their production processes or products, as means to "encourage and publicly recognize environmental leadership and promote pollution prevention in . . . manufacturing . . ." 58 Fed. Reg. 4802, 4802 (1993). The pilot phase of the program ended in August 1996, after which EPA began the task of drafting the framework for the full scale projects. See 59 Fed. Reg. 4066 (Jan. 28, 1994), 59 Fed. Reg. 32,062 (June 21, 1994) and 59 Fed. Reg. 44,984 (Aug. 31, 1994). For background on the development of ELP, see generally *Innovative Initiative To Provide Facilities Relief Readied For Launch In 1997*, Program Chief Says, Env't Rep. (BNA) 1347 (Oct. 18, 1996); *EPA Preparing For 1997 Launch Of Environmental Leadership Program*, Daily Rep. for Executives (BNA) A-18 (Oct. 16, 1996); *Draft EPA Leadership Proposal May Offer Reg Relief To Participants*, INSIDE EPA WKLY. REP., Sept. 20, 1996, at 10; Daniel J.

lette Company, Ocean State Power, Duke Power, Ciba Geigy, Motorola and other firms completed a series of pilot projects under the program in August of 1996. The pilots were designed to evaluate whether environmental management systems do in fact encourage innovative compliance activities.²³⁴ The EPA used the results of these pilots to draft a proposed framework for a full-scale ELP program, including the components of an ELP environmental management system.²³⁵

In its current draft form, the program requires a "mature environmental management system" of participants. Specifically, firms must have had an EMS in place for two years, and have tested the system to ensure its proper operation. Participating firms must also have a compliance auditing program in place, as well as community outreach and employee involvement programs. As presently framed, ELP does not require ISO 14001 certification, even though many of the elements of the ELP EMS are consistent with ISO 14001. The draft ELP EMS Guidelines go beyond ISO 14001

Fiorino, *Toward A New System of Environmental Regulation: The Case For An Industry Sector Approach*, 26 ENVTL. L. 457, 475 (1996); Steven A. Herman, *EPA Launches Environmental Leadership Program*, NAT'L ENVTL. ENFORCEMENT J. 14 (May 1995).

234. Final reports from the pilot projects are available on the Internet via the ELP Website at <http://es.inel.gov/elp>. On lessons learned from the pilots, see generally Crispin Stutzman, *Environmental Leadership Program: 3 Northwest Pilots*, POLLUTION PREVENTION NORTHWEST, Jan.- Feb. 1997, at 3; *EPA Preparing for 1997 Launch of Environmental Leadership Program*, Daily Rep. for Executives (BNA) A-18 (Oct. 16, 1996); *ELP Company Reports Show EMS Progress*, INT'L. ENVTL. SYS. UPDATE, May 1996, at 13.

235. The text of the first draft EPA Proposed Framework For Full-Scale ELP is reprinted at p. E-1 of the October 16, 1996 issue of the BNA Daily Environment Reporter. A more recent draft of the Proposed Framework, dated February 1997, as well as draft Guidelines for the ELP-EMS, dated June 16, 1997, are available on the ELP Website. For background on the development of the program, see generally *New EPA Group To Focus On Links Between ISO 14001, Enforcement Policy*, Daily Rep. for Executives (BNA) A-18 (June 27, 1996); Dennis G. Willis, *The Role of ISO 14000, EPA's Environmental Leadership Program, and Life Cycle Assessments*, METROPOLITAN CORP. COUNS., Apr. 1996, at 51; *Companies Might See Fewer Inspections, Faster Permitting Under EPA Initiative*, 26 Env't Rep. (BNA) 1289 (Dec. 1, 1995); *ISO 14000 May Be Used In Common Sense, Environmental Leadership Programs of EPA*, Int'l Env't Daily (BNA) D-5 (May 23, 1995). The Gillette Company's ELP pilot project relied on third party EMS and compliance verification.

in requiring "explicit inclusion of compliance assurance, pollution prevention, and community outreach elements." ELP participants should also anticipate requirements to: (i) publish factual compliance data in an Annual Performance Report; (ii) conduct compliance and EMS audits in years two and five of the planned six-year ELP cycle; and (iii) implement a mentoring program or make a good faith effort to mentor other firms. In return, according to the ELP Draft Proposed Framework, participants will receive "Inspection Discretion Benefits," such as reduced and/or modified discretionary inspections. The Agency is also planning reduced "Regulatory Burden Benefits," which have yet to be finalized, but which may include expedited access to other reinvention projects (which themselves include benefits, such as expedited permits, streamlined permit modifications, and the like).

Some EPA regions have begun leadership programs of their own. Region 1's StarTrack program grew out of ELP, and was initiated to evaluate the credibility of third-party assessments of environmental performance.²³⁶ StarTrack emphasizes three main components; (i) implementation of an EMS benchmarked to ISO 14001; (ii) facility compliance audits meeting the guidelines of EPA and stakeholders; and (iii) correction of any violations discovered by a specific time frame, in accordance with the EPA's Self-Policing Policy. A third-party auditor must prepare a public report summarizing each component.²³⁷ Benefits to certified companies could include penalty reduction for most violations discovered during a voluntary audit, expedited regulatory decisions, and future regulatory flexibility, such as reduced record keeping or reporting.²³⁸

EPA Region 10 funded an initiative called the "ISO

236. See *EPA Launches "StarTrack" Assurance Test*, INT'L ENVTL. SYS. UPDATE, June 1996, at 20.

237. See George Hawkins, *Compliance and Enforcement Changes In Congress and EPA*, NATURAL RESOURCES & ENV'T, Spring 1997, at 42, 44.

238. See *StarTrack Gears Up For Next Year*, INT'L ENVTL. SYS. UPDATE, June 1997, at 1, 3.

14000 Leadership Project,"²³⁹ designed to clarify the potential environmental, economic, and regulatory benefits of ISO 14001 certification. The eight-month project took the form of three forum meetings with participants from private industry, environmental interest groups, regulatory agencies and federal facilities. The first forum defined the levels of awareness of ISO 14001 and provided information on the standard. Three of the industry participants (Matsushita Semiconductor Corp. of America (Panasonic), Intalco Aluminum Corp., and Murray Pacific Corp.) then undertook an EMS analysis. A second forum was held to discuss lessons learned by the companies. A registrar also discussed the certification process, particularly as it related to compliance issues. A final forum centered around preparation of a final report. Among the group's findings was a realization that an ISO 14001 EMS should provide significant internal organizational motivation to maintain compliance and to move beyond compliance to superior environmental performance, and that third-party certification is a meaningful process.²⁴⁰ A decision has not been made on how to follow up on this mainly theoretical project. It may be that interested companies will enter the Environmental Leadership Program when it is launched as a full-scale program or that work will continue within the region.

239. See *ISO 14000 Leadership Project Launched in Northwest*, INT'L ENVTL. SYS. UPDATE, Dec. 1996, at 8; Annette Dennis McCully, *Leadership Project Opens Doors*, INT'L ENVTL. SYS. UPDATE, June 1997, at 10.

240. The Washington Department of Ecology, which participated in this project, is recruiting for an Environmental Management System Alternative to Pollution Planning. In this scheme a company which has an EMS which satisfies Washington's criteria on pollution prevention can substitute it as an alternative for a traditional Pollution Prevention Plan or Five Year Plan Update. Washington's definition of pollution prevention calls for the use of processes or practices that reduce or eliminate the use of hazardous substances and the generation of pollutants or wastes at the source, unlike the definition of pollution control used in ISO 14001, which relies on end of pipe treatment. Washington officials have indicated that facilities in compliance with ISO 14001 should have little difficulty meeting the requirements under its EMS program. WASHINGTON STATE DEPARTMENT OF ECOLOGY, ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) ALTERNATIVE TO POLLUTION PREVENTION PLANNING (1997) (on file with authors).

Other initiatives, within and outside the EPA, also explore the potential significance of ISO 14000. EPA Region 9's Merit Partnership for Pollution Prevention²⁴¹ will study companies which implement the ISO 14000 EMS in an effort to discover whether such systems aid pollution prevention and promote economic growth. Region 9 representatives are also working with financial and insurance institutions in an attempt to create incentives, such as new types of insurance coverage or lower premiums, or reduced transaction costs for companies with certified EMSs.²⁴² Another program, run by the Agency's Office of Water, awards grants to states interested in using ISO 14000 in their water programs.²⁴³

One of the more intriguing pilot concepts is one under consideration by the EPA's Chemical Emergency Preparedness and Prevention Office which would facilitate compliance with federal risk management planning requirements. Congress, concerned about the environmental and human health and safety risks posed by uncontrolled releases of volatile organic compounds, acids, and other hazardous substances,²⁴⁴ authorized the Agency to require owners or operators of facilities handling a regulated substance in more than a threshold quantity to prepare a risk management plan as part of the

241. The Merit Steering Committee is seeking to determine if the environmental protection afforded by EMSs can be worthwhile enough to be promoted by regulatory agencies or considered by the agencies "in their interactions with industry." U.S. EPA Region 9, *The Merit Partnership for Pollution Prevention - An Overview* (Feb. 1997), at 2 (on file with authors).

242. See generally *EPA Region IX Program Drives ISO 14001 Using Insurance and Financial Sector Incentives*, INT'L ENVTL. SYS. UPDATE, June 1996, at 21; *EPA Merit Program Partners Agency With ISO 14001*, INT'L ENVTL. SYS. UPDATE, Apr. 26, 1996, at 21-22.

243. See 62 Fed. Reg. 3036 (1997); see generally *USEPA Gives Eight States ISO 14001 "Management System" Grants*, State Env't. Monitor (BNA) 19 (May 5, 1997).

244. That such accidents can also be extremely expensive requires no emphasis. For recent estimates of losses, further insights into the role of management in their prevention, and insight into the stock price implications of such events, see Michael Bradford, *Property Loss Control: Plants Turning To Prevention To Keep Losses Under Control: Strict Standards Paying Off For Chemical, Petroleum Industries*, BUS. INS., Aug. 18, 1997, at 12; United Kingdom, Health and Safety Executive, HSG-96, *The Cost of Accidents at Work* (1997); Robert D. Klassen & Curtis P. McLaughlin, *The Impact of Environmental Management on Firm Performance*, MGMT. SCI., Aug. 1996, at 1199.

Clean Air Act amendments of 1990.²⁴⁵ The EPA responded in June of 1996, promulgating a comprehensive set of risk management regulations plan for chemical accidental release prevention known as the "RMP Rule."²⁴⁶ Compliance with the RMP Rule will entail, for an estimated 66,000 facilities, preparation and implementation of a risk management plan by June 21, 1999.

The RMP Rule requires the establishment of management systems to oversee implementation of risk management program elements.²⁴⁷ The purpose of this requirement is to ensure that facility managers define a system that integrates the implementation of all elements of the risk management program and assign responsibility for that implementation.²⁴⁸ To that end, the RMP Rule also mandates the assignment of a qualified person or position with overall responsibility for the development, implementation, and integration of risk management program elements.²⁴⁹ The EPA

245. The Clean Air Act of 1990 and the EPA RMP Rule give owners and operators of stationary sources which produce, process, handle or store listed substances above threshold amounts, see 42 U.S.C. § 7412(r)(3), until June 21, 1999 to prepare and implement:

a risk management plan to detect and prevent or minimize accidental releases of such substances from the stationary source, and to provide a prompt emergency response to any such releases in order to protect human health and the environment.

42 U.S.C. § 7412(r)(7)(B)(ii). The threshold determination process, and the list of regulated toxic substances and thresholds for accidental release prevention, are set forth at 40 C.F.R. §§ 688.115 and 688.1300, respectively.

246. See 61 Fed. Reg. 31,668 (1996) (codified at 40 C.F.R. Pt. 68).

247. The RMP Rule mandates that the owner or operator of a source with a process subject to Program 2 or Program 3 must "develop a management system to oversee the implementation of the risk management program elements." 40 C.F.R. §§ 68.12(c)(1), 68.12(d)(1), 68.15. The emphasis on systems reflects a growing recognition of their importance in accident prevention strategy. Exxon Co., for example claims to have cut the incidence of accidents and pollutant releases at its facilities in half since it implemented a comprehensive facility management system in 1991. See OCTANE WK., July 29, 1996, at 4.

248. See 58 Fed. Reg. 54,190, 54,196.

249. See 40 C.F.R. 68.15(a)-(b). The regulations state that when responsibility for implementation of individual elements of the risk management program is delegated to others, the names and positions of such persons must be documented and lines of authority defined through an organization chart or similar document. See *id.* at (c).

left it to the regulated community to interpret and apply the "management system" requirement.

The ISO 14001 scheme offers firms a flexible management framework for preventing uncontrolled releases, and for meeting their obligations under the RMP Rule. The management system elements overlap in many key respects. For example, in the area of planning, ISO 14001 requires an organization to formulate a plan to fulfill its environmental policy, including any commitments it may have made to the prevention of pollution, and to compliance with relevant environmental laws and regulations and other requirements. This means identifying the significant environmental impacts associated with the firm's operations and setting objectives and targets to improve performance in selected areas. An RMP could be linked to objectives to reduce or eliminate the release of toxic pollutants into the environment, or to improve control measures to prevent and limit the severity of accidental releases of pollutants.²⁵⁰ ISO 14001 firms must also establish a program for achieving their objectives and targets. This task includes designation of responsibility for achieving objectives and targets at each relevant function and level of the organization. The RMP Rule similarly requires the owner or operator to assign a qualified person or position with overall responsibility for the development, implementation, and integration of risk management program elements.²⁵¹

The possibilities for synergy have not been missed by the EPA, which is contemplating a pilot designed to study whether ISO 14001 enhances implementation of the RMP Rule. The RMP Rule calls for the EPA to audit RMPs of selected sources for adequacy, with audit sites determined on the facility's accident history, hazards identified in the plans,

250. The system might also provide for measurement of actual improvement in safety performance. See generally David M. Kiser & J. Grant Esler, *Kodak's Safety Performance Indexing - A Tool For Environmental Improvement*, TOTAL QUALITY ENVTL. MGMT., Autumn 1995, at 35.

251. See William L. Thomas, *Using ISO 14001 to Comply with the Management System Requirements of U.S. EPA's RMP Rule and the EU's Seveso II Directive*, EUR. ENVTL. L. REV. Dec. 1997 at 337.

and other factors.²⁵² Under a pilot study proposal put forward for consideration by Dr. Isadore Rosenthal, of the Wharton Risk Management and Decision Processing Center, and Donald Theiler, of the Wisconsin Department of Natural Resources' Bureau of Air Management, firms would be entitled to, among other benefits under consideration, automatic approval of the risk management plan by the agency and low priority in regard to compliance inspections, provided the organization agreed to:

- Incorporate a specific objective calling for development and execution of an RMP Rule risk management program in their EMS;
- Obtain ISO 14001 certification from an outside registrar, who would perform the initial registration audits and subsequent audits;
- Request that performance on risk management objectives be reviewed in such external audits;
- Make audit results available to the government, the local emergency response committee, and the public; and
- Hold public meetings to discuss the audit and surveillance reports.

The agencies and public also stand to gain much under such a proposal. This or a similar initiative would, for example, allow regulators to target dwindling resources on those facilities most likely to be out of compliance. And, because it provides better information and more meaningful opportunity for local community input, the pilot would likely give concerned citizens greater confidence in the RMP exercise. The Risk Management Plan Implementation Workgroup, composed of representatives of local, state and federal governments, public interest organizations, and industry, is currently examining this proposal, as well as others. Workgroup members are also discussing the pros and cons of potential pilot initiative approaches with regulators in vari-

252. See 40 C.F.R. § 68.220. Stationary sources with Star or Merit rankings under OSHA's voluntary protection program will be exempt from such audits.

ous offices within the EPA and it is possible that an ISO 14001/RMP pilot could emerge from this dialogue in 1998.

Outside the EPA, the DOJ (a participant in the OECA working group),²⁵³ NASA,²⁵⁴ and other departments²⁵⁵ are assessing the potential significance of the standards for enforcement and government operations. The Department of Defense is considering EMS procurement pilot initiatives designed around the ISO system.²⁵⁶ The Department of Defense is also examining whether or not to certify selected in-

253. Mr. Cascio optimistically predicts that ISO 14001 may actually become the model EPA and DOJ will use when determining the appropriate use of prosecutorial and sentencing discretion. See Testimony Before the U.S. House of Representatives, Committee on Science, Subcommittee on Technology (June 4, 1996); see also Cascio, *supra* note 4, at 35. It is much too early to have high confidence in that prospect. EPA suspicions about ISO 14000 certification are described by Ronald Begley in *ISO 14000 A Step Toward Industry Self-Regulation*, ENVTL. SCI. & TECH., June 1996, at 298.

254. See *States, Industry Weigh In on Regulatory Relief*, CHEM. WK., Oct. 9, 1996, at 52. It is reported that NASA may require its suppliers to seek ISO 14000 certification. This may also include suppliers of electricity, thus forcing some utilities to seek certification. See *New ISO 14000 Standards Aim to Help Utilities With Environmental Programs*, UTILITY ENV'T REP., Jan. 3, 1997, available in 1997 WL 8883454.

255. For example, the Department of Energy has contemplated a requirement that major contractors become certified to an ISO-type EMS. See generally *Government Grapples with ISO 14001 as Model EMS*, INT'L ENVTL. SYS. UPDATE, Nov. 1996, at 9; *DOE May Mandate ISO 14001 For Contractors*, INT'L ENVTL. SYS. UPDATE, Aug. 1996, at 4; see also *Chair of DOE Advisory Committee Pushes Faster Use of Technology*, AIR WATER POLLUTION REP. (Dec. 2, 1996), available in 1996 WL 14657213. Laurent Hourcle, Co-director of George Washington University's Environmental Law Program, observes that ISO 14000 certification can be incorporated into government contracts without major changes to procurement laws and regulations, perhaps as a prequalification "requirement," as an "evaluation factor" under in the context of "best value" contracts, or as a remedial factor for contractors seeking to avoid debarment or suspension, or to regain the ability to obtain federal contracts. Letter from Laurent R. Hourcle to Erik Meyers (Feb. 12, 1996) (copy of letter on file with authors).

256. See generally *DOE May Mandate ISO 14001 For Contractors*, INT'L ENVTL. SYS. UPDATE, Aug. 1996, at 3,5; *DOD Cautious But Open To Use of ISO 14001*, INT'L ENVTL. SYS. UPDATE, Apr. 26, 1996, at 1. On the potential use of the standards by the Army, Air Force, and Marine Corps, see Annette Dennis McCully, *ISO 14001 Seen as Complement To Aerospace Standard*, INT'L ENVTL. SYS. UPDATE, Apr. 26, 1996, at 6. Interestingly, the EPA has called on federal agencies to implement its new Code of Environmental Management Principles for Federal Agencies or ISO 14001 to demonstrate environmental excellence. See EPA, Code of Environmental Management Principles, 61 Fed. Reg. 54,062 (1996).

stallations under the ISO 14001 EMS specification.²⁵⁷

A number of state environmental agencies have begun, or soon will begin, ISO 14000 pilot initiatives²⁵⁸ and studies of the effectiveness of environmental management systems.²⁵⁹ California's pilot project, currently in the recruit-

257. See, *DOD Weighs ISO 14001 Options*, INT'L ENVTL. SYS. UPDATE, June 1997, at 1. See also Annette Dennis McCully, *Northwest Naval Installations Regionalize Using ISO 14001*, INT'L ENVTL. SYS. UPDATE, Apr. 1997, at 8.

258. At the state level, California, Illinois, Indiana, Massachusetts, Minnesota, New Jersey, North Carolina, Oregon, Pennsylvania, Texas, Washington, Wisconsin are among states experimenting with incentives for companies implementing ISO 14001-type EMSs. Concerning developments at the state level, see Linda Rimer, *Evolving State and EPA Partnerships: Regulatory Innovation Through the Use of Environmental Management Systems*, SB52 ALI-ABA 639 (1997); Mark D. Anderson & Barney Lawrence, *States Plan Pilot Projects Promoting ISO 14001*, ENVTL. COMPLIANCE & LITIG. Strategy, Apr. 1997, at 4; Jim Gribble, *DNR: Breaking Through For Business*, BUS. J.-MILWAUKEE, Nov. 9, 1996, at 21; *EPA, States Seek Rules For Reinvention Projects Outside XL*, INSIDE EPA WKLY. REP., Nov. 8, 1996, at 1; *U.S. EPA Unsure How ISO 14001 Factors Into Reform; Public Data Called Key*, Int'l Env't Rep. (BNA) 960 (Oct. 30, 1996); *States, Industry Weigh In on Regulatory Relief*, CHEM. WK., Oct. 9, 1996, at 52; *Nine States Move To Coordinate ISO 14000 Pilot Projects*, INSIDE EPA WKLY. REP., Sept. 27, 1996, at 15; *States Test Facility-Wide Permits*, CHEM. WK., Oct. 16, 1996, at 51; *Spearheading Change In The Keystone State*, J. OF BUS. STRATEGY, Sept. 1, 1996, available in 1996 WL 10928575; John Pendergrass, *ISO No Substitute For A Permit*, ENVTL. F., Sept.- Oct. 1996, at 6; *EPA, States Coordinating ISO 14001 In Enforcement Strategy*, INT'L ENVTL. SYS. UPDATE, Aug. 1996, at 11; *California Verification Protocol To Be Used In Development of Annex To ISO 14023 Standard*, Int'l Env't Rep. (BNA) 645 (July 24, 1996); *State Officials Eye Uniform Compliance Approach For ISO 14000*, STATE ENVTL. MONITOR, May 6, 1996, at 11; See generally, *Seif Testifies to Penn Senate That ISO 14001 Offers Alternative*, INT'L ENVTL. SYS. UPDATE, Apr. 1996, at 5; Bob Sanders, *Environmental Self-Policing Comes to New Hampshire*, NEW HAMPSHIRE BUS. REV., March 15, 1996, at 1; *Interest High in States But Keyed to Compliance*, INT'L ENVTL. SYS. UPDATE, Mar. 1996, at 9; *ISO 14001: Performance Through Systems?*, ENVTL. F. Nov.-Dec. 1995, at 36, 39.

259. Several states split off from OECA's Task Group to formulate their own set of metrics to assess the effectiveness of voluntary EMSs, "Environmental Management System Project Evaluation Guidance", as part of the Multi-State Working Group (MSWG) on EMS/ISO 14000. The focus of these states, which include Arizona, California, Pennsylvania, North Carolina, Texas, Wisconsin, Minnesota, Illinois, Massachusetts, and Oregon, is on ways to track EMS performance - looking beyond basic compliance issues. Other members of the MSWG on EMS/ISO 14000 include representatives from the Environmental Law Institute, Sidley & Austin, Tulane Law School, National Institute of Standards and Technology, and the University of North Carolina at Chapel Hill. The MSWG matrix covers six main areas or categories:

ment stage, aims to evaluate several issues, including the factors associated with the establishment and implementation of an EMS, e.g., environmental performance, compliance, public acceptance, pollution prevention, information quality, and cost. The goal of the program is to assess the appropriateness and feasibility of using an EMS based on ISO 14001 as a voluntary alternative mechanism to achieve more effective and efficient compliance with existing regulatory standards.²⁶⁰ Oregon's "Environmental Management System

-
- Environmental Performance Indicators – measuring discharges of pollutants
 - Environmental Conditions Indicators – measuring ambient conditions such air, land and water associated with a specific facility
 - Environmental Compliance Indicators – measuring the extent to which emissions are in compliance with existing laws and whether an EMS has resulted in faster discovery and correction of any problems
 - Management Framework Indicators – information about the organizations business plan and management system and what specific practices and tools are applied to support the system
 - Costs/Benefit Indicators associated with an EMS – such as the costs of certification and whether there are any benefits such as stock prices increasing
 - Pollution Prevention Indicators – measures whether EMS leads to activities that prevent pollution
 - Stakeholder Confidence Indicators – measuring community and stakeholder acceptance and involvement in an EMS.

Guidance On The Evaluation Of Pilot Projects Evaluation the Environmental, Economic and Compliance Performance Of Organizations Implementing ISO 14001 Environmental Management Systems (May 1997) (draft) (on file with the authors), available at <<http://www.sunsite.unc.edu/villani/matrix.htm>>. The MSWG has stated that it does not intend by its matrices to modify ISO 14001, but rather to provide a framework for collecting data from pilot projects using the ISO 14001 EMS. See *Separate state proposal imminent, USEPA offers environmental management system measures*, STATE ENV'T. MONITOR, May 5, 1997, at 18; *Multi-State Working Group Makes Progress*, INT'L ENVTL. SYS. UPDATE, Aug. 1997, at 12.

260. In assessing applications for the program, CAL/EPA staff will be looking for projects where the EMS is clearly connected to environmental regulations which would offer some demonstration value. Applicants will be expected to be in good environmental standing with local agencies. Any violations found during the pilot as a result of self-audits will be handled according to the self-auditing policy of the affected CAL/EPA board or department. The project will contain a public involvement program. California EPA, *ISO 14000 Pilot Project Request for Proposals*, May 16, 1997 (on file with authors).

Incentives” project is still in the planning stages but as initially designed would recruit companies which have an effective EMS based on ISO 14001, which have demonstrated superior environmental performance and which have meaningful stakeholder activities in place. In return for “beyond compliance” performance, the government might give regulatory “benefits” such as fast-track permitting, single-contact permitting, and administrative flexibility.²⁶¹ In time, lessons learned from experiences under these programs could inform major regulatory reforms emphasizing corporate self-policing and third party verification in the U.S. and elsewhere.²⁶²

261. This project was initially to be called the “Green Permits” Project, but the name changed in the development phase. See *Oregon Department of Environmental Quality, Green Permits Project Overview* (June 1997) (on file with authors).

262. ISO 14000 regulatory initiatives in other countries are also in a very formative stage of development. See generally Susan Rost, *Special Supplement: Global ISO 14001 Progression Evident*, INT’L ENVTL. SYS. UPDATE, June 1997, at 1; DYLAN TANNER ET AL., ENVIRONMENTAL MANAGEMENT IN ASIA: A GUIDE TO ISO 14000 (1997). Preliminary background on ISO pilots and regulatory experiments worldwide is also offered in the sources listed below.

- Australia and New Zealand. See *JAS-ANZ Announces 1st Accreditations and Certifications*, INT’L ENVTL. SYS. UPDATE, Sept. 1996, at 6; *Five-Month Pilot Scheme On ISO 14001 To Be Offered By New Zealand, Australia*, Int’l Env’t Rep. (BNA) 20 (Jan. 10, 1996).
- Canada. See *Mexico, Canada, U.S. to Share Data, Technology Linked to Compliance*, Int’l Env’tl. Daily (BNA) 3 (Feb. 1, 1996).
- China. See *China Sets Up ISO Environment Standards Committee*, XINHUA NEWS AGENCY - CEIS, May 28, 1997, available in 1997 WL 8996105; *China Adopts 14000 as State Policy*, INT’L ENVTL. SYS. UPDATE, Apr. 1997, at 1; Liu Yinglang, *China Adopts ISO Standards for Environmental Control*, CHINA DAILY, Nov. 6, 1996, at 22; *Environmental Inspections*, CHINA MARKET INTELLIGENCE, Nov. 1996, at 5; *Federal Committee Created To Introduce ISO 14000 Series In Country*, Daily Env’t Rep. (BNA) B-4 (1996); see also *China’s Pilot City for Environment Protection Standard*, XINHUA ENG’G NEWSWIRE, available in 1996 WL 14562767.
- Hong Kong. See *14000 Pilot Program for Non-Manufacturing SMEs*, INT’L ENVTL. SYS. UPDATE, July 1997, at 12.
- Indonesia. See *Indonesian Pilot Offers Lessons*, INT’L ENVTL. SYS. UPDATE, June 1997, at 8.
- Japan. In a 1996 survey of leading firms in Japan, 44.7% of the respondents indicated that they are preparing to apply for registration. See *Japan’s Local Governments Embracing ISO 14000*

Series, ASIA PULSE, July 10, 1997, available in 1997 WL 11799426; *14000 Becoming Japan Inc.'s Magic Number*, NIKKEI WKLY., Nov. 25, 1996, at 21. On developments there, see generally *Japan Establishes National Standards Based On ISO 14000 - Environmental Series*, Int'l Env't Rep. (BNA) 1013 (Nov. 13, 1996); *Japanese Government Encourages ISO 14000*, INT'L ENVTL. SYS. UPDATE, Nov. 1996, at 9; *Japan Version Worked Out For ISO Standard Series*, JAPAN CHEM. WK., Nov. 6, 1996; *Japan's ISO Initiative*, CHEM. WK., Oct. 16, 1996, at 58; *MITI Embraces ISO Ecology Standard*, NIKKEI WKLY., Sept. 23, 1996, at 2. See also *Agency Initiating Program To Urge Public Companies To Use Management Standards*, Daily Env't Rep. (BNA) B-3 (Oct. 10, 1996).

- Malaysia. See Esther Tan, *Cabinet Adopts Environs Standard*, The New Straits Times, June 19, 1997, available in 1997 WL 11335441; Anita Gabriel, *Sirim Set To Award EMS To Five Local Firms In December*, BUS. TIMES (Malaysia), Nov. 13, 1996, at 7; Zuraimi Abdullah, *At Least Four Companies To Receive ISO 14000 By Year-End*, NEW STRAITS TIMES, Nov. 13, 1996, at 23.
- Mexico. See *Mexico, Canada, U.S. to Share Data, Technology Linked to Compliance*, Int'l Env'tl. Daily (BNA) 3 (Feb. 1, 1996); *New Water Pollution Standards Changes to Other Rules Forecast for 1996*, INT'L ENVTL. DAILY, Jan. 22, 1996, at 4 (discussing small-firm version of ISO 14000 as part of Mexico's environmental agenda for 1996); John Nagel, *Mexican Official Describes "Environmental Regulation Revolution"*, Int'l Env't Daily (BNA) D-5 (Aug. 29, 1995); *International Standards Certification Expected to be Key to National Enforcement*, Int'l Env't Daily (BNA) D-3 (June 6, 1995); Susan Bruninga, *ISO 14000 Standards May Be Substitute For Differing Rules In Many Nations*, Int'l Env't Daily (BNA) D-2 (Apr. 26, 1995). Prospects look especially good for integrating ISO 14001 certification with Mexico's voluntary environmental audit system, the Terminos de Referencia para la Realizacion de Auditorias Ambientales ("Terms of Reference for Conducting Environmental Audits").
- Philippines. See Al R. Dizon, *Asian Watch: Environmental Concerns*, BUSINESS WORLD (Manila), July 8, 1997, available in 1997 WL 11539582.
- Singapore. See *Singapore Launching Program To Help SMEs Understand Requirements Of ISO 14000 Series*, Int'l Env't Rep. (BNA) 1013 (Nov. 13, 1996); Tan Hsueh Yun, *Help for SMEs Seeking To Attain ISO 14000 Award*, SINGAPORE STRAITS TIMES, Nov. 7, 1996, available in 1996 WL 11727858; Simon S.C. Tay, *Asians Must Learn To Play The Green Game*, BUS. TIMES (Singapore), available in WESTLAW, ALLNEWS database (1996 WL 6291102).
- Thailand. See Sukanya Jitpleechep, *SK Expects to Match '96 Sales: New Lines Will Use "Green" Technology*, BANGKOK POST, July 10, 1997, available in 1997 WL 12488851; *More Plants*

2. ISO 14001: Recognizing the Disclosure Risks

Executives contemplating implementation of ISO 14001 have a number of significant legal issues to evaluate. Perhaps the most difficult matter to resolve is what measures, if any, the firm will take to ensure that ISO reports and documents are not later used against it in an enforcement or civil action setting.²⁶³ Earlier in this Article we highlighted the risks created by the use of audit-generated documents by prosecutors and third-party litigants. As the experience of Lucent Technologies with its ISO 14001-influenced Project XL proposal proves,²⁶⁴ it is possible that similar questions may arise in the ISO context, especially in circumstances where a company seeks third-party certification or verification of its EMS.²⁶⁵

Queue for ISO 14000 Award Thailand: Several Industrial Facilities Owners Try to Attain ISO 14000 Certificate for Waste Treatment, Bangkok Post, Nov. 13, 1996, at 3; *Thai Companies to Take Part in Pilot Project on ISO 14000*, Int'l Env't Rep. (BNA) 407 (May 15, 1996); *Thailand Preparing For ISO Implementation*, INT'L ENVTL. SYS. UPDATE, Apr. 1996, at 5; *Thailand: Country To Look To Private Sector To Handle Pollution Control, Monitoring*, Int'l Env'tl. Daily (BNA) (Mar. 18, 1996) (as part of a regulatory drive to reduce pollution, the government of Thailand plans to encourage firms to conduct EMS audits and bring their environmental management in line ISO 14000).

263. As the authors of one article on the ISO scheme framed the issue: "Will companies be [sorry] when ISO audits discover areas of noncompliance with federal regulations, making the company vulnerable to millions of dollars in fines from government agencies?" Kara Sissell & Rick Mullin, *Fitting in ISO 14000 A Search for Synergies*, CHEM. WK Nov. 8, 1995, at 39. See also 14010s Environmental Auditing, *supra* note 128, at 69-72 (describing potential confidentiality problem under the ISO standards).

264. Lucent Technologies and regulators struggled over an auditing policy for the company's XL project. Lucent sought an up-front pledge that violations discovered under the initiative would not be met with sanctions (since they would have been corrected in accordance with the company's ISO-based EMS); the government argued that the new Self-Policing Policy was itself sufficient. See Susan Bruninga, *EPA Not Likely To Waive Provisions In Audit Policy For Project XL Proposal*, Daily Rep. for Executives (BNA) A-11 (Aug. 20, 1996); Susan Bruninga, *EPA Audit Policy May Determine Success Of Company's Project XL Proposal*, Daily Rep. for Executives (BNA) A-15 (Aug. 19, 1996).

265. The fears of U.S. industry in this regard are recounted in *Committee Draft on Management Standards Addresses Pollution Avoidance, Compliance*, 18 Int'l Env't Rep. (BNA) 175 (1996). Jack Goldman analyzes these risks at

EMS audits should focus on the soundness of the auditee's EMS rather than its compliance history. A company cannot obtain certification under ISO 14001, however, without demonstrating that it has in place an effective program to evaluate compliance. Moreover, registrars will require that the organization's policy include a commitment to comply with relevant environmental legislation and regulations.²⁶⁶ Debate continues within the registrar and auditor communities over how compliance aspects of the specification should be assessed.²⁶⁷ Until we acquire some field experience with how auditors will construe their responsibilities under the standards, it is reasonable to assume some auditors will develop materials bearing on environmental aspects of the auditee's operations, and specifically, data on the auditee's compliance. Of such information, little, if any, would be shielded from disclosure to the government or third-parties²⁶⁸ under common law principles or audit privilege laws, especially under third-party certification or verification scenarios.²⁶⁹ As described above, it is also questionable whether

length in *Will Implementing ISO 14001 Destroy the Confidentiality of Environmental Compliance Audits?*, Env't Rep. (BNA) 426 (June 7, 1996).

266. ISO 14001 § 4.2(c).

267. Consultants have yet to arrive at a consensus on this issue. See *Legal Issues Forum Addresses the Role of Regulatory Compliance in ISO 14001 Audits*, INT'L ENVTL. SYS. UPDATE, Oct. 1996, at 19; Kara Sissell & Rick Mullin, *Fitting in ISO 14000 A Search for Synergies*, CHEM. WK. Nov. 8, 1995, at 39, 42.

268. Citizens groups have become quite adroit at enforcing the environmental laws, see generally Michael S. Greve, *The Private Enforcement of Environmental Law*, 65 TUL. L. REV. 339, 351-55 (1990); J. MILLER, *CITIZEN SUITS: PRIVATE ENFORCEMENT OF FEDERAL POLLUTION CONTROL LAWS* (1987); B. Boyer & E. Meidinger, *Privatizing Regulatory Enforcement: A Preliminary Assessment of Citizen Suits Under Federal Environmental Laws*, 34 BUFF. L. REV. 833 (1985), and at exploiting environmental audits, as illustrated by the plaintiffs' effective discovery tactics in *Carr v. El Dorado Chem. Co.*, Nos., 96-1081 and 96-1113 (W.D. Ark. Apr. 14, 1997). The stakes will only become higher as EPA brings the public more deeply into the enforcement process. See *EPA Plans New Public Access to Data on RCRA Inspections and Violations*, INSIDE EPA WKLY. REP. Feb. 14, 1997, at 1; *EPA Plans Initiative to Bolster Public Participation in Enforcement*, INSIDE EPA WKLY. REP., Aug. 9, 1996, at 1.

269. Implementation of ISO 14000 requires considerable documentation and record-keeping. See generally W.D. Anderson, *Environmental Management System Documentation*, in *IMPLEMENTING ISO 14000* (Ira Feldman & Tom Tibor eds., 1997); Gerry Van Houten, *The ISO Document Tidal Wave*, 30 RECORDS MGMT. Q. 12 (1996); *Chemical Industry Appears "Most Comfortable" With ISO*

policies developed thus far by the EPA or DOJ would dramatically alter most firms' evaluation of the risks and benefits of undertaking the exercise.²⁷⁰

Communications between counsel and client concerning legal matters are generally protected from disclosure to the government and third-party litigants under the attorney-client privilege.²⁷¹ This privilege might conceivably protect some ISO 14001 communications, provided that the exercise was initiated and performed under the supervision and direction of a lawyer,²⁷² and that the privilege was not otherwise

14001 Reporting, PESTICIDE & TOXIC CHEM. NEWS, Apr. 17, 1996; RICHARD B. CLEMENTS, COMPLETE GUIDE TO ISO 14000 60-61, 224, 279-89 (1996).

270. See John F. Cooney et al., *Criminal Enforcement of Environmental Laws: Part III - From Investigation to Sentencing and Beyond*, 25 ENVTL. L. REP. (ENVTL. L. INST.) 10,600 (Nov. 1995).

271. See *Upjohn Co. v. United States*, 449 U.S. 383, 389 (1981); *United States v. Construction Prods. Research, Inc.*, 73 F.3d 464 (2d Cir. 1996). For additional reading concerning the attorney-client privilege, see generally Norman G. Tabler, *Implementing Environmental Compliance: The Role of the Attorney-Client Privilege*, 29 J. HEALTH & HOSP. L. 27 (1996); John F. Cooney et al., *Criminal Enforcement of Environmental Laws: Part III - From Investigation to Sentencing and Beyond*, 25 ENVTL. L. REP. (ENVTL. L. INST.) 10600 (Nov. 1995); CORPORATE COUNSEL'S GUIDE TO THE ATTORNEY-CLIENT, WORK-PRODUCT & SELF-EVALUATIVE PRIVILEGES, 101.003 (William A. Hancock ed., 1995); T.W. Hyland & M.H. Craig, *Attorney-Client Privilege and Work-Product Doctrine in the Corporate Setting*, DEF. COUNS. J. 553 (1995); Comment, *Developments in the Law: Privileged Communications*, 98 HARV. L. REV. 1450 (1985); Michael W. Tankersley, *The Corporate Attorney-Client Privilege: Culpable Employees, Attorney Ethics, and the Joint Defense Doctrine*, 58 TEX. L. REV. 809 (1980) [hereinafter Tankersley]; Geoffrey C. Hazard, Jr., *An Historical Perspective on the Attorney-Client Privilege*, 68 CAL. L. REV. 1061 (1978); Note, *The Attorney-Client Privilege and The Corporation in Shareholder Litigation*, 50 S. CAL. L. REV. 303 (1977); C. McCORMICK, HANDBOOK OF THE LAW OF EVIDENCE § 87 (1972); Gardner, *A Re-evaluation of the Attorney-Client Privilege*, 8 VILL. L. REV. 279 (1963); Radin, *The Privilege of Confidential Communication Between Lawyer and Client*, 16 CAL. L. REV. 487 (1928); Rodgers, *Privileged Communications Between Attorney and Client*, 64 CENT. L.J. 66 (1907); Comment, *Privileged Communications by Client to Attorney*, 25 ALB. L. J. 24 (1882).

272. The most oft-cited definition of the attorney-client privilege remains that set forth by Judge Wyzanski in *United States v. United Shoe Mach. Corp.*:

The privilege applies only if (1) the asserted holder of the privilege is or sought to become a client; (2) the person to whom the communication was made (a) is a member of the bar of a court, or his [or her] subordinate and (b) in connection with this communication is acting as a lawyer; (3) the communication relates to a fact of which the attorney was informed (a) by his [or her] client (b) without the

waived.²⁷³ In many instances, however, such claims would be vulnerable to the counter argument that the EMS exercise was undertaken for business, not legal, reasons.²⁷⁴ Also,

presence of strangers (c) for the purpose of securing primarily either (i) an opinion on law or (ii) legal services or (iii) assistance in some legal proceeding, and not (d) for the purpose of committing a crime or tort; and (4) the privilege has been (a) claimed and (b) not waived by the client.

89 F. Supp. 357, 358 (D. Mass. 1950).

Protection under the privilege extends to both corporate and individual clients, *see, e.g.*, *Radiant Burners, Inc. v. American Gas Assoc.*, 320 F.2d 314 (7th Cir.), *cert. denied*, 375 U.S. 929 (1963); *see generally* McNeil & Reid, *The Protection of Privileged and Confidential Documents within a Corporate Setting*, 31 ARIZ. ATT'Y 14 (Jan. 1995); S. Ravkind, *Corporate Attorney-Client Privilege*, 57 TEX. B. J. 1193 (1994); Hyland & Forman, *The Attorney-Client Privilege in the Corporate Setting*, 58 DEF. COUNS. J. 331 (1991), and encompasses communications between counsel and present, as well as former, employees. *See, e.g.*, *In re Coordinated Pretrial Proceedings in Petroleum Prods. Antitrust Litig.*, 658 F.2d 1355 (9th Cir. 1981), *cert. denied* sub nom *California Standard Oil Co.*, 455 U.S. 990 (1982). The privilege applies in a variety of contexts, including criminal cases.

273. *See In re Subpoena Duces Tecum Served on Wilkie Farr & Gallagher*, 1997 U.S. Dist. LEXIS 2927 (S.D.N.Y. Mar. 4, 1997). The decision to waive the attorney-client privilege rests with the client. *See, e.g.*, *United States v. Fisher*, 692 F. Supp. 488, 494 (E.D. Pa. 1988); *United States v. Gregory*, 611 F. Supp. 1033, 1043 (S.D.N.Y. 1985). And, where the client is a corporation, the corporation, not the employee, can waive the attorney-client privilege. *See Industrial Clearinghouse, Inc. v. Browning Mfg. Div. of Emerson Elec. Co.*, 953 F.2d 1004 (5th Cir. 1992); *Westinghouse Elec. Corp. v. Republic of Philippines*, 951 F.2d 1414 (3d Cir. 1991). Yet, because disclosure to third parties ordinarily constitutes waiver of the attorney-client privilege, counsel must institute measures to prevent information leaks and control access to confidential documents. Issues of waiver are explored in *Are Lawyer's Notes From Internal Investigation Privileged*, METROPOLITAN CORP. COUNS., Nov. 1996, at 5; R.M. Harding, "Show and Tell": *An Analysis of the Scope of the Attorney-Client Waiver Standards*, 14 REV. LITIG. 367 (1995); J.L. Hall, *Limited Waiver of Protection Afforded By the Attorney-Client Privilege and the Work Product Doctrine*, 1993 U. ILL. L. REV. 981 (1993).

274. *See generally* David G. Keyko & R. David Hosp, *Privilege for Inside Counsel Communications Scrutinized: Two Federal Decisions Highlight Problems of Dual Roles*, Corp. Counsel Wkly (BNA) 8 (Apr. 3, 1996); S.R. Flucke, *The Attorney-Client Privilege in the Corporate Setting: Counsel's Dual Role as Attorney and Executive*, 62 UMKC L. REV. 549 (1994). The privilege protects: (i) materials such as counsel's notes, interview memoranda, and responses to questionnaires; (ii) minutes; and (iii) audit reports, provided legal advice and not to assess facts for business purposes. *See Upjohn Co. v. United States*, 449 U.S. 383 (1981); *Georgia Pacific Corp. v. GAF Roofing Mfg. Corp.*, 93 Civ. 5125, 1996 U.S. Dist. LEXIS 671 (S.D.N.Y. Jan. 24, 1996); *United States v.*

from a functional standpoint, few if any businesses would want counsel running their compliance programs, let alone their ISO 14000 EMSs. Nor would the attorney-client privilege prevent disclosure of information concerning environmental conditions at the site; such data would arguably fall into the unprotected category of fact material.²⁷⁵

Similarly, it would be difficult to make a case for non-disclosure of ISO 14000 material under the work product doctrine.²⁷⁶ In almost every case it would be impossible to estab-

Shyres, 898 F.2d 647, 657 (8th Cir.), *cert. denied*, 498 U.S. 821 (1990); *see generally* Simon v. G.D. Searle & Co., 816 F.2d 397, 403 (8th Cir.), *cert. denied*, 484 U.S. 917 (1987); Diversified Indus., Inc. v. Meredith, 572 F.2d 596 (8th Cir. 1977); *In re* Grand Jury Proceedings of Browning Arms Co., 528 F.2d 1301, 1304 (8th Cir. 1976); U.S. Postal Serv. v. Phelps Dodge Ref. Corp., 852 F. Supp. 156 (E.D.N.Y. 1994); SICPA Holdings SA v. Optical Coating Lab. Inc., Civ. Action No. 15129 (Del. Ch. Ct. Oct. 7, 1996).

275. The mere existence of an attorney-client relationship does not mean that a communication will be immune from compelled disclosure. The privilege only "protects the disclosure of communications; it does not protect disclosure of the underlying facts by those who communicated with the attorney." *Upjohn Co. v. United States*, 449 U.S. 383, 395 (1981). *See, e.g., In re* Six Grand Jury Witnesses, 979 F.2d 939 (2d Cir. 1992); *Dawson v. New York Life Ins. Co.*, 901 F. Supp. 1362 (N.D. Ill. 1995); *United States v. Davis*, 132 F.R.D. 12, 15 (S.D.N.Y. 1990); *City of Philadelphia v. Westinghouse Elec. Corp.*, 205 F. Supp. 830, 831 (E.D. Pa. 1962) ("The client cannot be compelled to answer the question, 'What did you say or write to the attorney?' but may not refuse to disclose any relevant fact within his [or her] knowledge merely because he [or she] incorporated a statement of fact into [the] communication . . ."). Similarly, the privilege does not protect from disclosure the facts surrounding the making of the communication. *See Ramseur v. Chase Manhattan Bank*, 865 F.2d 460, 467 (2d Cir. 1989); *In re Walsh*, 623 F.2d 489 (7th Cir.), *cert. denied*, 449 U.S. 994 (1980). While the privilege belongs to the client rather than the attorney, the attorney may assert the privilege on the client's behalf. *Fisher v. United States*, 425 U.S. 391, 402 (1976); *In re Impounded Case*, 879 F.2d 1211, 1213 (3d Cir. 1989).

276. The work product doctrine traces its origins to the Supreme Court's decision in *Hickman v. Taylor*, 329 U.S. 495 (1947), and protects from discovery documents and other tangible materials such as interview notes, drafts, memoranda and correspondence prepared by counsel in anticipation of litigation. *See generally* CORPORATE COUNSEL'S GUIDE TO THE ATTORNEY-CLIENT, WORK-PRODUCT & SELF-EVALUATIVE PRIVILEGES, 401.01 (William A. Hancock ed., 1995); Orland, *Observations on the Work-Product Rule*, 29 GONZ. L. REV. 281 (1994); Francis M. Smith, *The Work Product Doctrine: Its Origin, Evolution and Status in Modern Practice*, 33 S.D. L. REV. 224 (1988); Cohn, *The Work Product Doctrine: Protection, Not Privilege*, 71 GEO. L.J. 917 (1983); Special Project, *The Work Product Doctrine*, 68 CORNELL L. REV. 760 (1983); Note, *Protection of Opinion Work Product Under the Federal Rules of Civil Procedure*, 64 VA. L.

lish that ISO documents and other tangible materials were prepared "in anticipation of litigation."²⁷⁷ And, even if this hurdle could be surmounted, protection could be circum-

REV. 333 (1978). Distinct from, and in some ways broader than the attorney-client privilege, the work product doctrine promotes the adversarial nature of our system by safeguarding the fruits of an attorney's trial preparations from discovery. Whereas the attorney-client privilege only encompasses confidential communications between attorney and client, the work product doctrine reaches communications with others, as well as all materials developed by counsel. F.R. Civ. P. 26(b)(3), substantially codifying the rule of *Hickman*, at 495, sets forth the elements of the work product doctrine:

[A] party may obtain discovery of documents and tangible things otherwise discoverable under subdivision (b) (1) of this rule and prepared in anticipation of litigation or for trial by or for another party or for that other party's representative (including his attorney, consultant, surety, indemnitor, insurer, or agent) only upon a showing that the party seeking discovery has substantial need of the materials in the preparation of his [or her] case and that he [or she] is unable without undue hardship to obtain the substantial equivalent of the materials by other means. In ordering discovery of such materials when the required showing has been made, the court shall protect against disclosure of the mental impressions, conclusions, opinions, or legal theories of an attorney or other representative of a party concerning the litigation.

Id.

277. In order to find protection under the work product doctrine, a document or other item must have been prepared in anticipation of litigation. *See, e.g., In re Woolworth Corp. Sec. Class Action Litig.*, No. 94 CIV.2217 (RO), 1996 WL 306576, at 3 (S.D.N.Y. June 7, 1996); *Bowne of New York City, Inc. v. AmBase Corp.*, 150 F.R.D. 465, 471 (S.D.N.Y. 1993). This requirement has been construed broadly – but some possibility of litigation must exist. *See generally Powell, Discovery Privileges: What Constitutes "Anticipation of Litigation"?*, 57 TEX. B.J. 122 (Feb. 1994). Although what is meant by "litigation" has not been precisely defined, the key seems to be whether the proceeding for which the materials were prepared is adversarial in nature. The term "litigation," as used in this clause, has been construed to include administrative investigations. *See Maertín v. Armstrong World Indus., Inc.*, No. 95-2849 (D.N.J. Apr. 29, 1997). It is highly questionable whether an environmental audit prepared prior to any anticipation of a government enforcement action would satisfy this criterion. *See Terrell E. Hunt & Timothy A. Wilkins, Environmental Audits & Enforcement Policy*, 16 HARV. ENVTL. L. REV. 365, 385-86 (1992).

vented by a showing of compelling need²⁷⁸ or waiver.²⁷⁹ Like the attorney-client privilege, the work product doctrine does

278. The work product doctrine does not provide absolute protection against disclosure of tangible materials. For example, if a party seeking to discover material has substantial need for the information and cannot obtain the substantial equivalent without undue hardship, a court can order that the information be disclosed. See *In re Kidder Peabody Sec. Litig.*, No.94CIV.3954, 1996 WL 263030, at 2 (S.D.N.Y. May 31, 1996); *Bowne of New York City, Inc. v. AmBase Corp.*, 150 FRD 465, 471 (S.D.N.Y. 1993). In evaluating whether or not there is sufficient need to overcome a claim under the work product doctrine, courts draw a distinction between treatment of material which does not reveal any of the attorney's mental processes, e.g., "ordinary work product" (witness statements, surveys, intra-office memoranda, photographs and charts), and material which shows the mental impressions of the attorney, e.g., "opinion work product" (mental impressions, conclusions, opinions, or legal theories about litigation). An audit could conceivably contain both "ordinary" work product and "opinion" work product.

Of the two, "opinion" work product receives greater protection from disclosure. Ordinary work product will not be protected from discovery if an adverse party can: (i) show substantial need for the information, and (ii) demonstrate that he or she is unable, without undue hardship, to obtain the substantial equivalent of the materials by other means. See Fed. R. Civ. P. 26(b)(3). On the distinction between opinion and ordinary work product, see generally K. Waits, *Opinion Work Product: a Critical Analysis of Current Law and a New Analytical Framework*, 73 OR. L. REV. 385 (1994). The determination of substantial need and undue hardship is made case-by-case, based on factors such as the nature of the materials requested, the effort involved in composing or assembling the materials, the potential for alternative sources of information, the importance of the materials in relation to the issues at hand, and the procedural posture in which the claim arises. See Thomas R. Mulroy, Jr. & W. Joseph Thesing, Jr., *Trial Techniques: Protecting Client Confidences When the Client is a Corporation*, 25 TORT & INS. L. J. 476, 483 (1990). A higher threshold must be met to compel the disclosure of opinion work product but an exact standard has yet to be established. All that is clear is that the party seeking disclosure must show more than substantial need and inability to obtain the material elsewhere. See *Upjohn v. United States*, 449 U.S. 383, 401 (1981) (fact that investigative materials sought by government included documentation gathered from parent corporation's international offices and subsidiaries did not constitute "undue hardship").

279. See *In re Kidder Peabody Sec. Litig.*, at 15-16. Although it has been said that "the mere showing of a voluntary disclosure to a third person will . . . not suffice in itself for waiver of the attorney work product privilege," courts have held that work product protection may be waived if materials are disclosed to anyone other than one with a common interest. See, e.g., *United States v. American Telephone & Telegraph Co.*, 642 F.2d 1285, 1298-1300 (D.C. Cir. 1980); see generally J.L. Hall, *Limited Waiver" of Protection Afforded By the Attorney-Client Privilege and the Work Product Doctrine*, 1993 U. ILL. L. REV. 981 (1993).

not bar discovery of facts.²⁸⁰

The self-critical analysis doctrine, or self-evaluative privilege,²⁸¹ would seem a more likely refuge. Yet, just like the work product doctrine, it too is sharply qualified. In *Reich-*

280. The work product doctrine covers only "mental impressions, conclusions, opinions, or legal theories" of an attorney or other representative of a party concerning the litigation. See FED. R. CIV. P. 26(b)(3).

281. A judicially-created self-critical analysis, or self-evaluative, privilege recognizes that the disclosure of documents reflecting candid self-examination will deter or discourage internal investigations designed to improve compliance with the law. The privilege was first recognized in *Bredice v. Doctor's Hosp., Inc.*, 50 F.R.D. 249 (D.D.C. 1970), *aff'd without op.*, 479 F.2d 920 (D.C. Cir. 1973), when a plaintiff, alleging negligence by the defendant-hospital in her husband's death, sought production of "Minutes and Reports" from any hospital staff meetings that discussed her husband's case. The *Bredice* court ruled that the retrospective review by the medical staff of the effectiveness of specific treatments was essential to the continued improvement of patient care and outweighed the public's interest in disclosure of the report. Other courts have since applied this doctrine to protect medical records, accounting records, academic peer reviews, railroad accident investigations, employment records, and product safety assessments. See, e.g., *Tharp v. Sivyver Steel Corp.*, 149 F.R.D. 177 (S.D. Iowa 1993). For further analysis of this nascent privilege and its limitations, see generally Eric W. Orts & Paula C. Murray, *Environmental Disclosure and Evidentiary Privilege*, 1997 U. ILL. L. REV. 1, 28-45 (1997); Eric J. Wallach et al., *The Self-Critical Analysis Privilege Has Been Recognized As Federal Common Law in Title VII And Other Cases In Order To Promote The Perceived Public Interest*, NAT'L L.J., June 16, 1997, at B-9; Mia Anna Mazza, *The New Evidentiary Privilege for Environmental Audit Reports: Making the Worst of a Bad Situation*, 23 ECOLOGY L.Q. 79, 91-103 (1996); Stephen C. Simpson, *The Self-Critical Analysis Privilege in Employment Law*, 21 J. OF CORP. L. 577 (1996); CORPORATE COUNSEL'S GUIDE TO THE ATTORNEY-CLIENT, WORK-PRODUCT & SELF-EVALUATIVE PRIVILEGES, 201.01 (William A. Hancock ed., 1995); Beck, *Self-Evaluative Privilege Held to Protect Sensitive Documents*, 213 N.Y. L.J., Apr. 25, 1995, at 1; Peter A. Gish, *The Self-Critical Analysis Privilege and Environmental Audit Reports*, 25 ENVTL. L. 73 (1994); Bush, *Stimulating Self-Regulation - The Corporate Self-Evaluative Privilege: Paradigmatic Preferentialism or Pragmatic Panacea*, 87 NW. U. L. REV. 597 (1993); H. Thomas Wells, Jr. & Cynthia G. Lamar, *Discovery of Environmental and Other Non-Financial Audits: Is There a Self-Evaluative Privilege?*, 11 E. MIN. L. INST. 1 (1990); *Critical Self-Analysis: When Are the Findings Privileged Material*, NAT'L L.J., Mar. 23, 1987, at 28; Nancy C. Chrisman & Arthur F. Mathews, *Limited Waiver of Attorney-Client Privilege and Work-Product Doctrine in Internal Corporate Investigations: An Emerging Corporate "Self-Evaluative" Privilege*, 21 AM. CRIM. L. REV. 123 (1983); Note, *The Privilege of Self-Critical Analysis*, 96 HARV. L. REV. 1083 (1983); Joseph E. Murphy, *The Self-Evaluative Privilege*, 7 J. CORP. L. 489 (1982); Note, *The Attorney-Client Privilege, The Self-Evaluative Report Privilege, and Diversified Industries v. Meredith*, 40 OHIO ST. L.J. 699 (1979).

hold *Chem. Inc. v. Textron, Inc.*,²⁸² a federal district court held for the first time that environmental reports and documents prepared for retrospective analysis of past conduct and practices (and its resulting environmental consequences) contain information protected from disclosure under the self-critical analysis doctrine.²⁸³ The decision thus offers another form of protection, in addition to the attorney-client privilege and the work product doctrine, that companies can invoke in order to prevent disclosure of environmental documents.

In upholding Reichhold's exercise of the privilege, the court examined four factors. Specifically, the court asked whether: (i) the information resulted from a critical self-analysis undertaken by the party seeking protection; (ii) the party and the public had a strong interest in preserving the free flow of the type of information sought; (iii) the information was of a type whose flow would be curtailed if discovery was allowed; and (iv) the information was prepared with the expectation that it would be kept confidential, and has in fact remained confidential.²⁸⁴ The court also tried to explain conflicting precedent, stating that the self-critical analysis privilege: (i) applies only to subjective impressions and opinions and does not apply to objective facts; (ii) in some circumstances may not apply to documents that have been subpoenaed by a government agency as part of an administrative investigation; (iii) can be overcome by a showing of extraordinary circumstances or special need; and (iv) may only apply to retrospective analysis, not to the evaluations of the potential environmental risks of a proposed course of action made

282. 157 F.R.D. 522 (N.D. Fla. 1994).

283. The dispute in *Reichhold* centered around documents prepared by the plaintiff in connection with the cleanup of groundwater contamination pursuant to a consent decree with the Florida Department of Environmental Regulation. In 1992, when Reichhold filed suit for contribution under Superfund against former owners of the site, the former owners sought to discover the results of the state mandated environmental investigation. Reichhold argued that the documents from the investigation were privileged under the self-critical analysis doctrine.

284. See Reichhold, 157 F.R.D. at 526; See *Dowling v. American Hawaii Cruises, Inc.*, 971 F.2d 423, 425-26 (9th Cir. 1992) (citations omitted) (declining to support application of the privilege to routine internal corporate matters related to safety concerns).

in advance of the decision to adopt that course of action.²⁸⁵ The court identified several limitations that may limit the decision's value as a shield against disclosure, *e.g.*, the privilege does not apply to a government subpoena pursuant to an administrative investigation.²⁸⁶

If applied to environmental audits, limitations such as the one allowing documents to be subpoenaed pursuant to an administrative investigation would greatly reduce the amount of protection offered by this privilege since a company's biggest concern with environmental audits is that they provide a roadmap to government enforcement actions. Courts may consider much of the data contained in compliance audits, *e.g.*, sampling results, emission rates, amount of time hazardous waste has been stored on a site, etc., to be "objective facts" and thus not covered by the privilege. Portions of audit reports containing recommendations for improvement may also be considered outside the scope of the privilege, *i.e.*, "proposed course of action." Moreover, like the work product doctrine, this privilege is also vulnerable to a showing of extraordinary circumstances or special need. Finally, the self-evaluative privilege applies only to retrospective analysis and not to evaluations of the potential environmental risks of a proposed course of action made in advance of the decision to adopt that course of action. Greater acceptance of the privilege may make compliance auditing more common,²⁸⁷ but we doubt it will prove generally efficacious.

Two recent court decisions bring the limitations of these doctrines out in sharp relief. During the course of its defense against a Clean Water Act lawsuit brought by a local citizens organization in *Louisiana Env'tl. Action Network, Inc. v. Evans Indus., Inc.*, Evans Industries sought to withhold memo-

285. See Reichhold, 157 F.R.D. at 526.

286. See *id.*

287. Short of legislative action, broad acceptance of the privilege is an unlikely prospect in the near term. See generally James T. O'Reilly, *Environmental Audit Privileges: The Need for Legislative Recognition*, 19 SETON HALL L. REV. 119 (1994). Eric Orts and Paula Murray trace the outlines of an interesting alternative framework employing the doctrine in *Environmental Disclosure and Evidentiary Privilege*, 1997 U. ILL. L. REV. 1, 45-54 (1997).

randa describing the results of an EPA inspection and other biomonitoring test results contending the documents were off-limits from disclosure under the work product and self-critical analysis doctrines.²⁸⁸ The court ruled that the documents fell outside the scope of the work product doctrine because it was "clear that the instant documents were prepared during the normal course of business of investigating environmental problems rather than in anticipation of litigation."²⁸⁹ Even assuming the self-critical analysis privilege is recognized in the Fifth Circuit, the court found justification for application of it wanting in cases involving "voluntary environmental self-analyses."²⁹⁰

A group of plaintiffs also prevailed in their attempt to obtain the defendant's environmental audit report in *Carr v. El Dorado Chem. Co.*²⁹¹ The court concluded that the audit of El Dorado Chemical's facility was neither protected under Arkansas' audit privilege statute (because it was prepared two years before enactment of the Arkansas statute creating an environmental audit privilege), nor shielded under the self-critical analysis doctrine. Even assuming recognition of such a privilege, it would not apply in cases like this where there was no evidence that the defendant "would cease performing environmental audits or similar analyses, if discovery" of the audit were allowed, but ample evidence of "special need" for the documents.²⁹²

288. See No. CIV.A.95-3002, 1996 WL 325588, at 1 (E.D. La. June 11, 1996).

289. *Id.* at 2.

290. *Id.* The court also doubted that such environmental reviews were always performed with the expectation that the results would be kept confidential. See *id.* Also, the fairness rationale offered to justify application of the privilege to documents that a party has been legally required to prepare is inapplicable to documents voluntarily prepared. See *id.* at 3.

291. See Civ. Nos. 96-1081 and 96-1113 (W.D. Ark. Apr. 14, 1997).

292. See *id.* at 15-16. The self-evaluative privilege has also been rejected in the following environmental cases. See, e.g., *Detroit Newspaper Agency and the Detroit Free Press, Inc. and Newspaper Guild of Detroit, Local 22, of the Newspaper Guild, AFL-CIO-CLC*, 149 L.R.R.M. (BNA) 1241 (June 30, 1995) (declining to protect environmental report for management from disclosure to employees union under the privilege of self-critical analysis); *United States v. Dexter Corp.*, 132 F.R.D. 8 (D. Conn. 1990); *State ex rel. Celebrezze v. CECLOS Int'l, Inc.*, 583 N.E.2d 118 (Ohio App. 1990); see generally Patrick J. Ennis,

The EPA and DOJ self-policing incentives may induce some firms to implement and assess an EMS – but the discretionary nature of both policies will likely give some executives pause. Moreover, as the dispute in *In re Harmon Electronics Inc.* illustrates, the government and defendants often disagree sharply over the interpretation of such policies.²⁹³ Broadening such incentives to explicitly cover environmental management systems was a good step,²⁹⁴ but as discussed above, such policies have no binding effect on the government and, perhaps even more significantly, fail to address state regulators and private litigants. The policies also contain conditions many firms will find intolerable or impossible to meet.²⁹⁵

Audit privilege/immunity laws would appear to provide the most explicit and expansive protection for ISO 14001 communications and documents. Thus far, however, only a limited number of states have enacted some form of legislation protecting audits from disclosure or granting some level of immunity for voluntary disclosure of violations uncovered during environmental audits, and as of yet there is no compa-

Note, *Environmental Audits: Protective Shields or Smoking Guns?*, 42 WASH. U. J. URB. & CONTEMP. L. 389, 391-93 (1992).

293. See RCRA Docket No. VII-91-H-0037 (Mar. 24, 1997). Harmon Electronics, facing more than \$585,000 in penalties for violations of the RCRA, sought elimination of all but \$6,000 (the amount of the economic benefit the company was thought to have enjoyed for not complying with the regulations) on the grounds that it had discovered the violations and reported them voluntarily to the Missouri Department of Natural Resources. Agency counsel rejected the company's arguments, as did the EPA Environmental Appeals Board. See Amy Porter, *Harmon Electronics Ruling On Overfiling, Audit Policy Has Implications For Other Laws*, Daily Rep. for Executives (BNA) A-14 (Mar. 26, 1997).

294. See *Final EPA Audit Policy May Cover Violations Not Currently Eligible*, Daily Rep. for Executives (BNA) A-7 (Nov. 3, 1995); *Final Version of EPA Audit Policy May Cover Compliance Management Plans*, Daily Rep. for Executives (BNA) A-10 (Sept. 28, 1995); *EPA Official Describes Potential Expansion Of Audit Policy*, Daily Rep. for Executives (BNA) A-14 (Sept. 14, 1995).

295. For example, the DOJ's FACTORS statement might offer ISO participants a full pass, or at least a partial break, in charging decisions. In order to benefit, however, companies would need to adopt control measures beyond existing law as a comfort zone to prevent noncompliance events. It is unclear that all, or even most, companies would care to make this commitment.

rable federal statute.²⁹⁶ It is also significant that, of the state audit statutes that have been enacted, all contain notable restrictions.²⁹⁷ For example, several statutes explicitly state that the privilege is lost in criminal proceedings if the prosecutor has a need (commonly expressed as a substantial or compelling need) or circumstances exist requiring disclosure of the information.²⁹⁸ In most states, the privilege will also be lost if the company did not act promptly and with "reasonable diligence" to rectify the situation. Most statutes would not apply to information that must be collected, developed, maintained, reported or otherwise made available to regulatory agencies.²⁹⁹ Nor would such laws bar the federal govern-

296. The state statutes and prospects for federal legislation are discussed *supra* note 79, and note 80 respectively.

297. The privilege provided by such statutes is distinct from the attorney-client privilege that may also be asserted if the audit was performed with the assistance of counsel. The statutes generally attempt to strike a balance between the government's interest in detecting culpable violations and in encouraging self-detection and correction of environmental violations. Each uses essentially the same model statutory language to create the privilege. To qualify as privileged material under many of the laws enacted thus far, an environmental audit report must include: (i) a report by the auditor; (ii) a memorandum analyzing portions of the auditor's report; (iii) implementation plans that address compliance, improve compliance and prevent further non-compliance; and (iv) the words "environmental audit report - privileged document" on each document. Some of the states also protect those individuals hired to conduct the audit from examination by investigators or enforcement officials unless the owner or operator for whom the audit was performed consents to the questioning. Access to the environmental audit documents fitting this description will be permitted in criminal cases if, after a review by the judge in chambers, the court determines that: (i) the privilege was asserted for a fraudulent purpose; (ii) the audit report showed evidence that the facility had discovered non-compliance and failed to rectify the situation with reasonable diligence; or (iii) there was a compelling need for the information and it was not otherwise obtainable without incurring unreasonable cost and delay. The privilege also does not apply to information that must be collected, developed, maintained, reported or otherwise made available to regulatory agencies. Prosecutors are often allowed under these statutes to consult with the enforcement agency regarding the contents of the audit report in order to prepare for the in-camera hearing. If the privilege is successfully upheld, the information used in preparation for this hearing cannot be used in any investigation or proceeding against the defendant, although it may be difficult to prove that a prosecutor violated this privilege.

298. See, e.g., Colorado, Indiana, Kentucky, and Oregon.

299. On the pros and cons of audit privileges, compare David Ronald, *The Case Against Environmental Audit Privilege*, NAT'L ENVTL. ENFORCEMENT J.,

ment from taking action.

Many firms will implement EMSs and conduct EMS audits anyway on the grounds that the overall benefits³⁰⁰ of the exercise exceed the potential downside risks. Companies concerned about the limited efficiency of common law and statutory privileges or which remain unconvinced by pledges of governmental restraint, however, should carefully circumscribe the scope of EMS audits and ensure that documentation closely conforms to the requirements of the specification.³⁰¹ Companies opting to proceed with ISO implementation should also build firewalls and establish procedures to ensure that counsel is given the role of analyzing any legal issues, so that viable protections are neither waived nor otherwise lost.³⁰² Those firms which have not previously

Sept. 1994, at 3; and NAT'L ENVTL. ENFORCEMENT J., Dec. 1994 - Jan. 1995, at 12; Jim Moore, *A Response to "The Case Against an Environmental Audit Privilege"*, NAT'L ENVTL. ENFORCEMENT J., Dec. 1994 - Jan. 1995, at 3, and see Ann C. Hurley, *Environmental Audit Privileges: A Coverup, Not a Cure*, NAT'L ENVTL. ENFORCEMENT J., Feb. 1995, at 15.

300. Especially rewards under regulatory initiatives that could possibly be developed based on experiences with ELP, Project XL, CSI, and other state and federal pilot programs.

301. See Michael D. McIntyre et al., *New Cutting Edge Environmental Management Standard - ISO 14001*, ADVOC., June 1997, at 36, 39 (describing the implementation of Micron Technologies' ISO 14001-based EMS and noting that the most difficult aspect of the decision to pursue certification "centered on confidentiality").

302. See Donald A. Carr, *Internal Investigations of Offenses Under Environmental Laws*, in ENVIRONMENTAL CRIMINAL LIABILITY: AVOIDING AND DEFENDING ENFORCEMENT ACTIONS (Donald A. Carr ed., 1995) and JOHN F. COONEY ET AL., ENVIRONMENTAL CRIMES DESKBOOK 45-47 (1995) for a discussion of how to minimize disclosure risks. In general, counsel must endeavor to ensure that: (i) the role of counsel is documented so that it is evident that counsel was retained to provide legal advice, not business judgment, and where appropriate, that counsel is acting in anticipation of litigation; (ii) any non-legal personnel used to assist lawyers, including any environmental consultants, operate at the request of counsel and under counsel's direction; (iii) attorney-client communications are kept discrete and confidential; (iv) legal advice is carefully channeled in accordance with the resolution authorizing the endeavor; (v) work product is structured as "opinion" rather than "fact" by, to the extent practicable, interweaving legal analysis with factual reporting; and (vi) all disclosure to government attorneys or regulatory attorneys is carefully circumscribed. Further advice on how to shield audit information is offered in Anne C. Flannery & Katherine M. Polk, *Recent Decisions On The Attorney-Client Privilege And Their Impact On Internal Corporate Investigations*, METROPOLITAN CORP.

evaluated environmental performance may wish to begin with an environmental compliance audit before making a decision about implementation of ISO 14001 at a particular facility.³⁰³

IV. Implications of ISO 14000 for International Trade

The U.S. TAG is beginning to explore potential areas of conflict between the ISO 14000 standards and the provisions of various international trade laws. Of the issues to be considered, one of the most difficult will be whether an unfair trade barrier under the Agreement on Technical Barriers to

COUNS., Nov. 1996, at 5; Irvin B. Nathan & Michael B. Gerrard, *In-House Probes Reveal Liabilities*, NAT'L L.J., Oct. 14, 1996, at C1; C. Russel H. Shearer, *Protecting Audit Confidentiality*, NAT. RESOURCES & ENV'T, Fall 1996, at 52; C. Russel H. Shearer, *Costs and Benefits of Audit Disclosure*, NAT. RESOURCES & ENV'T, Summer 1996, at 48; Mark Latham, *Maintaining Confidentiality of Environmental Audits: Legal Protections*, 29 J. HEALTH & HOSP. L. 20 (1996); Richard S. Baron & Christopher J. Valeriote, *Environmental Audits-What Are They and Can They Be Kept Confidential?*, 73 MICH. B.J. 1048 (1994); John S. Guttman, *Environmental Reviews Can Be Kept Confidential*, NAT'L L.J., June 20, 1994; Michael H. Levin et al., *Discovery and Disclosure: How to Protect Your Environmental Audit Report*, 24 ENVTL. REP. (BNA) 13 (Jan. 7, 1994); David Sweet, *How to Minimize the Chance that Self-Audits Will be Used Against You*, ENVTL. CORP. COUNS. REP., Apr. 1994, at 1; Elizabeth Stewart, *Protection of Privilege in Environmental Audits*, 94.1 ENVTL. REG. (1994.); Dan K. Webb & Steven F. Molo, *Some Practical Considerations in Developing Effective Compliance Programs: A Framework For Meeting The Requirements Of The Sentencing Guidelines*, 71 WASH. U. L.Q. 375, 378 (1993); Marc Shaye, *Keeping Environmental Audit Results Confidential*, MICH. LAW WKLY., Aug. 30, 1993, at 24A; Terrell E. Hunt & Timothy A. Wilkens, *Environmental Audits and Enforcement Policy*, 16 HARV. ENVTL. L. REV. 365, 375-92 (1992); James W. Moorman & Lawrence S. Kirsch, *Environmental Compliance Assessments: Why Do Them, How to Do Them, and How Not to Do Them*, 26 WAKE FOREST L. REV. 97, 113-20 (1991); Mary E. Kris & Gail L. Vanelli, *Today's Criminal Environmental Enforcement Program: Why You May Be Vulnerable and Why You Should Guard Against Prosecution Through an Environmental Audit*, 16 COLUM. J. ENVTL. L. 227 (1991); Frost & Siegel, *Environmental Audits: How to Protect Them From Disclosure*, 5 TOXICS L. REP. (BNA) 211 (1991); Kane, *Environmental Auditing: A Sound Risk if Done Right*, HAZARDOUS WASTE & TOXIC TORTS L. & STRATEGY, May 1990, at 1.

303. See REEVA SCHIFFMAN et al., *ISO 14001 Implementation - Getting Started*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 37, 45 (Tom Tibor & Ira Feldman eds., 1997); Beth Duncan, *Two Inside Attorneys Say Law Department Oversight Helps Preserve Environmental Audit Confidentiality*, Corp. Counsel Wkly. (BNA) 5 (Nov. 29, 1995).

Trade ("TBT Agreement," one of the family of international trade agreements negotiated during the Uruguay Round and administered by the World Trade Organization (WTO)),³⁰⁴ would be created if a country were to impose a requirement of ISO 14001 registration on imports from other countries.³⁰⁵ Forty-eight percent of respondents in one poll expressed concern that ISO 14001 could be employed as a non-tariff trade barrier.³⁰⁶ Although a detailed examination of the reasonableness of such fears³⁰⁷ would take us beyond the scope of

304. See *General Agreement on Tariffs and Trade: Multilateral Trade Negotiations Final Act Embodying the Results of the Uruguay Round of Trade Negotiation*, Apr. 15, 1994, 33 I.L.M. 1125 (1994). See generally BENEDICT KINGSBURY, *Environment and Trade: The GATT/WTO Regime in the International Legal System* in ENVIRONMENTAL REGULATION AND ECONOMIC GROWTH 183 (A. Boyle ed., 1994); Halina Ward, *Trade and the Environment in the Round - and After*, 7 GEO. INT'L ENVTL. L. REV. 623 (1994).

305. ISO is striving to ensure that its 14000 standards conform to WTO principles. See *Japan Vows 5th Plenary of TC 207*, INT'L ENVTL. SYS. UPDATE, May 1997, at 1; Toshio Aritake, *Standards: Committee Agrees ISO EMS Standards Will Not Violate World Trade Principles*, Int'l Env't Daily (BNA)(Apr. 29, 1997).

306. Kara Sissell, *Survey: High Regard for ISO 14000*, CHEM. WK. Nov. 8, 1995, at 42; see also *Call to Improve Products: Standards May Block Thai Trade*, BANGKOK POST, Dec. 14, 1996, available in WESTLAW, ALLNEWS database.

307. Various perspectives on the trade angle are offered in Kerstin Pfliegner, *International Voluntary Standards—The Potential For Trade Barriers*, in ENVIRONMENTAL MANAGEMENT SYSTEMS AND CLEANER PRODUCTION 37 (Ruth Hillary ed., 1997); Kerstin Pfliegner, *ISO 14000 Implications for Companies and Developing Trade*, in IMPLEMENTING ISO 14000: A PRACTICAL, COMPREHENSIVE GUIDE TO THE ISO 14000 ENVIRONMENTAL MANAGEMENT STANDARDS 511 (Tom Tibor & Ira Feldman eds., 1997); M. Bruce Harper, *Trips Article 27.2: An Argument for Caution*, 21 WM. & MARY ENVTL. L. & POL'Y REV. 381 (1997); DONALD O'LAOIRE, *Trade, Competitiveness and the Environment*, in ISO 14001 AND BEYOND: ENVIRONMENTAL MANAGEMENT SYSTEMS IN THE REAL WORLD 127 (Christopher Sheldon ed., 1997); Kowit Sanandang, *It's Time to Look Inward*, BANGKOK POST, June 14, 1997, at 9 ("... ISO 14000 certification ... helps [firms] overcome the trade barriers set by importing countries"); *Will ISO 14000 Reduce or Create Trade Barriers*, INT'L ENVTL. SYS. UPDATE, Nov. 1996, at 12; *More Work Needed In ISO 14000 Process On Certification, Says Committee Member*, Int'l Env't Rep. (BNA) 647 (July 24, 1996); *International Standards and U.S. Industry: Hearings on ISO 14000 before the Subcomm. On Tech. Of the House Comm. On Science*, 104th Cong. (1996) (Belinda L. Collins, Director, Office of Standards Services, NIST), available in 1996 WL 10164741; James Cameron, "ISO 14000: Globalization and the Trading System," Address at Symposium entitled ISO 14000: Regulation, Trade and the Environment, Australian Center for Environmental Law, Canberra, Australia (July 2, 1996); THE ISO 14000 HANDBOOK 411-48 (Joseph Cascio ed., 1996); *Brazil-Economic Reform Helps, But Hurdles*

this Article, a short treatment of the theme makes sense, if only to highlight the questions for those who would seek to tailor a compliance program to ISO 14001 out of some trade-based concern.

Since the TBT Agreement sets rules regarding international trade in goods, its primary implications are for the product-related standards in the ISO 14000 series.³⁰⁸ Thus, to the extent that trade warnings relate to the EMS specification, ISO 14001, or the auditing standards, they probably overstate the threat.³⁰⁹ The far more relevant question is whether, given (i) the scientific and technical content of some of the standards, e.g., the eco-labeling (ISO 14020) and life-cycle assessment (ISO 14040) standards, and (ii) the relative lack of accreditation and/or registration bodies in some parts of the world, developing countries will view the ISO standards as technical barriers to trade under the TBT Agree-

Remain, INSTRUMENT BUS. OUTLOOK, May 15, 1996; Paul Merrion, *14000 Ways to Play Safe*, CRAIN'S CHICAGO BUS., Apr. 15, 1996, at 15; *SMEs Have Trade Concerns*, INT'L ENVTL. SYS. UPDATE, Apr. 1996, at 19; Owen Clyde, *Modernizing Economies Will Benefit From Globalization*, FIN. TIMES, Feb. 15, 1996, at 24; Mark Newham, *Kenyan Industry Found To Lack Information On Upcoming ISO 14000 Environmental Series*, Int'l Env't Rep. (BNA) 480 (June 12, 1996); James O. Sample, *ISO Rules Must For Exporters*, DENVER POST, Dec. 11, 1995, at E-01. The Industrial Sectors and Environment Division of UNIDO has published a report, UNIDO Doc. ISED.9 (Spec.) (Feb. 12, 1996), on the potential effects of ISO 9000 and ISO 14000 series on the trade of developing countries.

308. See Tom Conway, *ISO 14000 Standards and China: A Trade and Sustainable Development Perspective*, Conference on ISO 14000 - Environmental Management and Sustainable Development, Beijing China, (Nov. 5-7, 1996) in INT'L INST. FOR SUSTAINABLE DEV., Oct. 1996, at 28-29. On the differences between the process and product standards under the ISO 14000 series, see Kerry E. Rodgers, *The ISO Environmental Standards Initiative*, 5 N.Y.U. ENVTL. L.J. 181, 185 (1996). On process and product standards generally, see Rex J. Zedalis, *Product v. Non-Product Based Distinctions in GATT Article 111 Trade and Environment Jurisprudence: Recent Developments*, EUR. ENVTL. L. REV., Apr. 1997, at 108; DAVID VOGEL, *TRADING UP: CONSUMER AND ENVIRONMENTAL REGULATION IN A GLOBAL ECONOMY* (1995); M. Schlagenhof, *Trade Measures Based On Environmental Processes and Production Methods*, 29 J. WORLD TRADE 123 (1995).

309. See Genevieve Mullett, *ISO 14000: Harmonizing Environmental Standards And Certification Procedures Worldwide*, 6 MINN. J. GLOBAL TRADE 379, 400 (1997) (Concluding that ISO 14000 is not likely to have a major impact on the overall trade versus environment dispute).

ment.³¹⁰ In Mexico, for example, the Secretaria de Comercio y Fomento Industrial has resisted previous eco-labeling initiatives, characterizing such measures as non-tariff barriers to trade. Officials with the Thailand Ministry of Industry have already publicly characterized the ISO 14000 series as a new technical barrier to trade.

In his article on ISO 14000 and its trade implications in the *National Law Journal*, Stephen Kass assessed the validity of the ISO 14000 standards under the Uruguay Round agreements and the North American Free Trade Agreement, concluding that "ISO sponsors can have considerable confidence that their efforts will survive challenges."³¹¹ Mr. Kass concentrated primarily on the EMS specification, however, and left for a later day the tougher problems presented by the life-cycle and eco-labeling standards.³¹² Professor Roht-Arriaza examined these issues in some detail and offered a more mixed forecast.³¹³ In our view, the ISO 14000 standards could have substantial implications under the TBT Agreement, as well as the WTO Agreement on Government Procurement, especially if: (i) countries require imported products to meet the ISO 14000 standards (and it can be es-

310. See *Trade Fears Play Major Role in Taiwanese EMS Implementation Effort*, INT'L ENVTL. SYS. UPDATE, Oct. 1996, at 20; *ISO 14000: Benefit or Barrier?*, HAZNEWS, Oct. 1, 1996, available in 1996 WL 8767443; UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT COMMODITIES DIVISION, ISO 14001 INTERNATIONAL ENVIRONMENTAL MANAGEMENT SYSTEMS STANDARDS: FIVE KEY QUESTIONS FOR DEVELOPING COUNTRY OFFICIALS 62 (Geneva 1996) (Draft). For further discussion of the implications of environmental labeling and life cycle analysis schemes for international trade, see generally Elliot B. Staffin, *Trade Barrier Or Trade Boon? A Critical Evaluation Of Environmental Labeling And Its Role In The "Greening" Of World Trade*, 21 COLUM. J. ENVTL. L. 205 (1996); DANIEL C. ESTY, GREENING THE GATT: TRADE, ENVIRONMENT, AND THE FUTURE (Institute for International Economics 1994); JIM SALZMAN & CANDICE STEVENS et. al, LIFE-CYCLE MANAGEMENT AND TRADE (Organization for Economic Cooperation and Development ed., 1994); George Richards, *Environmental Labeling of Consumer Products: The Need for International Harmonization of Standards Governing Third-Party Certification Programs*, 7 GEO. INT'L ENVTL. L. REV. 235 (1994).

311. Stephen L. Kass, *ISO Plans Uniform Standards*, NAT'L L.J., Nov. 6, 1995, at C-1, C-6.

312. On the potential manipulation of eco-labeling regimes, see William H. Lash III, PROTECTIONISM IN GREEN, J. OF COMM., Dec. 16, 1996.

313. Roht-Arriaza, *supra* note 133, at 517-31.

tablished that the criteria of the standards are biased in favor of domestic products);³¹⁴ (ii) government agencies mandate registration to the standards as a contractual requirement;³¹⁵ or (iii) government agencies use ISO 14001 registration as a factor in regulatory and enforcement decisions (and in doing so discriminate in favor of domestic producers). The answers to some of these questions may become clearer when the WTO Committee on Trade and the Environment completes its review of the implications of national and international standards under the Uruguay Round agreements. In the interim, organizations tying compliance to ISO 14001 because of concerns over market access should focus carefully, and realistically, on the potential trade issues presented by the ISO standards regime.

V. Some Approaches to the Design and Implementation of Compliance Programs

An organization may maximize its certification prospects and at the same time reduce the risk of serious sanctions for noncompliance occurrences by factoring the criteria of the DOJ's *Factors* document,³¹⁶ the EPA's Self-Policing Policy,³¹⁷ the compliance program provision of the Organizational Guidelines,³¹⁸ and ISO 14001 into the design of its EMS.³¹⁹

314. See Thomas J. Schoenbaum, *International Trade and Protection of the Environment: The Continuing Search for Reconciliation*, 91 AM. J. INT'L L. 268, 294 (1997); Paula C. Murray, *The International Environmental Management Standard, ISO 14000: A Non-Tariff Barrier Or A Step To An Emerging Global Environmental Policy?*, 18 U. PA. J. INT'L ECON. L. 577, 608 (1997).

315. In India, for example, ISO 14000 could soon become a precondition for government purchases. See Jayanta Mallick, *India: Govt. Purchase on ISO 9000 Basis Likely*, BUS. LINE, June 6, 1997, at 2.

316. See discussion *supra* Part II.E.1.

317. See discussion *supra* Part III.C.1.

318. See ORGANIZATIONAL GUIDELINES, *supra* note 6, § 8A1.2; DRAFT ENVIRONMENTAL SENTENCING GUIDELINES, *supra* note 108, § 9D1.1.

319. Additional insight into program design and implementation, are offered in many of the sources cited *supra* Part III.B, and in FRANK B. FRIEDMAN, PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT *supra* note 124; N.P. CHEREMISNOFF & M. GRAFFIA, ENVIRONMENTAL AND HEALTH & SAFETY MANAGEMENT: A GUIDE TO COMPLIANCE (1995); W. LEE KUHRE, ISO 14001 CERTIFICATION: ENVIRONMENTAL MANAGEMENT SYSTEMS (1995); GROSKAUFMANIS, *supra* note 124, at § 5.07A; D. KEITH DENTON, ENVIRO-MANAGEMENT (1994); ROGENE A. BUCHHOLZ,

Generally, such an approach entails addressing the following areas of inquiry:

- ISO 14001.
- Does the organization's EMS meet the requirements set forth in § 4 of ISO 14001?
- Organizational Guidelines.
- Does the organization have an effective program to prevent and detect violations of law?³²⁰
- DOJ *Factors*.

PRINCIPLES OF ENVIRONMENTAL MANAGEMENT THE GREENING OF BUSINESS (1993); STEVEN J. BENNETT, RICHARD FREIERMAN & STEPHEN GEORGE, CORPORATE REALITIES & ENVIRONMENTAL TRUTHS (1993); William A. Hancock, *Environmental Compliance Programs*, in CORPORATE COUNSEL'S GUIDE TO ENVIRONMENTAL COMPLIANCE AND AUDITS 4.001 (William A. Hancock ed., 1993); DAVID T. BUENTE, JR., THOMAS C. GREEN & JAMES CONNAUGHTON, *Developing and Implementing an Environmental Corporate Compliance Program*, C868 ALI-ABA 85 (1993); Paul G. Wallach & Dan Levin, *Using Government's Guidance To Structure a Compliance Plan*, NAT'L L.J., Aug. 30, 1993, at S10; David J. Hayes & Edward J. Shapiro, *Corporate Compliance Programs under the New Organizational Sentencing Guidelines*, in CORPORATE COUNSEL'S GUIDE TO ENVIRONMENTAL COMPLIANCE AND AUDITS 4.201 (William A. Hancock ed., 1993); Dan K. Webb & Steven F. Molo, *Some Practical Considerations In Developing Effective Compliance Programs: A Framework For Meeting The Requirements Of The Sentencing Guidelines*, 71 WASH. U.L.Q. 375 (1993); Kirk S. Jordan, *Designing and Implementing a Corporate Code of Conduct in the Context of an "Effective" Compliance Program*, Preventative L. Rep. 3 (Winter 1993); Kerry Beringhaus, *Practical Considerations in Developing Effective Compliance Programs*, Preventative L. Rep. 9 (Winter 1993); BRUCE SMART, BEYOND COMPLIANCE A NEW INDUSTRY VIEW OF THE ENVIRONMENT (1992); James W. Moorman & Lawrence S. Kirsch, *Environmental Compliance Assessments: Why Do Them, How To Do Them, And How Not To Do Them*, 26 WAKE FOREST L. REV. 97 (1991).

320. Specifically,

a program that has been reasonably designed, implemented, and enforced so that it generally will be effective in preventing and detecting criminal conduct. Failure to prevent or detect the instant offense, by itself, does not mean that the program was not effective. The hallmark of an effective program to prevent and detect violations of law is that the organization exercised due diligence in seeking to prevent and detect criminal conduct by its employees and other agents.

§ 8A1.2. Commentary 3.(k).

For purposes of comparison, we will also point out relevant provisions of the *Draft Environmental Organizational Guidelines*, which evaluate the organization's "commitment to environmental performance" to evaluate the Base Offense Level as described in detail *supra* Part II.3.a.

- Explore the establishment and scope of “any regularized, intensive, and comprehensive environmental compliance program” in place and if so, what was its scope?³²¹
- EPA Self-Policing Policy
- Was the violation discovered through an environmental audit or an objective, documented, systematic procedure or practice reflecting the regulated entity’s due diligence in preventing, detecting, and correcting violations?³²² Where the violation is discovered through a “systematic procedure or practice” which is not an audit, the regulated entity will be asked to document how its program reflects due diligence.³²³

The general facets of such an environmental preventive maintenance and defense strategy are outlined below.³²⁴

The task of integrating compliance with the larger ISO 14001 EMS may be divided into several stages, beginning with the establishment of a select group of company executives responsible for EMS strategy, including implementation of ISO 14001. Early in the process of developing or reshaping the firm’s EMS to meet the requirements of the specification,³²⁵ the aim of this group should be to identify, with the

321. See *FACTORS*, *supra* note 42, at Section II.C.

322. See *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,711.

323. *Id.* at 66,708.

324. Of course, the structure and specific characteristics of an ISO EMS and any compliance sub-system will depend on the nature and size of the firm as well as its unique goals and objectives. See *generally* ISO 14001 §§ 4.2, A.3.1 and ISO 14004 § 0.1; *ORGANIZATIONAL GUIDELINES*, *supra* note 6, § 8A1.2. Commentary 3.(k)(7)(i) and (ii) (*compare* Draft Environmental Sentencing Guidelines, *supra* note 108, § 9D1.1(a)(2) and Comment 3; *FACTORS*, *supra* note 42, Sections I and II. The EPA recognizes that “a variety of compliance management programs may develop under the “due diligence criteria.” *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,708. Accordingly, the term “due diligence” is interpreted to encompass the regulated entity’s systematic efforts, appropriate to the size and nature of its business . . .” *Id.* at 66,708. See Bell, *supra* note 122, at 10,684-85.

325. Compliance with ISO 14001 will require companies to take a multi-disciplinary approach to implementation, drawing on expertise from operations, production, and marketing and public relations. Given the regulatory and other legal issues involved in ISO 14000 implementation, the team will want to consult with counsel from an early stage forward to ensure that the ISO 14001

aid of counsel and on the basis of prior auditing experience, the legal and other requirements applicable to the environmental aspects of the company's activities, products or services.³²⁶ There is no "one size fits all" model; the organization must tailor its overall strategy, and any compliance sub-component, to reflect the unique characteristics, goals, and objectives of the firm.³²⁷

effort is consistent with the organization's overall compliance strategy and objectives. Most firms contemplating implementation of ISO 14001 will find it useful to perform the following tasks before proceeding with implementation: (i) identify all key ISO stakeholders; (ii) develop an ISO 14001-based market strategy; (iii) perform a "gap analysis," or comparison of their existing management system against one fulfilling the criteria of the ISO specification, using an analytical tool like the one developed by the Global Environmental Management Initiative, ISO 14001 ENVIRONMENTAL MANAGEMENT SYSTEM SELF-ASSESSMENT CHECKLIST (Mar. 1996); and (iv) analyze the costs and benefits of various implementation responses.

326. See Bell, *supra* note 122, at 10,681; PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT, *supra* note 124, at 118-123; Herbert I. Zinn, *Chickens and Eggs and Carts and Horses: A Case Study in the Development of a Corporate Compliance Program*, C110 ALI-ABA 91, 94-95 (Mar. 2, 1995); Dan K. Webb & Steven F. Molo, *Some Practical Considerations in Developing Effective Compliance Programs: A Framework for Meeting the Requirements of the Sentencing Guidelines*, 71 WASH. U.L.Q. 375, 385-87 (1993); David M. Zornow & Dana H. Freyer, *Corporate Compliance Programs: Implementation Rationale and Methodology*, C900 ALI-ABA 537, 549-51 (Jan. 20, 1994); James W. Moorman & Lawrence S. Kirsch, *Environmental Compliance Assessments: Why Do Them, How To Do Them, And How Not to Do Them*, 26 WAKE FOREST L. REV. 97, 101-03 (1991).

327. See generally ISO 14001 §§ 4.2 ("Top Management shall define the organization's environmental policy and ensure that it a) is appropriate to the nature, scale and environmental impacts of its activities, products or services") and A.4.1.2; ORGANIZATIONAL GUIDELINES, *supra* note 6, at § 8A1.2. Commentary 3.(k)(7)(i) and (ii) ("[T]he precise actions necessary for an effective program to prevent and detect violations of law will depend upon a number of factors. Among the relevant factors are: (i) Size of the organization – The requisite degree of formality of a [compliance] program will vary with the size of the organization: the larger the organization, the more formal the program typically should be . . . ; (ii) Likelihood that certain offenses may occur because of the nature of its business. If because of the nature of an organization's business, there is a substantial risk that certain types of offenses may occur, management must have taken steps to prevent and detect those types of offenses.") (compare *Draft Environmental Organizational Guidelines*, *supra* note 108, § 9D1.1(a)(2) and Comment 3 (describing the differences in compliance programs of small and large companies, and companies with varying environmental impacts and risks)); FACTORS (Sections I and II state clearly that the DOJ's policy is a framework document rather than a checklist. The application of the

A questionnaire might be circulated to a wider group of line managers selected by the company, in order to more specifically ascertain what the most troublesome obligations are and will be on the ground. Having traced a broad outline of the firm's various commitments, counsel and company executives should systematically analyze the most pressing issues. In any near-close call, executives for the company should meet with counsel and possibly other outside consultants to analyze whether and how to proceed. Some organizations may ask counsel to perform an environmental audit. As described previously, companies should make every effort to shield the results of such assessments to the maximum extent possible under state and federal common law and statutory protections, and carefully weigh the risks and advantages of any disclosures to the government. After sorting through these questions, company executives will then be in positions to sit down with counsel to plan implementation and, perhaps certification or some other form of external verification, at selected business units or sites. In most cases, these decisions will hinge on the reasons for implementation of the standards.³²⁸

In both the international environmental management standards and enforcement contexts, it is essential that the organization make a genuine commitment to legal compli-

criteria "should bear some relation to the nature and size of the business under consideration."). The EPA similarly recognizes that "a variety of compliance management programs may develop under the due diligence criteria." Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,708. Accordingly, the term "due diligence," is interpreted to encompass the regulated entity's systematic efforts, appropriate to the size and nature of its business" *Id.* at 66,708. See generally KUHRE *supra* note 128, at 21 ("The depth or complexity of the environmental management systems needed will depend on many things. Location, type and complexity of operation, level and number of environmental impacts and operating conditions are a few variables that determine the depth needed.").

328. If, for example, the key stakeholder for implementation is the Federal Government, third-party verification may be necessary to secure any significant regulatory relief. By contrast, if the stakeholder is an existing customer, demand for formal registration or some other type of external verification may not be as great.

ance and to continual improvement of the EMS.³²⁹ Company management at the highest level must pledge to pursue these goals.³³⁰ The organization must have a firm policy in place

329. The introductory section of ISO 14001 states that the success of the system depends on commitment from all levels and functions, especially from top management. See ISO 14001 § 0.1. See also ISO 14001 §§ 4.2 (“Top Management shall define the organization’s environmental policy”), 4.4.1 (“The organization’s top management shall appoint: a) specific management representative(s) who, irrespective of other responsibilities, shall have defined roles, responsibilities and authority for b) ensuring that environmental management system requirements are established, implemented and maintained in accordance with this International Standard; c) reporting on the performance of the environmental management system to top management for review and as a basis for improvement of the environmental management system.”), and A.2 (“The [environmental] . . . policy should. . . reflect the commitment of top management to compliance with applicable laws and continual improvement.”). Guidance concerning this facet of the specification is offered at ISO 14004 § 4.1.2. The EPA and DOJ place a similar emphasis on commitment at all levels of the organization, including top management. See generally FACTORS, *supra* note 42, at Section II.D.1 (In evaluating the pervasiveness of noncompliance, the Department will take into account the level of employees involved in noncompliance), and Section III. Example 2 (indicating that the likelihood of prosecutorial leniency is not as great where company management makes no attempt to oversee implementation of the compliance program); Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,707 (The EPA Self-Policing Policy will not apply where “corporate officials are consciously involved in or wilfully blind to violations, or conceal or condone noncompliance.”); ORGANIZATIONAL GUIDELINES, *supra* note 6, § 8A1.2 Commentary 3.(k)(2) (In order for the organization to have an effective compliance program, “specific individual(s) within high level personnel of the organization must have been assigned overall responsibility to oversee compliance with [the] standards and procedures [of the organizations compliance program].”). “High-level personnel” are defined in § 8A1.2 Commentary 3.(b) as “individuals who have substantial control over the organization or who have a substantial role in the making of policy within the organization.” *Id.* Compare Draft Environmental Organizational Guidelines, *supra* note 108, § 9.D1.1(a)(1) (“In the day-to-day operation of the organization, line managers, including the executive and operating officers at all levels, direct their attention, through the management mechanisms utilized throughout the organization . . . to measuring, maintaining and improving the organization’s compliance with environmental laws and regulation.”).

330. See generally Glenn E. Shaffer, *A Printer’s Approach to ISO 14001*, INT’L ENVTL. SYS. UPDATE, Dec. 1996, at 14 (“The most important ingredient in Sullivan Graphics’ EMS is management support”); P.E.J. Green & G. Lafontaine, *Creating an Effective Environmental Management System*, PULP & PAPER CANADA, Sept. 9, 1996, at 42; Polly T. Strife, *ISO’s Strengths and Weaknesses*, ENVTL. F., July - Aug. 1996, at 9; KUHRE *supra* note 128, at 39 (“upper management approval is key to success” of ISO certification), 41 (“A good top manage-

articulating these commitments,³³¹ and the overall program

ment policy, energetically pursued will assure success.”); Bell, *supra* note 122, at 10,680-81; PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT, *supra* note 124, at 79-80, 154; Herbert I. Zinn, *Chickens and Eggs and Carts and Horses: A Case Study in the Development of a Corporate Compliance Program*, C110 ALI-ABA 91, 94 (Mar. 2, 1995); *Sentencing Commission Holds Seminar Geared To Improve Corporate Compliance*, Antitrust & Trade Reg. Daily (BNA) (Sept. 22, 1995); Richard H. Porter, *Corporate Compliance – Implications for Counsel and Corporate Management*, C900 ALI-ABA 121, 124, 126 (Jan. 20, 1994) (describing how the efficacy of corporate compliance programs is contingent upon senior management’s commitment to responsible self-governance); David M. Zornow & Dana H. Freyer, *Corporate Compliance Programs: Implementation Rationale and Methodology*, C900 ALI-ABA 537, 551 (Jan. 20, 1994); GROSKAUFMANIS, *supra* note 124, at §§ 5.06[3], 5.07[1][a]; David J. Hayes & Edward J. Shapiro, *Corporate Compliance Programs under the New Organizational Sentencing Guidelines*, in CORPORATE COUNSEL’S GUIDE TO ENVIRONMENTAL COMPLIANCE AND AUDITS 4.215 (William A. Hancock ed., 1993) (“The best compliance program in the world will not help a company whose high-level personnel (at the corporate or the unit level) participated in, condoned, or willfully ignored the violation.”); Dan K. Webb & Steven F. Molo, *Some Practical Considerations in Developing Effective Compliance Programs: A Framework for Meeting the Requirements of the Sentencing Guidelines*, 71 WASH. U.L.Q. 375, 384, 388-89 (1993); Frank B. Friedman, *Environmental Management for the Future: Environmental Auditing is Not Enough*, 12 CARDOZO L. REV. 1297, 1322 (1991).

331. See generally ISO 14001 §§ 3.9 (defining “environmental policy” as the “statement by the organization of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets”), 4.2. A.2 (“The environmental policy is the driver for implementing and improving the organization’s environmental management system so that it can maintain and potentially improve its environmental performance. The policy should therefore reflect the commitment of top management to compliance with applicable laws and continual improvement”), and guidance concerning policy drafting under the standard offered at ISO 14004 § 4.1.4; ORGANIZATIONAL GUIDELINES, *supra* note 6, § 8A1.2 Commentary 3.(k)(1) (In order for the organization to have an effective compliance program, the “organization must have established compliance standards and procedures to be followed by its employees and other agents that are reasonably capable of reducing the prospect of criminal conduct.”) and (7)(i) (“A larger organization generally should have established written policies defining the standards and procedures to be followed by its employees and other agents.”) (*Compare Draft Environmental Organizational Guidelines, supra* note 108, § 9D1.1(a)(2)); FACTORS, *supra* note 42, at Section II.C. (“Was there a strong institutional policy to comply with all environmental requirements?”) and Section III, Example 1; Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,710 (Due diligence inquiry encompasses “(a) Compliance policies, standards and procedures that identify how employees and agents are to meet the requirements of laws, regulations, permits and other sources of authority for environmental requirements.”).

must be designed to foster better performance. Goal-setting and a sound method for measuring progress are also critical.³³²

Ranking managers must be actively engaged in supervising compliance by the "troops," leading to an atmosphere in which it is appreciated that the hierarchy insists upon attentiveness to applicable legal requirements. Relegating oversight of compliance programs to lower-level staff will not do, though line personnel must also be involved. The compliance effort, just as other components of the EMS, must be supported by appropriate human,³³³ physical (e.g., facilities,

332. See generally ISO 14001 §§ 4.3.2 ("The organization shall establish and maintain a procedure to identify and have access to legal and other requirements to which the organization subscribes, that are applicable to the environmental aspects of its activities, products or services."), 4.3.3 ("When establishing and reviewing its objectives, an organization shall consider . . . legal . . . requirements."), 4.5.1 ("The organization shall establish and maintain a documented procedure for periodically evaluating compliance with relevant environmental legislation and regulations."), A.3.1 ("An organization with no existing environmental management system should, initially, establish its current position with regard to the environment by means of a review. The aim should be to consider all environmental aspects of the organization as a basis for establishing the environmental management system. . . . The review should cover . . . legislative and regulatory requirements . . ." and guidance concerning this aspect of the specification offered) at ISO 14004 § 4.2.3; ORGANIZATIONAL GUIDELINES, *supra* note 6, § 8A1.2 Commentary 3.(k)(1) (In order for the organization to have an effective compliance program, the "organization must have established compliance standards and procedures to be followed by its employees and other agents that are reasonably capable of reducing the prospect of criminal conduct.") and (7)(i) ("The precise actions necessary for an effective program to prevent and detect violations of law will depend upon a number of factors. Among the relevant factors are: (i) . . . [A] larger organization generally should have established written policies defining the standards and procedures to be followed by its employees and other agents.") (Compare DRAFT ENVIRONMENTAL ORGANIZATIONAL GUIDELINES, *supra* note 108, § 9D1.1(a)(2)); FACTORS, *supra* note 42, at Section II.C ("Were there procedures and safeguards to ensure the integrity of any audit conducted?"); Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,710 (Due diligence inquiry encompasses "(a) Compliance policies, standards and procedures that identify how employees and agents are to meet the requirements of laws, regulations, permits and other sources of authority for environmental requirements.").

333. See GRACE H. WEVER, STRATEGIC ENVIRONMENTAL MANAGEMENT 123 (1996); KUHRE *supra* note 128, at 54-55 (suggesting that the organization has reached an adequate level of personnel when it is able not only to put out "fires," but take proactive environmental action).

equipment),³³⁴ and financial resources.³³⁵

As noted above, the organization conveys its commitments through policies, procedures, and standards addressing a variety of "legal" and other obligations.³³⁶ An organization seeking ISO 14001 registration or favorable treatment from a prosecutor should set in motion a process of building, implementing, and regularly revising an oversight scheme specifically tailored to the kinds of issues most likely to be confronted in real life at its facilities. The process should be integrated with the firm's overall compliance strategy and structured towards the compilation of policies and procedures devoted to all applicable legal and other requirements to which it subscribes.³³⁷ Obvious examples of "legal" requirements include federal, state, and local environmental laws and regulations (listed and proposed), ordinances, permits, licenses, and authorizations.³³⁸ Corporate action may also be circumscribed by the terms of other regulatory/governmental commitments, e.g., judicial or administrative orders or consent agreements. Somewhat less conspicuous environmental requirements arise out of mergers and acquisitions agreements, credit agreements, insurance policies,

334. See KUHRE *supra* note 128, at 60 (Information resources should also be taken into account, e.g., chemical and legislative databases, access to agency information, and technical literature).

335. See ISO 14001 § 4.4.1 ("Management shall provide resources essential to the implementation and control of the environmental management system."), and guidance concerning this aspect of the specification at ISO 14004 §§ 0.1 and 4.3.2.1; FACTORS, *supra* note 42, at Section II.C ("Were adequate resources committed to the auditing program and to implementing its recommendations?"). Neither the Organizational Guidelines nor the EPA Self-Policing Policy mention the subject of resources as such, but clearly the organization must commit sufficient resources to satisfy the stated criteria or leniency will not be granted. The Draft Environmental Organizational Guidelines require line managers to ensure the application of resources and mechanisms necessary to carry out environmental compliance. See *supra* note 108, at § 9D1.1(a)(1), as well as, § 9D1.1(a)(3)-(5), and (7).

336. See John F. Cooney et al., *Criminal Enforcement of Environmental Laws: Part III - From Investigation to Sentencing and Beyond*, 25 *Envtl. L. Rep. (Envtl. L. Inst.)* 10600 (Nov. 1995).

337. See *supra* note 332 and ISO 14001 § A.1 (The management system "should enable an organization to . . . identify . . . relevant legislative and regulatory requirements . . .").

338. See ISO 14004 § 4.2.3.

and supply contracts.³³⁹

The design of the EMS system should account for all of the organization's major environmental commitments, not merely its legal ones.³⁴⁰ Additionally, companies striving to exceed "mere compliance" levels should account for voluntary commitments in their EMS strategies as well. Section 4.3.2 of ISO 14001 acknowledges that many firms will undertake to fulfill obligations beyond those required by law, and calls for mechanisms to ensure their identification and accessibility of such obligations. As used in the specification, legal and other requirements are distinct from, but related to, "objectives and targets," with "objectives" consisting of goals the organization sets for itself arising from its environmental policy, and "targets" signifying the detailed performance requirement arising from identified objectives.³⁴¹ Activities,

339. See ISO 14000 ENVIRONMENTAL AUDITING, *supra* note 128, at 10; Bell, *supra* note 122, at 10,681.

340. See generally ISO 14001 § 4.3.2 (requiring organizations to "establish and maintain a procedure to identify and have access to legal, and other requirements to which the organization subscribes, . . . [directly] applicable to the environmental aspects of its activities, products or services.") (Compare ISO 14001 § 4.3.2 with EMAS, Article 3 and Annex I, B.3 (requiring participating companies to maintain a register of "legislative, regulatory and other policy requirements" applicable to its activities), B.S. 7750 § 4.4.1 ("The organization shall establish and maintain procedures to record all legislative regulatory and other policy requirements pertaining to the environmental aspects of its activities, products, and services."), and ISO 9004-1, art. 0.1 (declaring that "in order to be successful, a company must offer products or services that . . . comply with statutory (and other) requirements of society.")), and guidance concerning this aspect of the specification offered at ISO 14004 § 4.2.3; ORGANIZATIONAL GUIDELINES, *supra* note 6, § 8A1.2. Commentary 3.(k)(7) ("An organization's failure to incorporate and follow applicable industry practice or the standards called for by any applicable governmental regulation weighs against a finding of an effective program to prevent and detect violations of law.") (Compare DRAFT ENVIRONMENTAL ORGANIZATIONAL GUIDELINES, *supra* note 108, § 9D1.1(a)(4)(i) (The program must be adequate "to maintain up-to-date, sufficiently detailed understanding of all applicable environmental requirements . . ."); FACTORS, *supra* note 42, at II.C ("Had safeguards beyond those required by existing law been developed an implemented to prevent noncompliance from occurring?"); Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66712 (requiring only that the organization to develop a program to comply with the federal environmental statutes administered by the agency).

341. Compare ISO 14001 § 4.3.2 with §§ 3.7, 3.10, and 4.3.3 ("When establishing and reviewing its objectives, an organization shall consider the legal and

products, and services of the organization could be measured against "other" requirements arising out of, for example:

- agreements with public authorities,³⁴² under, e.g., voluntary initiatives such as the EPA's Natural Gas Star, Climate Wise, Project XL, and the ELP;
- non-regulatory guidelines,³⁴³ e.g., principles developed by the International Chamber of Commerce ("Business Charter for Sustainable Risk"), the Organization for Economic Development ("Guidelines for Multinational Enterprises"), and the Coalition for Environmentally Responsible Economics ("CERES Principles");³⁴⁴
- industry codes of practice,³⁴⁵ e.g., Responsible Care, Coatings Care,³⁴⁶ and other business-business collaborations such as the Global Environmental Management Initiative (TQEM)³⁴⁷ and the Business Council for Sus-

other requirements, its significant environmental aspects, its technological options and its financial, operational and business requirements, and the views of interested parties"). See generally ISO 14000 GUIDE, *supra* note 160, at 107-15.

342. See ISO 14001 § A.3.2.

343. See *id.*

344. See Jennifer Nash & John Ehrenfeld, *Code Green*, 38 ENV'T (Jan. 1996), at 16, 19-36; J. Andy Smith, III, *The CERES Principles: Model for Public Environmental Accountability*, 4 REV. OF EUR. COMMUNITY & INT'L ENVTL. L. 116 (1995).

345. See ISO 14001 § A.3.2.

346. See Stephen Sides, *Coatings Care: Comprehensive Health, Safety, Environmental Program Now Being Unwrapped*, AM. PAINT & COATINGS J., June 10, 1996, at 25.

347. See generally GRACE H. WEVER, STRATEGIC ENVIRONMENTAL MANAGEMENT 207-220 (1996); PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT, *supra* note 124, at 70-72; E. Donald Elliott, *Environmental TQM: Anatomy of a Pollution Control Program that Works!*, 92 MICH. L. REV. 1840 (1994); UNDERSTANDING TOTAL QUALITY ENVIRONMENTAL MANAGEMENT (John T. Wilig ed., 1994); A. BUSHAN & J.C. MACKENZIE, ENVIRONMENTAL LEADERSHIP PLUS TOTAL QUALITY MANAGEMENT EQUALS CONTINUOUS IMPROVEMENT (1994); Barbara A. Boczar, *Toward a Viable Environmental Framework: From Corporate Environmental Management to Regulatory Consensus*, 6 DEPAUL BUS. L.J. 291, 313 (1994); STEVEN J. BENNETT ET AL., CORPORATE REALITIES AND ENVIRONMENTAL TRUTHS 31-53 (1993); GLOBAL ENVIRONMENTAL MANAGEMENT INITIATIVE, TOTAL QUALITY ENVIRONMENTAL MANAGEMENT: THE PRIMER (1993); Richard Welford, *Linking Quality and the Environment, A Strategy for the Implementation of Environmental Management Systems*, 1 BUS. STRATEGY & THE ENV'T, at 25 (1992); Environmental Management Initiative, Proceedings - Corporate Quality/Environmental Management: The First Conference (Jan. 9-10, 1991).

- tainable Development;³⁴⁸
- corporate policies and standards;³⁴⁹
 - other standards, e.g., ISO 9000;³⁵⁰ and B.S. 7750;
 - agreements with lenders and insurers;³⁵¹
 - supplier criteria;³⁵²
 - voluntary partnership agreements with nonprofit organizations and communities, e.g., McDonald's partnership with the Environmental Defense Fund, the Natural Resource Defense Council's recycled paper initiative with Bank of America, Chevron and others, and the Industry Cooperative for Ozone Layer Protection;³⁵³ and
 - prerequisites under various voluntary enforcement initiatives and guidelines, e.g., Cal/EPA's General Policy on Incentives for Self-Evaluation and the guidance on the use of environmental marketing claims developed by the Federal Trade Commission.

Compliance with such requirements evinces a firm's commit-

348. See generally Jennifer Nash & John Ehrenfeld, *Code Green*, *Env't*, Jan. - Feb. 1996, at 16. Various voluntary codes and declarations are set forth on pages 174-188 of volume four of the Review of European Community & International Environmental Law.

349. See 14010s Environmental Auditing, *supra* note 128, at 9.

350. See Bell, *supra* note 122, at 10,679; HALL & TOCKMAN, *supra* note 204.

351. See sources referenced *supra* Part II for a description of some of the ways leading banks and insurance firms are striving to reduce environmental risks.

352. See Sergio Mazza, *Meeting the Challenge of Standardization*, 68 MACHINE DESIGN 178 (1996).

353. A major study of 100 senior Environment, Health and Safety executives and experts found that alliances between major corporations and environmental groups are growing, and provide significant benefits for participants. LETICIA ORTI, THE CONFERENCE BOARD, REPORT NO. 1134-95-RR, *Environmental Alliances: Critical Factors for Success: A Research Report* (1995). Further discussion of the benefits of environmental partnerships and suggestions on how to form successful alliances may be found in FREDERICK J. LONG & MATTHEW B. ARNOLD, *THE POWER OF ENVIRONMENTAL PARTNERSHIPS* (1995); FRANCES CAIRNCROSS, *GREEN, INC.* 180-181 (1995); PRESIDENT'S COUNCIL ON SUSTAINABLE DEVELOPMENT, *PARTNERSHIPS TO PROGRESS* (1993); STEVEN J. BENNETT ET AL., *CORPORATE REALITIES & ENVIRONMENTAL TRUTHS: STRATEGIES FOR LEADING YOUR BUSINESS IN THE ENVIRONMENTAL ERA* 136-142 (1993); Thomas N. Gladwin, *The Meaning of Greening: A Plea for Organizational Theory, in ENVIRONMENTAL STRATEGIES FOR INDUSTRY: INTERNATIONAL PERSPECTIVES ON RESEARCH NEEDS AND POLICY IMPLICATIONS* 46 (Kurt Fischer & Johan Schot eds., 1993); FRANCES CAIRNCROSS, *COSTING THE EARTH* 288 (1991).

ment to pursue continual improvement³⁵⁴ and thus they should be integrated with the organization's procedures to maintain compliance with applicable legal obligations as described above.³⁵⁵

Executives of the company, aided by counsel, should develop a sufficient grounding in the range of issues needed to compile a set of procedures and other materials concerning the organization's obligations and objectives.³⁵⁶ At a minimum, each site should maintain a list of all requirements and retain access to a complete set of applicable laws, regulations, policies and other requirements.³⁵⁷ Companies should also maintain materials summarizing site-specific requirements at corporate headquarters. Firm policies should be widely circulated throughout the organization and made available to the public.³⁵⁸ A solid training program and, where appropri-

354. Kenneth D. Woodrow, *The Proposed Federal Environmental Sentencing Guidelines: A Model for Corporate Environmental Compliance Programs*, 25 *Env't Rep. (BNA)* 325 (June 17, 1994).

355. See *supra* Part II.F and accompanying notes. The company's procedures should also cross-reference ISO 14001. See KUHRE *supra* note 128, at 24.

356. See generally KUHRE *supra* note 128, at 39 ("Procedures for identification, assembly, and analysis of impacts and regulations into the organization's systems are needed . . . it is a good idea to actually obtain the regulations and impacts and assemble them into . . . binders."); PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT, *supra* note 124, at 81 ("Policies should be broad-based, outlining the key aspects of an environmental program and establishing the company's commitment to that program. Means of implementing policies should be described separately in procedures and guidelines. Procedures should be mandatory methods of implementing policies. Guidelines should be written when implementation of a policy does not lend itself to specific procedures or when a procedure itself needs explanation.") See *id.* at 155-57. Corporate procedures may address organization, assessment of environmental impacts, responses to proposed and newly enacted environmental laws and regulations, monthly environmental reporting, implementation, reporting, and employee awareness and training. *Id.* at 81. See also Bell, *supra* note 122, at 10,681; Dan K. Webb & Steven F. Molo, *Some Practical Considerations in Developing Effective Compliance Programs: A Framework for Meeting the Requirements of the Sentencing Guidelines*, 71 *WASH. U.L.Q.* 375, 386 (1993).

357. See ISO 14004 § 4.2.3.

358. Public outreach is explored further *infra* note 378. See generally Nancy Evans Stuckwisch, *ISO 14001 and the Need To Communicate with Shareholders*, *ENVTL. QUALITY MGMT.*, Winter 1996 at 81; KUHRE, *supra* note 128, at 48; GLOBAL ENVIRONMENTAL MANAGEMENT INITIATIVE, *ISO 14001 ENVIRONMENTAL MANAGEMENT SYSTEM SELF-ASSESSMENT CHECKLIST 41* (Mar. 1996).

ate, publications should be developed to convey the compliance message in each relevant area or discipline in a way that can be understood and acted upon by company officers, directors, and employees.³⁵⁹ Training must be provided for all employees and contractor personnel so that they understand the impact of their actions on the environment, and their responsibilities for minimizing those impacts under the organization's procedures.³⁶⁰ The organization should pre-

359. See generally ISO 14001 § 4.4.2 ("The organization shall identify training needs. It shall require that all personnel whose work may create a significant impact upon the environment, have received appropriate training. It shall establish and maintain procedures to make its employees or members at each relevant function and level aware of: a) the importance of conformance with the environmental policy and procedures and with the requirements of the environmental management system; b) the significant environmental impacts, actual or potential, of their work activities and the environmental benefits of improved personal performance; c) their roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirements of the environmental management system, including emergency preparedness and response requirements; d) the potential consequences of departure from specified operating procedures. Personnel performing the tasks which can cause significant environmental impacts shall be competent on the basis of appropriate education, training and/or experience.") and guidance on training under the specification offered at ISO 14004 § 4.3.2.5; ORGANIZATIONAL GUIDELINES, *supra* note 6, § 8A1.2 Commentary 3.(k)(4) (In order for the organization to have an effective program, it must have taken steps to communicate effectively its standards and procedures to all employees and other agents, e.g., by requiring participation in training programs or by disseminating publications that explain in a practical manner what is required.") (Compare DRAFT ENVIRONMENTAL ORGANIZATIONAL GUIDELINES, *supra* note 108, § 9D1.1(a)(4)(ii)); FACTORS, *supra* note 42, Section III (The significance of employee training can be seen by contrasting the first and second hypothetical); Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66711 (Due diligence inquiry encompasses "(d) Efforts to communicate the regulated entity's standards and procedures to all employees and other agents.").

360. See Jayne Pilot, *Insure. (Part 2) (The Three I's of ISO 14001 - Identify, Insure, Improve.)*, CANADIAN PAPERMAKER, Oct. 1, 1996, at 33; GRACE H. WEVER, STRATEGIC ENVIRONMENTAL MANAGEMENT 117 (1996); ISO 14000 GUIDE, *supra* note 160, at 119-24; KUHRE *supra* note 128, at 60-63; Bell, *supra* note 122, at 10681; PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT, *supra* note 124, at 123-24; Colin Ryall & Tim Pinder, *Training for Environmental Management*, GREENER MGMT. INT'L, Apr. 1994, at 24; Kenneth D. Woodrow, *The Proposed Federal Environmental Sentencing Guidelines: A Model for Corporate Environmental Compliance Programs*, 25 Env't Rep. (BNA) (June 17, 1994); James T. Banks, *Corporate Environmental Programs: Are We Seeing an Evolution in Federal Policy*, C964 ALI-ABA 467, 484 (Oct. 20, 1994); GROSKAUFMANIS, *supra*

pare training procedures covering environmental impacts, legal and other obligations, and assessment of employee performance. Logs should also be kept to document training at all levels of the organization.³⁶¹ As with other aspects of the EMS, the training program must be continually reevaluated and updated to meet changing business expectations and shifting legal requirements.³⁶²

A sound program will also clearly define the accountability and responsibilities of relevant personnel, especially in areas such as reporting and emergency preparedness and response. Responsibilities should be assigned judiciously, so that employees with a "propensity" for wrongdoing are precluded from rising to a position of substantial discretionary authority in the organization.³⁶³ The organization should

note 124, at § 5.06[2]; David J. Hayes & Edward J. Shapiro, *Corporate Compliance Programs under the New Organizational Sentencing Guidelines*, in CORPORATE COUNSEL'S GUIDE TO ENVIRONMENTAL COMPLIANCE AND AUDITS 4.216 (William A. Hancock ed., 1993); Dan K. Webb & Steven F. Molo, *Some Practical Considerations in Developing Effective Compliance Programs: A Framework for Meeting the Requirements of the Sentencing Guidelines*, 71 WASH. U.L.Q. 375, 394 (1993).

361. See Kenneth D. Woodrow, *The Proposed Federal Environmental Sentencing Guidelines: A Model for Corporate Environmental Compliance Programs*, 25 Env't Rep. (BNA) 325 (June 17, 1994).

362. See KUHRE *supra* note 128, at 60; David M. Zornow & Dana H. Freyer, *Corporate Compliance Programs: Implementation Rationale and Methodology*, C900 ALI-ABA 537, 554 (Jan. 20, 1994).

363. See generally ISO 14001 §§ 4.3.3 ("The organization shall establish and maintain documented environmental objectives and targets, at each relevant function and level within the organization."), 4.3.4 ("The organization shall establish and maintain (a) program(s) for achieving its objectives and targets. It shall include: a) designation of responsibility for achieving objectives and targets at each relevant function and level of the organization . . ."), 4.4.1 ("Roles, responsibility and authorities shall be defined, documented and communicated in order to facilitate effective environmental management."), 4.4.2(c) (The organization "shall establish and maintain procedures to make its employees or members at each relevant function and level aware of . . . their roles and responsibilities"), and guidance concerning this aspect of the specification offered at ISO 14004 § 4.3.2.3; Sentencing Guidelines for Organizations, § 8A1.2. Commentary 3.(k)(2) ("Specific individual(s) within high-level personnel of the organization must have been assigned overall responsibility to oversee compliance with such standards and procedures.") and (k)(3) (In order for the organization to have an effective program, it must have "used due care not to delegate substantial discretionary authority to individuals whom the organization knew, or should have known through the exercise of due diligence, had a propensity to

give at least one management representative the authority to ensure implementation of the EMS.³⁶⁴ Responsibilities and authorities for the rest of the employees in the organization should also be clearly spelled out.³⁶⁵ There must be a tough disciplinary structure to mete out sufficient punishment to offenders, as well as to penalize supervisors and upper management who are not vigilant enough. Environmental compliance must be incorporated into the standards by which all personnel are evaluated. The organization may also find it useful to implement rewards,³⁶⁶ recognition, and other

engage in illegal activities.”) (*compare Draft Environmental Organizational Guidelines, supra* note 108, § 9D1.1(a)(3)(v) (“The organization . . . has . . . the systems that are necessary for: (v) redundant, independent checks on the status of compliance, particularly in those operations where the organization knows, or has reason to believe, that employees may have, in the past, concealed non-compliance through falsification or other means, and in those operations, facilities or processes where the organization reasonably believes such potential exists.”); FACTORS, Section III, Example 2 (indicating that the likelihood of prosecutorial leniency is not as great where company makes no effort to impress upon employees the significance of the compliance program); Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,710 (Due diligence inquiry encompasses “(b) Assignment of overall responsibility for overseeing compliance with policies, standards and procedures, and assignment of specific responsibility for assuring compliance at each facility or operation.”).

364. See KUHRE *supra* note 128, at 52.

365. *Id.* at 52-54; see Bell, *supra* note 122, at 10681; PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT, *supra* note 124, at 80-83, 154 (illustrating how to delineate and communicate duties and responsibilities); Herbert I. Zinn, *Chickens and Eggs and Carts and Horses: A Case Study in the Development of a Corporate Compliance Program*, C110 ALI-ABA 91, 98-99 (Mar. 2, 1995) (at Arizona Public Service Company, employees each manager is accountable for developing strategies with his/her staff to make the compliance program work in his/her area); Richard H. Porter, *Corporate Compliance - Implications for Counsel and Corporate Management*, C900 ALI-ABA 121, 125 (Jan. 20, 1994) (“Corporate compliance must play a role in annual evaluations” as must “[s]anctions and employee discipline. . . .”); James T. Banks, *Corporate Environmental Programs: Are We Seeing an Evolution in Federal Policy*, C964 ALI-ABA 467, 477-78 (Oct. 20, 1994).

366. The program should be designed to provide positive as well as negative recognition. Performance evaluations should encompass environmental protection. See KUHRE *supra* note 128, at 65-66; David M. Zornow & Dana H. Freyer, *Corporate Compliance Programs: Implementation Rationale and Methodology*, C900 ALI-ABA 537, 553 (Jan. 20, 1994); James T. Banks, *Corporate Environmental Programs: Are We Seeing an Evolution in Federal Policy*, C964 ALI-ABA 467, 486-87 (Oct. 20, 1994); Kenneth D. Woodrow, *The Proposed Federal*

measures to motivate compliance efforts.³⁶⁷

Many firms will probably find it useful to draft a manual addressing attendant issues and problems.³⁶⁸ The manual should cover applicable requirements and include descriptions and copies of relevant federal statutes and regulations. Requirements of interest to a particular facility, e.g., laws pertaining to facilities in a particular state or country, as well

Environmental Sentencing Guidelines: A Model for Corporate Environmental Compliance Programs, 25 Env't Rep. (BNA) 325 (June 17, 1994); GROSKAUFMANIS, *supra* note 124, at § 5.07[2]; David J. Hayes & Edward J. Shapiro, *Corporate Compliance Programs under the New Organizational Sentencing Guidelines*, in CORPORATE COUNSEL'S GUIDE TO ENVIRONMENTAL COMPLIANCE AND AUDITS 4.217 (William A. Hancock ed., 1993); Dan K. Webb & Steven F. Molo, *Some Practical Considerations in Developing Effective Compliance Programs: A Framework for Meeting the Requirements of the Sentencing Guidelines*, 71 WASH. U.L.Q. 375, 393 (1993).

367. See generally ISO 14001 § 4.4.2(d) (The organization . . . shall establish and maintain procedures to make its employees or members at each relevant function and level aware of . . . the potential consequences of departure from specified operating procedures.) and guidance concerning employee accountability and recognition offered at ISO 14004 § 4.3.2.3 – 4.3.2.4; ORGANIZATIONAL GUIDELINES, *supra* note 6, at § 8A1.2 Commentary 3.(k)(6) (In order for the organization to have an effective program, its compliance “standards must have been consistently enforced through appropriate disciplinary mechanisms, including, as appropriate, discipline of individuals responsible for the failure to detect an offense.”) (Compare DRAFT ENVIRONMENTAL ORGANIZATIONAL GUIDELINES, *supra* note 108, § 9D1.1(a)(5) (concerning incentives) and (6) (concerning disciplinary procedures)); Factors, *supra* note 42, at Section II.C (“Was environmental compliance a standard by which employee and corporate departmental performance was judged?”), Section II.D.2 (“Effective internal disciplinary action is crucial to any compliance program. The attorney for the Department should consider whether there was an effective system of discipline for employees who violated company environmental compliance policies. Did the disciplinary system establish an awareness in other employees that unlawful conduct would not be condoned?”), and Section III, Example 1; Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,711 (Due diligence inquiry encompasses “(e) Appropriate incentives to managers and employees to perform in accordance with the compliance policies, standards and procedures, including consistent enforcement through appropriate disciplinary mechanisms.”).

368. See David M. Zornow & Dana H. Freyer, *Corporate Compliance Programs: Implementation Rationale and Methodology*, C900 ALI-ABA 537, 552-53 (Jan. 20, 1994); Kenneth D. Woodrow, *The Proposed Federal Environmental Sentencing Guidelines: A Model for Corporate Environmental Compliance Programs*, 25 Env't Rep. (BNA) 325 (June 17, 1994); James W. Moorman & Lawrence S. Kirsch, *Environmental Compliance Assessments: Why Do Them, How To Do Them, And How Not to Do Them*, 26 WAKE FOREST L. REV. 97, 101 (1991).

as agreements pertaining to a particular facility, could be referenced in separate inserts. New laws, regulations, agreements and other events could be described in bulletins (with appropriate guidance for compliance and filing) or covered in seminars for management and line personnel. All materials should be regularly reviewed and updated so that new laws, regulations, agreements and other events are incorporated in the organization's policies and procedures on a timely basis.³⁶⁹ Such materials should suffice to address the concerns of the EMS auditor seeking to verify conformance to ISO 14001, whereas the process of producing the manual or workbook should help the company respond to the question most likely to be on the mind of an Assistant U.S. Attorney whose grand jury or whistleblower has developed evidence unfavorable to the company in the scenario our program must be designed to address: What did the company try to do to prevent this? Most important, however, is that the organization follow through on its commitments.³⁷⁰ The company must have real policies, standards and procedures to encourage compliance which actually guide employee behavior, not just a pretty book on the shelf; the commitment to compliance and continual improvement of environmental performance should permeate the organization and be an integral part of operations.³⁷¹

369. See ISO 14001 §§ A.1 (The management system "should enable an organization to . . . (g) be capable of adapting to changing circumstances . . .") and A.6 ("Management review should include (c) the continuing suitability of the environmental management system in relation to changing conditions and information . . .").

370. The Assistant U.S. Attorney or DOJ prosecutor will carefully evaluate the diligence with which the program is actually pursued and kept up-to-date.

371. See generally ISO 14001 §§ 4.3.2 (requiring organizations to "establish and maintain a procedure to identify and have access to legal, and other requirements to which the organization subscribes, [directly] applicable to the environmental aspects of its activities, products or services."), A.1 ("The system [shall] enable an organization to: . . . (c) identify the relevant legislative and regulatory requirements."); Organizational Guidelines, *supra* note 6, § 8A1.2 Commentary 3.(k) (*Compare* DRAFT ENVIRONMENTAL ORGANIZATIONAL GUIDELINES, *supra* note 108, § 9D1.1(a)); FACTORS, *supra* note 42, at Section II.C ("Particular consideration should be given to whether the compliance or audit program includes sufficient measures to identify and prevent future noncompliance . . ."), Section II.D.1 ("Pervasive noncompliance may indicate systemic or

The organization must also implement auditing,³⁷² monitoring³⁷³ and reporting³⁷⁴ systems such that it could be ex-

repeated participation in or condonation of criminal behavior. It may also indicate the lack of a meaningful compliance program. In evaluating this factor, the attorney for the Department should consider, among other things, the number and level of employees participating in the unlawful activities and the obviousness, seriousness, duration, history, and frequency of noncompliance.⁷⁹), and Section III, Example 2 (indicating that the likelihood of prosecutorial leniency is not as great where compliance program is nothing more than a collection of paper); Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,712.

372. Concerning auditing, see generally Gregory P. Johnson, ISO 14000 EMS AUDIT HANDBOOK (1997); David J. Hayes, *The Business Risk Audit*, THE ENVTL. FORUM, 19 (Nov. - Dec. 1996); ISO 14000 GUIDE, *supra* note 160, at 139-49; KUHRE, *supra* note 128, at 41-42, 67-75; Bell, *supra* note 122, at 10,681; PRACTICAL GUIDE TO ENVIRONMENTAL MANAGEMENT, *supra* note 124, at 161-64; Kenneth D. Woodrow, *The Proposed Federal Environmental Sentencing Guidelines: A Model for Corporate Environmental Compliance Programs*, 25 Env't Rep. (BNA) 325 (June 17, 1994); GROSKAUFMANIS, *supra* note 124, at § 5.07[1][b]; James T. Banks, *Corporate Environmental Programs: Are We Seeing an Evolution in Federal Policy*, C964 ALI-ABA 467, 481-82 (Oct. 20, 1994); David J. Hayes & Edward J. Shapiro, *Corporate Compliance Programs under the New Organizational Sentencing Guidelines*, in CORPORATE COUNSEL'S GUIDE TO ENVIRONMENTAL COMPLIANCE AND AUDITS 4.216 (William A. Hancock ed., 1993); Dan K. Webb & Steven F. Molo, *Some Practical Considerations in Developing Effective Compliance Programs: A Framework for Meeting the Requirements of the Sentencing Guidelines*, 71 WASH. U.L.Q. 375, 395 (1993); James W. Moorman & Lawrence S. Kirsch, *Environmental Compliance Assessments: Why Do Them, How To Do Them, And How Not to Do Them*, 26 WAKE FOREST L. REV. 97 (1991).

373. Concerning monitoring, see generally GRACE H. WEVER, STRATEGIC ENVIRONMENTAL MANAGEMENT 155 (1996); ISO 14000 GUIDE, *supra* note 160, at 130-36; Kenneth D. Woodrow, *The Proposed Federal Environmental Sentencing Guidelines: A Model for Corporate Environmental Compliance Programs*, 25 Env't Rep. (BNA) 325 (June 17, 1994); James T. Banks, *Corporate Environmental Programs: Are We Seeing an Evolution in Federal Policy*, C964 ALI-ABA 467, 481-83 (Oct. 20, 1994); Dan K. Webb & Steven F. Molo, *Some Practical Considerations in Developing Effective Compliance Programs: A Framework for Meeting the Requirements of the Sentencing Guidelines*, 71 WASH. U.L.Q. 375, 395 (1993).

374. Concerning reporting, see generally David M. Zornow & Dana H. Freyer, *Corporate Compliance Programs: Implementation Rationale and Methodology*, C900 ALI-ABA 537, 553 (Jan. 20, 1994); James T. Banks, *Corporate Environmental Programs: Are We Seeing an Evolution in Federal Policy*, C964 ALI-ABA 467, 481-84 (Oct. 20, 1994); Kenneth D. Woodrow, *The Proposed Federal Environmental Sentencing Guidelines: A Model for Corporate Environmental Compliance Programs*, 25 Env't Rep. (BNA) 325 (June 17, 1994); Dan K. Webb & Steven F. Molo, *Some Practical Considerations in Developing Effective*

pected that criminal conduct would not go undetected, and such that an organizational culture or "honor code" would develop to turn in any offenders. A mechanism to encourage "whistleblowers" (employees who inform regulatory or law enforcement agencies of alleged violations) and to preserve their confidentiality will often be desirable.³⁷⁵ Firms should make provision for "postmortem" changes to the compliance program after an offense is uncovered to take account of its failures and to maximize prevention of further similar offenses.³⁷⁶ As Christopher Bell observed, "[t]op management

Compliance Programs: A Framework for Meeting the Requirements of the Sentencing Guidelines, 71 WASH. U.L.Q. 375, 392-93 (1993).

375. See generally ISO 14001 § 4.5 and guidance concerning these subjects offered at ISO 14004 § 4.4; ORGANIZATIONAL GUIDELINES, *supra* note 6, § 8A1.2 Commentary 3.(k)(5) (In order for the organization to have an effective compliance program, the "organization must have taken reasonable steps to achieve compliance with its standards, e.g., by utilizing monitoring and auditing systems reasonably designed to detect criminal conduct by its employees and other agents and by having in place and publicizing a reporting system whereby employees and other agents could report criminal conduct by others within the organization without fear of retribution.") (*Compare* DRAFT ENVIRONMENTAL ORGANIZATIONAL GUIDELINES, *supra* note 108, § 9D1.1(a)(1) (requiring line managers to routinely review environmental monitoring and reports, and direct the resolution of identified compliance issues), and (a)(3)); FACTORS, *supra* note 42, at Section II.C ("Were there regular procedures, including internal or external compliance and management audits, to evaluate, detect, prevent and remedy circumstances like those that led to the noncompliance? Were there procedures and safeguards to ensure the integrity of any audit conducted? Did the audit evaluate all sources of pollution (i.e. all media), including the possibility of cross-media transfers of pollutants? Were the auditor's recommendations implemented in a timely fashion?") and Section III (The significance of auditing, monitoring and reporting may be gleaned from a comparison of the hypotheticals); Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66,710-11 (Due diligence inquiry encompasses "(c) Mechanisms for systematically assuring that compliance policies, standards and procedures are being carried out, including monitoring and auditing systems reasonably designed to detect and correct violations, periodic evaluation of the overall performance of the compliance management system, and a means for employees or agents to report violations of environmental requirements without fear of retaliation.").

376. See generally ISO 14001 §§ 4.5.2, 4.6 (The organization's top management shall, at intervals that it determines, review the adequacy of the environmental management system, to ensure its continuing suitability, adequacy and effectiveness.), A.5.2 ("In establishing and maintaining procedures for investigating and correcting non-conformance, the organization should include these basic elements: a) identifying the cause of the non-conformance; b) identifying

must periodically review the environmental management system to ensure its continuing adequacy and effectiveness.³⁷⁷ In addition, the organization should establish and maintain communications with the surrounding community

and implementing the necessary corrective action; c) implementing or modifying controls necessary to avoid repetition of the non-conformance; d) recording any changes in written procedures resulting from the corrective action”), and guidance on such aspects of the specification offered at ISO 14004 § 4.5.3; ORGANIZATIONAL GUIDELINES, *supra* note 6, § 8A1.2 Commentary 3.(k)(7) (In order for the organization to have an effective compliance program, the “organization must have taken all reasonable steps to respond appropriately to the offense and to prevent further similar offenses – including any necessary modifications to its [compliance] program . . .”) and § 8A1.2. Commentary 3.(k)(7)(iii) (“The precise actions necessary for an effective program to prevent and detect violations of law will depend upon a number of factors. Among the relevant factors are: . . . (iii) Prior history of the organization – An organization’s prior history may indicate types of offenses that it should have taken actions to prevent. Recurrence of misconduct similar to that which an organization has previously committed casts doubt on whether it took all reasonable steps to prevent such misconduct.”) (*Compare* Draft Environmental ORGANIZATIONAL GUIDELINES, *supra* note 108, § 9D1.1(a)(7)); FACTORS, *supra* note 42, at Section II.C. (“Were the auditor’s recommendations implemented in a timely fashion?”), Section II.D.3 (the attorney for the Department should consider the “promptness and completeness of any action taken to remove the source of the noncompliance and to lessen the environmental harm resulting from the noncompliance . . .), and Section III. (the hypotheticals indicate that the likelihood of prosecutorial leniency is not as great where company makes no effort to strengthen its compliance procedures after discovery of a violation); Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 60 Fed. Reg. at 66711 (due diligence inquiry encompasses “(f) Procedures for the prompt and appropriate correction of any violations, and any necessary modifications to the regulated entity’s program to prevent future violations.”).

377. See Bell, *supra* note 122, at 10,681. See generally David M. Zornow & Dana H. Freyer, *Corporate Compliance Programs: Implementation Rationale and Methodology*, C900 ALI-ABA 537, 554 (Jan. 20, 1994) (suggesting that the compliance program be reviewed annually to determine whether it is operating properly and to assist the company in updating policies, procedures, and manuals); GROSKAUFMANIS, *supra* note 124, at § 5.07[3]; James T. Banks, *Corporate Environmental Programs: Are We Seeing an Evolution in Federal Policy*, C964 ALI-ABA 467, 487 (Oct. 20, 1994); Colleen C. Murnane, *Criminal Sanctions For Deterrence Are a Needed Weapon, But Self-Initiated Auditing Is Even Better: Keeping the Environment Clean and Responsible Corporate Officers Out of Jail*, 55 OHIO ST. L.J. 1181, 1196 (1994) (“The CEO should always put a good faith effort into the program and be ready to make any corrections or take any remedial measures necessary to fix or prevent problems once the plan has been enacted”); Dan K. Webb & Steven F. Molo, *Some Practical Considerations in Developing Effective Compliance Programs: A Framework for Meeting the Requirements of the Sentencing Guidelines*, 71 WASH. U.L.Q. 375, 395-96 (1993).

and interested groups, as appropriate. Communications with the community may include limited access to information concerning environmental aspects of the organization's operations.³⁷⁸

VI. Summary

In summary, ISO 14001 and the enforcement initiatives described in this Article require the organization to put in place a system containing the following general elements: (i) commitment from everyone at the company, including top management, ranking managers, and line employees, to compliance and continual improvement of environmental performance; (ii) adequate human, physical (e.g., facilities, equipment), and financial resources; (iii) a design which accounts for all of the organization's major environmental commitments, not merely its legal ones; (iv) an institutional policy articulating these commitments; (v) procedures designed to foster compliance and continual improvement; (vi) clear definition and assignment of responsibilities so that employees with a "propensity" for wrongdoing are precluded from rising to a position of substantial discretionary authority in the organization; (vii) training programs and, where appropriate, publications to convey the compliance message in each relevant area or discipline in a way that can be easily understood; (viii) auditing, monitoring, and reporting such

378. See generally ISO 14001 §§ 4.2(f) ("Top Management shall define the organization's environmental policy and ensure that it . . . is available to the public."), 4.4.3 ("The organization shall consider processes for external communication on its significant environmental aspects and record its decision."), and guidance concerning program transparency and communication with the public offered at ISO 14004 § 0.1 ("key principles for managers implementing or enhancing an [EMS] include establish[ing] and maintain[ing] communications with . . . external interested parties); Incentives for Self-Policing: *Discovery, Disclosure, Correction and Prevention of Violations*, 60 Fed. Reg. at 66,711 (The "EPA may require as a condition of penalty mitigation that a description of the regulated entity's due diligence efforts be made publicly available."). Neither the Sentencing Guidelines for Organizations nor the DOJ's FACTORS address matters of transparency or public disclosure (though FACTORS does mention the need for the firm to fulfil its legal reporting obligations in Section III). See also Thomas Flahive, *EMS External Communications Strategies*, INT'L ENVTL. SYS. UPDATE, Oct. 1996, at 21.

that it could be expected that criminal conduct would not go undetected; (ix) provision for “postmortem” changes to the compliance program after an offense is uncovered to take account of its failures and to maximize prevention of further similar offenses; (x) checks to ensure policies, procedures, and other EMS materials remain complete, well-organized, and up-to-date; and (xi) communication with the surrounding community and interested groups, including limited access to information concerning the environmental aspects of the organization’s operations.

VII. Conclusion

The trend towards criminalizing the complex body of U.S. environmental rules will continue to challenge the ability of American businesses, as well as foreign corporations with business enterprises in the United States, to build good records of what they have done to ensure environmental compliance and to demonstrate why mercy is more appropriate than an extra measure of vengeance. In this regard, companies will more likely be successful if they have factored into the design and implementation of their compliance programs an insightful assessment of how a prosecutor will view the measures taken to anticipate and address specific potential violations. Insofar as compliance auditing will become critical to certification under ISO 14001 and other EMS standards regimes, many companies will have more compelling reasons to evaluate compliance. The compliance program designer must anticipate such questions as: “Can I demonstrate its effectiveness to outsiders?”; “Does the program reflect the unique structure of the organization?”; and “Will it help the company establish a pattern of continual improvement?” If the answer to each of these questions is “Yes,” then the odds are that the program will yield not only EMS certification, but greater prospects of prosecutorial leniency.