

ACKNOWLEDGMENTS

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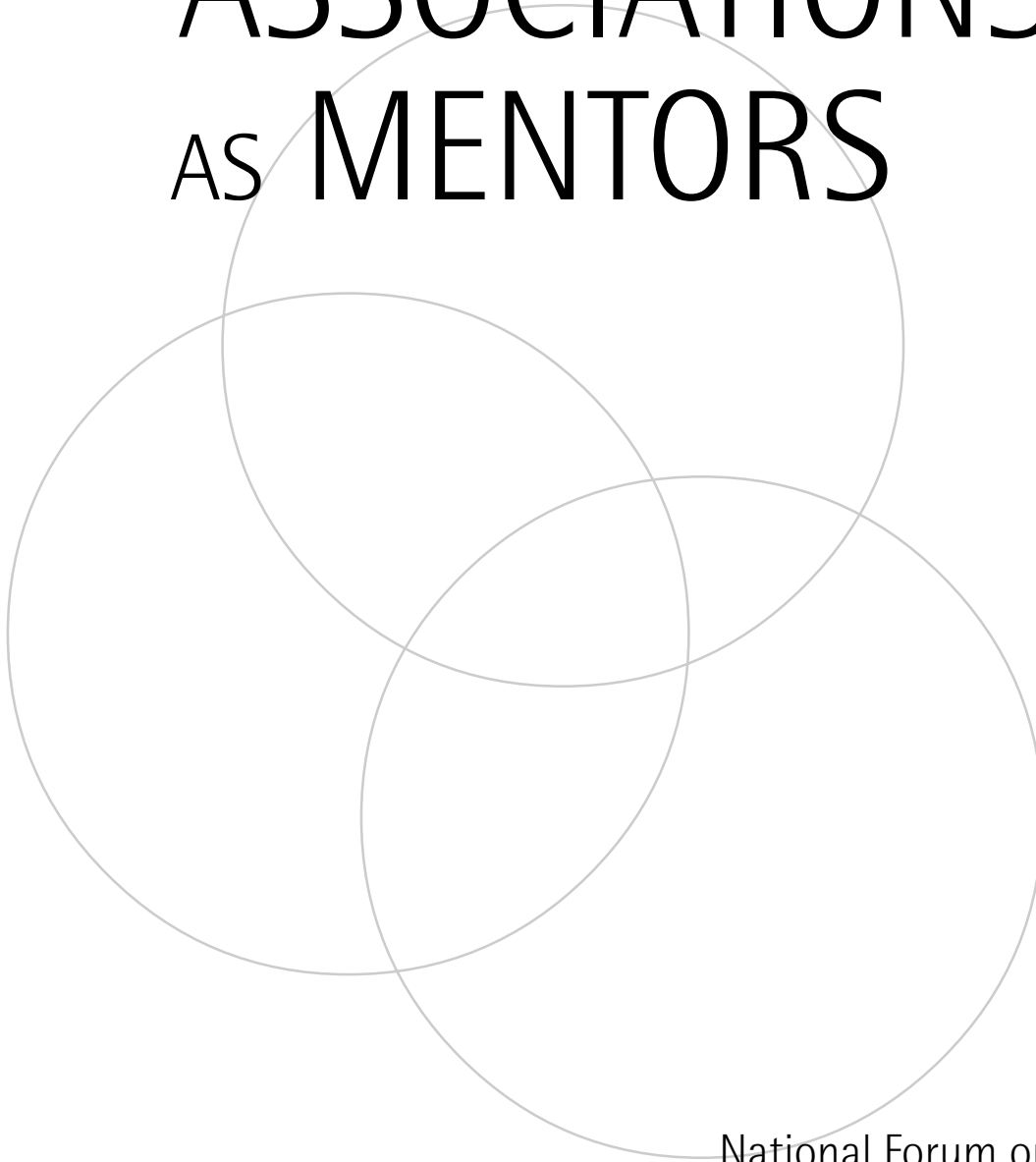


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THE EMERGING ROLE OF ASSOCIATIONS AS MENTORS



National Forum on Defining
Environmental Excellence
March 28, 2000

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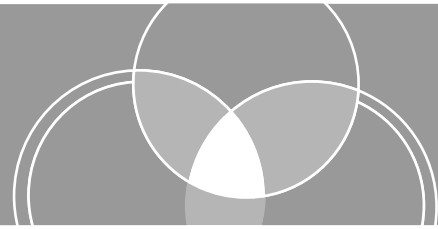
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Mentoring Session 3: Communications and Outreach Strategies

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I. FOREWORD



CODES OF CONDUCT: MOTIVATIONS FOR CHANGE

It was a real pleasure to bring together on March 28th, 2000 in Washington, DC, so many people who are working in trade associations, companies, government agencies, universities, and other organizations trying to change the way American businesses view environmental performance. We are seeing a paradigm shift – slowly but surely. Industry is moving from a focus on achieving compliance with environmental regulation to an approach that treats the environment as a strategic asset. Voluntary participation by business in environmental "codes of conduct" is on the rise and holds great promise for the future. This was the subject of the Institute for Corporate Environmental Mentoring's National Forum on the Emerging Role of Associations as Mentors and a companion workshop held by the Office of Policy, Economics, and Innovation of the U.S. EPA on June 15, 2000.

The motivation for change is clear: pure practicality. High environmental performance drops long-term costs to the company, improves the health and safety of workers, and boosts the reputation of the company and the entire industry. But the reasons for change go beyond the practical; such change puts business in tune with society. People today feel they have a right to know about their environment. Disclosure programs such as the Toxics Release Inventory reflect this trend, as do the more recent

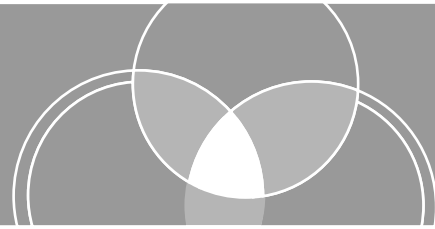
Consumer Confidence Reports on drinking water. The public "right to know" concept is vitally important in how businesses serve their customers.

Trade associations, the main subject of this forum, play a critical role in business and the environment. There are three-legs to any environmental program: regulation, technology, and education/learning. The purpose of NEETF's forum was to elevate awareness of the education/learning leg, which is still somewhat wobbly, and to see how trade associations can support environmental learning. The EPA's Office of Policy, Economics, and Innovation workshop took a closer look at what role industry codes of conduct may play in future public policy.

My thanks to our distinguished speakers, Richard Farrell of U.S. EPA, Robert J. Barkanic of the Pennsylvania Department of Environmental Protection, and to our panelists and presenters for sharing with us the lessons they've learned from hands-on experience in developing industry codes. Thanks also go to Art Gibson, Greg Waldrip, and Joel Makower for moderating the sessions and to our own Walt Tunnessen and Christine Coughlin for managing and hosting the forum.

Kevin Coyle, President
The National Environmental Education & Training Foundation

II. BACKGROUND



Fifteen years ago, few envisioned trade associations as mentors for improved environmental performance. Now with the emergence of environmental codes of conduct and practice, associations are assuming a new role in the field of environmental management as promoters and providers of best management practices. While only a handful of associations have established environmental codes for their members, these programs are among the most comprehensive environmental management programs currently being offered by industry groups and in the private sector.

The emergence of association-based environmental codes is neatly aligned with the growth of voluntary environmental management initiatives and voluntary agreements. These initiatives seek to improve business environmental performance with and beyond legal requirements. The recent expansion of voluntary initiatives reveals a growing demand for additional tools and programs that integrate media based regulatory requirements and reward better environmental performance. It also reflects a shift in the focus of environmental policy setting from public to private sector mechanisms.

THE GROWTH OF VOLUNTARY INITIATIVES

Both public and private sector organizations have launched voluntary initiatives within and across business sectors. Some initiatives challenge companies to reduce emissions and encourage pollution prevention. Other programs promote better management practices within a specific industry in return for recognition, such as the Great Printers Project.¹ Typically, challenge programs are established by public agencies to create opportunities for firms to receive recognition for conservation or for

pollution reducing activities. Companies that choose to participate in these programs typically commit to specific improvements and may withdraw at any time without any repercussions. Examples include the U.S. EPA's 33/50 Initiative, Green Lights, Energy Star, and Climate Wise programs. Challenge programs have been designed for both multiple and specific business sectors.² (See Table 1.)

Another form of public voluntary initiative are negotiated agreements. These programs involve a contract between the government and a business that creates specific obligations that the firm must meet in return for increased flexibility or relief from certain regulatory requirements. The most widely recognized of these programs in the United States is EPA's Project XL.

Voluntary initiatives established by private or non-governmental organizations are generally distinguishable by whether they cut across multiple business sectors or focus on a specific industry sector. Multi-sector approaches include the International Standards Organization's Environmental Management Systems standards (ISO 14000). Single sector approaches focus on a specific business sector, such as the Responsible Care® program in the chemical industry. Environmental codes of conduct and practice, which have been established by industry and trade associations, are business sector-based voluntary initiatives. The development of such initiatives represents an evolution in the role that associations play in environmental issues.

AN EVOLVING ROLE IN ENVIRONMENTAL MANAGEMENT

Trade associations have tremendous reach into the business community. They exist by the thousands, represent

¹ In 1993, the Council of Great Lakes Governors, Environmental Defense and the Printing Industries of America formed a team representing Great Lakes regulatory agency, state and federal technical assistance providers, printers, supplier and customer, and members of labor and environmental groups to: 1) make pollution prevention the primary choice of the Great Lakes states printing industry to meet and exceed its environmental and human health protection responsibilities and, 2) recast its approach to environmental policy by bringing together representatives from government, industry, labor, and environmental groups to focus on the common goals of environmental protection and economic strength. For more information see: <http://www.pneac.org/greatprinters/gppmoreinfo.html>

² For more information on voluntary initiatives, see: Paton, Bruce (1999) *Voluntary Environmental Initiatives And Sustainable Industry*. Paper presented at the 1999 Greening of Industry Network Conference. [Available at: greening99.bschool.unc.edu/best_paper_proceedings.html], Harrison, Kathryn (1998) Talking with the Donkey: Cooperative Approaches to Environmental Protection, *Journal of Industrial Ecology*, 2(3) and United Nations Environmental Programme, (1998) *Voluntary Initiatives*, in *Industry and Environment*, Volume 21 January-June 1998.

Table 1 - Examples of Voluntary Initiatives in the United States

Public Sector Programs		Private Sector Programs	
<i>Challenge Programs</i>	<i>Negotiated</i>	<i>Sector Based</i>	<i>Multi-Sector</i>
33/50 Program (1991) AgStar (1993) Climate Wise (1993) Design for the Environment (1991) Environmental Leadership Program (1994) Energy Star Buildings (1994) Energy Star Homes (1995) Energy Star Office Equipment (1993) Green Lights (1991) Transportation Partners (1995) WasteWise (1992) Water Alliance for Voluntary Efficiency (1992) Voluntary Standards Network (1993)	Project XL (1995) Common Sense Initiative (1994) Star Track (1996)	Coatings Care [®] (1996) Encouraging Environmental Excellence (1992) Great Printers Project (1992) Strategies for Today's Environmental Partnership (1990) Sustainable Forestry Initiative SM (1995) Responsible Care [®] (1988) Responsible Distribution Process SM (1991) Responsible Recycling Code (1993)	ISO 14000 (1995) CERES Principles (1990)

Adapted from Mazurek (1998a), see fn. 11.

business competitors in a single industry, and operate at every political level (international, national, state, and local). Businesses often belong to more than one association, the largest companies in the U.S. frequently have membership in hundreds of different groups.

In most trade associations, environmental issues have been primarily viewed as a government-relations function. As organizations that represent a constituency, most associations' initial involvement in environmental issues focus on activities connected to legislation, rulemaking, and public relations campaigns. However, as many environmental issues moved from the legislative and rulemaking arena to permitting and compliance, the environment has become a member services activity for many associations.

Associations have long offered services to their members, ranging from providing market data to organizing group purchasing plans. Today, most associations offer some form of environmental related services to their members. Most of these services are compliance-oriented and are characterized by activities such as new rule notification, compliance

guides, training materials, workshops, technology reviews, and technical assistance. Many associations have also expanded their member services to include information on more proactive approaches, such as pollution prevention.

In some cases, associations have worked in partnership with public agencies and non-profit organizations to promote pollution prevention and best practices to a targeted industry sector. The Great Printers Project, a joint initiative involving the Printing Industries of America, the Council of Great Lakes Governors, and Environmental Defense represents such an initiative. In Michigan, the Department of Environmental Quality is currently working with state paper and pulp industry groups to promote pollution prevention.³ Such partnership programs reflect the changing role of associations as promoters or distributors of environmental management practices.

In a similar vein, many associations have created or are creating environmental policy statements to guide the conduct of their members. Such policy statements vary in detail and depth by industry group. Some statements, such as the Independent Cosmetic Manufacturers and

³ Similar partnership programs Massachusetts, New Jersey, Texas, and Wisconsin are referenced in Nash, Jennifer (2000), *The Emergence of Trade Associations as Agents of Environmental Performance Improvement*, prepared for the Performance Incentives Division of the U.S. EPA.

Table 2. Associations with Established Environmental Codes of Conduct	
Association	Code name and year established
Chemical Manufacturers Association (CMA) American Petroleum Institute (API) National Association of Chemical Distributors (NACD) American Textile Manufacturers Institute (ATMI) National Association of Chemical Recyclers (NACR) American Forest & Paper Association (AF&PA) National Paint and Coatings Association (NPCA) Responsible Care, [®] 1989	Strategies for Today's Environmental Partnership (STEP), 1990 Responsible Distribution Process SM (RDP), 1991 <ul style="list-style-type: none"> • Encouraging Environmental Excellence (E3), 1992 • Quest for the Best, 1993 Responsible Recycling, 1993 <ul style="list-style-type: none"> • Sustainable Forestry Initiative (SFISM), 1994 • Environmental, Health and Safety Principles, 1995 Coatings Care, [®] 1996
Source: Nash (2000)	

Distributors, are drafted as an ethical pledge. Others, such as the Steel Manufacturers Association's environmental statement, incorporate both a shared vision and a "guiding set of principles" for members to follow.⁴

With the creation of environmental code programs, some associations have significantly expanded the role of their environmental member services. Code programs represent a shift from offering assistance to influencing and shaping the behavior of members, essentially creating environmental management standards.⁵

The role as standard setter is not new to associations. In the area of product development, associations frequently act as the conveners for industry standards and specification. For example, the Aerospace Industry Association has established over 2,800 standards.⁶ The formation of environmental codes builds on this convening role of the association, but also represents a departure. As the term suggests, environmental codes of conduct and practice focus on protocols that affect internal operations and processes rather than product design. They are geared towards changing the organizational culture and behavior of the membership rather than attributes of specific products.

ESTABLISHING ENVIRONMENTAL CODES OF CONDUCT AND PRACTICES

Beginning with the Chemical Manufacturers Association's (CMA)⁷ Responsible Care[®] program in 1998,

a handful of trade associations have launched sector-based voluntary initiatives aimed at defining and establishing best environmental management practices. These environmental code programs represent the most ambitious environmental programs currently offered by associations (see Table 2). While the origins, purpose, elements, and impact of these initiatives differ, the creation and existence of these programs signals an emerging new role for associations as standard setters, promoters, and mentors of environmental management practices.

Although code programs have developed in a variety of industries, all share common elements. All require a participating company pledge to prevent pollution, share information with surrounding communities, and assume a degree of product stewardship.⁸ All code programs require some form of verification ranging from self reporting, audits, and review by association personnel to third party verification of implementation of the code requirements. Code programs also rely on a degree of peer pressure to ensure performance. Codes are generally very flexible regarding implementation of the program, allowing the membership to meet code requirements in their own way.⁹

Code programs also vary in a number of general ways. For example, participation in some programs is a requirement of membership and failure to achieve code program requirements can result in expulsion from the association.¹⁰ In other associations, participation is voluntary.

⁴ For more discussion, see Nash (2000), *ibid.*

⁵ Most association representatives stress that code programs do not set "performance standards" for their membership.

⁶ Nash (2000), *op. cit.*

⁷ The Chemical Manufacturers Association changed its name to the American Chemistry Council in June 2000.

⁸ For more discussion, see Nash (2000), *op. cit.*

⁹ *Ibid.*

Table 3. Comparison of Code Requirements							
	ATMI's E3	CMA's Responsible Care®	NPCA's Coatings Care®	Responsible Distribution SM	SOCMA Responsible Care®	API's STEP	AFPA's SFI SM
Regulatory Compliance Required	Yes	No	No	Yes	No	No	Yes
Demonstrate Continuous Improvement	Yes	Yes	Yes	No	Yes	Yes	Yes
Community Involvement	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Product Stewardship	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Participation mandatory	No	Yes	Yes	Yes	Yes	Yes	Yes
3rd Party Verification	No	Voluntary	No	Yes	Voluntary	No	Voluntary

Adapted from Nash (2000)

Additionally, code programs vary in their emphasis on regulatory compliance with some programs stressing regulatory compliance and others not. Table 3 provides a comparison of these general differences between programmatic requirements.

Considering that membership is voluntary, and associations are constantly struggling to secure and maintain its membership base, why would an association want to place burdens on members or in some cases, expel members, because of a failure to meet code objectives? After all, imposing requirements on the membership runs the risk of offending members who see little value in complying with requirements. Moreover, is it worth the investment if, as some have observed, it is possible for non-members to be "free riders" and reap the benefits of the accomplishments that associations have made in improving the reputation of the industry?¹¹ Regardless of these potential obstacles, association code programs currently boast high participation rates.

For instance, all of the Chemical Manufacturer's Association's (CMA's) 190 members participate in Responsible Care,[®] the American Forest & Paper Association has 167 SFISM participants, and there are 300 participants in American Petroleum Institute's STEP program.

Associations have established codes for a variety of reasons. The CMA's Responsible Care[®] program, the first association-based environmental code of conduct, grew out of a need for a better public information campaign. As a result of accidents in Bhopal, India and Institute, West Virginia, the chemical industry realized it needed to improve the performance of the industry as a whole in order to regain public favor and confidence. To do this, CMA recognized the need to take a more active role in advocating best environmental management practices and changing the culture of the industry. In 1989, CMA adopted the Responsible Care[®] principles, originally created by the Canadian Chemical Producers Association as an effort to improve the performance of the industry

¹⁰ For example, AF&PA, NACD, and SOCMA have expelled members.

¹¹ For more discussion, see Mazurek, Judith (1998a), *The Use of Voluntary Agreement in the United States: An Initial Survey*, Organization for Economic Co-operation and Development Report ENV/EPOC/GEEI(98)27/FINAL. [Available at: www.oecd.org/env/policies/online-eco.htm].

Table 4. Association Budgets & Staff

Association	Operating Budget (1998), Millions of Dollars	Number of Staff Members
American Forest & Paper Association	30	125
American Petroleum Institute	40	200
American Textile Manufacturers Institute	NA	40
Chemical Manufacturers Association	41	300
National Association of Chemical Distributors	1.4	7
National Association of Chemical Recyclers	NA	2
National Paint and Coatings Association	6	40
Synthetic Organic Chemical Manufacturers Association	25	45

Source: Encyclopedia of Associations (1999)

and regain public trust. Since then, CMA's Responsible Care® initiative has evolved to include over 100 individual management practices and guidelines.¹²

Partly because of the cohesiveness of the chemical industry, other chemical industry associations have adopted or created similar code programs. The National Association of Chemical Distributors, the Synthetic Organic Chemical Manufacturers Association, and the National Association of Chemical Recyclers have all created variations of Responsible Care.® Additionally, the American Petroleum Institute's STEP program and National Paint and Coatings Association's Coatings Care® have modeled their code programs after Responsible Care.®

The majority of the associations that are developing code programs include generally sophisticated organizations with large budgets, staff, and membership dominated by larger firms. The exceptions are the small associations in chemical and related industries that have created variations of Responsible Care® (see Table 4). Code programs have also emerged primarily in commodity industries where collective identity is often stronger than the name recognition of individual firms.¹³

Not surprisingly, code programs have emerged primarily in highly regulated industries. Some have suggested that an aggressive regulatory environment may be essential for both the promulgation of codes as well as the

development of measures to observe and sanction firm performance. As noted earlier, code programs also function as a form of member services and are usually designed to facilitate compliance.¹⁴

Associations have also developed codes as a way to differentiate member companies from others and to avoid creation of new regulations or programs created by outside stakeholders. Code programs have also created benefits for associations and their membership and include:

- Better recognition of environmental efforts;
- Better transfer of best management practices;
- Increased communication between members on environmental issues;
- Reduced insurance premiums for participating firms; and
- Procurement preference by customers.

Additionally, for Environmental Health & Safety staff, environmental codes can provide leverage for facilitating better environmental performance at the facility level and establish templates to use during staff changes or operational start-ups.

Code programs also provide a vehicle for industries to establish and promote better practices internationally. Several code programs, such as Responsible Care® and

¹² For more discussion of the origins of Responsible Care, see Nash (2000) and Janet Mazurek (1998b), *The Use of Unilateral Agreements in the United States: The Responsible Care Initiative*, OECD Report ENV/EPOC/GEEI (98)25/Final [Available at: www.oecd.org/env/policies/online-eco.htm].

¹³ For more discussion of aspects of industry sectors with code programs, see Nash (2000), op. cit.

¹⁴ Ibid.

Table 5. Associations Adopting CMA's Responsible Care® Principles

Association of Water Technologies Chemical Industry Council of New Jersey Chemical Council of Missouri Chlorine Chemistry Council Compressed Gas Association, Inc The Chlorine Institute, Inc Florida Manufacturing and Chemical Council, Inc Louisiana Chemical Association Manufacturers and Chemical Industry Council of North Carolina	Michigan Chemical Council Ohio Chemical Council Pennsylvania Chemical Industry Council Texas Chemical Council The Vinyl Institute West Virginia Manufacturers Association, Chemical Industry Committee
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Coatings Care,® are implemented by member companies outside of the United States and have been adopted or adapted by trade associations in other countries. Other U.S. associations as well as non-CMA member companies have also adopted Responsible Care.® (See Table 5.)

FUTURE ROLES FOR ASSOCIATIONS AND CODE PROGRAMS

Businesses are increasingly facing new expectations for environmental performance. Supply chain standards, ISO 14001 certification, reporting initiatives, material declarations, product certifications, EPA's Performance Track opportunities, and other initiatives are shaping the way businesses approach environmental management. These programs represent both challenges and opportunities for associations.

Associations can help their members meet these new expectations through the development of initiatives geared towards improving the environmental performance of their membership. Associations can also play an important role in developing mechanisms and initiatives focused on product stewardship by establishing industry-wide practices. Additionally, code programs may help prepare companies or industries for incentive and flexible permitting programs currently being explored by regulatory agencies.

Although environmental codes of conduct and practices have formed primarily among commodity-based industries, sectors engaged in retail and services are also beginning to consider voluntary initiatives. The Electronic Industry Alliance, for example, is currently developing a Product Ecology Program to facilitate product stewardship. Moreover,

other associations, such as the American Furniture Manufacturers Association, National Association of Metal Finishers, and the International Association of Electronic Recyclers are developing versions of code programs.

At the international level, the United Nations has observed that voluntary codes can benefit society environmentally by widely promoting preventive approaches and economically by reducing indirect and direct pollution costs, increasing energy efficiency and reducing regulatory costs.¹⁵ Yet, while association based codes and voluntary initiatives may hold promise, the true test of such programs comes down to the businesses adopting these codes and incorporating them into their existing management systems. For both policy makers considering a future role of code programs, businesses weighing the investment, and other stakeholders concerned about the environment, code programs will likely be called on to demonstrate their successes in improving the environmental performance of their membership.

To date, many code programs serve as mechanisms for firms to take credit for programs already in place. Indeed, code programs help to formalize and standardize existing practices as well as provide a "brand name" for environmental management. However, there is a growing debate regarding whether code programs truly increase the environmental performance of companies.

Critics argue that because code programs are developed through a consensus process, there is a tendency to appeal to the lowest common denominator. Others have suggested that companies participating in code programs show no difference in environmental performance than non-participating companies.¹⁶ Associations counter that code programs

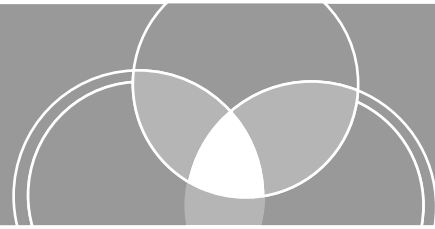
¹⁵ United Nations Environmental Programme (1998), *Voluntary Industry Codes of Conduct for the Environment*, Technical Report No. 40.

have facilitated continuous improvement by member companies and have improved overall environmental performance. However, until all sides can agree upon a common measure of what constitutes environmental performance and excellence, this debate is unlikely to be resolved. Nevertheless, it is clear that many trade associations are

looking at environmental issues through an entirely new lens and are evolving into the role of mentor for environmental performance to their member companies. Furthermore, environmental codes and the voluntary efforts behind them are capturing the attention of a wider audience concerned with encouraging environmental performance for the future.

¹⁶ King, Andrew and Michael Lenox (2000), "Industry Self-Regulation Without Sanctions: The Chemical Industry's Responsible Care Program," *The Academy of Management Journal*, 43(4).

III. THE EMERGING ROLE OF ASSOCIATIONS AS MENTORS: Forum Summary



What role do trade associations play in encouraging their members to become more environmentally responsible? And what roles are foreseeable in the future? These questions were at the heart of NEETF's National Forum on the Emerging Role of Associations as Mentors, held on March 28, 2000 in Washington, DC.

The Forum featured presentations by representatives from associations with major voluntary initiatives and codes of conduct, federal and state government agencies, and academia. Association programs featured at the forum included:

- Coatings Care,[®] National Paint & Coatings Association.
- Certification Program, International Association of Electronic Recyclers.
- EFEC (Effect Furniture's Environmental Culture), American Furniture Manufacturers Association.
- Encouraging Environmental Excellence (E3), American Textile Manufacturers Institute.
- Responsible Care,[®] Chemical Manufacturers Association.
- Responsible Care,[®] Synthetic Organic Chemical Manufacturers Association.
- Sustainable Forestry Initiative,SM American Forest & Paper Association.

WHICH ASSOCIATIONS CHOOSE VOLUNTARY INITIATIVES?

One of the recurring themes of the forum was the motivation of companies and trade associations to develop industry environmental codes, and the benefits of doing so. Development of codes began in the early 1990s after some industries became concerned with their negative public image and recognized new efforts were needed to restore public confidence.

Codes are likely to emerge in heavily regulated industries, where relief from further regulations and the need to demonstrate the industry's good citizenship are strong

incentives to action. Large trade associations - organizations with large budgets and staff, have historically developed codes. These codes are also represented in industries dominated by major corporations that tend to be visible and held responsible for the behavior of other companies in their industry. The exceptions are the small trade associations in the chemical and related industries that have developed codes at the urging of the Chemical Manufacturers Association. Finally, the active participation of a trade association—with its staff, budget, and committees—in developing and monitoring a code makes it more likely that a code will actually be developed.

BENEFITS OF INDUSTRY CODES OF CONDUCT

Codes of conduct and voluntary initiatives are capturing the attention of a wider audience each year from companies that see the benefit of cleaning up both the management structures and reputations of these industry sectors.

Among the benefits of implementing industry codes are:

- Improved environmental performance.
- Cost savings.
- Process efficiency.
- Improved competitiveness.
- A safe clean workplace for employees.
- Enhanced reputation as a responsible corporate citizen.

Gains in reputation and image have many dimensions, particularly for small and mid-sized businesses that see environmental codes as an opportunity for dialogue with state and federal regulators. That, in turn, leads to greater understanding of the industry on the part regulators, and a better reputation for the industry.

IMPLEMENTING INDUSTRY CODES

The Forum examined the design and implementation of industry codes and voluntary initiatives. Some practical points offered at the sessions included:

- **Flexibility and Applicability:** Codes need to

incorporate flexibility and be widely applicable to companies of any size or mix. But one size doesn't fit all, thus there is a need to design a flexible process that will allow members to meet code commitments in their own way, at their own pace.

Companies, particularly small and mid-sized ones, see environmental codes as an opportunity for dialogue with EPA

—Bob Benson, U.S. EPA Office of Policy, Economics and Innovation

- **Supporting a Company's Commitment to Industry Codes:** It is not enough to gain a member's commitment to a code; ongoing maintenance and support for the commitment and for the company's environmental activities are equally important. The American Textile Manufacturers Institute (ATMI) E3 program involves annual reports by members on how well they are meeting goals, an annual environmental conference to help get the word out, with speakers, case studies on EMS, reducing toxics, etc., and recognition of companies that have gone beyond compliance. Chemical Manufacturers Association (CMA) described the extensive efforts made by the trade association — including on-site visits by a Member Relations Executive — to monitor whether Responsible Care® is in place and provide advice when necessary.
- **Helping the Bottom Line:** Cost savings and better management practices are still the most powerful ways of attracting companies and trade associations to develop and adhere to environmental codes. Very few companies come at these voluntary initiatives with no financial incentive in mind. For example, Synthetic Organic Chemical Manufacturers Association (SOCMA) cited: direct economic benefits, including reduced insurance premiums, preferred supplier/customer status, and increased shareholder value as a result of implementing Responsible Care.® Cost savings and better management must, however, go hand in hand with improved public perception to drive it home.
- **Small vs. Large Companies:** Trade associations typically encompass both small and large companies,

which may have very different interests, resources, and levels of commitment to environmental goals. Company size does not necessarily determine performance — some of the best Responsible Care® performers are small companies. It is true, however, that the associations with environmental codes of conduct intact overwhelmingly represent larger companies. Trade associations should build internal mechanisms so that minority views are protected in the design of the code, and to make sure that small players are not "put in a box" by bigger players. Giving participating companies extensive opportunities to review and exchange information is extremely important in designing a code.

- **Legal Issues.** Questions of law are often encountered when developing codes, especially if performance measures are incorporated into the code. CMA's environmental staff and committee engaged its legal staff throughout the development of Responsible Care.® It is important, however, that the lawyers be "green light lawyers" who look for opportunities and incentives for members to participate. Although CMA has had about 10 lawsuits related to Responsible Care,® the association has prevailed on all of them. To avoid anti-trust liability it is important to have lawyers present when a code is being developed. Associations must also keep in mind the degree of market power the members of the association control and how the code program might be perceived as affecting the market. The amount of market share held by member companies vs. non-member companies is often an important determinant of the potential for antitrust liability as a result of trade association codes.
- **Enforcing the Code:** What does a trade association do if its members fail to adhere to the code? The recent move to third party verification and certifica-

Responsible Care has reduced insurance premiums, secured preferred supplier/customer status, and increased shareholder value for our members.

—Chris Hanson, Synthetic Organic Chemical Manufacturer's Association

“Trade associations should build internal mechanisms so that minority views are protected in the design of the code, and to make sure that small players are not ‘put in a box’ by bigger players.”

—Tom Richichi, Beveridge & Diamond PC

tion may reflect the need for accountability, particularly in the absence of sanctions. To date, sanctions, such as fines, use of the public spotlight, suspension, or expulsion, have been relatively rare. Several trade associations mentioned losing some members in recent years because of their codes, but they stressed that they do everything possible to keep members within the association. Trade associations do not make public the individual progress of member companies on environmental issues and most do not make compliance issues a factor for involvement in code programs.

- **The Internet – A New Tool to Facilitate the Use of Industry Codes:** Several presenters described how the Internet can be a boon in communications, outreach, and training efforts. For example, American Furniture Manufacturers Association (AFMA) found that the Internet has solved the problem of obsolescence for AFMA’s Environmental Guide for members. Web-based training can help trade associations and their members meet environmental goals by significantly reduce the training costs associated with environmental/safety requirements. In addition, associations can use the Web to train member companies and employees on code standards. The Web provides a way to automatically track training records, so an association can track overall training compliance by its members.
- With business increasingly migrating to the Internet, where does that leave industry codes and the labor-intensive time they imply? Moreover, how can a trade association ensure that proper instructions go out to users through the entire life cycle of a product when the only contact up and down the supply chain is through the Internet? As several participants noted,

the Internet puts a great deal of pressure on price competition. Trade associations face a challenge in designing initiatives to embrace both traditional and e-commerce companies. However, the Internet also offers correspondingly large opportunities for environmental responsibility in terms of getting information out, making available technical assistance, and disseminating information on industry’s environmental performance.

- **Management and Funding:** Several participants noted that there is no substitute for senior management attention and adequate funding, if companies are to effectively implement an environmental code.

RESULTS OF INDUSTRY CODES

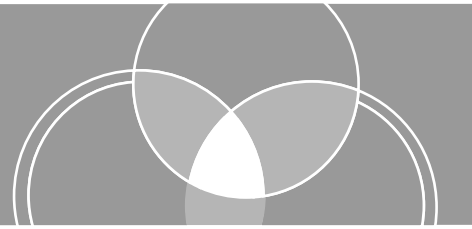
Why certain companies wholeheartedly adopt the environmental goals and attitudes embodied in an industry code and others do not is not entirely clear. But on one point virtually all the panelists, presenters, studies, and anecdotal evidence are in agreement: Code programs can make a big difference in community relations. In a study of plant managers involved in Responsible Care,[®] 90% said Responsible Care[®] resulted in significant or complete change in the company’s interactions with the public. In a similar vein, a Conference Board survey reported that company managers were unanimous in their belief that implementing an environmental management system benefited community relations.

“If a company is operating outside CMA’s Responsible Care Program, that’s bad for everyone.”

—Dick Doyle, CMA

As industry codes evolve and develop, there is some evidence that they will take on more ambitious roles, particularly in the area of environmental stewardship. Although most of the codes function as a way of formalizing and standardizing existing practices, forays into product stewardship could have far-reaching effects through supply and distribution chains. Product stewardship and sustainable development represent both a challenge and an opportunity for enormous progress in the years ahead in United States industry.

IV. INDUSTRY ENVIRONMENTAL CODES OF CONDUCT: Workshop Summary



What do industry environmental codes of conduct mean for public policy? This question was the topic of a small workshop convened by the Performance Incentive Division of the Office of Policy, Economics, and Innovation at the U.S. EPA on June 15, 2000 in Washington DC. Building on NEETF's Forum held in March, the goal of this workshop was to:

- Identify opportunities and challenges for developing effective and credible voluntary environmental codes of conduct.
- Explore issues associated with the design and operation of code programs.
- Stimulate dialogue on benefits and limitations of incorporating codes into government programs.

The workshop provided a timely opportunity for representatives from industry associations, government, NGOs, and international organizations to exchange ideas and information on the public policy implications of industry-based voluntary initiatives in the United States and Europe. Presenters and moderators included:

- William Allmond, Manager, Government Affairs, National Association of Chemical Distributors.
- Tom Carter, Director, Environmental Affairs, American Portland Cement Alliance.
- Dick Doyle, Vice President, Responsible Care®, American Chemistry Council.
- Jennifer Finlay, Director of Business Engagement, World Resource Institute.
- Dan Fiorino, Director, Performance Incentive Division, U.S. EPA.
- Franco Furger, Associate Research Professor, George Mason University.
- Bill Hanson, Director, Design for the Environment, U.S. EPA.
- Peter Machno, Manager, Environmental Management System, National Biosolids Partnership.

- Jennifer Nash, Acting Director, Technology, Business & Environment, Massachusetts Institute of Technology.
- Bruce Paton, Environmental Studies Department, University of California, Santa Cruz.
- Rena Steinzor, Director, Environmental Law Clinic, University of Maryland.
- Joseph Rees, Center for Public Administration, Virginia Polytechnic Institute.
- Michael Virga, Director, Sustainable Forestry Programs, American Forest & Paper Association.
- Laura Williamson, Programme Officer, United Nations Environmental Programme.

MEASURING PERFORMANCE

Measuring the effectiveness of code programs in raising the environmental performance of participating companies was one of the key issues raised at the workshop. Understanding how industry codes are affecting the behavior and performance of the participants is critical for determining what role, if any, these programs can play in future policy and initiatives.

Currently, several associations are using different metrics and indicators for internal benchmarking. However, there is no standard method for comparing performance between businesses participating in code programs and those who are not. Furthermore, many participants felt that publicly available data, such as TRI, compliance records, and OSHA records may not give a complete picture of overall environmental performance and thus make comparisons difficult.

Several participants also noted that understanding the influence of codes on environmental performance requires knowing how well the company is implementing the code. Associations are currently using a variety of methods to verify how their members are putting code elements in place. But because code programs are voluntary, they alone can not achieve the necessary level of environmental protection. Therefore, verification is

important for evaluating both code implementation and performance with regulatory requirements.

Opinions were mixed on the value of third party certifications for participants in industry codes. Several participants felt the processes for third party verification need to be streamlined and made less expensive. Others believe that third party verification helps provide greater assurance of compliance with code elements and other performance indicators.

INCENTIVES FOR DEVELOPING AND IMPLEMENTING CODES

Developing a code program is not a minor task. It requires buy-in from the membership and financial resources for development and administration. While associations with code programs can point to a variety of benefits (See Forum Summary and Forum Presenters sections of this report), associations made up of small businesses or whose members lack sophisticated environmental management staff may be reluctant to develop a major voluntary initiative. It was suggested that EPA might be able to create incentives for code development by providing some or all of the following:

- Technical assistance.
- Recognition.
- Acknowledgement in government procurement.
- Priority attention for new registrations (such as for pesticides).
- Regulatory flexibility.
- Inspection relief.
- Admission into alternative regulatory programs, such as the Performance Track, to companies implementing voluntary codes.

Many participants stressed the need for clear thinking about which benefits firms will value most if steps are taken to encourage development of code programs. For example, several participants questioned the value of recognition programs while others suggested speeding up EPA decision-making would be stronger incentive for firms to cooperate.

Several participants noted that incentives should be designed to encourage strong implementation of the code program by the company. Because code programs are voluntary, a company may choose to make either large or

The 5 "C's" of Effective Code Programs

Commitment: Success is dependent on the commitment of members to sincerely implement the program.

Content: Code programs should have a focus on proactive approaches, development of management tools, and a vision of social responsibility.

Collaboration: Code programs should foster information dissemination, education & training, guidelines, and peer support & networking.

Check: Associations need to check industry awareness, implementation, and results of code programs.

Communicate: Associations must communicate progress to those outside the industry.

—Laura Williamson, United Nations Environmental Programme.

small investment of time and resources to the initiative. Consequently, some companies may use a code program to strengthen their environmental program while others may use it as a "shield."

In general, it was stressed that in designing an industry code (or any other form of voluntary initiative), all parties need to clearly understand the specific benefits they expect to create for participants. There must be a reasonable fit between the requirements and the returns of implementing a code; otherwise there will be little incentive for participation.

Code programs also need to make clear what is required to maintain membership. Several speakers noted that codes should spell out a mechanism for removing firms that fail to follow through on their commitments. Otherwise there will be little distinction between those companies who are strongly committed to the initiative and those who are mostly interested in the label.

EVALUATING CODE PROGRAMS

How should code programs be evaluated to determine what role they could play in current or future government initiatives? Should code programs meet certain criteria in order to qualify for involvement in future government

Evaluation Criteria for Codes

Effectiveness: Area code programs achieving their stated goals?

Economic Efficiency: Are code programs a cost effective way to improve environmental performance?

Equity: Do code programs favor some company characteristics (e.g. size) over others?

Transparency: Are the requirements and administrative decision-making processes transparent to all members?

Openness: How open is the association to working with the public and government?

Effect on Behavior: Has the code program changed behavior?

Effect on Innovation: Does the code program spark or burden innovation?

—Bruce Paton,
University of California, Santa Cruz

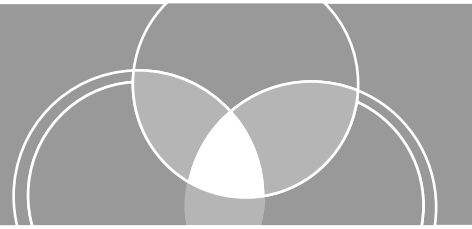
initiatives or environmental protection strategies? To date, there has been little discussion and research in the United States examining these questions. However, a number of evaluation criteria and questions were presented for discussion at the workshop (see box).

In examining code programs, it was suggested that EPA and industry associations will need to recognize differences between code programs that catalyze change in an entire industry and those that recognize only the leaders. Code programs focusing on the whole industry tend to find the highest common denominator that all can meet, whereas programs that recognize leaders can set "stretch" objectives for other companies to follow. However if a whole industry code tries to set very aggressive stretch goals, the program is likely to lose credibility because not all firms will be able to match the leaders (at least in the short term). At a minimum, there needs to be very clear communication about stretch objectives so that the target audiences understand that firms will progress at different rates.

NEXT STEPS

Nearly all of the participants expressed an interest for the dialogue launched at the workshop to continue to foster cooperation in the exchange of information between industry and government. Many participants expressed an interest in continuing the dialogue through future forums and workshops. Several participants expressed an interest in having the EPA facilitate workshops to share best practices and technical information regarding development, implementation, and future roles for code programs. Some participants suggested forming an organization for trade associations to share information on industry codes: what works, how to get started, etc. Additionally, nearly all participants supported the idea of holding further meetings like the EPA Workshop and NEETF Forum.

V. THE EMERGING ROLE OF ASSOCIATIONS AS MENTORS: Forum Presenters



FEDERAL AND STATE PERSPECTIVES

Rick Farrell

Assistant Administrator, Office of Policy,
Economics, and Innovation, U.S. EPA

Rick Farrell opened the meeting by noting the importance of trade associations in EPA's work and the role they can play in helping their members improve their environmental performance. Calling this a fertile area for the future, Farrell cited a few examples:

- The U.S. Semiconductor Industry Association recently agreed to join counterparts in Europe and Asia in a pledge to cut emissions of the most potent greenhouse gases over the next 10 years.
- The American Hospital Association has worked with EPA, its members, and the environmental coalition Healthcare Without Harm to develop an agreement to cut hospital waste in half by 2010 and eliminate mercury from hospital waste streams by 2005.
- The Chemical Manufacturer's Association's (CMA) Responsible Care® is helping to fill in critical data gaps for some of the nation's most toxic and widely-used chemicals, with a goal of creating baseline data for all chemicals.

This trend of trade association involvement is consistent with EPA's emphasis on environmental stewardship. EPA's efforts to encourage environmental stewardship are exemplified by the agency's commitment to develop the Performance Track. The idea of the Performance Track grew out of extensive outreach with stakeholders, which indicated that both industry and EPA need to go beyond compliance. The idea is to reward excellence by top performing organizations and create incentives to motivate others to improve. Farrell explained that preliminary plans call for the Performance Track to have two levels:

- An *Achievement Track* that recognizes companies with good records, environmental management system (EMS) in place, measures for demonstrating perfor-

mance, and a system for reporting to the public.

- A *Stewardship Track* for companies that are helping to define best practices within their industries and are leading the way in the protection of the environment through exemplary performance.

The Performance Track offers EPA good opportunities to interact with trade associations, Farrell stated, particularly because EPA is looking to involve small and mid-size business which often lack the resources needed to develop performance measures, EMS, etc. In the development of the second track, EPA will be looking to trade associations to help develop the right kinds of incentives.

Farrell described EPA's work with six sectors, primarily with trade associations, in its Sustainable Industries program. The sectors include meat processing, metal foundries and die casting, travel and tourism, specialty chemicals, and metal finishing. The most progress has been made in metal finishing, which created a model environmental stewardship program.

In addition to encouraging compliance with regulations, trade associations have also been an important link in implementing EPA's voluntary programs that focus on conserving energy and natural resources, and cutting waste and pollution. Today, more than 7,000 companies and organizations are participating in 20 voluntary efforts. For example:

Design for the Environment

The printed wiring board industry, which makes the building blocks for the electronics industry, is involved in EPA's Design for the Environment (DfE) program which helps businesses incorporate environmental considerations into the design of products, processes, and technical management systems. DfE and the industry have been working together to find ways to reduce the industry's traditional use of large amounts of toxic chemicals, water, and energy. The industry now prides itself on significant improvements: annually it has reduced formaldehyde use by 240,000

pounds, while cutting energy use by 9 million Btu and conserving 400 million gallons of water.

Environmental Management Systems

EPA has worked with the Screen Printers' Association in developing a template EMS, which is especially attractive to this industry because it comprises so many small businesses that do not have the resources to develop a custom-tailored EMS.

Project XL

Project XL has been another challenging area in which EPA has worked with trade associations to test promising innovative ideas that could produce better results than possible under existing laws. United Egg Producers is now testing an alternative NPDES permit,¹⁷ in which a general streamlined permit would be used for companies of a certain size in exchange for agreeing to outstanding environmental performance, including eliminating all discharges from their operations. Another XL project currently being tested in three sectors in Massachusetts would do away with permitting altogether and allow companies to self-certify. Trade associations have been integrally involved with designing this project as well.

Trade associations face a number of challenges, such as dealing with great variability in their members' levels of environmental performance and defining appropriate and quantifiable measures of progress. Farrell noted that strong environmental performance is linked to strong business performance overall, and trade associations are often in the best position to exploit that link to the benefit of both industry and the environment.

Robert Barkanic

Deputy Secretary for the Office of Pollution Prevention and Compliance Assistance, Pennsylvania Department of Environmental Protection

Robert Barkanic discussed Pennsylvania Department of Environmental Protection's (DEP) initiatives and efforts to encourage industry to improve environmental performance. Initiatives have included the Governor's Environmental Excellence Awards, the Pollution Prevention and Energy Efficiency Site Visit Program, and the Pennsylvania Environmental Assistance Network. The Governor's Green Government Council has taken advantage of the deregulation of the electric utility industry and is buying 5% of its power from renewable resources. Barkanic noted that companies tend to fall into a bell curve in terms of environmental performance with a few top performers that garner the recognition, a large middle section that can be motivated and assisted to excel, and a small group of laggards.

To get its own shop in shape in the last few years, DEP embarked on a regulatory review that ultimately eliminated 4,500 pages of guidance and regulations, saved companies and municipalities \$142 million, turned to the Web to make information available, and emphasized pollution prevention and new technology. A key area of reform was in the review of permits. Companies had been sending in permit applications that were clearly inadequate and missing information; because of the extra work needed to process them, many of them languished at DEP for unacceptably long periods of time. Barkanic described new "business-like" procedures that were instituted: incomplete permit applications were sent back to the companies, and every permit was subject to a deadline or a money-back guarantee. "Specifically, the gimmick was if an employee didn't review the permit in the prescribed amount of time, we gave the money back to the applicant and the employee got his/her picture taken with the Secretary." In four years, Barkanic noted, the Secretary of DEP has not had to have his picture taken with any employee returning money to a company.

Barkanic wholeheartedly supported environmental management systems, noting, "Anything that gets EMS's in place is good." On the other hand, he felt that ISO 14000 was not right for every company; although, he was certainly in favor of it if there were sound market reasons for undertaking it. Pennsylvania participates in the Multi-State Working Group that tracks specific environmental improvements in 78 facilities as a result of ISO 14000, to help determine how regulators should approach a facility certified under ISO.

Compliance assistance, Barkanic noted, seems to lead to pollution prevention and working with mainstream companies to get them into compliance has yielded large payoffs. Other high priorities of the state government are mentoring, education, and learning. In addition to its monthly TV show, DEP has published the GreenWorks Gazette, an 8-page newspaper insert in 4.3 million

¹⁷ National Pollutant Discharge Elimination System (NPDES), established under the federal Clean Water Act.

newspapers and continues to publish a weekly newsletter, the UPDATE, designed to inform broad audiences in Pennsylvania about current environmental issues and happenings. DEP will also issue an Environmental Literacy Report Card, modeled after the NEETF/Roper Starch national survey, which annually assesses environmental knowledge, attitudes, and behavior of adult Americans. DEP's Website (www.dep.state.pa.us) receives millions of hits every month, and makes available "eFACTS," a compliance tracking database on facilities, inspections, and violations.

INDUSTRY CODES

Richard Doyle

Vice President for Responsible Care,[®]
Chemical Manufacturers Association (CMA)

Dick Doyle opened the panel presentations with an overview of the Responsible Care[®] program developed by CMA in the last decade. Resulting from the Bhopal, India disaster of 1984, Responsible Care[®] was first developed by the Canadian Chemical Producers Association and has since been adopted in the United States and expanded to a set of six management codes that cover every aspect of the chemical process. Responsible Care's[®] approach dovetailed with the new federal emphasis on voluntary actions.

Responsible Care[®] Program

Responsible Care[®] (RC) outlines more than 100 management practices in emergency response and community dialogue, pollution prevention, process safety, distribution, employee health and safety, and product stewardship. Although changes have occurred, RC still goes substantially beyond the level of compliance required by government regulations. Doyle described doing a "stretch analysis" of Responsible Care[®] to determine how much of the code requires companies to stretch beyond government regulations. Ten years ago, regulatory requirements covered about 32% of RC requirements. Today, roughly 52% of RC requirements are also addressed by environmental regulations. Doyle believes that although the gap between voluntary and regulatory requirements has narrowed, RC still requires a lot of "stretch" by companies beyond compliance.

Doyle noted that one of the most important structural elements in Responsible Care's[®] credibility is having a diverse group of stakeholders on its advisory board, including state government officials, consumer activists, environmental groups, physicians, and others. CMA has

Rohm & Haas

As an example of the verification process in action, Doyle discussed the Rohm & Haas experience. A large chemical producer based outside of Philadelphia, Rohm & Haas began by verifying an EMS at its headquarters and then at two nearby plants. During the verification meetings, Rohm & Haas officials invited the community to participate. Each time the verification team mentioned an "opportunity for improvement," the community responded with the question: What are you going to do about it? And the company had to respond. In the end, Rohm & Haas placed the entire CMA verification report on CMA's website, along with the company's responses to these "opportunities for improvement." Eighteen other companies have since done the same. But more importantly, RC companies have set up over 300 community advisory panels in the communities where they operate.

"We will make continuous progress toward the vision of no accidents, injuries, or harm to the environment and will publicly report our global health, safety, and environmental performance."

— Preamble to Responsible Care[®]

committed to publishing an uncensored letter from the advisory board in CMA's Annual Report to reflect on current progress. Doyle noted that the advisory board has been "very outspoken" and "good at prodding us," and he credited the advisory board with much of the growth of RC. Environmentalists on the advisory board in particular find themselves in a tough spot. But, he noted, "we listen to what they say, have been responsive to their challenges, and they've stayed with us."

One example of the advisory board's contribution has been the evolution of RC's approach to measuring results. The advisory board asked: How do we know companies that committed to RC are really making progress? CMA responded by putting in place a self-evaluation process, but the advisory board did not consider that sufficient. Next, CMA developed

performance metrics for each aspect of the code. The advisory board liked the metrics better, but still preferred a third party process. In 1996, CMA developed a management system verification process that has been carried out by 75 companies. Although it is not a requirement of RC, it represents a demonstrable step forward. (See box on Rohm and Haas.)

Partnerships with Affiliated Industries

Doyle described CMA's Partnerships Program, which extends from truckers to railroads to warehouses and is operational at 63 companies. Another 28 associations are working with CMA on the Partnerships Program, including the Synthetic Organic Chemical Manufacturers Association (SOCMA). SOCMA has also made participation in RC a condition of membership, which has added 300 additional Responsible Care® followers. CMA's RC companies have seen production rise 18% in the last eight years, while toxic chemicals have been reduced by 58%. Doyle noted that in terms of safety performance, RC companies are twice as good as the chemical industry in general and five times as good as the manufacturing sector. The chemical industry's worker compensation costs are now two-thirds the national average.

Benefits of Responsible Care®

Doyle stressed that Responsible Care® is good for the bottom line. To build the business value of companies participating in RC, CMA works with the EPA to give RC companies credit for their environmental efforts. CMA is also working with the EPA and states to give RC companies the flexibility they need to improve performance. Another powerful motivator has been the possibility of reduced insurance rates because of reduced risks.

Future of Responsible Care®

Is there an end point to RC? Not according to the 900 internal and external stakeholders who gave CMA feedback on RC and the need for continuous improvement in the future. Last year, CMA's board approved a set of enhancements to carry Responsible Care® into the 21st century, articulating a vision of "no accidents, injuries, or harm to the environment" in which companies publicly report their progress worldwide. One big change was the new RC requirement that every company set performance goals by September 1999 and publicly report them to neighbors, employees, and other stakeholders. Having collected all those performance goals, CMA is seeking to create performance goals for the entire industry to translate the new vision into action. The willingness of RC companies to set these goals, publicly report the goals, and report their progress will "take us light years ahead," noted Doyle.

Julie Fleming

Assistant Director, Government Relations

American Textile Manufacturers Institute

The American Textile Manufacturers Institute (ATMI) is the national trade association for the domestic textile industry. The high-tech, globally competitive, and highly diverse U.S. textile industry operates in over 30 states and employs over 600,000 people.

In 1992, the members of ATMI initiated a voluntary environmental leadership program known as Encouraging Environmental Excellence (E3). E3 was developed by ATMI in response to today's changing regulatory and work environments. ATMI recognized that it is no longer enough to just maintain the industry's environmental record - it needs to be improved through a pro-active process, addressing social and economic concerns. E3 not only recognizes companies with outstanding environmental programs, but also challenges its members to continually strive to improve their environmental performance. The program requires textile manufacturers to make a public commitment to exceed federal, state, and local environmental laws. E3 centers on "excellence beyond compliance," a concept embodied in the program criteria.

An industry council and independent advisory board manage the E3 program. The E3 Council is comprised of representatives from member companies who are professionals from the environmental, communications, and marketing fields. The Council is responsible for the day-to-day operations of the E3 program, educating, and fostering the exchange of ideas, environmental solutions, and information among ATMI member companies.

The E3 Advisory Board serves as an independent advisory body for the program, monitoring the program and the parameters under which it operates. The Board advises the Council on ways to improve the E3 program, taking into account evolving environmental, customer, and public concerns. The advisory board consists of representatives from

Responsible Care® and the Bottom Line

Borden Chemical reported an annual savings of \$5 million in insurance premiums, and Oxychem reported a \$20 million savings. CMA has negotiated a modification factor for RC participants, which reduces premiums on some insurance up to 30 percent.

business, environmental regulatory agencies, academia, and the environmental/ conservation communities.

To qualify and become a member of the E3 program, companies must meet 10 criteria that are based on environmental management principles. In addition, E3 companies must demonstrate continued adherence to the criteria and environmental performance improvement through an annual self-certification process. To assure that E3 is not simply a corporate program, individual facilities of member companies must certify that they are meeting the E3 criteria. Since E3's inception, over 50 textile companies have qualified for the program, impacting over 300,000 textile industry employees and the communities where they live and operate.

E3 companies take their responsibility as stewards for the environment very seriously. They work with their suppliers, customers, government officials, and local community organizations to set new environmental goals every year and to raise the bar ever higher on environmental performance levels.

Environmental preservation is important to the textile industry for two reasons. First, textile companies are located in small towns across America. These mills have been part of these communities for decades and have deep roots within local families. Providing children with a good education, strong stable jobs, and a clean community are key motivations for a program like E3. As Fleming said, "It's the right thing to do. We live where we work. Often the textile company is the community."

Second, the U.S. textile industry has survived many challenges throughout history. The industry has survived and prospered because of its commitment to investing in research and development – especially pollution prevention (P2). Julie Fleming noted that "P2 has become a watchword for our industry...If you get pollutants out of your product stream to begin with, you don't have to clean them up later." Another key component is the best available environmental technologies. By installing heat recovery systems, dye recovery equipment, and state of the art wastewater treatment systems and by learning how to use textile waste fibers in new product lines, the industry has reduced its overhead and set companies on a path to successfully compete and thrive in the future.

E3 Guidelines

ATMI's E3 member companies operate their environmental programs with structure, strategic planning and strict

supervision to ensure both compliance and excellence. The program guidelines require companies to have an environmental policy and specify that companies conduct detailed audits of their facilities, direct outreach programs to suppliers and customers to encourage recycling, and to establish environmental goals in the areas of air and water quality, waste minimization, energy conservation, and community outreach.

Benefits of E3

E3 companies are seeing economic benefits beyond the obvious advantages of working toward a cleaner environment. Customer and consumer awareness of environmental issues and widespread use of the Internet as a tool for tracking actions also provides motivation for participation in the E3 program. By participating in E3, companies interested in pursuing environmental excellence can enhance ecological protection, lower costs, reduce risk, obtain positive publicity, and possibly forge new sales opportunities, all at the same time.

**P2 has become a watchword
for our industry.**

—Julie Fleming, ATMI

Fleming described differences between the European Eco-Label, ISO 14000 programs, and ATMI's E3, particularly in terms of how each program recognizes differences in the technical considerations facing companies and the political/regulatory contexts in which they operate.

Among the benefits of a program such as E3 is that it conveys a sense of sophistication about the industry. "Most people, when they think textiles, they think Norma Rae," noted Julie Fleming. "We want them to think high-tech."

Partnerships with Suppliers

Examples of cooperative efforts between textile manufacturers and suppliers to address environmental concerns include:

- *Recycling of containers:* Empty dye drums were historically sent to landfills. Now, the containers are returned to the dye suppliers to be cleaned and reused.
- *Beneficial reformulations:* Some slashing compounds (the temporary coating that is used to strengthen

warp yarns for weaving) had a high methanol content that resulted in potential air emissions and permitting problems. Joint efforts determined that the methanol was not necessary to the process, and suppliers subsequently reformulated their slashing products to reduce methanol content below de minimis levels.

- * *Education:* To help protect workers and the environment, the dye manufacturers association developed a pamphlet in "laymen speak" on the proper handling of dyes for textile workers. In the development of environmental regulations impacting the industry, ATMI has ensured that chemical and dye suppliers are part of the process to help EPA understand the need for certain dyes to produce certain end products.
- *Better environmental information:* Traditional material safety data sheets (MSDS) do not provide the critical environmental data needed for reporting and environmental decision making. Working with suppliers, ATMI created the Voluntary Product Environmental Profile (VPEP), a standardized format for the exchange of this important information.

Lessons Learned

Fleming noted that one of the important lessons learned in the E3 program is that management needs to fully support its environmental commitments – not just superficially, but also with access to funds that are invariably needed for such things as replacing equipment and bringing in new process changes.

The U.S. textile industry understands that environmental conservation and the global competitiveness of the industry go hand in hand. In addition to making a strong commitment to their employees, E3 companies are cutting costs and becoming more productive – all of which are attributes of a successful 21st century industry.

Jennifer Nash

Associate Director, MIT Technology, Business and the Environment Program

Jennifer Nash reported on her studies of industry environmental codes. Although there are only a handful of codes currently in existence – covering chemical manufacturing, chemical distributors, paint and coatings, forest and paper, textiles, petroleum, metal finishers, and furniture manufacturers – industry environmental initiatives are proliferating and growing stronger.

Changing Behavior

Nash compared trade association codes to ISO 14001 on a number of dimensions. First, trade association codes tend to help establish new values, such as pollution prevention, environmental stewardship, and sustainability. In this regard, industry codes tend to be more ambitious than ISO 14001, which focuses on regulatory compliance and continuous improvement.

ISO 14001 may set its sights on lower environmental goals than trade association codes, but may require greater consistency between the goals managers establish and their environmental practices. In other words, in ISO 14001 facilities, managers must "say what they do and do what they say." In contrast, the guiding principles of trade association codes may serve as "official" rather than "operative" goals, communicating intentions but not necessarily implemented goals.

Monitoring Progress

Similarly, in terms of monitoring mechanisms, trade association codes may rely on self-monitoring, self-reporting, association monitoring, and third-party certification. The information trade associations disclose to the public is relatively limited. Peer pressure is the primary method trade associations use to sanction companies that lag behind in code implementation. Peer pressure would be even more effective, Nash argued, if trade associations provided more information on individual companies' performance to their membership. In addition, some trade associations have expelled members for failure to adopt their codes. With sanctions, trade associations are particularly good on peer pressure and are beginning to use expulsion when necessary. Some may also be starting to think about disclosure to peers as a way of controlling members' behavior. But public disclosure of the performance of individual members and mandatory fines are not in the foreseeable future.

Promoters vs. Adopters

Nash researched company responses to industry codes in an effort to determine how codes change actual behavior. Looking at Responsible Care,[®] one of the most ambitious and well-established programs, she found tremendous variability in the responses of company officials. Nash categorized companies into four levels. Companies that fell into the category of "drifters" experienced no apparent impact from RC. "It's about documenting procedures," company officials said. Most companies fell into the category of "pro-

Industry environmental codes appear to both promote and hinder environmental protection.

— Jennifer Nash

motors." They found that RC was a useful tool for interacting with community groups, but it didn't change the company in any other way.

At the next level, companies were characterized as "adopters." These firms involved their marketing staff, product designers, and process engineers in the code, integrated the code into job training, and gave their environmental managers real leverage. Finally, the "leaders" used RC to institute a whole new way of thinking. They emphasized the scope of RC and used it in choosing plant sites and product development decisions. They also appointed a management sponsor at the vice-president level whose job was to obtain funding for RC-related activities.

Are Industry Codes Effective?

In the end, noted Nash, a complex picture emerges. Industry environmental codes appear to both promote and hinder environmental protection. Those that see the environment as peripheral to their business use the codes as a shield to deflect criticism. Others, however, use them to reinforce and amplify their environmental commitments.

To the public, the reliability and accountability associated with codes may be as crucial as to how high they aim in terms of environmental improvements. Reliability is what makes ISO 14000 so attractive to the public.

How to Improve Industry Codes

Nash had specific advice for trade associations in their involvement with industry codes:

1. *Results:* First, be ambitious. The public still wants to see results, not just a commitment to continuous improvement.
2. *Trust:* Build trust by making and keeping promises. Promises are not same as intentions. Promises mean doing something specific by a certain time. Trade associations and their member companies should give the public direct information about the results of their promised actions.

3. *Responsibility:* Take responsibility for ensuring performance. Trade associations should be proactive in identifying members who lag behind.
4. *Sanctions:* Finally, trade associations should employ sanctions against those who won't comply. Responsibility, she reminded the forum, is a way of acting, not just of speaking.

Bob Benson

Director of Sector Strategies Division,
U.S. EPA Office of Policy, Economics, and Innovation

EPA's Sustainable Industry Program

Benson noted that EPA laid the groundwork for success in working with the metal finishing industry through its Sustainable Industry program, a sector "diagnostic" process in which EPA staff takes time to learn as much as possible about the sector, including the traits of the industry related to environmental management, trends that reflect how the industry is changing, and factors that affect how environmental management is done - i.e., "drivers and barriers" that affect performance.

"The government needs to be willing to engage in dialogue, to be flexible, and to be open to hearing what will work best. The ability to act on what you hear builds trust."

— Bob Benson, EPA

In a sense EPA became efficiency experts on the industry. The end result, noted Benson, was useful to both industry and EPA. "Frankly, I'd say the industry learned a lot about itself as we went through this process." The metal finishing companies also saw this as an opportunity to improve the perception that other groups have of their industry, leading to a constructive policy dialogue with EPA and benefits from EPA's greater understanding of the industry. The reputation of metal finishing as a sophisticated industry improved as a result of the program. "Everyone finally realized that they weren't taking tubs out to the backyard and dumping them in the stream," noted Benson. The National Metal Finishing Strategic Goals Program was

jumpstarted when EPA Administrator Carol Browner came to a meeting and asked the group to set up strategic framework with goals for the industry. In 1998, the program was launched. It sets voluntary goals that go beyond compliance and that are tailored to this industry – water conservation, specific reductions in emissions of metals and other materials into waste streams, reduced exposures to workers and communities (most metal finishing shops are in close proximity to residential neighborhoods). Close to 400 companies have signed up, along with 21 states and over 60 municipalities.

Benson described environmental performance as a bell curve, with most companies in the middle in terms of compliance, a few bad actors, and a few stars. The point of the program is to shift the bell curve to the right. In the case of metal finishing, companies had very strong market motivation to be involved. The industry had recently gone through a shakeout, and firms that did not perform well environmentally dropped out. The remaining firms were thus receptive to working with

EPA. More generally, however, Benson found that industry looks to EPA for leadership, not just facilitation, and leaders who listen very carefully to all stakeholders.

After six years of working with the National Metal Finishing Association at EPA to promote stewardship in the industry, Bob Benson had some lessons to share with the forum.

- * First, the government needs to be willing to engage in dialogue, to be flexible, and to be open to hearing what will work best. "The ability to act on what you hear builds trust."
- * Second, it is crucial to set reasonable expectations and be realistic, not to set the bar too high, but not too low either. Companies need tangible benefits, not just recognition - e.g., a faster permitting process, reduced monitoring, a little less oversight. The goal should be "meaningful and achievable" results.
- * Third, trade associations need to be activists and willing to set industry-wide goals. That approach really resonates with regulators and citizens.

MENTORING SESSION 1: Benefits of Codes

This mentoring session provided the participants the opportunity to hear about the benefits for members instituted by trade associations as well as share their experiences and ask questions. Steve Sides of the National Paint & Coatings Association, Chris Hanson of SOCMA, and David Lowy of The Conference Board elaborated on benefits such as compliance assistance, comprehensive and useful guidelines, external recognition for regulatory efforts, and better relations with customers.

Steve Sides

Vice President, Environmental, Health and International Affairs, National Paint & Coatings Association

Steve Sides described the Coatings Care® program developed by the 450-member National Paint & Coatings Association (NPCA) whose members account for 95% of the industry. NPCA decided not to use CMA's Responsible Care® program, but instead built its own voluntary codes tailored to the needs of the coatings industry. NPCA has developed a joint statement with CMA and a partnership agreement with the National Association of Chemical Distributors (NACD) which helps coordinate Coatings Care® efforts to manage health, safety, and environmental responsibilities with those contained in the Responsible Care® and Responsible DistributionSM programs. Coatings Care® offers compliance assistance, shared technical, legal, and managerial help, comprehensive and useful guidelines, and extensive on-line and print information resources.

While participation in Coatings Care® is voluntary, over 90% of NPCA members have made the commitment. This impressive statistic is derived from the tremendous "business value" associated with implementation of the program. A recent promotional effort by NPCA aimed squarely at "top management" identified and communicated key motivational factors for industry participation in a new NPCA publication on program's benefits. "There are at least nine sound business reasons why every company in the coatings industry should consider participating in Coatings Care.®"

1. You'll have a system to manage important aspects of your business.
2. Well-run businesses are more profitable and more productive.

3. You will have a system for approaching your compliance obligations.
4. Coatings Care® helps you prepare for the challenges of ISO 14000 certification.
5. Coatings Care® fully complements Responsible Care® and Responsible Distribution.SM
6. The industry is changing.
7. Those thinking of "hiding in the weeds" should think again.
8. Coatings Care® is free to all members of NPCA.
9. Coatings Care® gives you the industry's 63 Best Management Practices."

Chris Hanson

Director, Performance Improvement, Synthetic Organic Chemical Manufacturers Association (SOCMA)

Chris Hanson described the benefits received by SOCMA's 300+ members as a result of implementing Responsible Care.® As a full partner in Responsible Care,® SOCMA members commit themselves to signing the Guiding Principles, implementing the six codes of management practices, continuous performance improvements, and annual code self-evaluations.

Implementation is yielding direct benefits as well as external recognition. Direct benefits include improved EH&S performance in the form of fewer incidents, injuries, and long-term costs; more effective management systems, and increased operational efficiency and employee involvement. Benefits of external recognition include enhanced support for regulatory efforts, better relations with customers, and direct economic benefits from:

- Reduced insurance premiums.
- Preferred supplier/customer status.
- Increased productivity.
- Increased shareholder value.

There are at least nine sound business reasons why every company in the coatings industry should consider participating in Coatings Care®

1. You'll have a system to manage important aspects of your business.
2. Well-run businesses are more profitable and more productive.
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David Lowy

Environmental Director, The Conference Board

David Lowy reported on the work in which The Conference Board is recently involved. He highlighted three main points:

- Global Perspective on Codes of Conduct – The Environment as an Ethical Issue.
- Defining Environmental Excellence – Management Systems as a Common Denominator.
- Benefits to Members and Industry – Associations as Leaders and Catalysts.

Lowy outlined three trends that benefit corporate articulation of Global Business Codes:

1. Growing North American and European participation in world markets.
2. Necessary role of ethical business climate in improving Asian, African, and Latin American prospects for development.
3. Increased emphasis on corporate and individual conduct as well as financial performance.

In his discussion of ethics programs, Lowy emphasized that most corporate ethics programs are manifested in company codes or business conduct statements. These programs address improved employee capability for making decisions in accord with corporate policy and legal requirements as well as providing concrete expression to the company's sense of mission and view of its duties and responsibilities as corporate citizens.

Lowy also discussed the role of management systems as common features or denominators of codes. How

“More and more, our customers are requiring that we provide them assistance and guidance in air quality and other regulatory considerations associated with their use of our products.... If you really have it together and are in full conformance with Coatings Care® guidelines, then you’re organized to provide information better, faster, and cheaper for your customers. That’s going to be an important feature of selling to them.”

**— Laurel Jamison, President
Ruud Company, Inc.**

companies are organized internally to manage the environmental issues they encounter is telling. The Conference Board is researching internal corporate capacity to manage environmental issues. This new study will determine how American companies are integrating environmental management systems (EMS) into business management systems. The study asks pertinent questions such as:

- Which companies are leaders in environmental health and safety (EHS)?

- Who gets compensated for EHS performance – executive management? Senior EHS managers, others?
- How many companies consistently integrate environmental issues into the design process?
- How many companies have systems in place to mentor their suppliers?
- How often is environmental performance reported to the Board of Directors – monthly, quarterly, annually?
- How often are chemical releases (TRI data) used as performance measures?
- How extensively is EMS deployed across facilities?

Most companies reporting in the survey indicated that they were not satisfied with EMS for the purposes for which they implemented it (e.g., improving operational efficiency,

managing potential risks). However, virtually 100 percent of company managers were satisfied with the effect of implementing an EMS on community relations. The results of the survey will be made available shortly on The Conference Board's Website, www.conferenceboard.org.

Lowy also focused on the potential role that associations could play as mentors to foster and encourage environmental improvements. He discussed their role as organizers, motivators, entities that can measure the level of environmental improvement within a facility or corporation, communicators, and anticipators. Indeed, as associations increasingly recognize their strategic position as instigators for environmental improvement and leaders in setting expectations, their perspectives can change the way businesses approach environmental issues in the next century.

MENTORING SESSION 2: Technical Aspects of Codes

All codes of conduct have different values to association members. Despite their unique quality, codes must prove useful to their members. This mentoring session describes the nuts and bolts of voluntary initiatives focusing on what it takes to build credibility, effectively manage the legal aspects of voluntary initiatives, and developing a legal framework.

John Powers

General Manager, International Association of Electronic Recyclers

The International Association of Electronic Recyclers (IAER) represents the electronics industry, including original equipment manufacturers (OEMs), recyclers, NGOs, suppliers, and service providers. After surveying both industry and leadership, IAER developed a certification program for the electronic recycling industry, intendend – as described by John Powers – to build credibility and an effective infrastructure for this emerging industry. The goals of the program have been to support and promote high standards for the industry in terms of both environmental quality and business practices, to establish a formal objective certification process that will designate “Certified Electronics Recyclers,” and to provide management system services to member companies.

IAER’s approach is based on the following elements:

- Focus on improving management systems rather than evaluating operational performance.
- Minimize the audit burden to member companies.
- Recognize existing certifications (e.g., ISO 14001).
- Engage objective and qualified third parties to provide certification services.

Powers described the careful process that IAER went through in selecting a third party to provide certification, emphasizing the importance of selecting a reputable and compatible service provider, achieving consensus on key criteria in the selection process, issuing a formal RFP, and interviewing a short list of candidates.

Beth Olson

Director of Voluntary Programs, America Forest & Paper Association

In 1994, AF&PA undertook a \$1 million effort to figure out how the public perceived the forestry industry, and how to do a better job in areas that were important to the public and where the public perceived the industry’s performance to be poor. The results of AF&PA’s survey are shown in the box on the next page. Out of this survey came the industry’s Sustainable Forestry InitiativeSM (SFI), which emphasizes continuous improvements in forest management and environmentally and economically responsible practices. Commitment to SFI principles is a condition of AF&PA membership, and the SFI program became the industry standard in 1998 with a voluntary certification process. As of 2000, 20 million acres of forestlands have committed to or completed third party certification.

As many as 30 companies have been expelled, suspended, or resigned as a result of SFI, but new members and SFI program licensees have been added. In 1998, AF&PA opened the SFI program to allow participation by licensed non-members. Licensees must meet the same requirements as members. The licensing fee is based on sales of forest products, logs, or stumpage. Benefits include the use of SFI program marks, the opportunity to participate in the voluntary verification process, and recognition as a participant.

AF&PA has two other environmentally related voluntary programs for its members:

- The Recovery Goal Program, initiated in the early 1990s, set an initial goal of 40% recovery of paper manufactured in the United States. This goal was achieved in 1994, and the current goal is 50% recovery.
- The Environmental, Health, and Safety (EHS) Principles Program has eight principles, each with implementing guidelines, designed to be suitably flexible to accommodate wide diversity in the industry in terms of company size, product line mix, employment levels, and site characteristics. In 1996, annual commitment to the EHS principles became a condition of AF&PA membership.

Tom Richichi
Director, Beveridge & Diamond PC

Tom Richichi spoke about the legal aspects/implications behind voluntary codes of conduct. Richichi was able to reference his experience as a lawyer working with trade associations interested in commencing voluntary initiatives. Richichi noted that a trade association's involvement in "self-regulation" tends to be highly effective because of participants' superior knowledge of the subject of regulation. The advantages include better compliance, more flexibility, and potential cost savings. Disadvantages, however, can arise and need to be avoided or at least weighed against the benefits. These include:

- Harm to existing or future product markets.
- Actions that could result in anti-competitive impacts.
- Actions that could increase the potential for tort liability (personal injury claims as well as business torts).

Richichi noted that a number of considerations affect the potential for antitrust liability as a result of trade association codes. An important question to ask at the beginning is how significant is the market power of association members. Antitrust lawyers should be "sitting at the table" as the code is hammered out, and companies should be communicating relevant information to the lawyers upfront. As procedural safeguards, Richichi suggested that a trade association:

- Ensure flexibility and respect individual company judgments.
- Focus on commitments upfront.
- Use voluntary verification and third party enforcement.

Richichi stressed the importance of taking the high road with respect to "non-joiners." He reminded the group that the trade association should never disparage companies for not joining, since that makes it look like the association has an ulterior motive rather than helping the consumer.

Andy Counts

**Vice President of Environmental Affairs,
American Furniture Manufacturers Association**

Andy Counts described the American Furniture Manufacturers Association's EFEC program (Effect Furniture's Environmental Culture). EFEC is intended to create proactive environmental management systems and showcase the industry's commitment to environmental progress. AFMA has over 350 corporate members in 36 states, employing 400,000 workers and covering three quarters of the U.S. furniture industry. Over half of AFMA's members are small businesses and few have environmental professionals on staff.

AFMA developed an Environmental Guide for its members in 1994 at a cost of \$160,000. The four-inch thick Guide quickly became obsolete, and the trade association realized that it was sending outdated information to its member companies. Even supplements quickly became obsolete. Moving to the Internet, AFMA's electronic version of the Guide went online in January 1999 at a cost of \$100,000 (www.afma-enviro-guide.com). Benefits include the capability of making quick "real time" updates in-house and having a forum available for capturing and exchanging free information provided by suppliers. A CD-ROM version is also available.

John Connelly

**Vice President, Member Relations, Chemical
Manufacturers Association (CMA)**

John Connelly described CMA's interactions with and approach to current and prospective members. He reported CMA has about 90% market penetration. Before admitting prospective members, the trade association attempts to determine why the company wants to join the trade association and whether they understand the principles of Responsible Care® (RC). A new applicant must sign the RC principles, and within three months of joining receives visits from the Member Relations Executive. (MREs are former industry veterans hired to help the association better understand and respond to their members' concerns.) The MRE tests whether RC is in place at the company and offers assistance at plant and corporate levels. Ongoing members receive regular MRE visits 3 to 5 times per

year at all levels. Connelly noted that the MRE is not considered the "RC police," but rather functions as an advisor. If significant gaps in the performance of RC are detected, special advisors (paid for by CMA) are available to work with the company to improve their performance.

Other CMA outreach tools include:

- CMA Board Committee on Responsible Care® that meets 5-6 times per year.
- Networks - both virtual/Web and periodic face-to-face meetings. Connelly stressed that electronic access is not enough for most people. They need a mix of the two approaches.
- Several conferences per year that involve open exchanges among companies in CMA.
- Mutual assistance through other CMA member companies "mentoring" one another.

Connelly forecasted that CMA's next focus will be to dramatically increase communications with business managers about business value of Responsible Care.®

Bill Ashman

President and CEO, AdvanceOnline

Bill Ashman discussed how trade associations can use Web-based training programs to affect employee training and safety and to help their members better meet environmental goals. Trade associations can provide such training as a service to their members, and the training can become self-supporting.

Ashman stated: "An Association can provide additional benefit to its members by sponsoring an Online Institute that allows association members to share "best-of-breed" training courses. Through the Association Website, members can post their courses and receive royalties on courses that are sold. This reduces the cost of training development for members and allows the Association to further its code-related goals."

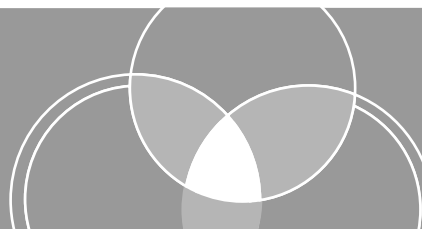
Ashman also outlined 10 questions to consider in designing a training program:

- What are your organization's goals?
- How will you acquire effective and accurate content that appropriately utilizes instructional design principles?
- How will you deliver e-training to users (i.e., via a Website, a CD-ROM, a separate in-house computer center, or some combination of the above)?
- How will you provide technical support to students and faculty?
- What role will instructors play in the course?
Examples include conducting real-time parts of a test (e.g., forklift driver test), signing off on completion of the program, access via e-mail, a computer room, or one-on-one tutorials.
- What level of technology do your students use (e.g., typical modem speed)?

- What are your staffing requirements to support e-training?
- How will you promote the training?
- How will return on investment be measured?

Ashman noted that combining content, delivery, and management through Web-based technology can be very effective. Content can come from a wide variety of sources. Automatic tracking of employee training records is easy to accomplish. In a typical online training institute, AdvanceOnline creates different sections of the Website for different users. In one section, instructors can interact with students, in another employers can check on employee performance, and in another, students can register for the course and take the training.

VI. RESOURCES: Trade Associations & Codes



Many trade associations have developed environmental codes of conduct and other initiatives to encourage behavioral change among their members. While the specific program objectives and elements differ, all programs reflect efforts by associations to improve the environmental performance and reputation of the membership. This section provides an overview selected association efforts and information referenced in this report.

AMERICAN CHEMISTRY COUNCIL (Formerly Chemical Manufacturer's Association)

Responsible Care®

www.americanchemistry.com

Program Elements

Objectives

- Continuous improvement of health, safety, and environmental performance.
- Listen and respond to public concerns.
- Assist each other to achieve optimum performance.
- Report goals and progress to the public.

Codes of Conduct

Responsible Care® is built upon six code of management practices that focus on specific practice areas.

- *Community Awareness and Emergency Response (CAER) Code* - Promotes emergency response planning and calls for ongoing dialogue with local communities.
- *The Pollution Prevention Code* - Commits industry to the safe management and reduction of wastes.
- *The Process Safety Code* - Is designed to prevent fires, explosions and accidental chemical releases.
- *The Distribution Code* - Focuses on reducing employee and public risks from the shipment of chemicals and applies to the transportation, storage, handling, transfer and repackaging of chemicals.
- *The Employee Health and Safety Code* - Protects employees and visitors at company sites; and to operate our plants and facilities in a manner that protects the environment and the health and safety of our employees and the public.
- *The Product Stewardship Code* - Makes health, safety and environmental protection an integral part of designing, manufacturing, marketing, distributing, using and recycling and disposing of products.

Guiding Principles

- To seek and incorporate public input regarding our products and operations.
- To provide chemicals that can be manufactured, transported, used and disposed of safely.
- To make health, safety, the environment and resource conservation critical considerations for all new and existing products and processes.
- To provide information on health or environmental risks and pursue protective measures for employees, the public and other key stakeholders.
- To work with customers, carriers, suppliers, distributors and contractors to foster the safe use, transport and disposal of chemicals.
- To operate our facilities in a manner that protects the environment and the health and safety of our employees and the public.
- To support education and research on the health, safety and environmental effects of our products and processes.
- To work with others to resolve problems associated with past handling and disposal practices.
- To lead in the development of responsible laws, regulations and standards that safeguard the community, workplace and environment.
- To practice Responsible Care® by encouraging and assisting others to adhere to these principles and practices.

Related Publications

- **Responsible Care® Newsletter**
Responsible Care® News is the primary source for information to help member companies and partners measure, implement, and add value through Responsible Care.® The newsletter is published on a monthly basis. To subscribe, contact: beth_walkos@AmericanChemistry.com
- **Responsible Care® Progress Report**
This is the annual report of the American Chemistry Council's Responsible Care® initiative. It contains updates on the six Codes of Management Practices; Strategic communications; Management Systems Verification; International Responsible Care;® Partnership Program; Mutual Assistance; Community Advisory Panels; Public Advisory Panel's Open Letter; and a list of members. The year 2000 report is available on the Website.
- **Responsible Care® Website**
Presentations, speeches, press releases, and other information on Responsible Care® is available on the ACC Website at <http://www.americanchemistry.com/>

AMERICAN FOREST & PAPER ASSOCIATION Sustainable Forestry InitiativeSM SFI

www.afandpa.org

www.afandpa.org/forestry/sfi_frame.html

Program Elements

Program Objectives

- Broadening the practice of sustainable forestry.
- Ensuring prompt reforestation.
- Protecting water quality.
- Enhancing wildlife habitat.
- Minimizing the visual impact of harvesting.
- Protecting special sites.
- Contributing to biodiversity.
- Continuing improvements in wood utilization.
- Continuing the prudent use of forest chemicals to help ensure forest health.

Codes of Conduct

Companies participating in SFI pledge to adhere to a comprehensive code of Environmental, Health, and Safety Principles. This pledge involves adhering to the following principles:

- Principle #1: To make environmental, health and safety considerations priorities in operating existing facilities, as well as in planning new operations.
- Principle #2: To recognize, in developing and designing products to meet customer needs, the environmental, health and safety effects of product manufacture, distribution, use and disposal.
- Principle #3: To monitor their environmental, health and safety performance and to report regularly on these matters to their Boards of Directors, as well as to confirm their adherence to these principles annually to the American Forest & Paper Association.
- Principle #4: To train employees in their environmental, health and safety responsibilities and to promote awareness and accountability on these matters.
- Principle #5: To improve environmental, health and safety performance through support of research and development that advance the frontiers of knowledge.
- Principle #6: To communicate with employees, customers, suppliers, the community, public officials, and shareholders to build greater understanding on environmental, health and safety matters.
- Principle #7: To participate constructively in the development of public policies on environmental, health and safety matters.
- Principle #8: To continue to pursue energy conservation, increased efficiency, greater utilization of alternatives to fossil fuels, and opportunities for cogeneration of electricity.

Program Criteria

SFI participants must meet market demands while using environmentally responsible practices that promote the protection of wildlife, plants, soil, air and water quality to ensure the future of our nation's forests. Specifically, members must:

- Establish a company environmental policy.

- Demonstrate commitment throughout company.
- Conduct regular environmental audits to ensure compliance with current laws.
- Work with suppliers and customers to address environmental concerns.
- Establish annual environmental goals with targeted achievement dates and track progress.
- Educate employees on environmental issues.
- Share interests and concerns with community and policymakers.
- Share expertise and insight with community, other companies, and local regulators.

Reporting and Outreach

The program has an education and outreach component geared toward all forest landowners and requires the public release of an annual progress report. Towards this end the objectives call on participants to:

- Foster the practice of sustainable forestry on all forestlands.
- Publicly report on their progress.
- Provide opportunities for public outreach.

Related Publications

- The SFI Program Fifth Annual Progress Report
Available at http://www.afandpa.org/forestry/sfi_frame.html
- SFI Brochure, Standard, Verifications and Procedures, Best Management Practices, Reforestation, Video, Forestry Aesthetics Guide, Voluntary Verification Document, and Verification Folder.
All are available at http://www.afandpa.org/forestry/sfi_frame.html

AMERICAN FURNITURE MANUFACTURER'S ASSOCIATION
Effect Furniture's Environmental Culture (EFEC)
www.afma4u.org and www.afma-enviro-guide.com

A. Program Elements

The American Furniture Manufacturer's Association Effect Furniture's Environmental Culture is a new program under development. The Mission and Objectives are outlined below.

Mission Statement

EFEC participants commit to leading our companies in ways that benefit society, the economy and the environment while maintaining a strong commitment to consumers, the community, employees and shareholders. Specific objectives include:

Program Objectives

- Create a proactive environmental management system.
- Implement an environmental system in a business setting to create new opportunities to increase company value.
- Create a communication forum to showcase industry's commitment.
- Develop a system to serve as a foundation for ISO 14000.

Related Publications

- Environmental Guide for the Furniture Industry
Available at <http://www.afma-enviro-guide.com>

AMERICAN PETROLEUM INSTITUTE

Strategies for Today's Environmental Partnership (STEP)

www.api.org/index.htm & www.api.org/step/

Program Elements

Objectives

- Improving industry environmental, health and safety performance.
- Documenting performance.
- Communicating performance improvement.
- Building sustained understanding and credibility through dialogue with concerned groups and individuals.

Guiding Principles

- To recognize and to respond to community concerns about our raw materials, products and operations.
- To operate our plants and facilities, and to handle our raw materials and products in a manner that protects the environment, and the safety and health of our employees and the public.

- To make safety, health and environmental considerations a priority in our planning, and our development of new products and processes.
- To advise promptly, appropriate officials, employees, customers and the public of information on significant industry-related safety, health and environmental hazards, and to recommend protective measures.
- To counsel customers, transporters and others in the safe use, transportation and disposal of our raw materials, products and waste materials.
- To economically develop and produce natural resources and to conserve those resources by using energy efficiently.
- To extend knowledge by conducting or supporting research on the safety, health and environmental effects of our raw materials, products, processes and waste materials.
- To commit to reduce overall emission and waste generation.
- To participate with government and others in creating responsible laws, regulations and standards to safeguard the community, workplace and environment.
- To promote these principles and practices by sharing experiences and offering assistance to others who produce, handle, use, transport or dispose of similar raw materials, petroleum products and wastes.

Codes of Conduct

The STEP code program is built around seven "operating strategies." These are:

- Preventing pollution.
- Promoting safe operating practices.
- Conserving resources.
- Promoting product stewardship.
- Maintaining crisis readiness.
- Addressing community concerns.
- Working with the government to create responsible rules to safeguard the community, the workplace, and the environment.

Related Publications

- Strategies for Today's Environmental Partnership

Available at <http://www.api.org/step/pdf/bigbook.pdf>

- Exploration and Production's: Protecting the Environment

Available at <http://www.api.org/ehs/PTE/protectintro.htm>

AMERICAN TEXTILE MANUFACTURING INSTITUTE Encouraging Environmental Excellence (E3)

www.atmi.org

www.atmi.org/Programs/e3.html

Program Elements

Objectives

- Recognize companies going "beyond compliance."
- Inspire other companies to adopt this attitude.
- Help them attain these goals.

Goals

- Widespread recognition of the E3 logo.
- Generate cost-effective environmental investment opportunities.
- Improve air, water, and land quality.
- Satisfy requirements of other certification programs.

Program Guidelines

To become an E3 member, each company must meet the following 10 guidelines:

1. Formulate and submit to ATMI a company environmental policy.
2. Describe, in detail, senior management's commitment to environmental excellence and how greater environmental awareness is encouraged throughout the company.
3. Submit a copy of an environmental audit form that describes measures for ensuring officers and employees are in full compliance with existing laws.

4. Describe how it has worked with suppliers as well as customers to address environmental concerns.
5. List its environmental goals and targeted achievement dates.
6. Describe its employee education program.
7. Identify and describe its emergency response plans.
8. Describe steps taken to relayed its environmental interests and concerns to the surrounding community, residents and policy makers.
9. Describe efforts to offer environmental assistance and insights to citizens, interest groups, other companies and local government agencies.
10. Describe its interaction with federal, state and local policy makers.

Participation Requirements

To qualify for E3 membership, an ATMI member company must comply with all federal, state and local environmental laws. In addition, a company must adopt a 10-point plan. The plan's guidelines require that a company develop a corporate environmental policy and set annual goals for reducing waste and conserving water and energy. A company must also develop an outreach program with customers and suppliers to encourage pollution prevention and waste minimization, develop employee education and community awareness programs and audit its facilities. Once a company is eligible to participate in the E3 program, membership renewal is not automatic. Companies are required to be re-certified annually.

Related Publications

- Encouraging Environmental Excellence Pamphlet
Available at http://www.atmi.org/Related_Publications/e3lit.html
- Encouraging Environmental Excellence Annual Report
Available at <http://www.atmi.org/Programs/report.html>
- E3 Video
Available at <http://www.atmi.org/Programs/e3video.html>

INTERNATIONAL ASSOCIATION OF ELECTRONICS RECYCLERS Certification Program

www.IAER.org/

www.IAER.org/communications/certification.htm

Program Elements

Program Objectives

The International Association of Electronics Recyclers is developing a certification process to support and promote high standards of environmental quality and regulatory compliance among electronics recyclers. The overall goal of the certification program is to provide organizations seeking to dispose of electronics equipment with confidence of the ability of certified Electronics Recyclers to properly handle materials. The specific objectives of the certification program are:

- Support and promote high standards of environmental quality and regulatory compliance.
- Establish a formal process to certify that an electronics recycling company is using high quality business practices.
- Provide a service to member companies to help them improve their management systems and gain recognition as high quality electronics recyclers.
- Recognize companies as a "Certified Electronics Recycler" if they are found to meet the IAER certification criteria as a result of the formal, objective certification process.

Certification Process Approach

- Focus on improving management systems, not evaluating operational performance.
- Minimize audit burden to member companies.
- Recognize existing certifications (e.g., ISO).
- Engage objective and qualified third party to provide certification services.

Scope of Certification Process

- General Business Credentials - Review management, finances, insurance, customer service.
- Operational Management - Review business practices, controls, security, regulatory compliance.
- Environmental Management System (EMS) - Firm has an ISO 14001 or equivalent EMS.
- Quality Management System (QMS) - Firm has a ISO 9001 or equivalent QMS.
- Health & Safety -Review health and safety records and programs.

- Qualifications and Training of Personnel - Review personnel.
- Suitability of Equipment and Facilities - Review facilities.
- Licenses & Permits - Review all applicable licenses and permits.

Certification Process

- *Questionnaire* - checklist of pre-qualifying criteria:
 - Submit to company for completion and return.
 - Review questionnaire vs. certification criteria and audit process requirements.
 - Identify deficiencies, questions, and focus areas for audit.
 - Respond to company for clarification, additional information or confirmation.
- *Audit Preparation* - optional service to member company seeking certification:
 - Pre-assessment based on review of questionnaire and on-site interviews.
 - Consultation and recommendations to management for improvements.
 - Orientation and preparation of management and staff for audit process.
- *Audit* - on-site review:
 - Review and assessment of management processes vs. certification criteria.
 - Focused and tailored to company based on review of questionnaire.
 - Advice and counsel on-site as needed.
 - Preliminary assessment and recommendations to management - including any deficiencies.
- *Follow-up*:
 - Confirmation of certification - if applicable + issuance of certificate.
 - Identification of deficiencies - if applicable.
 - Recommendations for improving deficiencies - if applicable.
 - Schedule follow-up audit to close deficiencies.

Related Publications

Information on IEAR's Certification program is available on the IAER Website at <http://www.IAER.org/communications/newsrelease.htm>

NATIONAL ASSOCIATION OF CHEMICAL DISTRIBUTORS Responsible Distribution ProcessSM

www.nacd.com/

www.nacd.com/text/rdp.html

Program Elements

Codes of Conduct

Responsible DistributionSM is built on codes which contain over forty management elements. These codes are:

- *Risk Management Code* - Establishes guidelines for:
 - Senior management commitment, through policy, communications, and resources, to on-going improvements in chemical distribution safety.
 - Regular review with manufacturers of the hazards of materials, the likelihood of accidents or releases, the potentials for human and environmental exposure from release of the materials, and the route and method of transport.
 - Identification and implementation of risk reduction measures.
- *Compliance Review and Training Code* - Requires process for:
 - Monitoring regulations and industry practices for their application to chemical distribution activities.
 - Implementing applicable regulations and practices that applies to chemical distribution activities.
 - Training for all employees in the implementation of applicable regulations, as well as member company's specific requirements.
 - Review of employee compliance with applicable regulations and member company's specific requirements and review of outside contractor and re-seller compliance with member company's specific requirements.
- *Carrier Selection Code* - Establishes a guidelines for selecting carriers to transport chemicals that includes carrier safety and fitness, regulatory compliance, and performance review.

- *Handling and Storage Code* - Establishes procedures and guidelines for:
 - Ensuring that containers are appropriate for the chemical being shipped, comply with regulatory requirements, and are free from leaks and visible defects. Criteria for the cleaning and re-use of transportation equipment and chemical containers, and the proper disposal of cleaning residues.
 - Loading and unloading chemicals at the member company's facilities that result in protection of personnel, a reduction in emissions to the environment, and ensures that chemicals are loaded and unloaded into and out of proper storage facilities.
 - Providing manufacturer guidance and information to customers, warehouses, terminals and carriers on procedures for loading, unloading, and storing chemicals.
 - Selecting owned and contracted facilities and sites for chemical storage or handling that emphasizes safety, fitness and includes reviews.
 - Documenting current operating procedures.
 - Facility design, construction, maintenance, inspection, and security practices that promote facility integrity, consistent with recognized codes and regulations
 - Control of processes and equipment during emergencies resulting from natural events, utility disruptions, and other external conditions.
- *Job Procedures Et Training Code* - Creates guidelines for:
 - Identification of the skills and knowledge necessary to perform each job.
 - Procedures and work practices for safe operating and maintenance activities.
 - Training for all personnel, including outside contract personnel as appropriate, to reach and maintain proficiency in safe work practices and the skills and knowledge necessary to perform their job, including confirmation of competence.
 - Programs designed to assure that personnel in safety critical jobs are fit for duty and are not comprised by external influences, including alcohol and drug abuse.
- *Waste Management Code* - Creates procedures to ensure that all self-generated waste and empty containers are disposed of in a responsible manner, and in accordance with existing regulations.
- *Emergency Response and Public Preparedness Code* - Contains guidelines for:
 - Responding to, reporting on, and investigating chemical distribution incidents and releases involving the member company's chemicals, and implementation of appropriate preventive measures developed from that investigative process.
 - A system of internal investigation, reporting, appropriate corrective action, and follow-up for each incident that results or could have resulted in a fire, explosion, or accidental chemical release.
 - Making emergency response information concerning the member company's chemicals available to response agencies.
 - Communicating with state and local emergency planning and response organizations on the potential hazards of the member company's chemicals.
 - Annual review, testing, and assessment of the operability of the member company's written emergency response plan.
 - Facility tours for first responders to promote emergency preparedness and to provide current knowledge of facility operations.
 - Coordination of the written facility emergency response plan with the local emergency response team and other facilities.
- *Community Outreach Code* - Contains guidelines and suggestions for facilitating community outreach efforts.
- *Product Stewardship Code* - Encourages member companies to work with customers to foster appropriate dissemination of information on the proper use, handling, and disposal of products commensurate with product risk.

Guiding Principles

- To recognize and respond to community concerns about chemicals, their handling, and transportation.
 - Make health, safety, and environmental consid-

erations a priority in our planning for all existing and new operations, products, processes, and facilities and inform emergency response officials, employees, customers, and the public of manufacturer's information on chemical-related health or environmental hazards, and the manufacturer's recommendations on protective measures.

- To work with customers, in accordance with manufacturer's recommendations, on product stewardship including handling, use, transportation, and disposal of chemical products.
- Participate with government and others in creating responsible laws, regulations, and practices to help safeguard the community, workplace, and environment and cooperate in resolving problems created by past handling and disposal of hazardous chemicals.
- To promote the principles and practices of Responsible Distribution ProcessSM by sharing experiences and offering assistance to others who produce, handle, use, transport, or dispose of chemicals.

Related Publications

Joint Responsible Distribution/Responsible Care Program: A blueprint for developing countries seeking to establish their own Responsible Distribution/Responsible Care programs.

NATIONAL ASSOCIATION OF CHEMICAL RECYCLERS Responsible Recycling

www.nacr-r2.org

Program Elements

Codes of Conduct

Each of the National Association of Chemical Recyclers' Codes addresses specific aspects of chemical recycling, health and safety, and environmental protection. The six codes are:

- *Community Awareness and Emergency Response (CAER) Code* - Fosters community right-to-know through the open communication of relevant, useful information to the public, and promotes comprehensive emergency preparedness.
- *Transportation Code*- Focuses on the mitigation of

hazards associated with the shipment of chemicals and other hazardous materials

- *Process Design, Safety and Control Code*- Seeks to prevent accidents and chemical releases, and encourages the design, development, and operation of process equipment to ensure safe and efficient materials handling.
- *Waste Minimization and Pollution Prevention Code* - Commits member companies to achieve ongoing reductions in the amount of pollutants released to the air, water, and land as a result of their operations.
- *Employee Health and Safety Code*- Protects the health and safety of facility employees and visitors by identifying hazards, preventing unsafe acts and conditions, maintaining and improving employee health, and fostering interactive communication on health and safety issues.
- *Chemical Recycling, Energy Recover and Disposal Stewardship Code* - Makes health, safety, and environmental protection an integral part of member companies, decisions regarding the processing and treatment of customers, waste streams.

Obligation of Membership

Commitment to implementing the Responsible RecyclingSM program is a condition of membership in NACR. Member companies are expected to sign a statement of commitment to the Responsible RecyclingSM Guiding Principles and must phase in full program implementation by July 1, 1998.

Guiding Principles

NACR members pledge to manage their businesses according to the following ten guiding principals, the foundation of responsible recycling:

- To follow responsible recycling and other waste management practices in accordance with a hierarchy that protects human health and the environment and promotes resource conservation and recovery.
- To recycle and manage chemicals that can be safely processed, transported, used and disposed.
- To identify and implement at every practicable opportunity, pollution prevention measures in both facility operations and customer services through source reduction and waste minimization.
- To make health, safety, and environmental consider-

ations a priority in facility operations and planning for new products, processes, and facilities.

- To recognize and respond to community concerns about chemicals and facility operations.
- To report promptly to officials, employees, customers, and the public information on chemical-related health or environmental hazards, and to recommend protective measures.
- To counsel customers on the safe use transportation, recycling, recovery and disposal of chemical products.
- To work with others to resolve environmental problems attributable to past hazardous waste management practices.
- To participate with government officials and others in creating responsible laws, regulations, and standards that safeguard the community, workplace, and environment.
- To promote the principles and procedures of Responsible RecyclingSM by sharing experiences and offering assistance to others who recycle, recover, produce, use, transport, or dispose of chemicals.

NATIONAL PAINT & COATINGS ASSOCIATION Coating's Care®

www.paint.org

www.paint.org/cc/

Program Elements

Guiding Principles

Each company that agrees to participate in the Coatings Care® program is required to commit to the program's policy statement. As participants, each company pledges to:

- Promote efforts to protect employees, customers, the public and the environment.
- Provide relevant information on the safe use and disposal of industry products to customers and make such information available to the public upon request.
- Make protection of health, safety and the environment an early and integral part of the organizational planning process.
- Comply with all legal requirements that affect operations and products;

- Be responsive to community concerns.
- Assist governments in the development of equitable and attainable standards.

Codes of Conduct

Coatings Care® is built upon four areas of management practices:

- *Manufacturing Management Code* - Seeks to ensure that plant operations are consistent with established health, safety and environmental practices. The code reflects regulatory and legislative requirements, as well as industry trade practices in the areas of employee protection, community and environmental protection, waste management practices, and other aspects of plant operations.
- *Transportation and Distribution Code* - Seeks to ensure the safe shipping of coatings products to the industry's customers, and to reinforce the integral role of health, safety and environmental considerations in the distribution chain. The transportation and distribution practices for coatings products are extremely diverse and highly regulated. This code addresses hazardous material transportation requirements, including those applying to containers and packaging, marking, placarding, and carrier selection. Storage and warehousing restrictions associated with hazardous material regulations, fire codes and use permits are also considered.
- *Product Stewardship Code* - Seeks to establish health, safety and environmental considerations as a part of product formulation and to communicate appropriate safeguards for product use and disposal to customers. To accomplish this, product stewardship must be viewed as a shared responsibility and understood by all those responsible for product formulation, manufacturing, marketing, and customer support. Product stewardship principles apply for all classes of industry products, and acknowledge the need for quality products that can be used and disposed of safely. In the workplace, product stewardship efforts support the employer's responsibility for providing a safe workplace and addressing environmental considerations arising from product use and disposal.
- *Community Responsibility Code* - This code has two major elements. The first element seeks to help

protect employees and communities by assuring that each coatings manufacturing facility has an established program, coordinated with local authorities, to respond to facility emergencies. The purpose of the second element is to assist participating NPCA member companies in establishing and maintaining community outreach efforts that communicate relevant and useful information that is responsive to questions and concerns regarding health, safety and the environment.

Related Publications

- The Business Case For Coatings Care:
Available upon request.

SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION IMPLEMENTING RESPONSIBLE CARE®

www.socma.com

www.socma.com/respcare/index.html

Program Elements

Codes of Conduct

- *Community Awareness & Emergency Response Code* - Designed to foster community outreach and to reduce potential harm to employees and to the public in the event of an emergency. Meeting the CAER code requires a continuous dialogue among facility managers and their responders, and the community. The code calls for a continuous assessment of public awareness and requires each facility to evaluate its outreach program regularly. Member companies are encouraged to share all relevant information with emergency management agencies and other local public organizations so that all emergency planning is coordinated. Companies must also test their emergency plans annually and help communities recover from any environmental, health, or safety incidents.
- *Process Safety Code* - Designed to prevent fires, explosions, and accidental chemical releases. To implement this code, member companies must establish an ongoing safety program that includes a measurement of performance, audits of conformity, and a written safety policy. Companies must also conduct safety reviews of all new and modified facilities before start-up, have maintenance and inspection programs, and must have documented and up-to-date safety information regarding process design and procedures. All jobs with process safety implications must have written step-by-step instructions and clear emergency procedures. Companies must also ensure that sufficient layers of protection are put in place to prevent equipment failures or human errors from escalating into incidents. If an incident should occur despite preventive measures, corrective action should be identified, carried out, and communicated to appropriate personnel.
- *Employee Health & Safety Code* - Designed to protect and promote the health and safety of people working at or visiting member company work sites. This code addresses management of occupational health and safety programs, identification and assessment of hazards, prevention of unsafe acts and conditions, and communication of safe work practices and hazards to employees, contractors, and visitors.
- *Pollution Prevention Code* - Designed to improve the chemical industry's performance by seeking an ongoing long-term reduction of waste released to the environment. Reduction goals are to give priority to wastes having the highest potential hazard. Companies will also manage any remaining waste through practicable methods that best, protect the environment as well as the health and safety of employees and the public. Obtaining employee and community input regarding pollution prevention programs is another requirement of this code. Companies must also promote pollution prevention concepts to customers, suppliers, other companies, and the government.
- *Distribution Code* - Designed to reduce employee, environmental, and public risks from the storage, handling, transfer, and repackaging of chemicals. All modes of transportation and all forms of chemicals are subject to the practices established by this code. The code calls for companies to evaluate the risks associated with their chemical distribution systems, as well as methods to minimize those risks. The performance of employees, distributors, carriers, and contractors must also be reviewed to ensure that each meets these requirements.
- *Product Stewardship Code* - Designed to make health, safety, and environmental protection an integral part of the design, manufacture, distribution, use, recycle, and disposal of products. Implementing

this code will affect virtually every function of a company, including research and development, manufacturing, distribution, sales, and marketing. The code fosters the sharing of information about the proper use, storage, and disposal of products with the company's stakeholders, such as customers, suppliers, distributors, and contractors. This code is designed to include as much of the chain of commerce as necessary to help prevent product misuse that might result in harm to human health or the environment.

Guiding Principles

- To seek and incorporate public input regarding our products and operations.
- To provide chemicals that can be manufactured, transported, used and disposed of safely.
- To make health, safety, the environment and resource conservation critical considerations for all new and existing products and processes.
- To provide information on health or environmental risks and pursue protective measures for employees, the public and other key stakeholders.
- To work with customers, carriers, suppliers, distributors and contractors to foster the safe use, transport and disposal of chemicals.
- To operate our facilities in a manner that protects the environment and the health and safety of our employees and the public.
- To support education and research on the health, safety and environmental effects of our products and processes.
- To work with others to resolve problems associated with past handling and disposal practices.
- To lead in the development of responsible laws, regulations, and standards that safeguard the community, workplace and environment.
- To practice Responsible Care® by encouraging and assisting others to adhere to these principles and practices.

Related Publications

- Pollution Prevention Open House Toolkit
- SOCMA's CAER Implementation Ideas
- SOCMA's Guide to Community Awareness and Emergency Response

- SOCMA's Guide to Completing the CAER Code Self-Evaluation Form
- SOCMA's Guide to Process Safety
- SOCMA's Guide to Product Stewardship

Publications are available through SOCMA Website at <http://www.socma.com/respcare/products>

STEEL MANUFACTURERS ASSOCIATION Guiding Environmental Principles

www.steelnet.org

Program Elements

Guiding Environmental Principles

Recognizing that steel is the most recycled material in North America, we advocate:

- The promotion of steel recycling.
- The implementation of continuous improvement in environmental performance.
- The participation with government and community groups in creating responsible laws, regulations, and standards to safeguard the community and the environment.

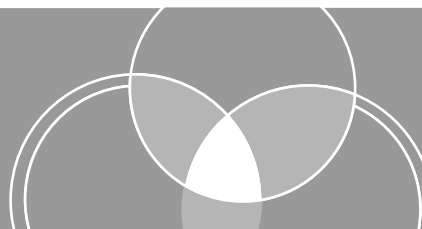
Recognizing that people are our most important asset, and that we live in the communities surrounding the facilities, we commit to:

- The integration of environmental awareness in our operations by educating our employees on the environmental impact of our processes and involving them in decisions that will have a direct impact on the environment.
- Meet or exceed the requirements of environmental laws and rules.
- The distribution of information to local communities about our operations and their impact on the environment through reasonable efforts.
- The advancement of research on the health, safety, and environmental effects of our industry.

Recognizing that steelmaking is an energy intensive process, we encourage:

- The optimization of energy efficiency of our production processes for the conservation of natural resources.

VII. USEFUL WEBSITES



ASSOCIATIONS

Aerospace Industries Association
<http://www.aia-aerospace.org/>

Association of Water Technologies
<http://www.awt.org/>

Chemical Industry Council of New Jersey
<http://www.cicnj.org/>

Chemical Council of Missouri
<http://www.ccmo.org/>

Chlorine Chemistry Council
<http://www.c3.org/>

Compressed Gas Association, Inc.
<http://www.cganet.com/>

The Chlorine Institute, Inc.
<http://www.cl2.com/>

The Electronic Industry Alliance
<http://www.eia.org/index2.cfm>
<http://www.eia.org/government/eic/index.cfm>

Florida Manufacturing and Chemical Council, Inc.
<http://www.fmcc.org/>

Louisiana Chemical Association
<http://www.lca.org/>

Manufacturers and Chemical Industry
Council of North Carolina
<http://www.mccicnc.org/>

Michigan Chemical Council
<http://www.mccinfo.org/>

Ohio Chemical Council
<http://www.ohiochem.org/>

Pennsylvania Chemical Industry Council
<http://www.pcic.org/>

Texas Chemical Council
<http://www.txchemcouncil.org/>

The Vinyl Institute
<http://www.vinylinfo.org/>

West Virginia's Manufacturers Association
<http://www.wvma.com/>

PROGRAMS

AgStar
<http://yosemite.epa.gov/methane/home.nsf/pages/agstar>

CERES Principles
<http://www.ceres.org/about/principles.html>

Climate Wise
<http://www.epa.gov/climatewise/>

Common Sense Initiative
<http://www.epa.gov/commonsense/>

Design for Environment
<http://www.epa.gov/opptintr/dfe/>

Encouraging Environmental Excellence
<http://www.atmi.org/Programs/e3home.html>

Energy Star Buildings
<http://www.epa.gov/greenlights>

Energy Star Homes
<http://yosemite.epa.gov/appd/eshomes/download.nsf/By+Category?OpenView>

Energy Star Office Equipment
<http://www.epa.gov/rgytgrnj/specinit/p2/volprog/esoe.htm>

Environmental Leadership Program
<http://es.epa.gov/elp/>

Environmental Management Systems
<http://www.denix.osd.mil/denix/Public/Library/ISO14000/Mgmt/iso14.html>

Great Printers Project
<http://www.cbemw.org/wisc/Printers.html>

Green Lights
<http://www.epa.gov/greenlights/>

ISO 14000
<http://www.iso.ch/>

Office of Pollution Prevention & Compliance Assistance
Pennsylvania Department of Environmental Protection
http://www.dep.state.pa.us/dep/deputate/pollprev/pollution_prevention.html

Project XL
<http://www.epa.gov/ProjectXL/index.htm>

Responsible Distribution ProcessSM
<http://www.nacd.com/text/rdp.html>

Responsible Recycling Code
<http://www.nacr-r2.org/RESPRECY.HTM>

33/50 Program
<http://www.epa.gov/opptintr/3350/index.html>

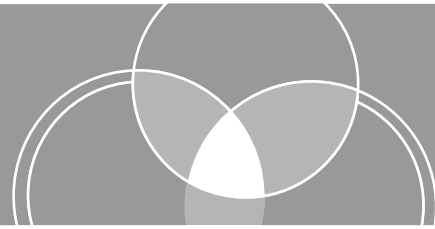
Star Track
<http://www.epa.gov/region01/steward/strack/>

Voluntary Standards Network
<http://www.epa.gov/opptintr/p2home/vsn.htm>

WasteWise
<http://www.epa.gov/epaoswer/non-hw/reduce/wstewise/main.htm>

Water Alliance for Voluntary Efficiency
<http://es.epa.gov/partners/wave/wave.html>

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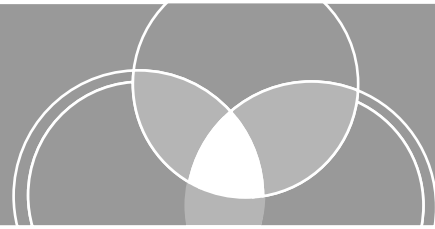
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IX. INSTITUTE FOR CORPORATE ENVIRONMENTAL MENTORING



The Institute for Corporate Environmental Mentoring (ICEM) was established in 1998 by The National Environmental Education & Training Foundation to explore ways to improve the environmental performance of small and medium-size businesses through the use of low cost, non-regulatory business education programs. Specifically the goal of the institute is to:

Enable education and mentoring that supports business efforts to achieve integrated economic, environmental, and social excellence.

To achieve its mission, ICEM seeks to:

- **Advance industrial ecology** as a strategic framework for improving business and environmental performance;
- **Provide unique national forums** to engage and empower industry, public stakeholders, educational and government leaders seeking to integrate environmental considerations into business decision making and planning;
- **Develop mentoring initiatives** to link companies of all sizes and sectors with environmental leaders; and
- **Utilize educational networks and institutions** to develop and deliver innovative curriculum, training, and informational programs.

The Institute is engaged in a number of different types of projects, all geared towards bringing environmental management expertise to small businesses. These include:

DEVELOPING MENTORING RESOURCES

- **The Mentor Center:** An Internet resource center for mentoring (www.mentor-center.org).
- **The Mentoring Handbook:** A how to guide for developing an environmental mentoring initiative or program.
- **Environmental Mentoring:** Benefits, Challenges, and Opportunities for the Business Community: An

examination of different types of successful environmental mentoring programs.

Strategic Environmental Management Training

- **Industrial Ecology Training & Mentoring Project:** An initiative to develop Industrial Ecology training workshops for small businesses and establish mentoring networks through the national community college system.
- **Strategic Environmental Management Systems Principles:** An intensive workshop for environmental professionals focusing on industrial ecology and cultivation of management skills.

FORUMS

- **White House Conference on Corporate Environmental Mentoring:** A one-day forum examining business-to-business mentoring held in January 1998.
- **Industrial Ecology Workshop For EH&S Professionals:** A one-day workshop on industrial ecology and business strategy for senior environmental professionals, held in January 1999.
- **Defining Environmental Excellence – The Emerging Role of Trade Associations as Mentors:** A forum examining industry sector voluntary initiative and environmental codes of conduct, held in March 2000.

RESEARCH

- **Mentoring for New Regulations:** A research initiative to examine the feasibility of designing mentoring initiatives for ensuring compliance with new federal environmental regulations.
- **Greening Corporate Supply Chains:** A research initiative to examine corporate supply chain environmental initiatives and the potential opportunities for mentoring.
- **Incentives and Barriers to Industrial Ecology:** A

research initiative with the Interagency Task Force on Material Flows and Industrial Ecology at the President's Council on Environmental Quality, exploring incentives and barriers to Industrial Ecology initiatives created through federal environmental regulations, reporting policies, and other federal programs.

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THE NATIONAL ENVIRONMENTAL EDUCATION & TRAINING FOUNDATION

The National Environmental Education & Training Foundation, chartered by Congress in 1990, is intended to fulfill a unique role in the environmental education and training field. The Foundation fosters environmental learning at the national level and provides a voice for learning oriented solutions to environmental problems and a forum for unique, unusual and effective working relationships that focus on the environment. These include partnerships between government, business, citizen groups, and individuals. As a part of its Congressional charter, the Foundation also works with the U.S. Environmental Protection Agency to support scientifically sound and effective development of non-regulatory voluntary programs for environmental stewardship.

The Foundation's mission is to help America make economic and societal progress through environmental learning by using public-private partnerships to connect the environment to issues of national concern such as: health care, education excellence, America's competitive position in the world economy, and effective community participation in managing our natural resources. In addition to awarding grants requiring private matching dollars for outstanding environmental education projects across the country, NEETF runs its own programs including Wellness & the Environment, the Institute for Corporate Environmental Mentoring, National Public Lands Day, and projects in safe drinking water and conservation education. The Foundation also commissions the annual NEETF/ Roper Starch National Report Card on Environmental Knowledge, Attitudes, and Behavior.

