EPA's Common Sense Initiative was discussed at the opening session by (l-r) Victor Shantora of Environment Canada; David Gardiner of EPA; Diane Cameron, Natural Resources Defense Council; Robert Huggett, EPA; and B.J. Mason, Government Advisory Committee and AESF Past President.

National Pollution Prevention Initiatives Inspire International Cooperation For Global Environmental Protection

Large numbers of industry professionals attended the opening session of the 17th AESF/EPA Pollution Prevention and Control Conference, held February 5–7 at the Clarion Plaza Hotel, Orlando, FL, to hear top environmental officials from Canada and the U.S. discuss initiatives and mutual concerns. The metal finishing sector of EPA's Common Sense Initiative was featured throughout the conference.

The Environmental Protection Agency's (EPA) Common Sense Initiative (CSI) is making progress toward finding cleaner, cheaper and smarter methods to manage the environment, according to Dr. Robert Huggett, assistant administrator for EPA's Office of Research & Development (ORD). Speaking at the opening session of the 17th AESF/EPA Pollution Prevention and Control Conference in Orlando, Huggett pointed out that the CSI emphasis is on pollution prevention. "We think it's better to completely avoid a problem, rather than work with it after it is a problem," he said.

In his talk, Huggett emphasized the role of the ORD in the CSI. He said one of their first projects under the new initiative, which was announced during AESF Week 1995, was the chromium MACT standards. He said several months were spent identifying companies that would cooperate in a project to collect baseline data in the Cleveland and Detroit areas. A preliminary report on the project may be ready as soon as SUR/FIN® '96—Cleveland.

An environmental research agenda for the metal finishing industry is also being developed, according to Huggett. High priority research needs will be identified and matched against current research efforts. Areas currently receiving priority attention for pollution prevention research include chlorinated solvents and cleaning, cadmium, hexavalent chromium, and cyanide. He said pollution prevention for nickel plating may also be included as a priority. Emphasis will be placed on zero discharge for finishing applications that cannot be replaced by non-pollution techniques.

Huggett said both pollution prevention research and education will receive emphasis in the future. EPA is already helping to fund some four-day training courses in pollution prevention, in cooperation with AESF, at five locations in the U.S., and in Mexico and Canada. Those courses are scheduled to be completed by the spring of 1997.

He also said EPA funding for research will be increased significantly by the 1997 fiscal year.

A Priority in Canada

Pollution prevention is a major part of the government agenda in Canada, according to Victor Shantora, Director General of Environment Canada's Toxics Pollution Prevention. "Environmental improvement and competitiveness work together," he said, pointing out that Canada views pollution prevention as being in the best interest of the environment, health, and economy.

Shantora said the U.S. and Canada have many common areas of interest in pollution prevention, citing the Great Lakes as one. "We already have

Speakers at the afternoon session on opening day were (l-r): Scott Dosick, EPA; Bob Benson, EPA; Bill Sonntag, Director of Government Relations, AESF/NAMF/MFSA; Karen Morley, EPA"s co-chairman of the Metal Finishing Sector Workgroup; Paul Shapiro, EPA; session chairman Teresa Harten, EPA; and Mark Ingle, EPA.

a number of joint understandings and pollution prevention initiatives in the Great Lakes, such as auto, printing and graphics, and one related to dry cleaning," he said. "We have learned that pollution isn't local, it is global." He said many of Canada's programs are similar to initiatives in the U.S., such as encouraging companies to develop better pollution prevention technology that works for them.

"The U.S. Common Sense Initiative is central to the way you expect to do business. Canada has a similar view. We want to use a process as a guide to find the best approach to solve a pollution problem," Shantora said. "It only makes good sense for the U.S. and Canada to cooperate in these areas."

Laying the Foundation For Broader Approaches To Pollution Prevention

The EPA's Common Sense Initiative has laid the foundation and built the first floor of a sound program, according to David Gardiner, Assistant Administrator, Office of Policy Planning and Evaluation, U.S. EPA. The next year, he said, should be spent completing the framework for the CSI. "If we can do that, we will have accomplished a great deal," he said.

Gardiner said the CSI has provided a way to start a dialog among people. "We have spent a good deal of time establishing a dialog and sense of trust among the players," he said. "We must have industry and EPA involved, but we also must involve other government agencies and the environmental community."

Gardiner said that, as a result of the CSI, a broad range of specific projects has been launched. EPA has endorsed 12 projects specifically related to the metal finishing industry. Those projects are ongoing in 12 states, he said, covering five separate EPA regions.

EPA has already begun to review, and to look forward to a strategic direction in the future, Gardiner said. "My vision is that, later this year, we can have a written agreement between all partners (in the CSI) to work toward becoming cleaner, cheaper and smarter," he said. "We hope to have everyone, including the environmental community, in agreement for future goals."

Environmental Community Praises CSI Achievements

Diane Cameron of the National Resources Defense Council, Washington, DC, praised the "hard work completed and progress made by this initiative," as she talked of her involvement with EPA's Common Sense Initiative. She said it was the first time her organization has been asked to make a long term commitment with industry to work together for a common goal.

"The consensus process in CSI is unique and sometimes delicate," she said, explaining that her organization is interested in preventing pollution, but that many in industry are interested in keeping their businesses going, and the industry effective and profitable. "We need to achieve some of the same goals for different reasons," she said.

Cameron said zero discharge is a desirable goal for all parties and can be achieved through good management, good practices and continuous reassessment of processes. "Continuous progress is what we are looking for."

Considerable progress has already been made, Cameron said, but much of the available technology is slow in being put into use. "We are trying to accelerate the verification of this technology to make it available faster to potential users."

Industry's Perspective

AESF Past President B. J. Mason, a member of the AESF/NAMF/MFSA Joint Government Advisory Committee, and member of the CSI's Metal Finishing Sector Working Group, said that after a year of cooperating in the initiative "I find myself in agreement with Bob Huggett and Diane Cameron."

Mason said he sometimes gets angry with other people working with the initiative, but noted that "they are the people helping us to make progress. The people who I am really angry with are those who are not doing their share to help this industry to do things cleaner, cheaper and smarter, and especially the unethical

businesses that give the rest of us a bad name," he said.

"We have achieved many goals, but we should have been doing most of them a long time ago," Mason said. "We need more positive participation from businesses in this industry."

Integrating Information

Bill Sonntag, NAMF/AESF/MFSA Director of Government Affairs, presented an overview of the National Metal Finishing Resource Center, a joint government/industry project designed to integrate usable information on environmental technology for surface finishers and make it available from one source. The project is a cooperative effort by EPA, NIST, NCMS, AESF, NAMF, and MFSA. It will be accessible through the World Wide Web and Internet.

Sonntag used slides to demonstrate the kinds of information available from the Center, including links to federal, state and local programs that apply to issues in the industry. He said the Center is on-line, and should be going full speed within the next few months.

MP&M Effluent Guidelines

Mark Ingle, project officer for the proposed Metal Products & Machinery (MP&M) Effluent Guidelines, covered the proposed limits and how they will be monitored. He said the guidelines are currently in two phases, but that industry wants to combine the two, so that one set of limits would take effect uniformly throughout the industry. "We have also heard quite a bit about indicators and undetectable limits," he said, referring to using aluminum and iron as indicators of other dangerous metals, and the very low cyanide limits proposed. He discussed ways for gathering the data used in the guidelines, and emphasized that it is a proposed document and may not be final. He called for input from industry, but emphasized it must be based on actual data, because it is a data-driven process to establish meaningful numbers for limits.

Flexible Solutions

A lot is going on in the metal finishing and plating sector of the CSI, according to Robert Benson, Office of Policy, Planning and Evaluation, U.S. EPA. Noting that the metal finishing sector is the most active of the six industries currently involved with CSI, Benson said the industry is so diverse that many new technologies must be studied to find different approaches for different shops. It's the only way to find the best approaches for effective pollution prevention and control, he said.

He said EPA is currently developing a guidance manual for environmental managers on the shop floor, and covered projects—proposed and underway—that have resulted from CSI activity. Some of the projects are exploring flexible ways of achieving zero discharge on plating process lines.

Paul Shapiro, coordinator for EPA's Office of Research and Development for CSI, outlined these goals for the CSI:

- Convene relative parties to find solutions for preventing pollution.
- Determine research priorities for pollution prevention.
- Provide technical support for non-research and development projects.
- Provide leadership to develop the technology needed to make CSI work.
- Develop federal and private sector partnerships to achieve the goals.

Shapiro said the agency will focus on finding ways to reduce or eliminate the most polluting processes, by reducing or eliminating materials of concern, such as cyanide.

Karen Morley of EPA, co-chairman of the Metal Finishing Sector Workgroup, and Scott Dosick of EPA's Office of Planning and Evaluation, teamed up for a presentation on tier III metal finishers—those who have old and outdated facilities with on-site contamination and possible clean-up liability.

EPA, they noted, is discussing ways to provide incentives for these firms to "clean-up," and ways to prevent others from becoming tier III firms. This may lead to a new initiative to incorporate an integrated holistic approach to cleaning up these sites, and to give more power to the regulated community to clean the contamination. A proposal will be made in the future, they said.

Morley noted that legislative change may be necessary to encourage proper cleanup in the future for tier III firms.

Speakers Forum

A majority of questions for agency speakers concerned the proposed Metal Products and Manufacturing (MP&M) guidelines. One member of the audience questioned EPA's reason for changing the required methods of treating wastewater in the MP&M guidelines, when other scientifically proven methods were already required and being used by metal finishers:

Q I am confused about the best available technology (BAT). The MP&M proposed to use lime for precipitation. That will create a lot more sludge to be disposed of. How is that better than methods that were developed and now required to be used by metal finishers?

A That's a good question. There were several precipitation methods studied for the rule. I believe the aim was strictly to reduce the pollutant in the wastewater. But, to be sure, we will need to pose that question to someone who was involved in the work to develop the rule.

Other discussions centered on the rule limiting cyanide levels in treated wastewater to .02 mg/L. It was pointed out by several members of the audience that the figure was scientifically flawed, because .02 is essentially undetectable, and the requirement of reaching an average of .02 for each month can never be achieved, because only higher limits can be detected.

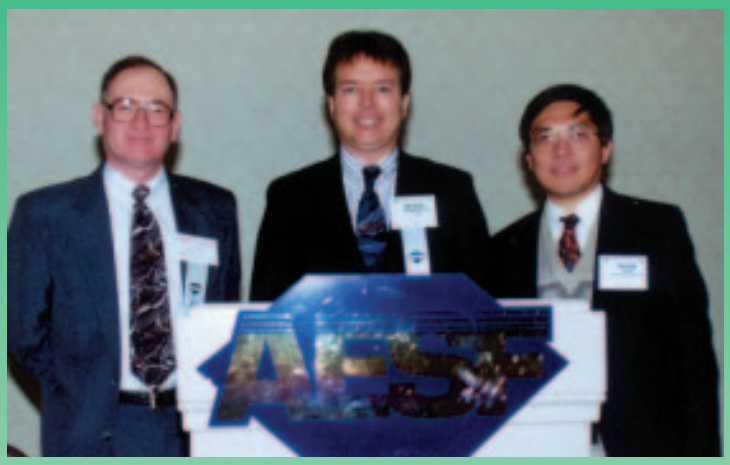
Agency speakers acknowledged that discussions about the cyanide levels were ongoing between industry and EPA. It was pointed out by officials that technology used at most plants observed for developing the rules were achieving those limits.

Another question was raised about the use of benign tracers (iron and aluminum) as indicators of other metals in wastewater, and oil and grease as an indication of toxic organics in wastewater. An agency spokesman said the procedure was developed to simplify the process and eliminate developing a "laundry list" of toxics to be tested in wastewater.

When the forum discussions ended, one agency speaker said this about the MP&M guidelines:

"EPA is saying to you that the door is wide open on MP&M. If you can come forward with good data to show us where the rule can be changed to make it better, we are willing to do so. If you have information that can help us, please come forward. We want to make the rule good enough to stand for protecting the environment, and to provide industry with acceptable methods that can be incorporated into the process to achieve the desired goals."

Session 2A speakers were (l-r): Michael Meagher, Esq., Burns & Levinson; Gayle Woodside, IBM Corporation; Session Chairman Dr. John Lott, DuPont Electronics; Karan Rhodes, Motorla, Inc.; and John Zavodjancik, Pratt & Whitney.



Speakers at Session 2B included (l-r): Session Chairman Lyle Kirman, Kinetico Engineered Systems; Michael Cournoyer, Lawrence Livermore National Laboratories; and Yinlun Huang, Department of Chemical Engineering & Materials Science, Wayne State University.

Session 3A speakers included (l-r): Michael Wyatt, MARCOR Environmental; Bill Penny, Manier, Herod, Hollabaugh & Smith; Kevin Walls, MARCOR Environmental; and Session Chairman H. Lee Martin, Westinghouse SRC.

Speakers at Session 3B were (l-r): Ole Solberg, P.E., R.R. Donnelley, Ltd.; Marie Reiner, CEF, Apollo Metals, Ltd.; Chengdong Zhou, Faraday Technology, Inc.; Paul Pajunen, P.E., Eco-Tec; and Session Chairman Derek Vachon, Wastewater Technology Centre.

Speakers at Session 4A were (seated l-r): Matt Kerby, Econco; Pauline Brown, Environmental Canada; Allan Jensen, The Technical University of Denmark. (Standing l-r): Bert Titcomb, BRT Consulting Services; Don Gallo, Esq., Michael, Best & Friedrich; Dan Kopplin, S.K. Williams Co.; Derek Vachon, Wastewater Technology Centre; Stratton Tragellis, Wheelabrator; and Session Chairman Dr. Fred Reinhard, Kenetic Recovery Corp.

Session 4B speakers were (standing l-r): John Brigance, Chemical Manufacturers Association; Dr. John Lot, DuPont Electronics; Pek Lee Choo, Nalco Chemical Company; Larry Strange, Benchmark Products, Inc.; and Session Chairman Dr. Rebecca Spearot, P.E., Clayton Environmental Consultants. (Seated, l-r): Katherine Hart, U.S. EPA; and Matthew Goldman, Roy F. Weston, Inc.

Speakers at Session 4C were (l-r): Session Chairman Jack Dini, Lawrence Livermore National Labs; Joe Farmer, Lawrence Livermore National Labs; Michael Meltzer, Lawrence livermore National Labs; Paul Shapiro, U.S. EPA; Christine Branson, Integrated Technologies Institute; and James Hensley, Integrated Technologies Institute.

Left—Session 5A speakers included (l-r): Tom Miles, Conserve Engineering; David Dicks, KCH Services; Jeffrey Lord, The Black Company Environmental; and Session Chairman Azita Yazdani, P.E., Pollution Prevention International, Inc.

Below—Speakers at Session 5B were (l-r): Keith Kramer, Ocean City Research Corp.; Mats Westerlund, AWM Ytteknik AB; Garson Shulman, Alumitec Products Corp.; Session Chairman John Zavodjancik, Pratt & Whitney; Almet Palazoglu, Department of Engineering & Materials Science, University of California-Davis; and Jack Dini, Lawrence Livermore National Labs.