I would like to share with you a glimpse of the important changes in which I have had the opportunity to participate as AESF Environmental Section chairman. Years of incremental progress with government and industry peers have at last come to fruition, and “common sense” is being achieved at a time when it is most needed.

In 1993, EPA and surface finishing representatives initiated the “Sustainable Industries Project” (SIP) to determine how regulations should be restructured to achieve environmental goals, as well as allow U.S. industry to compete on the world market. The SIP determined that there are companies: (1) that exceed compliance; (2) that want to be in compliance and would if they could obtain financing for the needed pollution control equipment; (3) that would like to shut down if regulations would allow; and (4) that knowingly pollute for profit. These tier-four “criminals” operate out of temporary facilities, decreasing the profits of legal competitors and causing many of the problems that have prompted the restrictive environmental regulations of today.

The Common Sense Initiative
An initiative to solve these problems was proposed, and the SIP report became the foundation for the EPA’s “Common Sense Initiative” (CSI), as explained in the January 1995 “Enviroscope” column by Robert Benson, EPA’s Chief of Pollution Prevention and Toxics Branch Office of Policy, Planning and Evaluation.

On July 20, 1994, EPA Administrator Carol Browner announced the CSI program as the Agency’s high-priority approach to the industrial sector. She called for innovative approaches to environmental policy-making that are different from traditional end-of-pipe, command-and-control programs. EPA’s new generation of environmental programs for industry will promote “cleaner, cheaper, smarter” solutions to environmental problems with an industry-by-industry approach to policy-making. The first phase of the program focuses on six industries: Metal finishing (including plating); automobile manufacturing; computers and electronics; iron and steel; petroleum refining; and printing.

The CSI Metal Finishing Sector Committee is structured to address opportunities identified by the SIP in each of the four tiers of our industry by consensus-based decision-making. The five work groups are:

- Regulatory & Reporting Programs
- Research & Technology
- Best Management Practices
- Environmentally Responsible Transition
- Enforcement & Compliance Assistance

EPA Director Timothy Oppelt, National Risk Management and Research Laboratory, and AESF President William Bonivert are co-chairmen of the work group on Research & Technology (R&T). I serve them as one of the six industry leaders working with nine leaders of citizen groups, and of federal, state and local government environmental agencies.

In a February 14 dinner meeting with Carol Browner in Orlando (during our joint 1995 AESF/EPA conference) she challenged our industry to deliver the first CSI success story—an important victory flag that she can wave for the CSI program when she returns to the joint 1996 conference.

Two days later, researchers of the Department of Defense (DoD), the Department of Energy (DoE), and the EPA presented their electroplating and surface finishing development programs to the R&T work group and to interested stakeholders. From this inventory, we are identifying those programs that may benefit small business surface finishers, and are establishing priorities. The goal is to develop a cross-agency/organization R&T plan that reinforces important and value-added ongoing research, as well as addresses key research and information gaps. The R&T plan will identify pilot projects with a high potential for near-term payoff, and will identify resources and implementing organizations for pilots and longer-term projects.

The proposed R&T “cleaner, cheaper, smarter” short-term strategy is to:

1. Diffuse current state-of-the-art market technology into the shops;
2. Improve current aqueous processes;
3. Develop alternative plating and cleaning process chemistries;
4. Change customer specifications;
5. Develop remediation technologies.

The proposed intermediate-term strategy is to define the R&T procedural process for a structured program of technology development and diffusion, to sustain a competitive “green” U.S. industry. Proposed long-term strategy includes developing alternative deposition methods that are superior, cost-effective and non-hazardous (or less hazardous).

On February 23 and 24 in Washington, DC, and on April 27 and 28 in Providence, RI, all worked together to
complete the CSI rules of operation. Despite the diverse interests of the committee members, “common sense” agreement was quickly attained. We have—at that CSI “table”—the ideal mix of leaders who speak with authority for their organizations.

Consensus is being achieved, and the CSI has great potential for benefit to our industry and the environment. The many years of AESF environmental and technical activities, the regulatory and assistance programs of NAMF and MFSA, and the SIP have all positioned the Metal Finishing Sector as the example for other CSI industry sectors to follow. All who are working at that CSI table realize the importance of this opportunity for the U.S.

Chromium Emissions

In breakout sessions, the R&T work group agreed that development and diffusion of effective, low-cost chromium emissions reduction technology is the immediate priority needed by the industry. New Clean Air Act standards had just required the small electroplater shops to complete the same Title V permits required of large industry. The cost ($15,000–$30,000) may be prohibitive for many small job shops, and the emission limit may be less than can be attained with their existing equipment.

The environmental regulations are being addressed by the Regulatory and Reporting Programs work group, but “common sense” regulatory change requires a solid technical basis. In addition, knowledgeable consultants have expressed concern that there has been insufficient evaluation of chromium emissions control technologies to ensure cost-effective industry compliance.

The Energy, Environment and Manufacturing project of the Technology Reinvestment Program (EMM-TRP) has funded approximately $250,000 for the CSI Chromium Emissions Control project. A MERIT (Metal Finishing in California) demonstration project is also evaluating emission controls of small job shops (one hard chromium and three decorative chromium plating shops). Additional research on hard chromium plating pollution control is needed. NAMF assisted in selecting three shops in Ohio and three in Michigan that volunteered for multimedia, in-plant baseline measurements. Other locations/sources of funding are being considered.

Teresa Harten and Roger Wilmoth, past EPA co-chairmen of our joint conference, are very knowledgeable of the industry and drafted the protocol for this study. Tim Oppelt presented it at the AESF Chromium Summit in Chicago, May 25–26. Comments by experienced chromium electroplaters who attended this AESF Chromium MACT Regulatory Compliance Workshop ensured that the project will address their needs.

Results of the in-plant measurements were presented to the R&T work group on June 29 in Baltimore at SUR/FIN® ’95. An AESF Pollution Prevention & Control Ad Hoc Committee, appointed by Chairman Peter Gallerani, CEF, and an MFSA Equipment Ad Hoc Committee, appointed by Chairman Terry Hutchins, as well as other interested suppliers, assisted in review of the proposed chromium emission control technology upgrades to be evaluated in three of the shops. Low-cost modifications or additions that small jobshops can afford are to be given priority.

If my crystal ball is accurate, EMM-TRP has just completed coordination of the technology selection with the shops. The equipment upgrades will be demonstrated during August through October. The technology transfer report will be peer-reviewed in January and distributed in February at the joint 1996 AESF/EPA Pollution Prevention & Control Conference in Orlando.

For those who need information now, I recommend University of Northern Iowa’s Practical Pollution Prevention Guide, Chromium Emission Reduction for Electroplaters and Anodizers, Program for Toxic Air Pollutant Studies. This guide has an excellent summary of these technologies that is easy to read and understand, and includes chromium removal efficiencies and cost estimates. Copies are $5 each and can be ordered by calling 319/273-2079 or 800/442-3109.

Speak Out for Common Sense

The CSI was initiated by the present administration, provides an excellent “common sense” flag to wave, and responds to the public demands. This program has the potential to level the playing field for U.S. industry to compete in the world market—but it is an unfunded initiative that is making progress only under the current public pressure for change. It is an important step in the right direction, but the laws that created these problems in the first place must be improved.

Philip K. Howard, in his book The Death of Common Sense, writes about how the law is suffocating America. If you, too, seek change, write your representatives and speak out for “common sense.” Most of the environmental laws are past due for reauthorization, and Congress is now drafting legislation. As citizens, we must continue to express our concerns. As industry, we must provide comment and needed technical information to bring about “common sense” legislation.

Bill Sonntag, AESF/NAMF/MFSA Government Relations, has been our voice in that endeavor. Sonntag, AESF Past President B.J. Mason and NAMF Past President David Marsh are frequent “common sense” voices at the CSI table. Please add your voice through active participation in CSI projects. □