

Metal Finishing Sector Subcommittee
Fact Sheet

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Metal Finishing Sector Subcommittee Fact Sheet

Subcommittee Background

On December 15-16, 1998, the Metal Finishing Sector Subcommittee held its final meeting under CSI. Over the course of its four-year history, the subcommittee forwarded three recommendations to the CSI Council that were endorsed and submitted to the Agency for action. Because some of the subcommittee's efforts are still works-in-progress, including the Tier 3 and Tier 4 projects, the Research and Development effort, and the Access to Capital Project, it will be continuing as a workgroup under the National Advisory Committee on Environmental Policy and Technology (NACEPT) Standing Committee on Sectors.

The Metal Finishing Subcommittee has over 20 members representing metal finishing companies, trade associations, suppliers, environmental and community groups, organized labor, and state and local governments. Representative organizations include the American Electroplaters and Surface Finishers Society, the AFL-CIO, the Barrio Planners of Los Angeles, the Water Environment Federation, and the Association of Metropolitan Sewerage Agencies. The Subcommittee has conducted 14 projects, and supports an additional CSI small business sector project.

A major theme for this sector from its creation has been the identification of significant incentives and barriers to improved, cost-effective environmental performance among metal finishers. The projects that the subcommittee conducted were based on these themes, experimentally testing innovative ways to address environmental problems. The cumulative result from these projects, and the products and changes that arose from them, has been the development of the Strategic Goals Program, a first of its kind beyond compliance voluntary incentives program for the metal finishing industry that fosters clean performance and continuous improvement with less regulatory burden. This program provides a long-term strategic vision and framework for the sector as a whole.

The design of the Strategic Goals Program was completed in September 1997. Since then, the program has been endorsed by the CSI Council, the

Metal Finishing Subcommittee, the major industry trade associations, EPA Administrator Browner, all senior managers at the Agency, and other important stakeholders.

For further information on the metal finishing sector, visit EPA's Sustainable Industry Web site at www.epa.gov/sustainableindustry, and for further information on the Strategic Goals Program, visit www.strategicgoals.org.

Industry Background

The Metal Finishing industry consists of more than three thousand "job shops," which are mostly small businesses with limited capital and personnel. This industry is also characterized by more than eight thousand "captive" metal finishing operations within larger manufacturing facilities. The industry is geographically diverse, but concentrated in heavily industrialized states. Metal finishers face a broad range of federal, state, and local environmental requirements (especially with regard to water use and waste disposal), because of the cross-media impacts of their operations. The industry takes pride in its many technical, educational and research activities, and in its participation in policy development through the Common Sense Initiative and other forums.

Strategic Goals Program

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The National Metal Finishing Strategic Goals Program (SGP) consists of voluntary, "better than compliance" national performance targets for metal finishing facilities, as well as compliance and achievement goals for the industry as a whole. The program represents a first-of-its-kind, consensus-backed package of cleaner, cheaper, and smarter policy actions for an industry sector. This industry stewardship program establishes a set of voluntary National Performance Goals for metal finishers that represent "better than compliance" environmental performance.

As of October 1999, the SGP had over 300 companies, 18 states, and 50 POTWs participating in this sector-wide effort to achieve cleaner, cheaper, smarter results by the metal finishing industry. Many EPA programs and all 10 Regions also are playing key roles in the implementation of the SGP.

The voluntary beyond compliance performance targets for participating SGP facilities are for the year 2002. The program promotes goals that are cleaner by reducing hazardous emissions; cheaper by saving money and providing economic advantages; and smarter by conserving resources. Examples of some targets for 2002 include a 90 percent reduction in organic Toxic Release Inventory (TRI) emissions; a 50 percent reduction in costs of unnecessary reporting, permitting, and monitoring; and a 50 percent reduction

in water use.

Starting in January 1998, EPA and its stakeholder partners have begun establishing SGP operations in locations nationwide, including developing program policies, holding workshops, providing outreach and marketing materials, and creating infrastructure to manage and analyze facility information. These local programs will provide assistance to SGP participant facilities, track and verify their progress toward the goal, and reward successful firms in the program. Regional implementation is underway now in Chicago, Los Angeles, New York, Providence, Boston, Indiana, Texas, North Carolina, Pennsylvania, and several other locations.

EPA and other stakeholders also are pursuing national commitments made as part of the program. Recent milestones include a proposed RCRA rule change to extend (to 180 days) the accumulation requirement for F006 metal finishing waste (to promote on-site metals recovery) and changes to the pretreatment program to enable POTWs to offer greater flexibility for facilities. Other national commitments include specific compliance assistance and R&D projects for the sector. For more information, visit the Web site at www.strategicgoals.org.

**Compliance
Leadership
through
Enforcement,
Auditing and
Negotiation
(CLEAN)**

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This New England based pilot project combined pollution prevention assistance and enforcement relief policies as incentives for improved environmental performance by metal finishers. It achieved measurable environmental results and increased compliance by conducting no-cost CLEAN assessments at six metal finishing facilities in Maine and New Hampshire.

To implement EPA Region I's CLEAN initiative, the states established multi-disciplinary technical assistance teams to conduct facility-wide, multi-media Pollution Prevention (P2) assessments at small and medium sized metal finishing companies located in Maine and New Hampshire. The teams included volunteers from industry, government technical assistance and regulatory programs, universities, and other organizations serving on the assessment teams and associated Workgroup and Steering Committee. The teams provided environmental compliance assistance and enforcement relief for facilities that fully participated in the project.

The CLEAN-P2 pilot ended in 1998. Now enforcement relief and referral to P2 technical assistance providers are becoming a routine aspect of regional and state compliance assurance efforts. These activities are

implemented by a newly created Small Business Team which utilizes the EPA's policy on compliance incentives for small businesses.

**Regulatory
Information
Inventory Team
Evaluation
(RIITE) Program**

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The Regulatory Information Inventory Team Evaluation (RIITE) project team applied business process reengineering techniques to examine federal, state, and local reporting requirements for metal finishers across all environmental media. The team explored ways to reduce paperwork burden, improve public access to data, and promote better environmental performance.

The results of regional pilot projects in Arizona and Texas have been used to develop national and state-specific policy recommendations to reengineer existing reporting requirements that will improve efficiency by collapsing duplicative or overlapping information requirements; expand public access to timely and error-free information; reduce the burden on industry submitters and government agencies; and create a replicable RIITE program for use by all states.

A RIITE "toolkit" was developed to assist interested states in applying the reengineering process and in using available tools for reporting reform. RIITE also has contributed to the Agency's overall efforts to reinvent environmental information, providing "One-Stop" states (for example) with important tools for their individual reform efforts. Arizona and Texas have both used their One-Stop grants to implement recommendations developed by the RIITE stakeholder groups.

**Metal Finishing
2000 Flexible
Track Projects**

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The Metal Finishing Subcommittee endorsed the concept of an alternative performance "flexible track" for top performing metal finishing facilities. Metal Finishing 2000 is designed to define and test the concept of offering operational flexibility for top environmental performing metal finishing facilities. Under the pilot, industry environmental performance leaders who meet the stakeholder-defined program criteria and pursue pollution prevention will receive operational flexibility. Early lessons learned from the pilots have provided SGP local groups with models for establishing stakeholder groups identifying benefits for metal finishers and compliance criteria.

The Metal Finishing 2000 concept changes the traditional framework and relationships by federal, state, and local governments working together to encourage facilities to achieve superior environmental performance and for agencies to provide for greater operational flexibility, using existing flexibility mechanisms available under current regulations. The flexible track concept

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(Michigan Project)

moves away from a “one-size-fits-all” regulatory approach, toward a more flexible, efficient, and incentive-based system.

Metal Finishing 2000 in Detroit, Michigan, is nearly complete with six companies implementing their individual pollution prevention projects. In Rhode Island, the Narragansett Bay Commission (NBC) has accepted one company into the program, is providing flexibility from certain regulatory requirements. NBC is evaluating the applications of seven additional firms. NBC also has applied to EPA's Project XL. If accepted, they will be able to offer these metal finishers flexibility from Federal regulatory requirements.

States and POTWs participating in the National Metal Finishing Strategic Goals Program are using lessons from these pilots to offer flexibility under the SGP. For More information on Metal Finishing 2000 visit the Sustainable Industry Web site at www.epa.gov/sustainableindustry.

**National Metal
Finishing
Resource Center
(NMFRC)**

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The National Metal Finishing Resource Center (NMFRC) provides "one-stop" access for metal finishers and others to up-to-date information about technical and compliance-related issues that affect their operations. The goal of the Center is to give direct, "customer-oriented" assistance to metal finishers and to help them reduce pollution, promote manufacturing efficiency, and achieve full compliance with all applicable environmental laws and regulations. The NMFRC was developed as a public/private partnership between EPA, National Institute of Standards and Technology (NIST), and the metal finishing industry.

The NMFRC became fully operational in October 1996 and is available to provide information on-line via the Internet on state and federal regulations, cost/benefit data on pollution prevention methods, technology updates, and opportunities for more in-depth technical assistance. In 1998, the NMFRC assumed a new role to assess the progress of facilities participating in the Strategic Goals Program and to provide technical assistance to participating firms. To access more information on NMFRC visit the Web site at www.nmfrc.org.

Metal Finishing Guidance Manual

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The Metal Finishing Guidance Manual is complete, and can be ordered from NMFRC at www.nmfrc.org/gmanual.htm. Its purpose is to serve as a plain language tool for use by shop floor managers to ensure continuing compliance with regulatory requirements. The Manual includes comprehensive information on federal and state regulatory requirements, as well as information on technology options, pollution prevention approaches, and environmental management systems. This project is a public/private partnership, co-funded by EPA and the industry trade associations, and guided by the NACEPT Metal Finishing workgroup. Phase 2 is underway and includes annual updates, seminars on use of the manual, and creation of a hypertext CD version for use with the NMFRC.

Chromium Pollution Prevention Technology Demonstration

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The Research and Technology Workgroup is developing innovative, low cost technologies to improve the performance of the metal finishing industry and achieve cost-effective pollution results. Multi-stage composite mesh pads and chemical fume suppressants are two new technologies being tested in volunteer metal finishing facilities in the Midwest. The first demonstration phase is complete. The most promising technologies will now be tested and, if successful, verified for broad marketing and use. Based on the results from the demonstration project, EPA's Office of Air and Radiation is working to make proposed changes to the Chrome Maximum Achievable Control Technology (MACT). The current rule states that all existing and new hard chromium electroplating, decorative chromium electroplating, and chromium anodizing tanks at major and area sources must limit emissions to the level of the MACT.

National Metal Finishing Environmental R&D Plan

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There is significant investment by many government and private entities in research and development for the metal finishing industry. This project has provided a better understanding of the technology needs of the industry, and has served as a basis for tailoring public and private sectors' Research and Development (R&D) to meet those needs. In 1997, the CSI Council and the Metal Finishing Subcommittee both endorsed this customer-oriented R&D strategy for the industry, ensuring that research efforts (including technology transfer and diffusions) meet the most significant environmental needs of metal finishers and are accessible to job shops and other stakeholders.

The National R&D Plan provides guidance to EPA, academia, industry, and other federal researchers on environmental R&D gaps within the metal finishing industry. ORD has also developed a risk screening tool (Characterizing Risk at Metal Finishing Facilities) and is providing grant

support for hexavalent chromium risk reduction and the metal finishing P2 verification pilot project. To view a copy of the R&D plan, visit NMFRC's Web site at www.nmfrc.org/pdf/rdcsi/title.htm.

The R&D Plan now is helping the current research program focus on pollution prevention and remediation technologies that are of greatest benefit to small job shops. The Plan provides an inventory of federal R&D for metal finishers and an assessment and prioritization of the technology needs of the industry. It is being widely disseminated to shape the research agenda for the metal finishing industry.

POTW Training, Education, and Incentives Program

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This project is based on the premise that Publicly Owned [Water] Treatment Works (POTWs) have a major impact on the environmental performance of metal finishers (and other industries) that discharge to POTW systems. The goals of this project include: improving the capabilities of lower tier POTWs to manage their industrial users by reducing mass pollutant loadings without limiting industrial activity; and providing the most effective POTWs with increased managerial flexibility to achieve higher environmental quality at lower cost.

A multi-stakeholder project team evaluated selected POTWs with varying levels of performance in California, Indiana, and Virginia. The Metal Finishing Subcommittee has endorsed the team's final report, which presents an analysis of factors affecting the success of industrial pretreatment programs. The report also provides information on possible tools, programs, and incentives to help industrial dischargers achieve compliance more easily, and help POTWs develop more effective pretreatment programs. EPA's Office of Water is taking action to address the findings in the final report, including developing available tools available on the EPA Web site for POTWs.

RCRA Metal Finishing F006 Wastewater Sludge Project

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This project is addressing the RCRA Definition of Solid Waste within the metal finishing context. Initially, the project team evaluated options for improving the recyclability of F006, a RCRA regulated hazardous waste generated by thousands of metal finishers. F006 often contains potentially valuable metals along with other toxic constituents. The goals of this project include: 1) to complete an objective study of the composition, quantities, and characteristics of metal finishing wastewater treatment sludges; 2) to reduce the generation of the toxicity of metal finishing wastewater treatment sludges through pollution prevention measures; 3) to improve the recyclability of

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metals contained in the sludges in a cheaper, smarter fashion, while ensuring no transfer of hazards to other environmental media, and; 4) to reduce the volume of sludges destined for land disposal.

The first phase of the F006 Wastewater Sludge Project, which was a benchmarking analysis of F006 constituents, using national and regional sampling data (the latter being gathered with the cooperation of metal finishers and other stakeholders in Milwaukee, Chicago, and Phoenix), is complete. A workgroup is assessing the results of the benchmarking to determine next steps and to help remove barriers to the improved utilization goals of the Strategic Goals Program.

Recent milestones for this group include a proposed RCRA rule change to extend (to 180 days) the accumulation requirements for F006 metal finishing waste to promote on-site metals recovery and recycling of waste. EPA is in the process of assessing public comments on the proposal.

**Environmentally
Responsible Site
Transition for
Tier 3 Firms**

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Tier 3 firms are outdated metal finishing job shops. When owners are ready to transition out of the business, factors such as declining finances or environmental liabilities from site contamination make the transition difficult, if not impossible. The result might be a facility shutdown with no assets left to clean the site for future uses. The job site may then become a “Brownfield” area. The CSI project team completed a series of case studies of representative Tier 3 facilities in Connecticut, Massachusetts, and California. The resulting report has been endorsed by the Metal Finishing Subcommittee. The report identifies factors that lead certain metal finishers to become Tier 3 Firms, and offers possible transition strategies for these facilities.

In 1998, EPA Region 1 and Rhode Island DEM completed a prototype guidance booklet to provide owners of Tier 3 firms with detailed explanations on the issues they face and local resources that are available to help them. This prototype booklet is currently being modified for use in Massachusetts and other states to take into account the varying state-to-state resources. Copies will be available on the SGP Web site at www.strategicgoals.org

Approaching Zero Discharge Demonstration Project

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The objective of this project is to promote the commercialization of metal finishing processes that operate at or near zero discharge of toxic pollutants. While it is desirable to seek less toxic alternatives to the substances used in metal finishing, in some cases performance-equivalent substitutes cannot be found for particular processes. In these cases, there are environmental benefits in demonstrating “cleaner” technologies that achieve waste reduction results approaching zero discharge through improved operational techniques and/or in-process recycling technologies.

A detailed project work plan has been drafted for demonstrations of up to four pollutant reduction technologies. The demonstrations will be designed to provide technology-specific information on environmental emissions, operation of the technologies, maintenance needs, production throughput, product quality, energy consumption, capital and operating costs, and occupational exposure. Funding has been secured for this project, and it is receiving broad stakeholder support.

Tier 4 Facility Enforcement Project

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Tier 4 firms are “renegade” shops that are chronically out of compliance, don’t actively seek ways to be in compliance, and generally escape enforcement attention because of their small size and transient nature, or the government authorities’ inability/unwillingness to proceed against them. These firms lower the reputation of the industry and compete with higher tier firms by avoiding the costs of environmental protection and underselling their competition. The objective of this project is to develop a targeted enforcement program that identifies Tier 4 firms and takes appropriate action against them.

A multi-stakeholder team developed a work plan for the project. In 1998, regional stakeholder teams developed pilot efforts in several areas to test new enforcement approaches for Tier 4 firms. In 1999, several local SGP groups began work on developing targeted enforcement strategies, and reviewing information sources to identify chronic non-compliers and “rogue” firms.

**Environmental
Technology
Verification
Project**

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This project is one of 12 pilots operating under the EPA's Environmental Technology Verification (ETV) program. The ETV Metal Finishing Pollution Prevention (ETV-MF) pilot was endorsed by the Metal Finishing Subcommittee in March 1997. Its purpose is to field test pollution prevention technologies and to promote the adoption of proven, effective technologies by metal finishers. The goal of this project is to institutionalize a long-term verification process. Technology categories will initially be drawn from the National Metal Finishing Environmental R&D Plan and later solicited from the pilot's Stakeholder Group.

**Access to Capital
Project**

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The metal finishing industry is characterized by small job shops. These small business owners often find barriers to obtaining funding for facility improvement and/or site remediation. The metal finishing sector is leading an effort to conduct an analysis of innovative ideas such as environmental insurance and technology verification to support loan decisions that can be of benefit across small business components within sectors.

In January 1997, EPA held a meeting of banking, insurance, and industry experts (with representatives from the CSI Printing, and the Computers and Electronics Sectors) to discuss Access to Capital issues. The resulting report and recommendations were endorsed by the CSI Council and the Metal Finishing Subcommittee. The subcommittee recommended to EPA that it develop an EPA/Small Business Association (SBA) sponsored pilot loan program to help small metal finishers fund facility improvements.

The Office of Policy awarded a grant to EPA Region 9's (San Francisco, CA) Environmental Finance Center to facilitate meetings and perform analysis for a local multi-stakeholder group. The multi-stakeholder group will develop loan criteria and a loan review board for this pilot program with SBA. Stakeholder planning meetings were held during the first two quarters of Fiscal Year 1999 to develop the pilot loan program for metal finishers in the Los Angeles area. Current plans anticipate a \$2-4 million small business loan program that will be piloted in early Fall 1999. Long-term plans call for replication of this model in other SGP areas and perhaps with other small business sectors.

Common Sense Initiative

On December 17, 1998, the Common Sense Initiative (CSI) Council conducted its final meeting. The CSI was an innovative approach to environmental protection that addressed environmental management by industrial sectors rather than environmental medium (air, water, land). In 1994, EPA selected six industries to serve as CSI pilots: automobile manufacturing, computer and electronics, iron and steel, metal finishing, petroleum refining, and printing. Using a consensus approach to decision making, the groups addressed a wide range of environmental topics such as pollution prevention, environmental reporting requirements, and public access to environmental information. The six sector subcommittees, each consisting of representatives from industry, environmental justice organizations, labor organizations, environmental organizations, federal, state, and local governments initiated nearly 40 projects. From the four-year initiative, the CSI Council presented 28 formal recommendations to the Agency. The Agency is in the process of addressing the recommendations, and the status of the recommendations in the Agency is being tracked.

The final Council meeting in December 1998 represented the conclusion of the CSI process as it has been operating since 1994. The initiative proved to be an innovative approach to environmental protection and pollution prevention. Three of the subcommittees will continue their work under the new National Advisory Committee on Environmental Policy and Technology (NACEPT) Standing Committee on Sectors. Visit the Sectors web site at www.epa.gov/sectors for more information on this initiative and other national and regional Agency projects that are being implemented.

For more information about CSI visit the archived web site at
www.epa.gov/csi, or write
U.S. EPA, MC 1802
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Common Sense Initiative

Printing Sector Subcommittee Fact Sheet

Subcommittee Background

The goals of the Common Sense Initiative Printing Sector were to achieve fundamental changes within the printing sector by incorporating pollution prevention practices into everyday worklife; to promote outreach to and participation by all stakeholders; to improve access to data and technical assistance for all interested parties; to streamline burdensome processes; to improve economy of business practices; and to promote greater community involvement.

The Printing Subcommittee included more than 20 members representing printing companies, trade associations, environmental and community groups, organized labor, and state and local governments. The members met regularly and focused on new ways to involve printers, associated regulators, and the community in environmental and public health protection.

The Printing Sector held its final meeting as a Subcommittee under the Common Sense Initiative in December 1998. The Printing Sector Subcommittee will continue its work as a part of the National Advisory Committee on Environmental Policy and Technology (NACEPT) Standing Committee on Sectors. This committee will be the vehicle for stakeholder input on printing sector-based issues.

During the Printing Subcommittee's four years with the Common Sense Initiative, it developed the following two projects: PrintSTEP and the New York City Education Project.

Industry Background

The Printing industry is very diverse, and it uses five different printing processes: lithography, gravure, flexography, letterpress, and screen printing. End products include newspapers, books, greeting cards, labels, textiles, nameplates, brochures, wrappers, and paper bags. It is estimated that there are 70,000 printing establishments employing 1.5 million people in the U.S.; however, almost one-half of all printing facilities have fewer than five employees, and approximately 84 percent employ fewer than 20. Printers

are often located in light industrial areas, business centers, and in some cases, residential areas.

The Printing Sector formed a multi-stakeholder team to examine the current regulatory requirements for the printing industry. The team identified the following problems within the current system:

- Printers generally want to be good environmental stewards, but even the best-intentioned are often daunted by the prospect of having to navigate what can be a confusing maze of air, hazardous waste, and industrial wastewater requirements.
- Many small printers have little or no interaction with regulatory agencies, which leaves the regulators with few opportunities to assist the printers with adopting voluntary cleaner processes.
- Most printers are small businesses with limited emissions; however, collectively they can affect overall environmental quality.
- There is a lack of meaningful public involvement when permits are issued despite the fact that printers may be seeking permission to add to current emissions.
- Most environmental management regulatory programs for printers are organized by environmental media, with separate regulations for emissions to the air, discharges to the water, and disposal of hazardous waste. This single-media approach can result in inefficient duplicative efforts.
- Operational flexibility is limited for printers with permits which hinders their ability to make process changes and respond to market demands.
- Pollution prevention opportunities are often not realized because limited resources are devoted to permit applications, renewals, and modifications. Additionally, the current single-media system discourages identifying opportunities for facility-wide pollution prevention.
- Little connection is made between environmental and worker health and safety issues.

PrintSTEP

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The goal of PrintSTEP (Printers' Simplified Total Environmental Partnership) is to help the printing industry and the public achieve cleaner, cheaper, and smarter environmental protection through the creation of a simpler regulatory "framework." PrintSTEP does not change the existing environmental emissions or release standards for the printing industry. Instead, it changes the process of implementing those standards. PrintSTEP should improve environmental performance, enhance efficiency, and simplify the regulatory process. This new approach encourages all stakeholders in the printing

industry to become involved and to contribute positively. Pilot projects with extensive evaluation (including gathering baseline information at the initiation of the pilot projects) will be the primary means of determining the effectiveness of PrintSTEP. The implementation of PrintSTEP will be conducted under EPA's Standing Committee on Sectors under the National Advisory Council for Environmental Policy and Technology (NACEPT).

The PrintSTEP pilots are designed to test a variety of reinvention approaches that will help the regulatory system become more effective, transparent, and flexible. The key elements include:

- A multi-media, modular approach with the level of regulatory oversight proportional to the level of waste generation and/or emissions.
- Enhanced opportunity for public involvement, including notice of permit changes, public consideration of the facility emissions and wastes generated, and planned public meetings concerning permits.
- Plain language tools to help printers determine their emissions and regulatory requirements, including definitions, references to pollution prevention measures, and calculations for determining the printer's air emissions regulatory category.
- A streamlined permitting process including a modular framework, decreased permit review time, and the ability to make certain process modifications without having to revise the permit. The new process will also include a provision for increased public involvement requirements if emissions increase.
- Conducting pilot projects in at least three states. These pilots will include a wide range of printing facilities and communities with different needs and circumstances.
- A formal evaluation of the pilots designed to ensure adequate data for drawing conclusions. Both base-line and pilot data will be collected. Examples of items to be measured include the increases in environmental protection as a result of pollution prevention, the environmental impact of permit flexibility, the costs and benefits to all stakeholders, the level of public interest, and the benefits of early public involvement in resolving difficult issues.

Four documents have been created to assist printers and regulators with the PrintSTEP program:

- Guide to States outlining the goals, features and anticipated benefits of an alternative regulatory system. The document also includes an implementation strategy to assist states in defining eligibility

requirements, regulatory thresholds, streamlining options, and geographic areas in which to implement pilot projects.

- Printers' Plain Language Workbook outlining the entire PrintSTEP system and identifying specifically what the printer must do to meet environmental regulatory requirements. This workbook will be provided to the states as a template to adapt in order to meet state-specific needs. After insertion of state specific requirements and information, the workbook will be available to all printers and other interested parties.
- Community Handbook specifically written for communities, contains plain language information outlining the PrintSTEP public involvement provisions and explains how the community, industry, and regulators can work together to meet the goals of the PrintSTEP pilots.
- Evaluation Strategy to identify baseline information, determine how PrintSTEP will work in practice, and ultimately how beneficial the system is for all stakeholders and the environment.

Timeline for PrintSTEP:

- Document Completion March 1999
- Grant Solicitation Publication April 1999
- State Grant Proposal to EPA July 1999
- Grants Announced September 1999
- Collection of Baseline Data Early 2000
- Midpoint Data Collection 2001
- Final Data/ Recommendations 2002

**New York City
Education Project**

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The Printing Subcommittee's New York City Education Project's aim was to incorporate pollution prevention into the everyday work practices of small printers. The goal of the project was to engage communities into identifying local printing businesses and to provide printers with information on how to access pollution prevention technical assistance. Education and outreach were critical elements of the workgroup's efforts. Existing relationships with trade groups, community groups, and state and local government were the key to sharing information with small printers and the community about pollution prevention, environmental compliance, and cost reduction.

The project's first educational tool is available: *The Environmental Compliance and Pollution Prevention Technical Assistance Directory for Printers in New York City*. More than a dozen city, state, federal, trade, and non-governmental organizations collaborated to document their services in this easy-to-use reference. This book has already proven beneficial in building awareness of the wide range of services available and the partnerships that



can be created between the providers.

The Common Sense Initiative

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For more information about CSI visit the archived web site at
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Common Sense Initiative

Iron and Steel Sector Subcommittee Fact Sheet

Subcommittee Background

On May 14, 1998, the Common Sense Initiative (CSI) Iron and Steel Sector Subcommittee held its final meeting, which concluded more than three and one-half years of effort, and resulted in five recommendations being forwarded to the CSI Council. At its first official Federal Advisory Committee Act (FACA) meeting in January 1995, the Iron and Steel Subcommittee was charged with finding ways to provide better environmental protection by looking at the areas of regulation, permits, compliance, reporting, pollution prevention, and environmental technology.

The Iron and Steel Subcommittee was composed of more than 20 members representing various environmental, regulatory, labor, and private sector organizations such as the Friends of the Earth, Bethlehem Steel Corporation, the United Steelworkers Association, and the Indiana Department of Environmental Management. The members met to decide issues to pursue, to review the progress of work groups that the Subcommittee created to carry out projects, to act on recommendations submitted by the work groups, and to hear panel discussions or special presentations on subjects related to the industry.

The Iron and Steel Subcommittee approached a variety of issues impacting the industry. For example, it addressed Brownfields, which are abandoned or idle sites that can be redeveloped and provide jobs and a healthier economy for communities around the sites. It addressed a series of permit related issues ranging from general – e.g., increased public participation in the permitting process, to those specific to the industry – e.g., the location of a pressure monitor in an electric arc furnace.

Industry

There are more than 1,000 facilities in the United States involved in steel making and processing, most of which are located in the Great Lakes Region and the South. The iron and steel industry manufactures a large variety of products—from steel nails and wire to bars and sheets of metal.

Iron is produced by heating coke, iron ore, and limestone in a blast furnace. Coke, which is both a fuel and a source of carbon, is produced by heating coal in the absence of oxygen at high temperatures. Steel is a blend of iron that has been manufactured in one of two ways—basic oxygen furnaces (BOF) or electric arc furnaces (EAF). The BOF uses molten iron from blast furnaces and combines it with the injection of high purity oxygen to cause a chemical reaction. The EAF uses primarily scrap steel that is melted and refined by passing electric current from electrodes through the material.

Brownfields Redevelopment

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Brownfields are abandoned or idle sites, often formerly used by commerce or industry, where expansion or redevelopment is impaired by real or perceived contamination. Redevelopment of these sites was a goal for all the stakeholders in the Iron and Steel Subcommittee. The Iron and Steel Subcommittee collaboratively developed Guiding Principles for Brownfields Redevelopment. These guiding principles present a set of goals that could be applied in a broad sense to any brownfields strategy. The Subcommittee's desire was that the guiding principles not be formulated as a policy directive or regulation. The Subcommittee also created a model statute for creating a community redevelopment authority. These approaches and other "tools" are available in a notebook for communities interested in implementing brownfields redevelopment in their own neighborhoods.

The Guiding Principles for Brownfields Redevelopment are being evaluated in Northwest Indiana and Birmingham, Alabama. The projects engage the community in the process and focus on getting idle, potentially contaminated iron and steel properties returned to productive use. Project managers are being surveyed to assess which guiding principles are being implemented and their impact. A final report will be issued after the assessment is completed.

**Birmingham
Alabama
Brownfields
Redevelopment
Project**

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**Northwest
Indiana
Brownfields
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Project**

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Birmingham, Alabama: In Birmingham, potentially contaminated land abandoned by iron foundries and other metal industries over the last 25 years, is being redeveloped. This commercial and noncommercial land-use redevelopment effort is creating as many as 2,000 jobs, and bringing new life to the many socio-economically depressed neighborhoods surrounding this brownfields area. A not-for-profit corporation has been created to further project development. The corporation received funding through a Supplemental Environment Project (SEP) that was created as the result of federal environmental enforcement actions, and the corporation was also the recipient of an EPA Brownfields Pilot Grant.

Northwest Indiana: Through a grant award from EPA's Brownfields Initiative, and matching funds from the Indiana Department of Environmental Management, the CSI Iron and Steel Subcommittee is working with its partners and local communities to restore the economic and environmental health of East Chicago, Gary, and Hammond. The project aims to create sustainable economic opportunities with new jobs, while improving the environment.

**Consolidated
Multi-Media
Reporting**

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EPA and its state partners collect environmental data for a variety of statutory and regulatory authorities on a single-media (air, land, or water) basis. This current reporting system is often burdensome for industry because of duplicative state and federal government requirements, different state requirements, and different techniques of collecting information. In addition, the information is often not easy for an affected community or regulators to use.

To address this problem, the CSI Iron and Steel Subcommittee identified State/EPA permit information that can be consolidated into electronically submitted reporting for a steel mini-mill. This consolidated report can potentially reduce duplication, minimize errors, yield substantial cost savings for industries and regulators, and provide affected communities with usable environmental information. The project was integrated into Utah's "One Stop" reporting initiative.

The project was a success. The state of Utah and Nucor Steel Company, the participating steel plant, developed a form to be used electronically to report data to the state of Utah. Utah will use the results of the project as preliminary work in developing its state-wide consolidated electronic format. This is part of a larger effort to make environmental data easily transferable between the state and the permittee and more available and comprehensible to the public.

**Iron and Steel
Web Site**

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Environmental technologies can make it easier and less costly for an industry to either prevent pollution, or to decrease impact on the environment. Many gains have been made over the last 25 years in environmental technologies for the iron and steel industry.

The CSI Iron and Steel Subcommittee considered developing a Web site that would inform the iron and steel industry about environmental technologies that could help them comply with or go beyond compliance with environmental standards. The Website would also provide the industry, regulators, and environmental and community groups with important environmental information. Due to funding and resources, the Web site was not developed.

**Promoting
Innovative
Technology**

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Innovative technology often produces improved industrial performance and environmental protection. However, there are barriers that can prevent testing or even adoption of such technology. For example, in the iron and steel industry the regulatory definition of solid waste may be adversely impacting metals recycling and the introduction of new technologies. The Regulatory Barriers Pilot Project, conducted by the Iron and Steel Subcommittee focused on this issue concerning the regulatory definition of Solid Waste.

Although this was the focus of the pilot project, the subcommittee did not reach consensus on whether the definition of solid waste is indeed a constraint. The Regulatory Barriers Pilot project did however result in specific findings and recommendations about how EPA can involve stakeholders in policy and regulatory development. The recommendations were forwarded to the CSI Council in the summer of 1997, and the Council subsequently submitted them to EPA in September 1997. As a result of the recommendations, EPA will be requiring regulatory managers to develop a discrete section in the work plans for significant rules on how the public will be involved throughout all stages of regulatory development.

**Spent Pickle
Liquor
Workshop**

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Before a hot-rolled steel product that is semi-finished undergoes cold rolling, forming or coating processes, its surface is cleaned through finishing operations. Several processes are used to chemically remove rust, oil, grease, and oxides from the surface of the product. One of these processes, acid pickling, produces spent pickle liquor, which is considered a hazardous waste because it contains lead, nickel, and hexavalent chromium. The U.S. produces approximately 900,000 tons of this waste annually, with most of it being recycled or reused.

In December 1996 the CSI Iron and Steel Subcommittee and the Environmental Law Institute convened a workshop to discuss the use of acid for steel pickling and the subsequent generation of spent pickle liquor. The workshop was also convened to discuss current and potential management alternatives for its reduction; recycling, reuse, and/or disposal options; and differences in the interpretations of state and federal regulations. The workshop brought together the expertise of all stakeholders to address and potentially reach agreement on cleaner, cheaper, smarter approaches for this environmental issue.

**Multi-Media
Permitting for
Mini Mills**

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Currently, iron and steel facilities, as do all facilities, must obtain separate permits for water, air, and waste, because each medium has separate regulatory requirements. This permit process addresses pollution impacts on a single media, rather than addressing a facility's entire impact on the environment. If the facility's total emissions were addressed, the environmental results might improve, and the community would be provided with a more complete picture of the facility's operations. In addition, the current system adds paperwork and administrative burdens for industries and their regulators.

The Iron and Steel Subcommittee developed a pseudo, non-enforceable multi-media permit for a steel mini-mill. This multi-media permitting approach included air, water, and waste and a pollution prevention plan. The Subcommittee also analyzed the potential statutory and regulatory barriers to multi-media permitting.

**General
Permitting
Issues**

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In addition to the Multi-Media Permitting Project, the CSI Iron and Steel Subcommittee examined general permitting issues. Specific interests to industry, regulators, and environmentalists, including public participation in the process, were addressed. A package of 12 permit issues and recommendations was developed to improve the permitting process in all mediums. These recommendations were forwarded to the CSI Council in the summer of 1997. The Council subsequently submitted the recommendations to EPA in September 1997.

Eight of the recommendations are being considered within EPA's general permit reform efforts and two of the recommendations support activities already underway. As a result of the remaining two recommendations, EPA released a regulation on electric arc furnace monitoring on March 2, 1999, and will develop consolidated guidance on witnessing certain air testing.

Using Supplemental Environmental Projects

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Supplemental Environmental Projects (SEPs) are one of the possible outcomes of an enforcement action taken on a company that is not in compliance with environmental laws. A portion of the penalty to be paid by companies in noncompliance may be used to promote a cleaner environment through opportunities like pollution prevention. The Iron and Steel Subcommittee worked with EPA's Office of Enforcement and Compliance Assurance (OECA) to identify ways to creatively use SEPs to support community development, facilitate additional Brownfields clean-up, increase public participation in the use of SEPs, and improve compliance.

In September 1999, the Office of Enforcement and Compliance Assurance completed an "Action Plan for Innovation" to implement the recommendations of the EPA Innovations Task Force. The Action Plan states that the enforcement and compliance assurance program will draft a new guidance establishing a process for involving communities early in the settlement of an enforcement action, so they can suggest or provide meaningful input on Supplemental Environmental Projects (SEPs). The enforcement and compliance assurance programs currently have a workgroup effort underway to develop this guidance. The Guidance will be issued by March 2000. The Action Plan also states that the enforcement and compliance assurance program will publicize innovative SEPs undertaken pursuant to EPA's Supplemental Environmental Projects Policy for encouraging certain SEP Projects, for example innovative projects to prevent pollution, encourage citizen monitoring, and provide training and technical support to the regulated community. Both of these activities will help to further refine and ultimately implement the recommendation from the CSI Iron and steel Subcommittee.

Community Advisory Committee

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Increasing emphasis is being placed on developing working relationships between an industrial facility and its surrounding community. Improved communication between communities and facilities creates opportunities to jointly address environmental improvement. The Iron and Steel Subcommittee has developed a set of Guiding Principles for such a relationship and is testing them at a pilot facility at Bethlehem Steel's Burns Harbor facility.

The Bethlehem Steel Burns Harbor Plant is the first integrated steel mill to voluntarily establish a Citizens Advisory Committee (CAC). The Bethlehem CAC includes area residents, representatives of environmental groups, the educational community, federal, state, and local government officials (including the EPA and National Park Service), and Bethlehem Steel union and management officials. The group adopted the CSI Guiding Principles, developed a mission statement, and has met regularly since November 1996 to

advise Bethlehem Steel regarding the improvement of its environmental performance. The process is facilitated by union leaders and this project assists Bethlehem Steel in its goal to become the corporate neighbor of choice.

In November 1998, through the Iron and Steel Subcommittee, EPA awarded a technical assistance grant to the Bethlehem CAC. The Save the Dunes Conservation Fund manages the grant for the advisory group. The grant identified three key objectives:

- (1) The CAC will study a portion of Bethlehem Steel's Burns Harbor property south of U.S. 12 to evaluate portions for possible use as a wildlife habitat and recreation area;
- (2) The group will develop a formal outreach and education plan to inform the community of its findings and provide EPA with an evaluation model for other iron and steel community advisory groups through an assessment of its development and operation over the past two years; and
- (3) The group will investigate innovative environmental performance measures to assess and communicate Bethlehem's environmental performance including whether it is improving.

The Bethlehem CAC has tackled several complex environmental issues including noise, truck traffic, and expediting RCRA corrective action for a former sludge dumping ground so that the area may be reused for wildlife habitat and recreational purposes. The cleanup and restoration of the sludge dumping ground has occupied a major portion of the CAC's attention. The former sludge dumping area, part of which is now a heron rookery, is adjacent to the Indiana Dunes National Lakeshore along the Little Calumet River. There is consensus among the CAC members that this property should be used, if possible, to enhance wildlife habitat and recreational opportunities and should not be used for industrial purposes. The CAC is working with the facility, the regulatory agencies, and the National Park Service to resolve the difficult challenges that must be overcome to achieve that goal.

**Iron and Steel
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The Iron and Steel Subcommittee proposed that all stakeholders, including industry, environmental groups, states, and communities, would benefit from having access to an iron and steel liaison in EPA. The Iron and Steel Subcommittee recommended that EPA create National and regional liaisons to fill this roll. This recommendation was forwarded to the CSI Council in the summer of 1997, and the Council subsequently submitted the recommendation to EPA in September 1997. Region 5 (Chicago, Illinois) established a pilot to test the Regional Liaison concept, and EPA established a pilot National Liaison in Washington, D.C. The liaisons acted as contact points, addressing problems, concerns, and issues regarding the iron and steel industry. The pilot project is complete, and the National and Regional Iron and Steel Liaison Evaluations are available at www.epa.gov/sectors.

**Environmental
Performance**

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One of the primary goals of CSI was to improve environmental performance. To promote this goal, the Iron and Steel Subcommittee looked at developing a stakeholder code of conduct to further environmental protection by mutual adherence to a set of principles. The Subcommittee also considered a concept of substantial compliance, which would possibly help establish intermediary compliance goals within the sector and recognize better environmental performers striving toward full compliance. Although a lot of work was accomplished on these two efforts, the group was unable to reach agreements on either project.

Contact

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The Common Sense Initiative

On December 17, 1998, the Common Sense Initiative (CSI) Council conducted its final meeting. The CSI was an innovative approach to environmental protection that addressed environmental management by industrial sectors rather than environmental medium (air, water, land). In 1994, EPA selected six industries to serve as CSI pilots: automobile manufacturing, computer and electronics, iron and steel, metal finishing, petroleum refining, and printing. Using a consensus approach to decision making, the groups addressed a wide range of environmental topics such as pollution prevention, environmental reporting requirements, and public access to environmental information. The six sector subcommittees, each consisting of representatives from industry, environmental justice organizations, labor organizations, environmental organizations, federal, state, and local governments initiated nearly 40 projects. From the four-year initiative, the CSI Council presented 28 formal recommendations to the Agency. The Agency is in the process of addressing the recommendations, and the status of the recommendations in the Agency is being tracked.

The final Council meeting in December 1998 represented the conclusion of the CSI process as it has been operating since 1994. The initiative proved to be an innovative approach to environmental protection and pollution prevention. Three of the subcommittees will continue their work under the new National Advisory Committee on Environmental Policy and Technology (NACEPT) Standing Committee on Sectors. Visit the Sectors web site at www.epa.gov/sectors for more information on this initiative and other National and regional Agency projects that are being implemented.

For more information about CSI visit the archived web site at
www.epa.gov/csi, or write
U.S. EPA, MC 1802
401 M Street SW
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Common Sense Initiative

Petroleum Refining Sector Subcommittee Fact Sheet

Subcommittee Background

On December 10-11, 1998, the Petroleum Refining Sector Subcommittee held its final meeting under CSI. This Subcommittee will continue its work under the National Advisory Committee for Environmental Policy and Technology (NACEPT) Standing Committee on Sectors. The Petroleum Subcommittee is currently working on the following three projects:

- Refinery Air Information Reporting System (RAIRS) Project (formerly: "One-Stop Reporting" Project)
- Equipment Leaks Project
- Refinery Accidental Release Information Communication Project

Under CSI, the subcommittee had more than 20 members with highly diverse and knowledgeable backgrounds. Members came from organizations such as the Louisiana Environmental Action Network (LEAN), Shell Oil, and Texas Natural Resources Conservation Commission. A similarly balanced membership will be maintained in the future.

Industry

The U.S. Department of Energy reported 164 operating petroleum refineries in the U.S. in 1997, with a total crude oil refining capacity of approximately 15 million barrels per day. Since 1982, the number of U.S. refineries has declined from about 300 facilities to its current number of 164 in 1997. Most of these closures have involved small facilities refining less than 50,000 barrels of crude oil per day; however, some larger facilities have closed in response to economic pressures. The petroleum refining industry refines crude oil into fuels (e.g., gasoline, diesel), finished non-fuel products (e.g., solvents, greases, asphalt), and raw materials for the chemical industry (e.g., naphtha, butane, propylene).

The industry is characterized by large facilities that are integrated companies with multiple high capacity refining facilities. However, small refineries also play a significant role within the industry; they make up approximately half of all U.S. facilities but only 14 percent of the total crude refining capacity. For reasons of efficiency in transporting crude oil feed stocks and finished

products, U.S. refineries are concentrated along the Gulf Coast and in the heavily industrialized areas on the east and west coasts.

**Refinery Air
Information
Reporting System
(RAIRS) Project**

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The Petroleum Refining Sector initiated the “Refinery Air Information System (RAIRS) Project” (*formerly “One-Stop Reporting and Public Access Project”*) to identify and recommend modifications to existing air reporting requirements that are duplicate and/or obsolete. The project also addressed community needs for increased understanding of and access to environmental information. The goal of the project is to enhance utility of air emission reports by all regulators, the regulated industry, and the public.

Initial findings of the pilot led to several key recommendations. For example, the reporting requirements did not contain as much duplication as originally anticipated, rather the requirements are very complex; the pilot facility spent a significant amount of time sorting through the regulatory maze. The RAIRS project team presented the following three recommendations to the CSI Council in September 1996:

- Pilot test the use of an electronic database of refinery air emissions reporting requirements with interested parties.
- Develop and test at a pilot facility a new air emissions reporting system that is sector-based.
- Develop a multi-media pilot of regulatory reporting requirements for a petroleum refinery.

The Sector currently is nearing completion of the project. This project was intentionally limited in scope to serve as a foundation for building trust among stakeholders. The purpose of the RAIRS project was to conduct an analysis of all current air emissions reporting requirements at refineries and to recommend modifications that significantly reduce the reporting burden for the refining industry while improving community understanding and access to reported environmental information. A consolidated air emissions reporting system was completed in August 1998. The revised reporting system was tested at a pilot refinery, Marathon Oil Refinery, in Texas City, Texas, in September 1998. The purpose of the pilot study was to compare the resource burden of existing reporting requirements with the revised system. Preliminary evaluation estimates indicate that the reporting burden was reduced by approximately 100 hours annually (33% reduction of the reporting burden for those reports included in the pilot project or about 5% of the total reporting burden at the pilot refinery).

Equipment Leaks

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The purpose of the Equipment Leaks Project was to identify alternatives to current leak detection and repair (LDAR) requirements at refineries to increase regulatory flexibility and cost effectiveness and reduce emissions. Upon initiation of the project, conventional wisdom indicated that a subset of "chronic leakers" could be identified and by focusing resources on these components the refinery could significantly reduce emissions. To validate this theory, the workgroup conducted a study of equipment leaks at 25 randomly selected refineries. The "Public Data Collection and Analysis Task Final Report" was completed in February 1998 and concluded that there was not a defined universe of chronic leakers. Likewise, similar results were reported in an API report, "Analysis of Refinery Screening Data", November 1997, which concluded that a LDAR program which focuses on high leakers, rather than chronic leakers, would reduce emissions more effectively than current requirements.

Therefore, in February 1998, the Subcommittee forwarded a recommendation to the CSI Council that the Agency support research, development, and demonstration of innovative technologies for the rapid detection and repair of equipment leaks at refineries. Implementation of this recommendation should ultimately lead to increased monitoring efficiency and flexibility at refineries, in exchange for improved environmental performance. To date, several technologies have been identified that have the potential to rapidly detect volatile organic compounds (VOC) emissions at refineries. The workgroup is investigating all of these technologies and has specifically field tested one such technology, a laser imaging system, including side-by-side comparison testing with current LDAR methods, at a volunteer refinery in April 1999. A man-portable prototype is scheduled to be completed by December 1999. The Agency expects to perform some laboratory testing with the prototype in early 2000 at Sandia National Laboratory in California. A refinery field test is expected to take place in April/May 2000. A pilot facility in Texas has been identified to participate.

Simultaneous with the development of these innovative technologies, the workgroup is coordinating with EPA's Office of Air Quality Planning and Standards (OAQPS) and state air regulatory agencies to develop and implement alternative procedures to current LDAR requirements. The Agency is coordinating the regulatory and technology development to ensure that this technology will be able to be utilized when it becomes commercially available.

**Accidental
Release
Communication
Project**

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The goal of the Refinery Accidental Release Information Communication Project is to improve the effectiveness of communication of accidental release information between refineries, the surrounding community, and other stakeholders, through work at a pilot refinery. The project work plan was developed and approved by the Subcommittee in July 1998. A pilot refinery, Shell Oil in Norco, Louisiana, was identified and a kick-off meeting between the CSI workgroup and the pilot facility was held in October 1998. A local workgroup, representative of the Norco community, was formed and has met periodically to discuss relevant issues. A goal of the pilot project is to develop a model program for improving communications between refineries and communities that could be tailored to the needs of other communities and refineries. The workgroup developed a model communication plan in August 1999 and the project was completed in September 1999. The final report was presented at an industry-wide National Petrochemical and Refiners Association (NPRA) Environmental Conference in Dallas, TX in the Fall 1999.

Common Sense Initiative

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The final Council meeting in December 1998 represented the conclusion of the CSI process as it has been operating since 1994. The initiative proved to be an innovative approach to environmental protection and pollution prevention. Three of the subcommittees will continue their work under the new National Advisory Committee on Environmental Policy and Technology (NACEPT) Standing Committee on Sectors. Visit the Sectors web site at www.epa.gov/sectors for more information on this initiative and other national and regional Agency projects that are being implemented.

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Common Sense Initiative

Computers and Electronics Sector Subcommittee Fact Sheet

Subcommittee Background

On December 3, 1998, the Computers and Electronics Sector Subcommittee held its final meeting, concluding nearly four years of effort and forwarding nine recommendations to the CSI Council. The subcommittee examined a wide range of pollution prevention, reporting, compliance, permitting, and environmental technology policies that affect the industry. The Computers and Electronics Subcommittee, composed of 23 members appointed by the EPA Administrator, represented a broad array of stakeholders, including federal and state government officials, industry and trade association representatives, leaders from the environmental and environmental justice movements, trade union professionals, academicians, and independent researchers. The EPA Assistant Administrator for Prevention, Pesticides, and Toxic Substances and the Administrators of EPA Regions I and IX co-chaired the subcommittee.

For close to four years, the Computers and Electronics Subcommittee engaged in meetings and developed projects to consider, design, and pilot test new policies and approaches for promoting more effective and less costly environmental performance. Three working groups of the subcommittee concentrated on identifying solutions to problems or issues in the following areas:

- Reporting and public access to environmental information—developing streamlined, relevant, and easily accessible reporting and retrieval systems that meet the information needs of industry, government, and the public.
- Overcoming barriers to pollution prevention, product stewardship, and recycling—addressing issues associated with policy communication, electronic product reuse, deconstruction, and recycling, with emphasis on regulatory barriers to pollution prevention and recycling in the manufacturing process.
- Creating alternative strategies for environmental protection—developing flexible, performance-based alternative approaches to environmental management, community engagement, and coordination between environmental and workplace health

policies.

Project structures were established within each of the three Computers and Electronics Sector Subcommittee workgroups to conduct specific site tests, demonstrate the potential for workable solutions, and draw lessons from the outcomes for future EPA sector-based and reinvention initiatives.

**Industry
Background**

The Computers and Electronics industry has emerged, at the close of the twentieth century, as a major engine for economic growth and social change. The Computers and Electronics Sector is diverse in that it is composed of not only very large companies, but thousands of small shops. While viewed as a “clean” industry, the sector does have environmental and occupational safety and health issues to address. Further development of this industry assures a future robust in new products, improved processes, environmental performance, and stewardship. Such a future will require modifying the traditional government approach of command and control toward an approach centered on common sense, collaboration, and flexibility with the goal of encouraging innovation, productive capacity, and a cleaner environment.

**Electronic
Product Recovery
and Recycling
(EPR2)
Roundtable**

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In July 1996, EPA entered a cooperative agreement with the National Safety Council’s Environmental Health Center to form the Electronic Product Recovery and Recycling (EPR2) Roundtable. Through annual conferences and the Internet, the roundtable brings together 23 interested stakeholders representing original equipment manufacturers; recyclers; reuse organizations; non-governmental organizations; federal, state, and local government agencies; retailers; and academics. The EPR2 Roundtable addresses issues raised as a result of the growing quantity of used computers and electronics equipment.

A fundamental goal of the EPR2 Roundtable is to promote public awareness about, and encourage development of, innovative strategies to address issues raised as a result of the growing quantity of computer and electronics equipment. The Roundtable also explores options and incentives for environmentally preferable design and manufacturing of this equipment in conjunction with initiatives such as Design for the Environment and Small Business Compliance Assistance Centers. Roundtable projects are designed to help identify and prioritize ways to overcome market, economic,

regulatory, administrative, and institutional barriers to effective management of electronic equipment throughout its life cycle.

An annual EPR2 Conference has been held for the past three years as a forum for exchanging information and technologies for developing practical, innovative strategies for managing end-of-life electronic equipment. A fourth conference is scheduled for September 2000 in Washington, DC. An EPR2 web site provides important materials related to electronics recovery and recycling to the interested public. For more information about the EPR2 Roundtable, please contact Dawn Amore at (202) 293-2270 extension 483 or epr2@nsc.org or visit the EPR2 Web site at www.nsc.org/ehc/epr2/EPR2_MEM.HTM.

**Cathode Ray
Tube (CRT)
Recycling**

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In order to promote responsible recycling of Cathode Ray Tubes (CRTs), revisions need to be made to the RCRA regulations. The CRTs in computers and televisions contain leaded glass to shield users from the radioactivity required to produce the image. Leaded glass recovered from used CRTs can be safely and practically recycled to produce new CRT glass. However, because of its lead oxide content, EPA's RCRA hazardous waste requirements require that recycled CRT glass be transported and processed as a hazardous waste. Such a requirement imposes a legal and economic burden on recycling this glass.

The Computers and Electronics Subcommittee proposed revisions to RCRA regulations that will enhance and increase CRT recycling. EPA expects to propose a RCRA rule in April 2000, that will greatly streamline the requirements for managing CRTs and reduce the regulatory burden on their recycling, while maintaining the appropriate level of protection for human health and the environment. These proposed regulatory changes will allow used CRT glass to be recycled into new glass by defining management practices for facilities that collect, process, or transport CRTs. The rule will also clarify that the CRT glass being processed, such that it is usable as a raw material in CRT glass manufacturing, is not subject to hazardous waste regulations. The proposed modifications to the RCRA regulations, as recommended by the CSI Council, will divert 200,000 tons per year of CRT glass from solid waste disposal facilities.

**Pilots and
Analysis of
Residential
Collection Pilots
for End-of-Life
Electrical and
Electronic
Equipment**

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Much of the nation's used computer and electronic equipment is not being recycled because of inadequate mechanisms to collect this material. To address this problem, a series of pilot projects were conducted exploring mechanisms to recover used residential computer and electronic equipment for reuse and recycling.

The residential computer and electronic equipment collection pilot programs in New York, Massachusetts, and California were so successful that their local sponsors have decided to permanently continue the programs. The pilot programs collected residential end-of-life computer and electronic equipment in Binghamton, NY; Somerville, MA; and San Jose, CA. In addition, data were collected from ongoing projects in Hennepin County, MN; Naperville, IL; San Francisco, CA; and Union County, NJ. These projects explored onetime used equipment drop-off events, multiple-day fixed drop-off locations, and collection at retail computer stores. The data were collected and analyzed to examine the economic impacts of various collection models for end-of-life electronic equipment and to model collection scenarios. The pilot projects and subsequent analysis provided first-time data that characterize the types and estimate the volumes of end-of-life electrical and electronic equipment in the municipal waste stream. The data also assess the economic viability of collecting, transporting, de-manufacturing, and recycling end-of-life residential electrical and electronic equipment, as well as gauge residential consumer willingness to help offset the costs of collecting and recycling electrical and electronic equipment.

A report for recycling industries and communities analyzed these pilot projects and was published in December 1998. The report contains a wealth of data. It addresses the volume and nature of equipment being recovered and recycled, the nature, size, and distribution of recycling and de-manufacturing facilities in the United States today; projections for equipment turnover in the coming decade; and the market for key materials.

Zero Wastewater Discharge Systems

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There is overlap between some existing environmental regulations. The regulation of zero wastewater discharge systems under the Resource Conservation and Recovery Act (RCRA) hazardous waste regulations and the Clean Water Act (CWA) regulations may, in some cases, present a barrier to the use of these environmentally beneficial discharge systems.

Manufacturers in the Computer and Electronics Sector, particularly printed wire board manufacturers, install zero wastewater discharge treatment and recycle systems in an effort to conserve water and reduce pollutants discharged to the environment. However, the use of zero wastewater discharge systems is currently hindered since no specific permitting structure exists for these systems. There are differences between states—and even between Publicly Owned Treatment Works (POTWs) within states—as to how these zero wastewater discharge systems should be regulated.

While all states do encourage the implementation of pollution prevention practices such as recycling systems, most states have no clear procedures or conditions for definitive certification that a zero wastewater discharge site is exempt from RCRA TSDF permitting requirements.

The Computer and Electronics Subcommittee identified several issues dealing with the overlap of RCRA and CWA requirements dealing with zero wastewater discharge systems. The goal of the project was to assess if the RCRA treatment, storage, and disposal facility (TSDF) regulations presented a barrier to the use of zero wastewater discharge systems.

Even though the Sector Subcommittee has completed its work, EPA has agreed to continue working on the use of zero wastewater discharge systems. There is general agreement that the confusion over the regulation of zero wastewater discharge units is directly related to how these units are regulated under RCRA. In the CSI Council recommendation submitted to the Agency, it was acknowledged that this work should continue within the context of limited Agency resources, but should be cognizant of other stakeholders efforts relating to the zero wastewater discharge issue.

To find out more about the CSI zero wastewater discharge study, visit the Web site at: <http://www.epa.gov/csi/computer/accomp5.htm>.

**Enhanced Public
Access: Solving
the Obscure
Policy Problem**

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EPA maintains a variety of information resources— including electronic bulletin boards, databases, libraries, and hotlines—however, they may be difficult to locate, access, or use. As a result, some regulatory determinations may be obscure simply because they are not well publicized and categorized for easy referral and access.

The Computer and Electronics Subcommittee found that a process is needed to ensure that EPA regulatory interpretations or determinations affecting the environmental management practices of the regulated community are compiled and made easily accessible to the public. EPA is implementing a system to provide easy public access to regulatory interpretations on the Internet.

The Agency-wide Task Force has now identified about 7,000 documents issued since 1992 that explain its interpretation of statutes and regulations, what the regulated community must do to comply, and how EPA will use discretionary authority. Approximately half of these documents are in paper version only. The Agency is in the process of completing the development of metadata on all of these documents and converting the paper documents to electronic format. An extensive quality assurance effort will then be required to review the metadata and converted documents for accuracy.

**Basic On-Line
Disaster and
Emergency
Response
(BOLDER)**

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EPA as well as other state and local agencies require that manufacturing facilities prepare emergency response plans. Each regulatory agency has historically required its own separate plan, which has meant that one facility might have up to nine separate emergency response plans, totaling hundreds of pages. Accessing and consulting paper copies of multiple plans in a real emergency is difficult for fire departments and other emergency response agencies.

The Computers and Electronics Subcommittee worked with fire departments and Computers and Electronics Sector facilities in Phoenix and Chandler, Arizona; Maricopa County; and other local communities to develop computer software that consolidates multiple emergency response plans into one document. The Basic On-Line Disaster and Emergency Response (BOLDER) software is a planning tool that consolidates over 500 pages of federal, state, and local agency response plans into one 30-page plan that is easy to access, understand, and implement. The BOLDER software makes a single plan (including facility maps and location of chemicals) electronically accessible to fire departments and other emergency response agencies

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through laptop computers on fire trucks, ambulances, and other response vehicles. It provides instant electronic access to emergency plans of Computers and Electronics Sector manufacturing facilities.

The BOLDER planning tool was completed in 1998 and is currently available in the Phoenix area. The workgroup has beta tested BOLDER with the Chemical Emergency Preparedness and Prevention Office in Corpus Christi, Texas, and will explore electronic submission of the One Plan requirements. Continuing work with the government-wide National Response Team is needed to realize the full potential of the BOLDER software. It is expected that BOLDER will be web-enabled for downloading by manufacturing facilities and emergency response agencies as public domain freeware. For more information on BOLDER, visit the Website at www.chemicalspill.org.

**Consolidated
Uniform Report
for the
Environment
(CURE)**

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Computers and electronics sector manufacturing facilities currently prepare environmental reports required by EPA, state, local, and other federal agencies. Each agency has historically required its own reports on separate schedules. While similar data were submitted, there is no central database, and there are significant differences among air, water, and solid waste reports that make it extremely difficult for government and nongovernment organizations (NGOs) to develop comprehensive reports.

The Computers and Electronics Subcommittee developed the Consolidated Uniform Report for the Environment (CURE) to provide easier access to environmental data for primary users, including reporting companies and their workers, regulating and responsible agencies at all levels of government, NGOs and local organizations, and the general public. In developing CURE, focus groups representing industry, government, environmental groups, the general public, and others were asked to define reporting and public access concerns in terms of what environmental information they need, how they would use the information, and how they would like to access it. Based on existing reports and the Stakeholder Needs Assessment that addresses the focus groups' responses, data elements were developed as an initial database.

CURE data will be more consistent, allow flexible queries and system outputs, and provide data security. CURE will include full functionality and will be documented by a data elements dictionary, as well as reports. CURE has the potential to replace 12 existing federal and state reports required of

companies in the Computers and Electronics Sector. Industry and government reporting forms are consolidated to eliminate duplication, coordinate reporting periods, update reporting requirements to meet current needs, and provide multiple methods of report submission, including electronic.

A demonstration-scale prototype of the CURE systems has been developed. Pilot tests have been conducted to test the use of the CURE prototype, including submission of and access to CURE data. The initial version targets the computers and electronics industry in Texas. Pennsylvania, Florida, Massachusetts, and other states have expressed interest in working together to further develop the CURE system. Future expansion could include other states and other industry sectors. Because there are multiple reporting initiatives within EPA, an attempt is also being made to integrate data content and reporting systems Agency wide. The CURE report was released in March 1999, and is located on the TNRCC Web site at www.tnrcc.state.tx.us/opr/cure/index.html.

For more information about the CURE, please visit the CURE Web site at www.rfdinc.com/tnrcc.

Reporting and Recordkeeping Requirements (3R) Inventory

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An inventory of current reporting requirements for the computers and electronics industry did not exist; and the availability of such an inventory was of great interest to many computers and electronics stakeholders. Thus, the Computer and Electronics Subcommittee agreed that a Reporting and Recordkeeping Requirements (3R) Inventory was needed. TNRCC in Texas and the Computers and Electronics Subcommittee built a sector specific database listing each applicable Federal and State (Texas only) rule or regulation that requires recordkeeping or reporting. The 3R Inventory was completed in 1997, and contains over 1,000 environmental federal and Texas regulations affecting the computer and electronics industry.

With assistance from the Institute for Interconnecting and Packaging Electronics Circuits, EPA's Office of Enforcement and Compliance Assistance (OECA) added the 3R Inventory to its Printed Wiring Board Resource Center (PWBRC). The PWBRC is one of nine resource centers established by OECA over the past three years. The CSI Council recommended that EPA periodically update the 3R Inventory and make it continuously available on the Internet.

For more information about the 3R Inventory, please visit the Compliance Assistance web site at www.pwbrc.org.

**Support for
Worker Health**

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The Computers and Electronics Sector's vision for the future includes integrating environmental, health, and safety programs into product design and production processes. An integrated environmental, health, and safety program would ensure that beneficial changes in one program area (such as the environment) are not to the detriment of other areas (such as safety or health). As subcommittee members considered ways to further this objective, it became apparent that a major impediment is the lack of integration of environmental, health, and safety programs at federal agencies.

The existing regulatory framework, which places responsibility for environmental mandates within EPA and health and safety mandates within OSHA, has created separate regulatory, monitoring, and reporting programs that could be much better integrated. Better collaboration among these agencies would (1) ensure that regulatory requirements are integrated; (2) improve the quality, quantity, and stakeholder access to chemical information, (3) assure that programs for chemical testing are conducted; (4) create options for integrating occupational health data for a national occupational health data system; and (5) ensure that existing chemical hazard, exposure, and modeling tools are available to stakeholders.

An interagency planning group, working under the direction of the ONE (OSHA, NIOSH, EPA) Committee held a workshop on June 17-18, 1999, in Washington, DC, to discuss "Common Sense Approaches to Protecting Workers and the Environment." The goal of the workshop was to improve and increase the coordination among the three agencies (OSHA, NIOSH, and EPA) on occupational and environmental issues. The results of the meeting will be published on EPA's Website at www.epa.gov/P2/workshop.htm. Future endeavors will be determined after the results have been compiled and the senior management of the three Agencies has been briefed.

**Performance
Track Program**

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There is general agreement among national environmental policy leaders that the next generation system of environmental protection should center on pollution prevention, continuous improvement, self-management, and the active collaboration of regulated entities, communities, workers, and

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regulatory agencies. To address this challenge for the future, the Computers and Electronics Sector Subcommittee focused on developing a performance track program that offers companies or facilities regulatory flexibility or other incentives to encourage them to improve their environmental, health, and safety performance. They believed that different performance tracks were necessary to encourage companies to take their next evolutionary step toward improved performance.

In May 1996, the Computers and Electronics Sector Subcommittee approved a document entitled “A Facility-Based Alternative System of Environmental Protection (ASEP)” that describes the vision, goals, objectives, and conceptual components of an alternative regulatory system.

The subcommittee agreed on the conceptual components that should be included in a performance track program and recommended that EPA consider including these components in any performance track programs that it develops. In its Innovations Task Force Report, *Aiming for Excellence*, EPA has committed to develop a performance track system to motivate and reward top environmental performance. EPA’s Office of Policy and Reinvention has established an EPA workgroup to assess the development of a performance track. The workgroup expects to prepare a concept paper for a performance track system in early 2000 and will conduct a number of stakeholder discussions as part of that process.

Constructive Engagement

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Constructive engagement means developing and continuously improving a cooperative partnership among a facility’s management, workers, communities, and government to plan, monitor, and evaluate its environmental, health, and safety activities. The capacity to effectively participate in constructive engagement requires that each party has timely access to relevant information, sufficient expertise to understand the information provided, and the resources to effectively participate.

As noted above, the Computers and Electronics Sector Subcommittee developed the concept of a facility-based alternative system of environmental protection. The goals of this system are to enhance environmental, health, and safety performance; to increase regulatory flexibility; and to increase engagement of and accountability to communities and workers.

One of the components of such a system is the constructive engagement of

industry, workers, communities, and government.

The *Constructive Engagement Resource Guide: Practical Advice for Dialogue Among Facilities, Workers, Communities and Regulators* was published as a consensus report of the Computers and Electronics Subcommittee in June 1999. It provides useful information to assist potential collaborators in how to use constructive engagement processes. The guide is available on EPA's Stakeholder Involvement Web site at www.epa.gov/stakeholders/pdf/resolve2.pdf. The document (EPA 745-B-99-008) can also be ordered free of charge from NSCEP either online at <http://www.epa.gov/ncepihom/> or at 1-800-490-97-9198.

Sulfuric Acid Recycling

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Sulfuric acid recycling by semiconductor manufacturers is inhibited by perceived RCRA regulatory barriers. The semiconductor industry uses ultra-pure concentrated sulfuric acid (95 to 97 percent) in its manufacturing processes. This acid is used to clean silicon wafers before they are etched to remove thin monolayers of ash or photoresist remaining on wafers. Once the acid has been used, the quantity of particulate matter or other contaminants contained in the used acid may be so small that the acid could be recycled and used as a raw material in other manufacturing processes.

Approximately 40,000 tons of concentrated ultra-pure sulfuric acid, worth about \$24 million, is used each year by the semiconductor industry. Many semiconductor manufacturers neutralize this 80 percent with sodium hydroxide or lime and discharge the resulting solution into the sewer. It takes approximately 32,000 tons of sodium hydroxide, worth \$9 million, to neutralize this acid. Many of the semiconductor manufacturing facilities do not recycle this acid because of the perception that it may be a hazardous waste under RCRA and because the costs of transporting and recycling it off-site as a hazardous waste are high. Although on-site distillation units to recycle this acid are commercially available, they are not suitable for many semiconductor manufacturing facilities.

The Computers and Electronics Subcommittee launched a project to find ways to eliminate perceived RCRA barriers to sulfuric acid recycling. When addressing this issue, it was discovered that there may be viable options for recycling the acid under current RCRA regulations, making regulatory or policy changes unnecessary. However, the circumstances under which sulfuric acid from semiconductor manufacturers can be recycled without being a

RCRA hazardous waste need to be clarified. EPA's Office of Solid Waste is in the process of preparing regulatory guidance to clarify those circumstances.

Common Sense Initiative

December 17, 1998, the Common Sense Initiative (CSI) Council conducted its final meeting. The CSI was an innovative approach to environmental protection that addressed environmental management by industrial sectors rather than environmental medium (air, water, land). In 1994, EPA selected six industries to serve as CSI pilots: automobile manufacturing, computer and electronics, iron and steel, metal finishing, petroleum refining, and printing. Using a consensus approach to decision making, the groups addressed a wide range of environmental topics such as pollution prevention, environmental reporting requirements, and public access to environmental information. The six sector subcommittees, each consisting of representatives from industry, environmental justice organizations, labor organizations, environmental organizations, federal, state, and local governments initiated nearly 40 projects. From the four-year initiative, the CSI Council presented 28 formal recommendations to the Agency. The Agency is in the process of addressing the recommendations, and the status of the recommendations in the Agency is being tracked.

The final Council meeting in December 1998 represented the conclusion of the CSI process as it has been operating since 1994. The initiative proved to be an innovative approach to environmental protection and pollution prevention. Three of the subcommittees will continue their work under the new National Advisory Committee on Environmental Policy and Technology (NACEPT) Standing Committee on Sectors. Visit the Sectors web site at www.epa.gov/sectors for more information on this initiative and other national and regional Agency projects that are being implemented.

For more information about CSI visit the archived web site at
www.epa.gov/csi, or write
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Common Sense Initiative

Automobile Manufacturing Subcommittee Fact Sheet

Subcommittee Background

The Automobile Manufacturing Subcommittee presented its findings to the CSI Council and concluded its agenda at the July 1997 CSI Council meeting. The final subcommittee meeting was March 17, 1997, and as a result of their work, the Automobile Manufacturing Sector Subcommittee forwarded three recommendations to the Council for consideration by the Agency, generated 10 consensus documents, and completed two reports: The Alternative Sector Regulatory System/Community Technical Assistance Project Team Report and the Life-Cycle Management Supplier Partnership Report. The following are the three subcommittee recommendations that were approved by the Council and forwarded to the Agency for review and action:

- Utilize the mass per unit area approach for use in future rule and guidance development for total vehicle coating;
- Consolidate environmental reporting to provide data more useful to Life Cycle Management; and
- Explore ways to improve the viability, accessibility, and usefulness of data resources.

The Automobile Manufacturing Subcommittee consisted of nearly 25 members from diverse backgrounds. Members came from such organizations as General Motors, Toyota, the Georgia Department of Natural Resources, and the Ecology Center of Ann Arbor, MI.

In the Spring of 1997, a full compliment of Project Goals was reached by the subcommittee. The subcommittee reviewed and accepted the documentary reports which represented thoughtful consideration of several crucial environmental policy questions such as: How might industry and community interact and exchange information? Are there realistic alternatives to the existing regulatory system? Where in the manufacturing process can industry gain efficiencies and flexibility, meet economic realities, and maintain strong environmental standards?

The automobile sector became the first industry ever to make its environmental performance information publicly available. A database was created that gives

interested citizens access to information on automobile assembly plants' performance and the surrounding community by instantly accessing key census data. The report can be found at www.epa.gov/oar/opar/auto.

Industry Background

As the largest industry in the United States, automobile manufacturing plays a significant role in the nation's economy. The industry produces not only vehicular transportation, but also automotive parts and accessories. Nearly 40 percent of the automobile manufacturing sector's facilities are concentrated in the Great Lakes Region.

Alternative Sector Regulatory System/Community Technical Assistance and Involvement Team

The Alternative Sector Regulatory System/Community Technical Assistance and Involvement Team addressed automobile manufacturing regulatory systems and community involvement. The project designed and tested community-based projects that strategically help local communities understand and participate in environmental quality and economic development issues in an interrelated and positive way. The team proposed core principles and a process for implementing an alternative to today's regulatory system that impacts the automobile manufacturing industry. The team also explored the unique role and information needs of the community in creating such alternatives.

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The team developed an Automotive Assembly Plant Data Base, which includes environmental information about the vicinity around auto plants, information from EPA's electronic databases, community demographic information, plant economic information, and an on-line media literature search for each auto plant community.

The following set of resultant documents was approved by the Subcommittee and forwarded to the Council for their consideration and dissemination.

Consensus Documents

- Principle for an Alternative Sector Regulatory System
- U.S. Automobile Assembly Plants and their Communities: Environmental, Economic and Demographic Profiles

Support Documents

- The Process of Implementing an Alternative Sector Regulatory System
- A Review of Community Participation in Environmental Decision-Making
- U.S. Automobile Assembly Plants and their Communities: Summary of Community and Plant Environmental and

Economic Issues Obtained through an Electronic Literature Search

As a result of the research for this project, Louisville, Kentucky was identified as a potential site for a community-based project. After additional review of the project, Ford Motor company decided not to proceed with the project.

Life Cycle Management/Supplier Partnership Project

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There are opportunities for environmental and economic gains through the wise selection and use of manufacturing materials using life-cycle management. The Automobile Manufacturing Subcommittee explored the business relationship between auto manufacturers, their many suppliers, and their role in positively influencing environmental outcomes in the manufacturing process.

The objective of the Life-Cycle Management/Supplier Partnership Project was to develop principles and strategies for applying life-cycle management in the automobile manufacturing sector to reduce environmental impacts in an economically efficient manner. The team wanted to demonstrate the principles and strategies of life-cycle management in automotive manufacturing through manufacturer/supplier partnerships in a way that would produce positive results and be applicable to and beneficial for the whole sector.

The project team grouped its work into two main areas: data needs for life cycle management; and testing of broader relationship issues between suppliers and manufacturers. The project team developed an environmental management data sheet as an example of how data collection could be organized. The idea surrounding this data sheet was to develop a chain of data, from the raw material through the various manufacturing stages, and hopefully in some form to the consumer. The other major focus area was the supplier partnership, and how the partnership can be developed and maintained (including potential regulatory incentives designed to aid the development of partnerships). The project team developed a document entitled "Tools and Policies for Life Cycle Management," which is a comprehensive document on domestic and international practices and policies, and can be used as a bench mark for beginning a broader discussion about policies to encourage life cycle management in other industry sectors.

From this effort, the stakeholders from this group have become even more convinced of the need to move beyond facility-based approaches, and to foster environmental protection that promises a more product-based approach. Government must organize itself similar to the way industry organizes itself

(e.g., around the product being sold). This may be the only way to address the broader life cycle impacts that derive from the creation of products and all of the processes related to those products.

The team's final reports range from primary data issues, to strategic relationship issues to core life-cycle management tools and policy assessments.

The following set of documents were forwarded to the Council for its consideration and dissemination.

Consensus Documents:

- Conclusions Document
- Data Collection to Support Life-Cycle Management
- Life-Cycle Management Data Summary Points
- Framework for Evaluating Life-Cycle Management Information Needs
- Life-Cycle Management/Supplier Partnership Project Team Simulation Exercise

Support Documents

- Tools and Policies for Life-Cycle Management/Life-Cycle Partnerships
- Identifying the Supply Chains for Automotive Assembly Plants: Supplier Process Descriptions and Pollution Prevention Opportunities
- The Chrysler Regulated Substance and Recyclability Certification Data Collection and Reporting system
- Life-Cycle Inventory Analysis of Instrument Panels: VOC Emissions in Manufacturing.

Regulatory Initiative Project

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The Regulatory Initiative Project applied a common sense approach to improve the effectiveness of automobile manufacturing regulatory requirements. This project addressed improvements to the following existing regulations: New Source Review of Air Construction/ Modification Permits and Clean Air Act Title V Operating Permits.

A multi-stakeholder team concentrated on one specific area and initiated a project to evaluate alternatives to the current complex topcoat standard. The project focused on evaluating the utility of expressing the current topcoat standard in alternative forms that provide the public with more understandable information and give the auto manufacturers a standard more consistent with

international regulations. The team focused on the viability of a mass/area standard and determined that EPA should explore the possibilities of using this type of standard in future rulemaking. The project resulted in a final report: Mass Per Unit Area Summary Report and Recommendations.

The group's final report outlined the history of this short-term exercise, the major issues and questions the exercise uncovered, and the recommendation that "EPA consider the mass per area issue external to the CSI because of the resource and time commitments involved. EPA should evaluate its effectiveness for use in future rule and guidance development." This issue is very complex and there are many questions surrounding its implementation and use in other countries, notably Germany, Canada, and Mexico. The group's report was adopted by the Subcommittee as a supporting document and was forwarded to the Council and EPA.

The Common Sense Initiative

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The final Council meeting in December 1998 represented the conclusion of the CSI process as it has been operating since 1994. The initiative proved to be an innovative approach to environmental protection and pollution prevention. Three of the subcommittees will continue their work under the new National Advisory Committee on Environmental Policy and Technology (NACEPT) Standing Committee on Sectors. Visit the Sectors web site at www.epa.gov/sectors for more information on this initiative and other national and regional Agency projects that are being implemented.