

# Metal Finishing Strategic Goals Initiative— A Summary\*

## Part 1: National Performance Goals

### Facility-based Performance Goals (by 2002, from 1992 levels)

1. **Improved Resource Utilization** (“Smarter Goals”)
  - a. 98% metals utilization
  - b. 50% reduction in water use
  - c. 25% reduction in energy use
2. **Reduced Hazardous Emissions** (“Cleaner Goals”)
  - a. 90% reduction in organic TRI emissions
  - b. 50% reduction in metals emissions
  - c. 50% reduction in hazardous sludge disposal
  - d. Reduction in sludge generation
  - e. Reduced worker & community exposure to toxics
3. **Increased Economic Payback & Decreased Compliance** (“Cheaper Goals”)
  - a. Achieve long-term economic benefits via Goals
  - b. 50% reduction in compliance costs not directly contributing to environmental protection

### Sector-based Performance Goals (by 2002)

4. **Sector-wide Beyond Compliance:** 80% of facilities (nationwide) achieve Goals 1–3
5. **a. 100% compliance:** All operating facilities achieve compliance with Federal, state & local performance requirements

- b. **Brownfields Prevention:** All metal finishers wishing to cease operations have access to a government-sponsored “exit strategy” for environmentally responsible site transition
- c. **Targeted Enforcement:** All facilities that do not intend to achieve compliance are enforced against to the fullest extent of the law, including facility closure

## Part 2: Action Plan

**National Performance Goals Program** for firms in Tiers 1 & 2, consisting of:

- **Incentives Package**—For facilities to sign up and commit to achieve the goals
- **Enabling Actions**—Major system changes to enable facilities to achieve goals
- **Full Flexible Track (future)**—Full privileges for top performers who achieve the goals
- **Stakeholder Commitments**—Actions by all stakeholder groups

**Compliance Assistance Program** for Tier 2 firms

**Site Transition Program** for Tier 3 firms

**Targeted Enforcement Program** for Tier 4 firms

## SGI National Performance Goals Program “Blueprint” \*

### Basic Points

- **A cornerstone of the SGI is the link to facility- and sector-wide “beyond compliance” Goals 1–4.** A voluntary program, with stakeholder policy oversight.
- **Program objectives:** To be simple to understand and run, with strong sign-up incentives, complemented by broader system changes to enable achievement of goals.
- **Target audience:** Mid- to top-tier firms, generally in compliance or striving to achieve full compliance.

### Program Elements

- **A jointly-run program:** The primary trade associations and EPA would be responsible for operating and funding different parts of the National Performance Goals Program.
- **Operating plan:** An industry/EPA Operations Group would develop plans for promoting and handling facility sign-up, providing information and assistance, tracking performance, giving recognition, creating ground rules, etc.

- **Timing:** The operating plan would be in place by the end of 1997, with sign-up initiated at AESF Week 1998.
- **Measuring success:** Participant facilities would report on their progress toward each goal. Aggregate data for the entire sector would allow fine-tuning of the program.
- **Facility development of EMS-based goal strategies** would be recommended, but not required.

### Incentives Package

- **Ground rules:** The package would be available to all firms that commit to the goals (regardless of past performance). All stakeholder groups provide incentives.
- **Possible incentives:**
  - Low-/no-cost access to tools and services (such as the NMFRC, the Guidance Manual, AESF products, EPA data bases).
  - Access to CLEAN audit/amnesty: Nationwide EPA program to provide environmental audits (with no penalties for minor violations) to signees.

- Industry mentoring:** Regional trade association-run programs to help facilities develop goal strategies.
- Free “how to” government consulting:** Facility-specific help with compliance, P2, technology decisions, etc.
- Public recognition by all stakeholder groups,** including use as a marketing advantage (“Performance partner”).
- Other ideas:** Improved access to insurance or financing; prospective flexibility (via Metal Finishing 2000).

### Long-term Oversight

**Multi-stakeholder oversight committee:** This EPA-run group would monitor progress of the Goals Program and major policy and program changes (“enabling actions”). The group would be a next-generation CSI group, reporting to EPA and all other stakeholder groups.

*\*These “drafts” of the SGI were provided at the 18th AESF/EPA Conference by Bob Benson, EPA’s Office of Policy, Planning & Prevention, Washington, DC*

## Working Toward the Full Flexible Track\*—Moving Up the Performance Tier Pyramid

Who They Are		What They Get	Accountability
Firms Achieving Goals	Tier 1 +	Full Flexible Track = Maximum Privileges	Self-monitoring
Firms with Good Records Working to Achieve Goals	Tier 1 & 2A Firms	Incentives Package; MF 2000 Performance-based Benefits	Reduced Monitoring & Reporting
Firms Seeking Full Compliance & Initial P2/EMS	Tier 2 Firms	Incentives Package; Compliance Assistance	Full Reporting
Firms Seeking Compliance But Needing Help	Tier 2B Firms	Incentives Package; Compliance Assistance	Full Reporting
Outdated Firms That Want Out of Business But Have Site Liability	Tier 3 Firms	"Exit Strategy" Program	Full Reporting
The "Rogues"—Chronic Non-compliers	Tier 4 Firms	Enforcement Program Leading to Rehab, Site Transfer or Closure	Full Reporting

## Common Sense Initiative Projects For the Metal Finishing Sector\*\*

Compliance Leadership Through Enforcement, Auditing & Negotiation (CLEAN)

U.S. EPA Contact: Austine Frawley (617/565-3231)

This New England-based project is intended to combine pollution prevention assistance & enforcement relief policies as incentives for improved environmental performance by metal finishers, and achieve measurable environmental results & increased compliance on both a facility-specific & industry-wide basis. 16 volunteer firms in NH & ME are undergoing audits to assess facility-wide pollution prevention & source reduction options. EPA New England (Region 1) plans to expand the scope of the project to other states & industry sectors in the coming year.

Regulatory Information Inventory Team Evaluation (RIITE) Program

U.S. EPA Contacts: Matthew Leopard (202/260-2468) & Mindy Gampel (202/260-2748)  
The RIITE team is applying business process re-engineering techniques to examine federal, state & local

reporting requirements across all environmental media. The team is exploring ways to reduce paperwork burden, improve public access to data, & promote better environmental performance. Results of regional pilot projects will be used to develop national policy recommendations to:

- Improve efficiency of existing process by collapsing duplicative or overlapping information requirements;
- Expand public access to error-free, timely information;
- Reduce burden on industry submitters & government agencies;
- Create a replicable RIITE program for use by all states;
- Institute national reforms in data requirements & processing. Program is reaching implementation phase in its two pilot states—AZ & TX.

Metal Finishing 2000 Flexible Track Projects

U.S. EPA Contacts: Mark Mahoney (CT & RI projects; 617/565-1155) & Bob Benson (MI project; 202/260-8668)

The Metal Finishing Sector has endorsed concept of alternative performance "flexible track" for top-performing metal finishing facilities. Under this, industry leaders would receive regulatory flexibility & incentives to seek ambitious environmental goals. Metal Finishing 2000 is developing a framework for a replicable flexible track system to (1) Maximize environmental improvements, commitment, long-term results; (2) minimize costs, burdens, oversight; and (3) promote the best possible approaches to environmental management. This project can promote continuous improvement beyond baseline compliance levels & provide tangible rewards for top performers.

Pilots have been established with firms in CT, MI & RI. Each project is distinctive in its approach to providing regulatory flexibility & in the types of "beyond compliance" activities being proposed by participating firms.

*\*\*This information extracted and edited from the December 1996 "Metal Finishing Sector Fact Sheet," EPA Document 742-B-96-007.*

National Metal Finishing  
Resource Center

U.S. EPA Contact: Scott Throwe  
(202/564-7013)

Developed as a partnership between the EPA, AESF, NSIT and the industry. Became operational October 1996 in providing complex compliance information on-line via the Internet. *Plating and Surface Finishing* provides a monthly column on the NMFRFC.

Metal Finishing Guidance Manual  
U.S. EPA Contact: Bob Benson  
(202/260-8668)

The *Manual's* purpose is to serve as a plain language tool for shop floor managers to ensure continuing compliance with regulatory requirements. Will include comprehensive information on federal & state regulatory requirements, as well as information on technology options, pollution prevention approaches & environmental management systems. *Manual* will be updated in collaboration with the NMFRFC. Project is a public/private partnership, co-funded by EPA & the industry trade associations, & guided by a multi-stakeholder CSI workgroup. Expected to be available to industry soon. Advance orders being taken by AESF, MFSA & NAMF.

Chromium Pollution Prevention  
Technology Demonstration

U.S. EPA Contact: David  
Ferguson (513/569-7518)

The Research & Technology Workgroup is developing innovative, low-cost technologies to improve the performance of the industry & achieve cost-effective pollution results. Multi-stage composite mesh pads & chemical fume suppressants are new technologies being tested in several volunteer facilities in the Midwest. First demonstration phase has been completed, & the most promising technologies will now be tested further to demonstrate their effectiveness in meeting the MACT air emission standards for CR (in effect January 1997).

National Metal Finishing  
Environmental R&D Plan

U.S. EPA Contact: Paul Shapiro  
(202/260-4969)

This project will provide a better understanding of the technology needs of the industry, as a basis for

tailoring public & private sectors R&D to meet those needs. The desired end-product of this work is a customer-oriented R&D strategy for the industry, ensuring that research efforts (including tech transfer & diffusion) meet the most significant environmental needs of finishers & are accessible to jobshops & other stakeholders. The project will also help the current research program to focus on pollution prevention & remediation technologies that are of greatest benefit to small jobshops.

EPA's Office of R&D has led a multi-stakeholder project team, in partnership with the industry trade associations (AESF & NAMF). Its report provides an inventory of federal R&D for finishers & an assessment & prioritization of the technology needs of the industry.

POTW Training, Education &  
Incentives Program

U.S. EPA Contact: Patrick  
Bradley (202/260-6963)

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

The multi-stakeholder team evaluated selected POTWs with varying levels of performance in CA, IN & VA. Its report presents analysis of factors affecting the success of industrial pretreatment programs. The report also provides information on possible tools, programs & incentives to help industrial dischargers achieve compliance more easily, help POTWs maintain high quality effluent & sludge, enable POTWs to become familiar with their dischargers, assist them in identifying pollution reduction opportunities & generally lead to more efficient use of resources by all.

RCRA Metal Finishing  
Wastewater Sludge Project

U.S. EPA Contact: Jim  
Lounsbury (703/308-8463)

This project is addressing Definition of Solid Waste issues in a metal

finishing context. The team will evaluate options for improving the recyclability of F006. Project goals are: (1) To complete an objective study of the composition, quantities & characteristics of metal finishing wastewater treatment sludges; (2) to reduce the generation & toxicity of metal finishing wastewater treatment sludges through pollution prevention measures; (3) to improve the recyclability of 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 is a benchmarking analysis of F006 constituents, using national & regional sampling data (the latter being gathered with the cooperation of finishers & other stakeholders in the Milwaukee area). Data will be used by CSI workgroup to assess RCRA reform options.

Environmentally Responsible  
Site Transition for Tier 3 Firms

U.S. EPA Contact: Scott Dosick  
(202/260-9211)

Tier 3 firms are outdated shops. When owners are ready to transition out of the business, factors such as declining finances or environmental liabilities from site contamination make this difficult, if not impossible. The result may be facility shutdown with no assets left to clean the site for future uses. The jobsite may become a "brownfield" area. This project completed case studies of representative Tier 3 facilities in CT, MA & CA, & the report identifies factors that lead certain metal finishers to become Tier 3 firms, & offers possible transition strategies. These ideas can be broadly applied by EPA, states & localities to help owners of Tier 3 firms pursue environmentally sound transition of their businesses & property, rather than abandoning their sites.

Approaching Zero Discharge  
Demonstration Project

U.S. EPA Contact: Paul Shapiro  
(202/260-4969)

The objective 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, in some cases, performance-equivalent substitutes cannot be



found. In these cases, it's important to have convincing demonstrations of "cleaner" technologies that achieve waste reduction results approaching zero discharge through improved operational techniques and/or in-process recycling technologies.

A work plan is being drafted to demonstrate up to four pollutant reduction technologies. 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 & operating costs, & occupation exposure.

Tier 4 Facility Enforcement Project  
U.S. EPA Contact: Scott Throwe  
(202/564-7013)

"Renegade" shops are chronically out of compliance, don't actively seek ways to be in compliance, & generally escape enforcement attention because of their small size & transient nature or the inability/unwillingness of government authorities to proceed against them. These firms lower the reputation of the industry & compete with higher tier firms by avoiding the costs of environmental protection & underselling their competition. This project will develop a targeted enforcement program that identifies

Tier 4 firms & takes appropriate action against them.

Access to Capital Project  
U.S. EPA Contact: Scott Dosick  
(202/260-9211)

Small business owners often find barriers to obtaining funding for facility improvement and/or site remediation. The CSI Metal Finishing Sector is leading an effort to conduct an analysis of innovative ideas, such as environmental insurance & technology verification, to support loan decisions that can be of benefit across CSI's small business components. *P&SF*

Who Represents the "Stakeholders"  
In CSI's Metal Finishing Sector?  
(Subcommittee Members & Affiliates)

Co-chair David Gardiner, *U.S. EPA*  
Co-chair Robert Huggett, *U.S. EPA*  
Co-chair John DeVillars  
*U.S. EPA Region 1*  
Designated Federal Officer  
Bob Benson, *U.S. EPA*  
Sparky Anderson, *Clean Water Action*  
Guy Aydlett, *Hampton Roads Sanitation Dist.*  
Diane Cameron, *Natural Resources Defense Council*  
Robert E. Chatel, *The Robbins Company*  
Andrew Comai, *United Auto Workers*  
John M. Craddock, *Bureau of Water Quality, MSD*  
John M. Cullen, *Masco Corp.*  
Stanley W. Eller, *Maine Metal Products Assoc.*  
William M. Eyring, *Center for Neighborhood Technology*  
Michael Flynn, *Int'l. Assoc. of Machinists & Aerospace Workers*  
John E. Iannotti, *NY State Dept. of Envir. Conservation*  
David Lawrence, *Metal Polishers, Buffers, Platers Union*  
Juan Mariscal, *Narragansett Bay Commission*  
David S. Marsh, *Marsh Plating Company*  
B.J. Mason, *Mid-Atlantic Finishing, Inc.*  
Russell Rhoades, *AZ Dept. of Envir. Quality*  
William J. Saas, *Taskem, Inc.*  
William A. Sonntag, Jr., *AESF/NAMF/MFSA*  
H. Curtis Spalding, *Save the Bay*  
Frank Villalobos, *Barrio Planners, Inc.*  
Thomas R. Wallin, *IL Envir. Protection Agency*  
Guy O. Williams, *Nat'l. Wildlife Federation*