Jobshops Benefit From Strategic Goals Program



The National Strategic Goals Program (SGP) is a voluntary program that encourages metal finishing companies to go beyond environmental compliance. SGP member companies benefit from incentives, resources, and reduced regulatory and policy barriers as they work to achieve specific environmental goals. The program was started in 1998 as a unique cooperative effort between the U.S. Environmental Protection Agency (EPA) and the metal finishing industry, represented by the American Electroplaters and Surface Finishers Society (AESF), the National Association of Metal Finishers (NAMF), the Metal Finishing Suppliers Association (MFSA), and the Surface Finishing Industry Council (SFIC). Featured here are just a few of the program's many success stories. To learn more about the Strategic Goals Program, visit http://www.strategicgoals.org or call the National SGP answer line at 703/354-2172.

East Side Plating Realizes Profits | Gull Industries, Inc. Takes a **Through Strategic Goals**

Cutting emissions can cut costs. If you don't already believe the statistics, then listen to Strategic Goals Program (SGP) member Herb Nissen, president of East Side Plating in Portland, OR. By installing two cooling towers last year, he used 31 million fewer gallons of water than he did in 1997—a cut of 64 percent. As Herb says, "It also saved us about \$175,000 in water/sewer charges." In addition, because less water has to go through the waste treatment process, the change saved the company more than \$54,000 in water treatment chemistry.

The cost savings don't stop there. Nissen explains: "Less water equals less chemistry, which equals less sludge." East Side shipped 142,000 fewer pounds of sludge in 1999 than it did in 1997. At a cost of approximately \$275/ton, this trimmed another \$19,000 in expenses from the company's operating budget.

Determined to go beyond compliance, East Side Plating also reduced its permitted copper, nickel, chromium and zinc discharges to the city by almost 600 pounds compared to 1997. The company implemented a plan to reduce trichlorethylene emissions at Plant 5. The same plant is now a cyanide-free plating shop, thanks to a new noncyanide process the company used to replace its old 1,000-gal cyanide zincate. East Side is currently installing a noncyanide copper bath at Plant 2, and hopes to reduce the total cyanide processes to the minimum achievable. The company is also working on reducing its natural gas use, which it hopes will cut the costs of its powder coating operations.

In recognition of its achievements, East Side Plating will receive an award letter from the city of Portland. But Herb Nissen can sum up his company's accomplishments better than anyone. "As you can see," he says, "trying to use less resources and generate less waste has a big impact on the bottom line of the financial statement ... otherwise known as profit!"

Common Sense Approach

What do Frito® bags and the lunar lander have in common? Both products incorporate metal finishing processes originating at Gull Industries, Inc., Houston, TX. The company has also been on board with the Strategic Goals Program since its inception. President J. Kelly Mowry says, "Due to this program, our thought process on waste reduction and minimization has changed completely, and has resulted in using equipment and processes we would never have considered."

Gull Industries uses EC Technology developed with Kasper Electroplating in Shiner, TX. The electro-coagulation system has reduced their solid waste by more than 60 percent and saves the company more than \$24,000 annually in waste disposal. The procedure uses no pretreatment chemistry, resulting in savings that paid for the system within the first 20 months. In-line evaporators and triple cascading rinse tanks have reduced water consumption from 100,000+ gallons per month for each line to approximately 40,000 gallons, saving water—and \$600 per month. "Because of our new way of thinking," Mowry says, "we are exploring some best available recycling technology and hope to make our water consumption all but go away." Going beyond compliance, Gull Industries uses triple redundancy in its air systems, and while this effort doesn't save any money, it produces very clean air. Energy reduction will be the company's next target.

Because Gull Industries was one of the first companies to ride on the SGP bandwagon, Mowry takes pride in the positive steps his business has taken in cooperation with the Program. He sums up his attitude by saying, "I hope that it continues in spirit, practice and program, and that our EPA recognizes it as **the direction** to pursue. More can be gained with a carrot, a little help, and some common sense than with a stick."

46 PLATING & SURFACE FINISHING

Electro-Platers of York Reel in Good Results

Avid fishermen such as David Sollenberger, owner of Electro-Platers of York, Inc., want to make sure Pennsylvania's Susquehanna River continues to thrive. After all, the river has a flourishing fish population and the sixth-best small-mouth bass fishery in the U.S. Through the Strategic Goals Program, Sollenberger is doing a painstaking job of reducing the amount of treated wastewater that his company discharges each year into the Susquehanna.

Electro-Platers of York, a high-volume zinc, nickel, and nickel-chrome plating shop, has met its goal of 50-percent reduction in water usage. In 1986, the company ran one shift on 10 production lines, and used 12.88 million gallons of water. In 1999, it ran 24 hours a day on 14 production lines, and used only 8.6 million gallons of water. The company achieved this by employing new spray rinsing technology, low-pressure air agitation in its tanks and flow restrictors. The most recent improvement was the addition of a refrigeration department that makes cold water to cool plating baths. Using this closed-loop system, cooling water is not dumped into rinse tanks. Electric costs have increased slightly, but huge savings are expected in wastewater treatment, reducing water going to treatment by 5.000 gallons per day. The company has been meeting or exceeding its NPDS discharge permit since 1967, increasing treatment efficiency in part through using feeder pumps to mix chemicals more thoroughly.

In an effort to meet its energy goal, the company recently installed a new high-efficiency air compressor to dry parts, and expects to see energy savings in the coming year. These savings will offset the higher cost of running fans that help reduce emissions. The company also made a large investment to install air scrubbers and achieve its air permit. Electro-Platers of York has reduced sludge by recovering nickel drag-out and returning it to the plating tank by using a sludge dryer and by sending the dried sludge to a metals reclamation facility. A reorganized sludge-handling procedure this year resulted in a reduction of five man-hours each day.

A charter member of the SGP, Sollenberger has been instrumental in the planning of the Pennsylvania state program, recently requesting placement on the state SGP ladder. He sees the time he has invested in the Program as profitable because of the increased communication between his company, the U.S. EPA, and the Pennsylvania Department of Environmental Protection. He states, "They are willing to work with industry, to listen to us and help us, instead of hammering us." Like his father before him, David Sollenberger feels that doing business in an environmentally responsible way is the "common sense" approach. It doesn't hurt the fishing, either. PESSF

January 2001 47