A SAFE BEGINNING

HOW ONE NARROW WEB FACILITY ESTABLISHED A SAFETY AND ENVIRONMENTAL PROGRAM

By Tim Gantley

Southern Atlantic Label Co. (SAL), Chesapeake, VA, is a narrow web converter that runs its presses 24 hours a day, five to six days a week. Its eight in-line presses range in web widths from seven to sixteen inches. They run from six to twelve colors on many different substrates, ranging from paper to polystyrene.

Founded in 1972 by Phillip Draper and James Cummings, the original business was literally started in a garage. It has since grown into a multi-million-dollar a year flexo facility with 100 employees.

In 1993, SAL was cited by the Commonwealth of Virginia's Department of Labor and Industry for 11 serious violations and four less-than-serious violations, resulting in fines totaling $15,000. The fine was reduced to $7,500 after an informal meeting with the Agency.

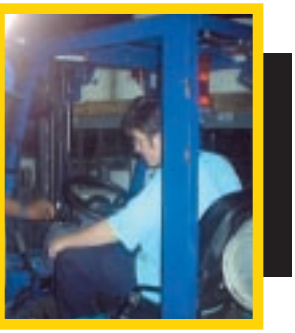
SAL was required to establish a hazard communication program and a grounding system for transfer of hazardous chemicals, develop an emergency response plan, use eye protection when dispensing hazardous chemicals, provide protection from unguarded pulleys and five other items. Until 1993, each department at SAL had handled its own safety training and handling of hazardous waste. It was evident after the fines were imposed that SAL had to regroup and rethink its safety and environmental policies.

New Policies Established

A plant safety coordinator position was created. This employee would coordinate among all departments the formulation of all safety and environmental policies.

In the summer of 1993, the plant safety coordinator, along with the general manager, began implementing a complete safety and environmental program. They started with sample programs furnished by Virginia Occupational, Safety and Health (VOSH), a state-approved Occupational Safety and Health Administration (OSHA) program. SAL used these as a starting point for each affected department to add input concerning its particular area.

All information was compiled into a Safety Handbook for the employees. The Safety Handbook is an ever-changing item. Each program is reviewed yearly and updated as needed. New programs are added as the need arises. SAL obtains updated OSHA, U.S. Environmental Protection Agency (U.S. EPA) and other regulatory information to help keep the programs current.



Press helper Michael Sparks tries out the controls of the forklift during the operational part of Southern Atlantic's training program.

Training Begins

Using the information contained in the Safety Handbook, training of individual employees began. Each department head is responsible for training new employees in hazard communications. Additional training in forklift, lock out/tag out, personal protective equipment, fire extinguisher and respirator use is done on an individual basis.

Fire extinguisher training has been done a couple of different ways. Originally, SAL contracted with the company that supplies fire services to do the training. A live demonstration was performed in the building's parking lot, where each employee was able to extinguish a controlled fire. This proved to be educational, but expensive. A couple of years later, this same company purchased an Ansul Fire Simulator, which is the current way training is done for fire extinguisher use.

Forklift training is accomplished by a team effort. The plant safety coordinator does the classroom part of the training, while the warehouse manager, who has over 25 years' experience in forklift use, does the operational part of the training.

SAL's approach to gaining the cooperation of newer employees is by enlisting the more experienced employees to work as a team toward safety compliance. Senior employees remember when the firm was fined and underwent inspections from the regulatory agencies. They know that it is to all employees' benefit to stay in compliance.

Environmental Problems, Resolution

Even though environmental policies were in place — and SAL had won pretreatment excellence awards from the local, publicly owned treatment works (POTW) in 1993, 1994 and 1995 — before 1996, SAL was discharging ink residues into the POTW during cleaning of ink trays between jobs.

The company was not aware of the environmental impact. Violations to the facility's wastewater permit in 1996 were the result of ink residue that was accumulating in the pipes that ran from the location where the employees were doing the wash-ups to where the local POTW and testing laboratory were taking samples. SAL was fined $2,500.

SAL became a permitted facility in 1990. A local laboratory obtains samples of wastewater on a monthly basis. This is in addition to the local POTW taking samples on a monthly basis. SAL originally received its permit to regulate the amount of silver that was discharged into the POTW.

The situation was perplexing. The readings that the laboratory obtained were well within permit limitations. When the POTW sampled, however, the readings significantly exceeded the permit limits.

Every pipe was replaced. This included digging up and replacing the wastewater line that ran through a large segment of the parking lot. After replacing everything, there was a reduction in the amount of metals that were being discharged.

Parts washers were installed to do all of the ink station wash-ups. As a result, the only ink residue that is discharged into the local water system is a minor amount of residue and cleaning solution that is well within permit guidelines.

Since the resolution of this problem, the POTW has kept SAL under strict monitoring, and the facility has had an unblemished environmental record. SAL received pretreatment awards from Hampton Roads Sanitation District (HRSD), the local POTW, in 1998, 1999 and 2000. The program through HRSD is recognized as one of the nation's best by the U.S. EPA, which uses it as a model throughout the country.

SAL was a recipient of the Pollution Prevention Award from HRSD for 2000 in the Non-significant Industrial User category for companies that have a total average discharge flow of less than 1,000 gallons per day. This is a vast improvement over just a few years ago. The facility won the award because of recycling of plate washout solution onsite. The other option was to ship the spent solution offsite as a hazardous waste. SAL reaps a saving of approximately $34,300 per year by recycling the washout solution onsite.

Environmental & Safety Resources

SAL has used a number of resources to establish its safety and environmental programs. One is the Safety and Health Consultation Service of the Virginia Department of Labor and Industry. SAL has used this free service a couple of times, making changes according to the findings of the consultant. This process began after the violations in 1993. In 2000, the process was repeated to "fine-tune" its programs. During the initial inspection in 1993, the consultant found about 27 different violations. The inspection in 2000 resulted in only one serious violation recorded.

SAL has used the Internet to access the OSHA, U.S. EPA and other state web sites for both regulatory and compliance information. It also uses the web to tap into the myriad web sites that encompass all the information needed for safety and environmental compliance.

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SAL utilizes the FTA and its Environmental Newsletter as a resource for updates on the federal and state level, pertinent web sites and other sources. SAL has used contacts through the safety and environmental communities to answer questions when they arise.

Results of SAL's Commitment

The concentration on safety has shown significant results. According to SAL's OSHA 2000 Log, there have been continuous decreases in the injury rate for the past three years. The reductions were 31 percent for 1998, 23 percent for 1999 and 29 percent for 2000.

SAL's concentration on environmental issues and its commitment to "greener" ways of doing business have been rewarded repeatedly by awards the facility has earned. SAL approaches safety and environmental concerns with a commitment to be in compliance with all laws and to maintain the safety of its employees. The safety and environmental programs continue to evolve. It is to the facility's benefit to excel in the safety and environmental arenas, as it has in the marketplace.

About the Author…
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