

**1990
GOVERNOR'S AWARD
FOR EXCELLENCE**

**FOR OUTSTANDING ACHIEVEMENT
IN WASTE MANAGEMENT**

LARGE BUSINESS CATEGORY

**PRESENTED
MAY 16, 1991
TO**

 **Convatec**
A Bristol-Myers Squibb Company

**BRISTOL-MYERS SQUIBB COMPANY
CONVATEC DIVISION
GREENSBORO, NORTH CAROLINA**

RPP 0107
3080 N

Bristol-Myers Squibb Company--ConvaTec Division, Greensboro

Bristol-Myers Squibb Company manufactures a wide range of pharmaceutical, medical, and personal care products. Its ConvaTec Division is the world leader for colostomy and urostomy products. The Greensboro plant is one of two ConvaTec manufacturing facilities.

Its manufacturing process in Greensboro includes the following: adhesive formulation, mixing and extrusion, ultrasonic welding of plastics, colostomy pouch production, and specialized package development. Various waste products are generated from these processes. Although both hazardous and nonhazardous wastes are generated, ConvaTec decided to first implement an aggressive hazardous waste program to minimize or eliminate all hazardous waste streams.

This program, initiated in 1987, enabled the plant to reduce its hazardous waste generation from 7,500 kilograms in 1987 to 1,700 kilograms in 1990, while doubling its manufacturing output. The total cost savings realized was \$85,000 per year.

Reduction activities included:

- switching from a solvent-based ink to a water-based ink system;
- replacing a hazardous degreaser with an equally acceptable non-hazardous degreaser;
- substituting high pressure hot water for alcohol to clean equipment; and
- reducing laboratory waste substantially with simple procedural modifications.

By switching to a water-based ink system, ConvaTec significantly reduced its largest hazardous waste stream by 80 percent, improved its printing quality, and reduced other waste products such as plastics. This was accomplished by converting its largest volume packaging lines to custom designed printers. A total investment of \$164,000 was made for the transition.

After analyzing its cleaning procedures and the high cost of the hazardous raw materials used, ConvaTec discovered two acceptable alternatives. First, a nonhazardous degreaser showing equivalent results replaced a hazardous degreaser. The other change was to substitute high pressure hot water for isopropyl alcohol to sanitize and clean manufacturing equipment. ConvaTec's combined savings in purchase and disposal charges came to \$9,500 per year.

Another hazardous waste stream in its laboratory was reduced from 110 gallons in 1987 to 10 gallons in 1990 with a simple revision in the test method. An inventory was made of stock chemicals, and those no longer in use were disposed of properly.

A key feature of ConvaTec's waste reduction program was the amount and degree of employee training, contributing significantly to the success of its program.

Bristol-Myers Squibb Company is dedicated to progressive waste management programs at all of its facilities. For its employees, the Company regularly conducts environmental workshops and training sessions and publishes an environmental newsletter.

Waste reduction efforts have expanded to include paper and plastic packaging recycling.

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