
CASE STUDY: Eagle Snacks, Inc. (Anheuser-Busch Companies)

Location:	Robersonville, NC (Martin County)
Industry:	Snack foods and nursery products (SIC: 2096/8731)
Pollution Prevention Application:	Agricultural Application of Wastewater, Packaging Redesign, Recycling
Annual Savings:	\$160,000
Payback Period:	Immediate
Contact:	Steve Leger, Plant Manager (919) 795-5141

Background

Eagle Snacks of Anheuser-Busch Companies, Inc., in Robersonville produces a full line of salted snack foods including potato chips, kettle chips, cheese crunch, tortilla chips, and nut snacks. Nutri-Turf, Inc., another Anheuser-Busch subsidiary and partner of Eagle Snacks, operates a farm three miles from the snack plant that produces sod and turf.

Waste Reduction Activities

- Water used in processing snack foods is high in proteins, carbohydrates, and other nutrients. To eliminate discharges to the local treatment plant, Eagle Snacks pumps the effluent to the Nutri-Turf farm where it is applied as a fertilizer to growing turf and sod.
- Packaging has provided Eagle Snacks with significant opportunities for waste minimization. Although film snack bags have been reduced from five layers to three thinner layers, package integrity has been maintained, and packaging redesign allowed less steel to be used for nut can manufacture.
- A centrifuge recovery system collects starch from potato washing operations for subsequent sale to an animal feed formulator.
- Eagle Snacks pays its wholesalers for returning the pallets and corrugated containers used to ship the snack products to the facility. These pallets are reused, and the corrugated containers are reused or recycled according to their condition.

Waste Reduction and Annual Savings

Over 50 million gallons of process water is pumped to the Nutri-Turf farm. This reuse application requires only 10 percent of the energy that would have been needed to treat the water through conventional aerobic means, and no sludge is produced. Estimated capital expenses for the alternative conventional aerobic treatment total \$4 million. The reduction in demand for fertilizer conserves 11 barrels of oil per ton of fertilizer reduced.

Packaging reductions annually save 500 tons of plastic film and 225 tons pounds of steel. The number of corrugated cartons returned has increased from 1,924,795 in 1992 to 2,942,210 in 1994. In 1994 alone, this program kept 3,250 tons of cardboard out of landfills. The sale of used cooking oils, food by-products, corrugated cardboard, cashew tins, and office paper annually saved \$25,000 in 1991 in landfill fees and generated \$135,000 in revenues. Associated amounts reduced, reused, and recycled are shown in Table 1.

Table 1: Eagle Snacks: Quantity of Material Recycled, tons

By-product	1992	1993	1994
Peanut/cotton oil	578,000	546,580	420,160
Cashew tins	199,358	194,866	173,590
Corrugated cardboard	762,000	660,000	822,000
Food scraps	4,155,562	6,389,068	7,813,557
Total	5,696,912	7,792,507	9,231,301

Overall, efforts to reduce, reuse, and recycle at the Robersonville facility have resulted in a 31% reduction in landfilled materials.

Other Activities

Eagle Snacks was recognized for Outstanding Achievement in the Large Business Category of the 1994 Governor's Award for Excellence in Waste Reduction competition.