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## CASE STUDY: Tyson Food Inc.

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Location:	Sanford, N.C. (Lee County)
Industry:	Bakery (SIC CODE 2099)
Pollution Prevention Application:	Water Conservation
Waste Reduction:	20,000 gallons of water per day
Annual Savings:	\$28,996
Payback Period:	6 months
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### Background

Tyson Foods produces taco shells, nacho chips and tortillas. The facility operates three shifts per day six days a week, and has approximately 450 employees. Raw materials are processed in various stages of production and the facility's operations include dough mixing, dough shaping, dough cutting, dough rising, oven baking, deep-frying, cooling, sorting and packing. During the manufacturing process, a significant amount of rinse water is required for cleaning the facility and associated production equipment. A considerable amount of dough, flour, soybean oil and other food materials are discharged to the drains. In 1999, Tyson decided to reduce wastewater discharge volumes below 25,000 gallons a day to discontinue its consideration as a significant industrial user by the municipal wastewater treatment facility. Tyson also needed to limit the amount of production material losses to the sewer in order to meet pollutant level limits in its wastewater.

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### Waste Reduction Activities

Tyson assessed its water use throughout the facility and determined there was excessive water use by line employees for cleaning floors. Though the facility had an extensive dry clean up program for collecting and recycling raw materials from the floor, employees were frequently using hoses to wash the material down the drain. In an effort to resolve this issue, Tyson implemented the following measures:

- Water compressors were shut off and locked during the first and second shifts.
- Line employees, sanitary crew and managers were educated on the need to reduce water use.
- Modifications were made to production equipment to reduce material losses to the floor.
- Production lines not in use were covered to reduce unnecessary cleaning.

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### Waste Reduced

Tyson was successful in reducing its average daily discharge from 35,000 to 15,000 gallons per day. The facility has been able to keep the maximum daily discharge below 25,000 gallons per day. The amount of material lost to the sewer has been reduced through the company's improved dry clean up procedures. The facility saves \$28,996 annually in water and sewer costs.

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### Other Activities

The facility is working with the city of Sanford to obtain reclassification as a Non-Significant Industrial User (Non-SIU).