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## **Company Background**

Trenton Agri Products (TAP) operates and maintains a dry-mill ethanol plant in Trenton, Nebraska. The plant produces ethanol by grinding corn from locally sourced producers and commercial grain operators. TAP is able to produce approximately 50,000,000 gallons of ethanol a year when running at full capacity. The plant operates 24 hours a day, 7 days a week. The corn that is brought in is turned to mash, fermented, and then distilled to produce ethanol that will be denatured to be used for fuels. Co-products that come from the process include wet distiller grains and corn oil. The wet distiller grains are sold to feed lots as a nutrient rich feed. Corn oil is sold as a cooking oil.

## **Project Description**

TAP is already implementing a number of pollution prevention actions and equipment to be a sustainable ethanol plant. There were three projects worked on over the summer which included two heat exchangers, and compressed air optimization. Each project was to help the plant reduce pollution as well as save the plant money. More information on the individual projects will be in the management reports.

## **Pollution Prevention Benefits**

During the summer data was collected and benefits of the projects for the plant were calculated. The bottoms heat exchanger will recapture thermal energy as well as have the potential to increase production of the plant. The sieve feed heat exchanger will save natural gas cost and the solenoid valve project will save energy costs.

P2 Opportunity	<b>Annual Savings</b>
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Bottoms heat exchanger	>\$15,000
Sieve vaporizer feed heat exchanger	\$46,000
Baghouse air optimization	\$140
Total	\$61,200