

Project Overview



Company Background

Colorado Bio-Labs in Cozad, NE is North America's only manufacturer of heme iron polypeptide, a highly bio-available form of iron used for human and animal supplements. In addition to making the heme iron polypeptide, the Cozad facility also manages the warehousing and distribution of the compound, with corporate offices located in Colorado. The substance is produced once a day, five days a week.

Project Description

The primary goal throughout the summer was to examine better methods to handle the waste water generated from manufacturing. The process wastewater is unable to be processed by the City of Cozad in its present form, and as such is currently being shipped away to be disposed of.

The primary reason that effluent waste water generated by CBL cannot be processed by the City of Cozad waste water treatment plant is that the waste has a very high biochemical oxygen demand. If the untreated waste was put down the drain, it could kill the microbes in the local wastewater treatment plant, rendering it in-operational.

Pollution Prevention Benefits

The primary pollution prevention benefit will be the reduction of transporting the waste. However, some pathways may also have some increased pollution due to increased electricity use.

Results

Three pathways were explored. These cannot be done simultaneously, and one of the three does not currently have enough data to present as an absolute result. The Cost Savings result and GHG Emissions are shown in Table 1.

Table 1: Project Results Overview

Pathway	Best-Case GHG Reduction (MTCO ₂ E)	Cost Savings
In-House Treatment	(850)	Cannot Be Calculated
Land Application	51	\$32,600
Alternative Disposal	Cannot Be Calculated	Cannot Be Calculated

