

Department of Agriculture, Trade and Consumer Protection
Division of Agricultural Development
Agricultural Development & Diversification Program (ADD)
Grant Project Final Report

Contract Number: 18015

Grant Project Title: Reducing Concentrations of Phosphorus Suspended Solids and Biological Oxygen Demand in Salty Wastewater at an Italian Cheese Manufacturing Plant

Amount of Funding Awarded: \$8,500

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Report Submitted on: August 11, 2004

Cedar Valley studied equipment performance, processes, procedures and raw materials to help determine what factors influenced the quality and quantity of salty wastewater produced by the plant. The pricing structure affiliated with wastewater disposal was also examined. By comparing these two issues, factors that influence the cost to manage salty wastewater were determined, and methods were identified to lower cost. The grant allowed the methods, procedures and a case study to be documented in a report. These findings can, and already have, been used beneficially by other Wisconsin cheese producers.

Cedar Valley considered several factors thought to be likely contributors to high wastewater disposal costs. Some of the earlier corrective actions successfully focused on specific pieces of equipment and/or procedures. The study determined that most of the remaining contributors to organic loading within the salty process wastewater stream emanate from diffuse sources. Diffuse sources can most effectively be managed by designing best management practices that incorporate new or different equipment, revise procedures, and train employees on the importance of following procedures. A procedure to conduct audits in other plant was developed by the study.

Overall, Cedar Valley was able to decrease the cost of salty process wastewater by \$175,000 per year. Further improvements can be made, but will likely be more difficult, relying on revised procedures, training, and real time monitoring. Cedar Valley plans to implement further work that should decrease salty wastewater quantity and possibly increase its quality.