

PROJECT FACT SHEET

Project Title: Improving Water Quality by Developing, Implementing, and Field Testing Innovative Methods

Project Lead: Texas Agricultural Experiment Station, Texas Water Resources Institute, Texas Cooperative Extension

Project Website: Not Available

Funding Source(s): Texas State Soil and Water Conservation Board (TSSWCB), EPA

Project Partner(s): TIAER, Cross Timbers SWCD, Texas Farm Bureau, NRCS, BRA

Project Description: The implementation of this project consists of evaluation of six new technologies that will be demonstrated on cooperators' dairy farms by the providers. Potential technologies include, but are not limited to: electrocoagulation systems, polymer enhanced solids separation systems, aeration with microbubblers, and a geotextile solids separation system. A technical advisory committee comprised of engineers, scientists, dairy industry, and state and federal agency representatives will assist in selecting two pilot systems to be evaluated each year for 3 years.

Each technology will be evaluated for its efficacy to reduce total P and SRP, and other nutrients and metals, by sampling and analyzing the raw and treated effluent. Cost effectiveness, treatment efficiency, and ease of adoption of the technology, as a BMP will be evaluated. Each technology will be demonstrated for a period of at least 10 weeks

Project Benefits: Dairy lagoons, designed to catch and contain processed water and runoff water from most dairies, typically are dewatered from time to time, which can add phosphorus to receiving solids. By reducing or removing P and SRP in this effluent, potential significant sources of phosphorus will be prevented from entering surrounding waterways following dewatering applications.

Project Schedule: 10/24/2003 thru 3/31/2006

Project Status: The first two technologies are currently being demonstrated. Request for proposals will be released in late spring 2005 with implementation of two new technologies expected early fall 2005. Due to delay in development of QAPP, project personnel anticipate extending project activities beyond 3/31/2006 to evaluate the final two technologies in 2006.

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