



Project Overview

AgriPurifier
University of Idaho

Industry Needs: Persistent Decon

“Best Management Practice: Potato Storage Preparation- Potato storage facilities should be thoroughly cleaned and disinfected before the new crop is placed into storage. Elimination of potential contamination to the new crop is essential for reduced risk of storage problems during the upcoming season. One way to achieve a clean facility is to first remove all debris from the previous crop and then use a hot water/detergent facility and equipment wash down followed by an appropriate disinfectant to all exposed surfaces that may contact the incoming crop.”

Dr. Gale Kleinkopf
University of Idaho

Project Goals

- **Test and evaluate the AgriPurifier water filter for potential use in the agricultural industry: potato storage and greenhouse applications**
- **Integrate participation and evaluation of water treatment system by the University of Idaho**
- **Conclude test and evaluation by spring planting (March 2001)**

Description

- Place AgriPurifier units for evaluation:
 - potato storage unit: **field test completed**
 - a commercial greenhouse: **field test completed**
- Evaluate the effect of the treated water on:
 - reduction of microbial (bacterial and fungal) burden in the storage unit

Technology: Potato Storage

- **AgriPurifier (water enhancement) surface and water treatment**
 - Persistent anti-microbial action: harvest to harvest
 - Supporting data from U of I.
 - Increased profits for growers (decreasing spoilage) and decreased cost of disinfectant
- **Standards being adopted**
 - Anti-microbial vs. pesticide

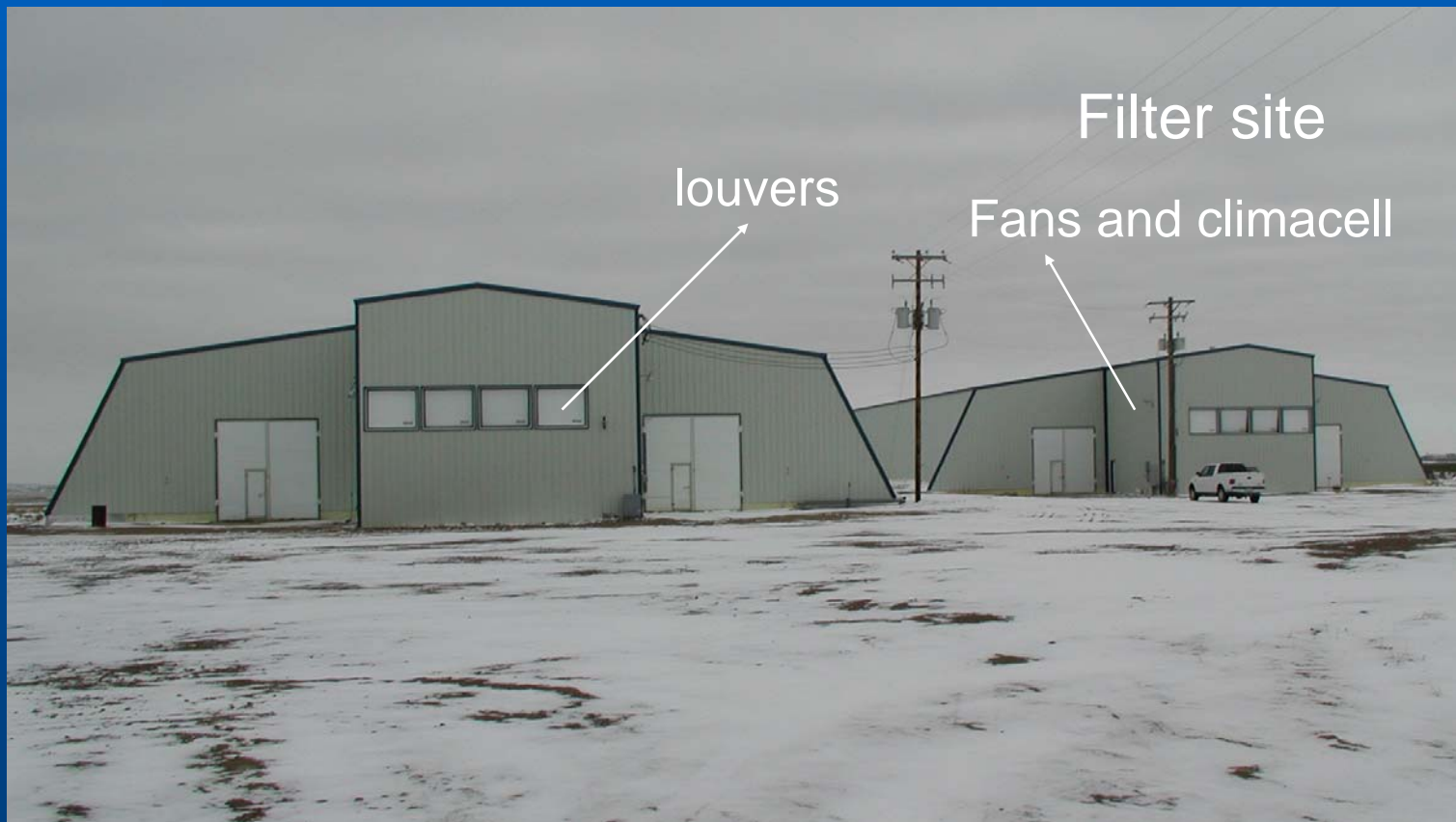
Team/Resources

- **Resources:**

- **People: AgriPurifier-Kirk Gorringer and Glenn Meixell Ph.D., Agri-Stor-Bob Murray and field support**
- **Equipment: 1 AgriPurifier, 1 mini-Purifier**
- **Locations: Twin Falls (potato storage), University of Idaho test facility.**
- **Support & outside services: Agri-Stor & Catmull plumbing, Magic Valley Labs, test and evaluation of U of I samples.**

Current Status: Installation

Potato Storage: University of Idaho, Kimberly Station



Current Status: Installations

Potato Storage: Kimberly Idaho



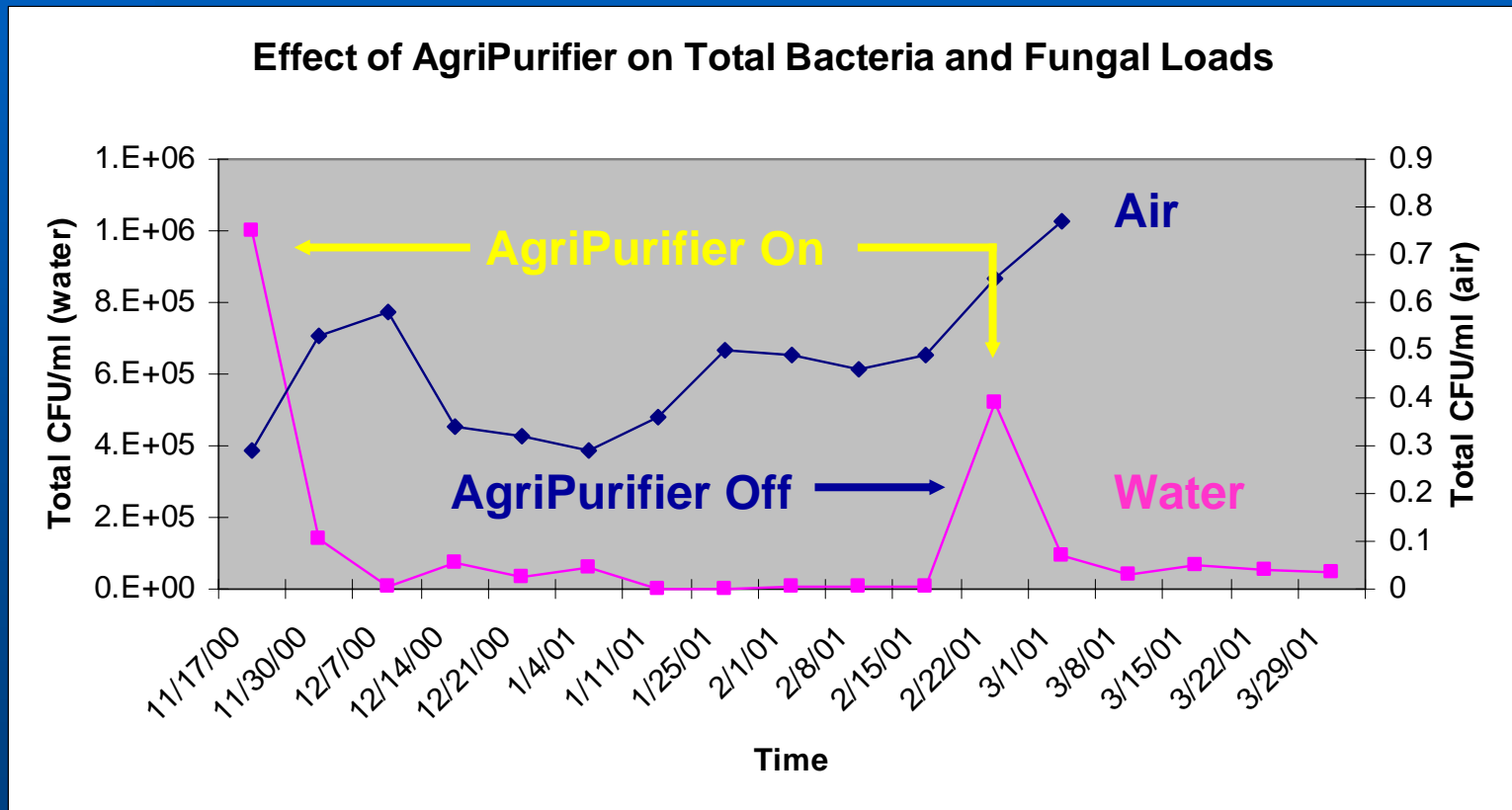
AgriPurifier

Auxiliary Unit



CELdek

Data: 11/17/00 – 3/29/01



Summary

- **Potato Storage**

- Data demonstrates value of water and surface treatment system.

- Advantages to growers:

- **Lower total micro-load, thus decreasing loss due to spoilage**
- **Eliminate cost of chlorine dioxide in post harvest treatment**