

# PAA is at the Front Line of Protection for Stored Potatoes

Spuds in storage now have an effective method of post-harvest protection with significant benefits to growers. Peracetic acid—or PAA—is a sanitizer that battles microorganisms and their spores. Specifically, chemical bonds are disrupted within the cell membrane to achieve mortality of the threatening bacteria.

Jet-Ag® is a product that pairs PAA with hydrogen peroxide, and upon application, it effectively disinfects stored potatoes.

In storage, excess water is the enemy! Potatoes can now be treated with Jet-Ag® in storage, without introducing moisture. The method of application is thermal fogging through the storage air system, which mixes with existing storage humidity, and results in a vapor. The vapor covers everywhere.

With traditional treatment, potatoes have been sprayed on line with a method that uses added moisture, achieving roughly 50% coverage of all potatoes on the piler. With the Jet-Ag® method, growers are seeing coverage close to 100% of their stored potatoes.

The product acts as a desiccant, doing a good job of drying off wet rot, along with destroying bacterial and fungal spores. Not only are potatoes thoroughly blanketed in this protection, the vapor reaches every nook and cranny of the storage area, resulting in excellent sanitization.

Growers are seeing the benefit of early application—the day after potatoes are stored is ideal. After application, the storage is closed up for six hours. After 24 hours, the potatoes are safe to consume.

PAA-based sanitizers are environmentally friendly, as the compounds simply break down into oxygen and water. Jet-Ag® complies with USDA National Organic Standards, and is registered for use in organic agriculture by the Washington State Department of Agriculture.

This sanitizer also has benefits for your equipment, as it is less corrosive than hypochlorite's. It can be used at any temperature, and works well under cold conditions (-4° C), uninhibited by equipment held below ambient temperature.

## Why hire out for application?

Industrial Ventilation Inc. (IVI) is a service-focused leader in potato storage, and they provide the expertise and equipment for Jet-Ag® application. Utilizing IVI's service means efficiency. Like the sprout inhibitor CIPC, a one-time application typically gets the job done.

This service eliminates the grower's worry about application amounts and chemical mixing, as well as equipment ownership requiring movement, maintenance and storage. "Small but troublesome equipment concerns are a thing of the past," states **Kevin Burgermeister**, a grower of chipper varieties in **American Falls, Idaho (Driscoll Brothers II)**. Burgermeister likes the efficiency he gains with IVI handling the Jet-Ag® application. He no longer has to worry about things like nozzles plugging up, but instead, just makes sure he is plugged into IVI's service schedule once the doors close on his harvested potatoes.

Burgermeister considers the application inexpensive when all cost considerations are factored in. "The application is just great insurance on protecting all the effort we put into growing a high-quality potato. We'll go this route again next harvest."

Other potato growers have seen the benefit of partnering with IVI for their Jet-Ag® application. While the day after storage occurs is ideal for the fogging, application can be done anytime, at any temperature. **Casey Poulson of Aberdeen, Idaho (Poulson Farms)** had red potatoes in storage for a month when he noticed a problem. He called IVI. "I was obviously concerned about my reds when I saw signs of rot. IVI's fogging method dried up the rot. The price was reasonable, and I would use it again—but next time, at the start of storage!"

**John Stahl of Stahl Hutterian Brethren Farm, Ritzville, Washington**, saw signs of rot after filling a 10,000 ton (200,000 cwt) storage with potatoes. Stahl was concerned: "I talked to IVI and told them I thought we needed to move these spuds right away. They recommended we try Jet-Ag. It's now June 8, 2013 and we are delivering spuds to Cavendish Potato in Jamestown, North Dakota and Lamb Weston in the Basin and there is very minimal rot. The potatoes look great and we are extremely pleased with the results. We will use it again."

Efficient, effective and safe: IVI's Jet-Ag® service is making its mark on potato grower's calendars.

- Mike Machurek, IVI Sales Manager, July, 2013