

## CASE HISTORY

# Controlling Dust in Feed Mills and Grain Facilities



As operations manager at [Furst-McNess](#), Ron Kerkhoff understood the importance of keeping feed mills and grain facilities clean and safe. However, with the constant presence of combustible dust, it isn't easy.

You try to have an enclosed system, but even then, a little bit of dust leaks out, so it'll be in the air. It's a constant challenge to keep it clean.

- Ron Kerkhoff

With a focus on producing high-quality livestock and poultry feed, ensuring dust control is about maintaining cleanliness and preventing potential hazards. All of the products Furst-McNess handles in making feed (corn, soybean meal, salt, and calcium) are classified as combustible dust environments, which means **a Dust Hazard Analysis (DHA for short) isn't optional; it's mandated.**

### Manual Cleaning Makes a Dirty Job

Traditionally, cleaning feed mills and grain facilities has been labor-intensive.



Before we got the SonicAire system, we'd bring in four or five people, five hours, on a weekend, so it was all overtime help. We'd do that like once a month. We'd bring in a scissors lift; elevate to the top. We'd bring in brushes and air wands and blow off the ledges. Then, after you're all done, people would come in and sweep it all up. So it was a big, dirty job.

- Ron Kerkhoff



### The Difficulty of Reaching Hard-to-Clean Areas

The receiving area at Furst-McNess is one of the most challenging areas to clean. Its 40-foot-tall side walls make it difficult to reach using traditional cleaning methods. Elevating workers to such heights and blowing dust down promotes dust dispersal, both of which are unnecessary risks. Figuring out how to manage dust effectively and safely in this area became crucial to their operation.

### The Hidden Risks of Combustible Dust

Accumulating combustible dust in feed mills and grain facilities presents a severe hazard. Combustible dust, combined with an ignition source, can lead to catastrophic explosions, causing injuries, fatalities, property damage, and even complete facility destruction.

## Furst-McNess' Commitment to Safety

Furst-McNess prioritizes safety in its facilities. Strict adherence to Occupational Safety and Health Administration (OSHA) guidelines is necessary to prevent dust explosions. Controlling dust levels is crucial in mitigating risks and creating a safer working environment.



"The last thing you want is to have to tell a family member that your son or your daughter or your husband died in a grain explosion. So, it's always on the top of mind to do the right thing.

- Ron Kerkhoff



## A Versatile Solution for Dust Control

### Classifying Hazardous Areas

Combustible dust in manufacturing facilities poses significant safety and regulatory challenges, especially in Class II Division 1 (CIID1) areas. SonicAire addresses this with their BarrierAire™ technology and the newly certified CIID1 XZ-210 and XZ-215 fans.

### Ensuring Safety and Compliance

Due to constant combustible dust, CIID1 environments require more robust dust control. Manual cleaning is often inefficient, making proactive dust control essential for safety and compliance.

SonicAire's fans are the only UL-certified dust control fans that meet strict safety standards and provide reliable dust control in hazardous environments. By adopting SonicAire's technology, facilities can create safer, more efficient workplaces while ensuring regulatory compliance.

## Saving Time and Labor Costs

By incorporating SonicAire Fans into their cleaning processes, First-McNess and other feed mills and grain facilities stand to reap numerous benefits. Instead of allocating extra resources monthly or compromising on cleanliness, SonicAire Fans allow for continuous and efficient dust control without requiring manual intervention.



I'm excited about the SonicAire fans. This is going to save us a lot of time and overtime labor. I estimate it's going to save us \$10,000 a year just in overtime cost alone.

- Ron Kerkoff



## The Future of Dust Control at Furst-McNess

Effective dust control is critical to maintaining cleanliness and safety in Furst-McNess facilities. They streamlined their cleaning processes by investing in innovative SonicAire solutions while significantly reducing labor costs. These fans' ability to consistently meet OSHA requirements demonstrates a commitment to employee welfare and operational excellence.

With technology continually evolving, the future holds promise for more advanced and tailored dust control systems specific to all feed mills and grain facilities. As the industry strives for enhanced safety and improved productivity, **SonicAire Fans emerge as a game-changing solution** capable of transforming how these facilities manage combustible dust.



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