



# Case Study

## Odor Control

### IOWA STATE UNIVERSITY

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### FACILITIES

A deep pit facility was used to test hydrogen sulfide levels during agitation. The building, located near Waukon, Iowa, was comprised of two 500-head finishing rooms with separate pits.

### PRE PITCHARGER ENVIRONMENT

Hydrogen sulfide is considered the most dangerous gas among the by-products of manure decomposition. It is colorless and has a very pungent odor, like rotten eggs. Concentrations of several hundred ppm are toxic to humans and animals. Levels of 50 ppm can cause dizziness and headaches. OSHA standards state that the safe eight-hour exposure to hydrogen sulfide for humans should not exceed 10 ppm.

### PITCHARGER ENVIRONMENT

Sixty days prior to testing one room was treated with *PitCharger Sulfide Reducer* and the second pit was left untreated. Pits were agitated and emptied in mid-November. In the untreated pit hydrogen sulfide reached a high of 203 ppm and averaged 93 ppm during agitation. The highest reading in the *PitCharger Sulfide Reducer* pit was 10 ppm and the average reading was 2.7 ppm – a 97% difference!

### DR. MEYER'S COMMENTS

**“Your product worked very well during pit agitation to minimize the hydrogen sulfide level . . . the average reading of the *PitCharger Sulfide Reducer* pit was only 2.9% of the reading from the untreated pit!”**

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