

# Iowa State University Study

*"We found that treatment with manure magic® reduced solids content, foam stability, and resulted in an altered microbial community."*

(ISU Agricultural and Biosystems Engineering Department researchers **Dan Andersen** and **Caleb Polson** in 2017 study **"Evaluation of Potential Treatments to Reduce Foaming from Swine Manures."**)

The ISU study demonstrated **manure magic®** additive inhibits foam by up to 75% and enhances solids destruction by 33% in swine manure pits.

<https://www.drylet.com/isu-manure-magic-inhibits-foaming-swinemanure/>



## About M<sup>2</sup>manure magic®

- Currently used by 8 of the Top 20 swine producers in the US.
- **manure magic®** additive is a dry-to-the-touch, safe-to-handle, chemical-free product.
- Treats deep pits, flush systems with shallow pit and/or recirculation for washout, lagoons.
- Reduces odors and hydrogen sulfide up to 43% and 50% respectively, according to a Purdue University study.

## OUR EXPERTS

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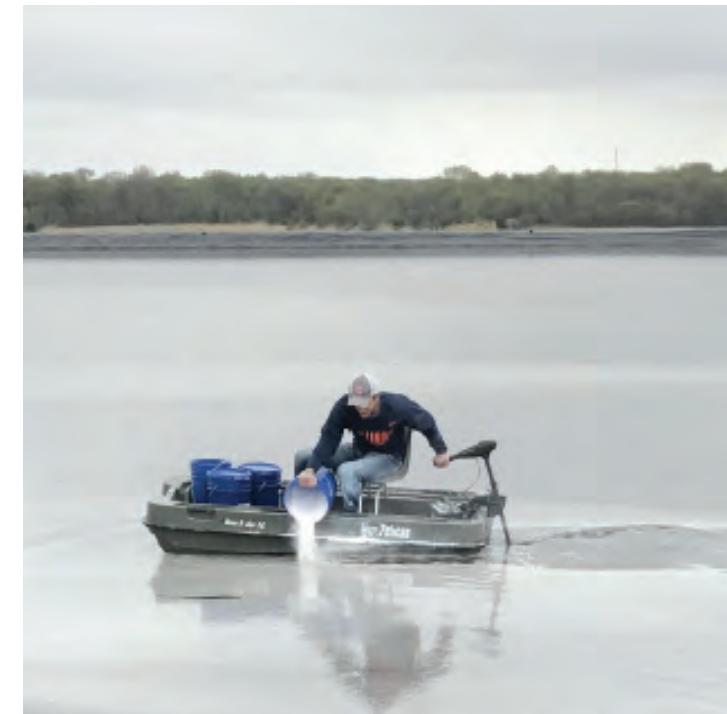
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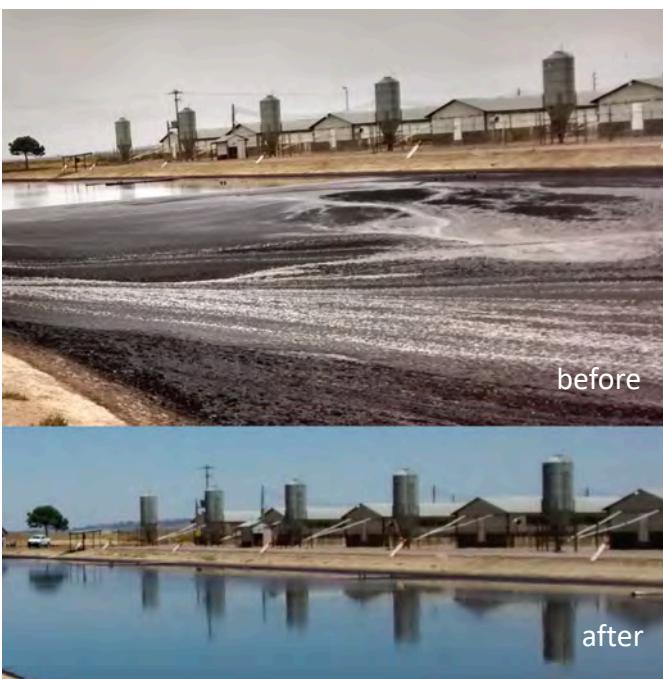
## M<sup>2</sup>manure magic®



- Typically only 1 application needed (problem manure pits may require multiple applications in the first year).
- Prevents foaming when applied consistently.
- Easy to apply in pits and lagoons.
- Helps to reclaim pit capacity by breaking down heavy solids.
- Breaks down and liquefies manure for easy pump-out.
- Translates to fast ROI.

# CASE STUDIES: SHARP REDUCTION IN SOLIDS BUILD-UP IN SYSTEMS TREATED WITH manure magic® ADDITIVE

## Major lagoon solids accumulation problem solved



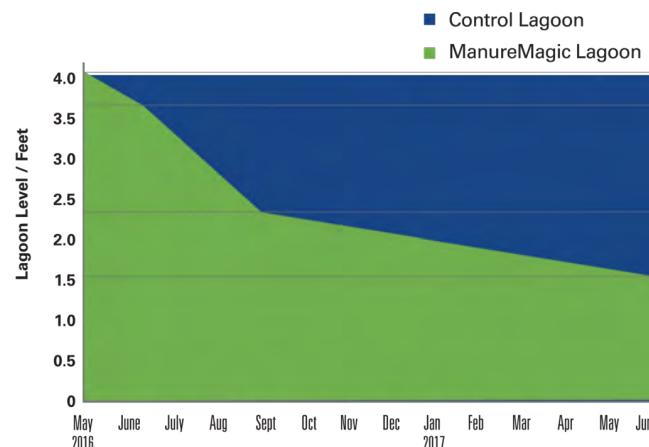
A large hog producer reached out seeking a solution for a crisis at one of their primary lagoons on a 10,000-head finishing farm. Connected to five large barns, the lagoon had reached a **critical build-up in solids** (see image), creating issues with land application pump-outs, as well as nuisance odors for the operational staff and local community. Several competing products had yielded no success, leading to customer frustration and the worsening of their solids problem. Fortunately, **manure magic®** additive was the answer: **after just one application** to the lagoon and in less than three months, the solids were **eliminated** (see image) and odors dramatically reduced.

## 60+% solids reduction in 1 year

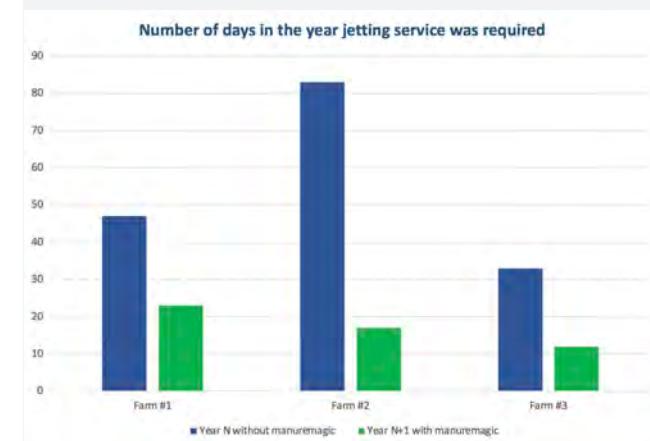
**manure magic®** additive was used to treat a lagoon system fed by four 1,000-head barns at a major swine integrator. The product was applied at a rate of 125 pounds to the 2-million-gallon lagoon just once in May and 50 pounds to the pull-plug pits of each barn over a period of four months. In only four months, the sludge level had dropped 42% on average (9 different sample locations).

Measurements taken nine months later revealed an **additional 44% decline on average, despite no additional manure magic® additive being added to the system during that time frame.**

In total for the 13-month period, the solids reduction was over 60%, in stark contrast to the untreated lagoon (see "Control Lagoon"), which had no solids reduction over the same period.



## 68% decline in jetting events drives significant savings



A major swine producer applied **manure magic®** additive to remedy stubborn manure solids accumulation. The site consisted of three farms, each designed as a flush system with shallow pits. Each pit was treated just once in the spring with 25 pounds of **manure magic®** additive. By the end of the year, a 68% reduction in total calls for jetting services was achieved compared to the previous year (from 163 down to 52). **At \$500 per day for jetting service calls, savings added up to \$45,000 net of product costs for the three farms, or an average of \$15,000 per farm.** By applying **manure magic®** additive proactively to every lagoon and barn in spring, this customer's manure crusting build-up, critically high sludge levels, and costly requirement for frequent jetting services have become problems of the past.