

## TECHNOLOGY SUMMARY

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Full paper is published in the proceedings of:

**MITIGATING AIR EMISSIONS FROM  
ANIMAL FEEDING OPERATIONS  
CONFERENCE**

Iowa State University Extension  
Iowa State University College of Agriculture  
and Life Sciences

**Conference Proceedings  
Sponsored by:**

NRI Air Quality Extension & Education  
U.S. Pork Center of Excellence  
Iowa Farm Bureau Federation  
Iowa Egg Council  
Iowa Pork Industry Center  
Iowa Pork Producers Association

## Odorgon: Overhead Spray System to Neutralize Odors

By Steve Opheim VP Klean Air Inc.

**Species:** Swine, Poultry, Beef & Dairy  
**Use Area:** Animal Housing  
**Technology Category:** Chemical Amendment  
**Air Mitigated Pollutants:** Ammonia, Hydrogen  
Sulfide, Odors

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### System Summary:

Odorgon is a water based formulation that is applied in confined animal feeding operations through a high pressure mist system. Odorgon is sprayed on an automated timer basis from the ceilings through high pressure nylon lines and nozzles to **neutralize** malodors.

### Applicability and Mitigating Mechanism:

- Unique class of cationic surfactants
- Atomized solution sprayed at 600 psi
- Buffer resulting in non volatile organic salts
- Greatly reduces ammonia & hydrogen sulfide
- Creates better environment for animals to thrive in resulting in lower mortality, less culls and less days to finish.
- Better conditions for workers/employees
- Mitigates neighbor/social issues

### Limitations:

- Water based, subject to freezing
- Summer use may be curtailed in open buildings during windy conditions

### Cost:

Equipment cost for a 42 by 200 foot finishing building with all components installed is approximately \$4900. Annual usage for this facility would average \$2100 of Odorgon concentrate or .73 per animal unit but could vary with region/climate. Nursery cost for swine is .19 per animal unit. Odorgon is mixed with water at a rate of 50 parts water to 1 part concentrate resulting in a cost of \$1.50 per gallon diluted. Cost also varies based on building dimensions and desired results.