TREATMENT RATES

Gallons of Manure	Shock (2x) Rate Pit-King®, lb	Maintenance Rate Pit-King®, lb
100,000	2.0	1.0
250,000	5.0	2.5
500,000	10.0	5.0
1,000,000	20.0	10.0

*** Maintenance rate estimates:*
- Feedlot cattle produce 9 gallons of manure/head/day or 270 gallons/hd/month
- Dairy cows produce 16 gallons of manure/head/day or 480 gallons/hd/month
- Finishing hogs produce 1.2 gallons of manure/head/day or 36 gallons/hd/month
- Feedlot cattle: 1 canister of Pit-King® to treat the manure produced by 1,000 cattle/month
- Dairy cows: 1 canister of Pit-King® to treat the manure produced by 500 cows/month
- Hog confinement (quad barn): 1 canister of Pit-King® to treat 6,900 head/month

SUBSCRIPTION PROGRAM

Want your Pit-King® delivered to your farm when you need to treat? Sign up for our subscription program and have the product shipped for free to your house on a monthly, quarterly, or semi-annual basis. Plus, you'll get a discount on each canister or bucket you request. For more information, contact your local Agri-King consultant.

PIT-KING®
MANURE DIGESTANT PRODUCT

PK#120

PIT-KING®
MANURE DIGESTANT PRODUCT

PIT-KING®

MANURE DIGESTANT PRODUCT

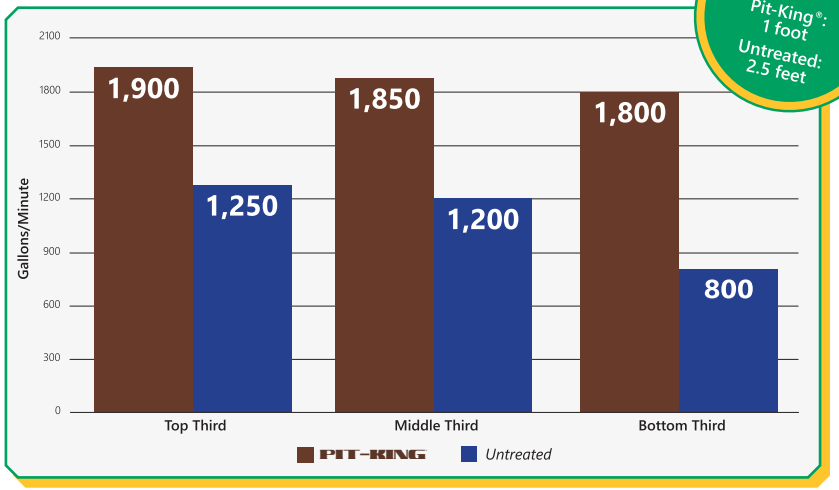
WHAT IS PIT-KING®?

Pit-King® is a manure digestant product designed for farm manure pits, lagoons, slurry stores, feedlots, and pens. It contains a patented and proprietary blend of enzymes and microorganisms that help break down manure solids produced by dairy cattle, beef cattle, and hogs.

FEATURES	BENEFITS
Multi-enzyme blend	Rapid breakdown of manure solids and undigested substances (i.e. fibers, starches)
Enzyme-producing microorganisms	Continued decomposition of manure solids in pits, lagoons, and slurry stores
Viable microorganisms	Increase manure solid decomposition and reduce commonly associated obnoxious odors (i.e. ammonia)

IMPROVE PUMPABILITY

A year-by-year comparison on a large farm in eastern Iowa showed Pit-King® produced more pumpable manure and had less unpumped sludge remaining. Pumping rates were calculated in gallons per minute along 1.14 miles of tubing.



At a large Washington dairy farm, Pit-King® was added to the lagoon in late Spring. Within one month, the farm noticed considerably fewer floating manure solids. The lagoon also became much easier to manage and odor levels saw a steady decrease in that time.

LESSEN AMMONIA LOSSES

Separate trials at farms in central Wisconsin and eastern Iowa sought to measure the impact treatment with Pit-King® had on reducing ammonia (NH_3 or NH_3-N) concentrations within manure. After 90 days, all pits treated with Pit-King® saw substantial decreases in ammonia concentrations.

CENTRAL WISCONSIN TRIAL

TREATMENT	WET BASIS NH_3-N, PPM	WET BASIS TOTAL N, PPM	NH_3-N AS % OF TOTAL N	EFFECT ON NH_3-N
Untreated	427.68	3663.9	11.67%	
PIT-KING	359.26	3896.3	9.22%	-21.0%
Untreated	614.42	5253.7	11.69%	
PIT-KING	461.88	4831.3	9.56%	-18.2%
Untreated	1067.60	3692.2	28.92%	
PIT-KING	861.76	3755.0	22.95%	-20.6%

EASTERN IOWA TRIAL

	CONTROL (NOT TREATED)	EAST PIT (TREATED)	WEST PIT (TREATED)
Crude Protein (% of DM)	28.5	48.6	43.2
NH_3 (% of CP)	99.4	57.3	61.5
As-Is Moisture	90.31	93.87	91.58

MINIMIZE ODORS

An on-farm trial at a Nebraska feedlot compared levels of total nitrogen and ammonia within Pit-King® treated manure against an untreated control. After 50 days, the Pit-King® treated manure had lower levels of ammonia and greater amounts of total nitrogen.

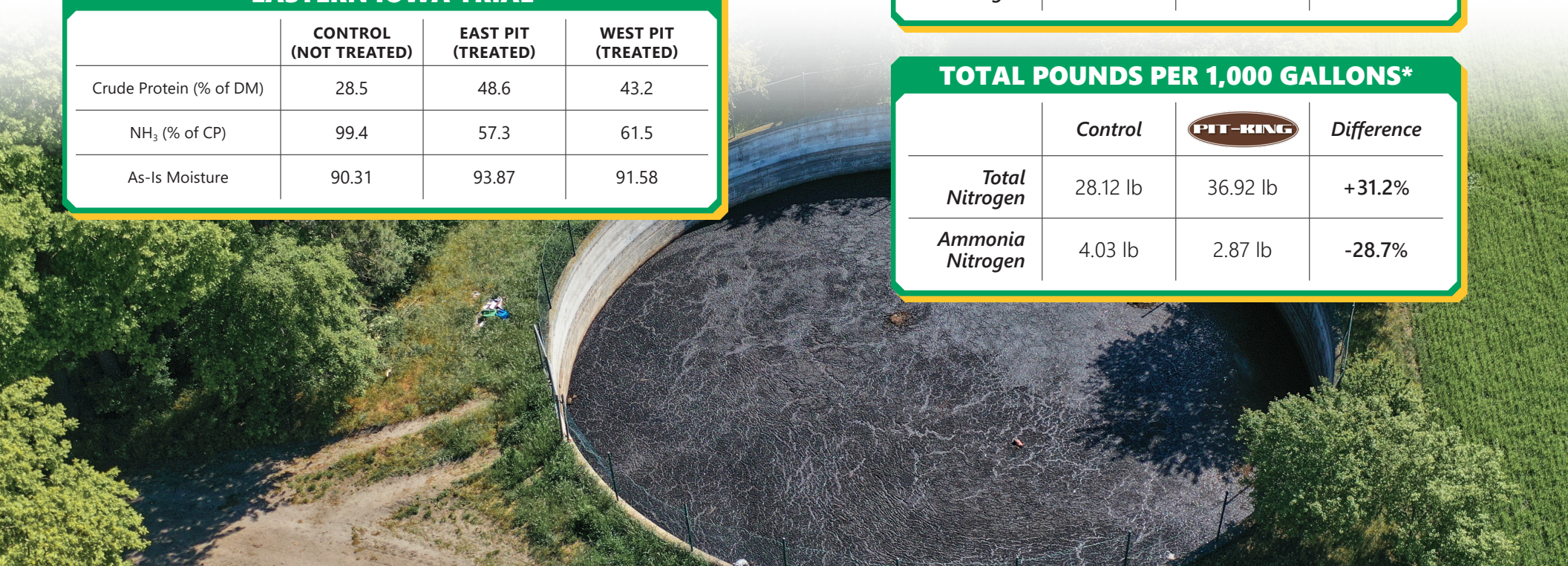
With higher levels of total nitrogen and less ammonia nitrogen, the Pit-King® treated manure will have less odor compared to the untreated manure. That means better air quality in the barns and fewer complaints from neighbors.

TOTAL POUNDS PER TON*

	Control	PIT-KING	*Difference*
Total Nitrogen	6.75 lb	8.86 lb	+31.2%
Ammonia Nitrogen	0.95 lb	0.68 lb	-28.4%

TOTAL POUNDS PER 1,000 GALLONS*

	Control	PIT-KING	*Difference*
Total Nitrogen	28.12 lb	36.92 lb	+31.2%
Ammonia Nitrogen	4.03 lb	2.87 lb	-28.7%



MITIGATE FOAMING

Pit-King® is formulated with a variety of enzymes and microbes that help suppress the formation of manure foam in the following ways.

ENZYMES

Break down undigested fibers in manure, reducing the ability for methane-producing bacteria to thrive

YEAST

Promote acetate production, which diverts metabolites and nutrients away from methane-producing bacteria

BACTERIA

Produce organic acids, which lower surface tension of manure and reduce methane production

MICROBES

Produce fiber-digesting enzymes and surfactant compounds, which hydrolyze fibers and disrupt foam formation

DO THE MATH

MANURE PRODUCED

Livestock Type	Gallons manure produced per head per day
Dairy Cattle	15.0
Beef Cattle	7.5
Finishing Hogs	1.2

TREATMENT RATES

Treatment Event	Pit-King® needed per 250,000 gal.
Initial/Shock	5.0 lb
Maintenance	2.5 lb
Excessive solids or heavy bedding	5.0 lb

SEE FOR YOURSELF...

How much manure is produced by your livestock each year? Use the formula below to determine your annual manure management needs.

_____ (number of livestock) **x** _____ (manure/head/day) **x 365 =** _____ (gallons of manure per year)

_____ (gallons of manure per year) **÷ 250,000** (gallons of manure treated by 2.5 lbs. of Pit-King) **x $195** (cost per canister of Pit-King) **=** _____ (total cost of Pit-King at maintenance rate per year)