

*Introducing a U.S. Patented Environmental Preservation System to reduce environmental issues in the equine industry*



Envirostall is a U.S Patented Environmental Preservation System that uses bioremediation techniques to clean and neutralize urine contaminants from horse stalls.

Bioremediation uses ecologically safe micro-organisms to degrade harmful contaminants and turn them into environmentally safe by-products.

The microbes in Envirostall are specifically formulated for use in the equine industry. They are EPA approved and ready for use requiring no special solutions, no special mixing and no waiting period before application. The simple addition of urine activates our product. These factors translate into cost savings for you.

Once the Envirostall microbes are injected in your stalls, they go to work digesting toxins and changing them into safe water and harmless gases. The microbes will thrive and multiply in your stalls as long as there is a horse in the stall.

With Envirostall, your stalls are virtually pristine reducing the health risks to your horses and you. You can have confidence in knowing that your stable is the healthiest environment possible when you have Envirostall.

**Next-Level Living for Horses**

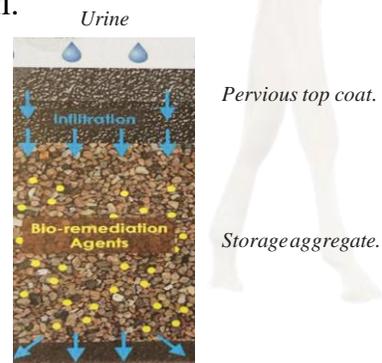
# Envirostall™

A 1000-pound horse produces up to 50 pounds of wet manure each day or nearly 10 tons of manure each year. With most of this being deposited in the stall, your horse lives in an environment filled with bacteria, virus, mold and mildew. Horse owners have long sought ways to help reduce or eliminate urine in an eco-friendly manner.

Our team has engaged in ground-breaking research resulting in this patented system. Envirostall is a new beginning in green technology as the first and only full-service system capable of dealing with and reducing environmental issues in the equine industry.

Envirostall is a multi-layered system that collects the horse urine and other contaminants, helps neutralizes them, and then disseminates safe water back into the soil.

Envirostall is the gold standard for green-technology in the equine industry. Envirostall is a patented system committed to helping the environment while simultaneously keeping your horse healthy.



## Installing Envirostall™



*Storage aggregate injected with bioremediation agent is tamped in place.*

The stall walls are sanitized with our EPA approved mist, which lasts up to three months. The natural soil is leveled and then covered with a high-capacity storage aggregate, which absorbs nitrates and other contaminants at a 250 percent greater rate than limestone. Then, we inject our proprietary bioremediation microbes into the storage aggregate, and they get to work cleaning and neutralizing contaminants. The microbes are EPA approved and designed specifically for the equine industry. These microbes remain active indefinitely if a horse is urinating daily in the stall.

A perforated, one-half inch mat is placed on top of the aggregate creating a comfortable stall by reducing compression on the horse's joints. Finally, a durable, porous film is placed over the rubber mat before adding bedding allowing urine and other contaminants to drain into the Envirostall system. This soft topcoat can drain 25 gallons per square foot per minute and lasts for several years.



*Cushioned mat laid over the storage aggregate.*



*Finished floor with the porous top skin.*

As the urine passes through the layers, the Envirostall microbes break down and remove harmful bacteria and drains harmless water back into the soil. A stall using the Envirostall system is virtually odorless and free of the contaminants that cause respiratory problems in horses. The Envirostall system helps mitigate mold and mildew while reducing bedding, labor, disposal, and veterinary costs.

# The Envirostall Approach

Using the Envirostall system reduces the contaminates that harm your horses, people and the environment.

## ENVIROSTALL Benefits to Horses

- Helps to eliminate contaminates that cause thrush, respiratory problems and other health issues caused by contaminated stalls.
- Helps reduce fatigue on horse shoulders and legs.
- Eliminates odor naturally.
- Provides a level surface for the horse.

## ENVIROSTALL Benefits to the Environment

- Generated through sustainable and recycled materials.
- Neutralizes urine contaminants from horse stalls.
- Reduces contaminated materials to safe water.
- Meets EPA ground water protocols.

## ENVIROSTALL Benefits to People

- Significantly reduces the cost of horse ownership and veterinary services.
- Reduces bedding, waste disposal and labor cleanup costs.
- Allows you to spend more time enjoying your horse.
- 100% tax deductible.

## A Veterinarian's View: Thomas Lurito, DVM

“The biggest problem in having horses is clean stalls. Stalls should be cleaned two or three times a day to keep a stall sanitary and dry. Horses collect manure and urine in their hooves and moisture from the fields. Dry stalls take the moisture out of the hooves, which is important for horse health. With a horse, everything is affected from the bottom up. Having dirty stalls will influence what goes on in the horse's hooves. Wet stalls influence how the horse's shoes stay on, and the durability and soundness of the hooves. Wet stalls cause thrush and separation of hoof walls so horseshoe nails will not hold.

“Dirty stalls also contain urea, the cause of the ammonia odor in stalls. Horses are in their stalls several hours a day inhaling all the nitrogen in urea formed by the horse's urine. The effect of urea on the nasal passages, trachea, and lungs is far underestimated. It is caustic as if sucking asbestos into the respiratory system. If you keep the urea and odor to a minimum, your horse will breathe much easier. Envirostall will eliminate the odor and keep the horse's respiratory system clean.

“Envirostall also creates comfort for the horse. The drainage system takes away the bacteria and moisture in the stall. The rubbery mat under the bedding gives a cushion that supports the horse and eliminates sores on its hocks. Envirostall will allow your horse to be comfortable and healthier while improving the soundness and longevity of the horse.”

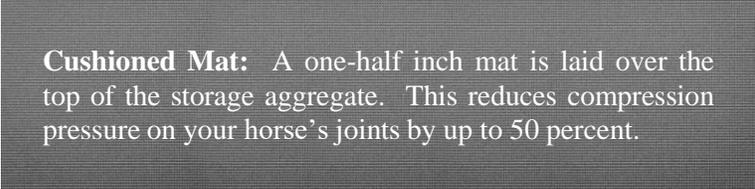
## Our Solution



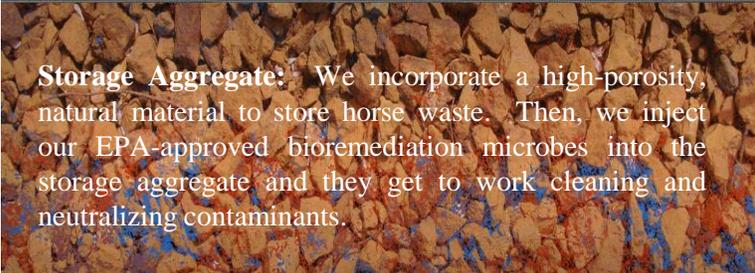
**Bedding:** Top off your EnviroStall with the bedding of your choice to provide your horse with the healthiest, most comfortable stall possible.



**Porous Top Skin:** We add a thin film over the rubber mat before adding bedding allowing urine and other contaminants to drain into the EnviroStall systems.



**Cushioned Mat:** A one-half inch mat is laid over the top of the storage aggregate. This reduces compression pressure on your horse's joints by up to 50 percent.



**Storage Aggregate:** We incorporate a high-porosity, natural material to store horse waste. Then, we inject our EPA-approved bioremediation microbes into the storage aggregate and they get to work cleaning and neutralizing contaminants.



**Native Soil:** The first step in the EnviroStall system is to prepare the stall for acceptance of safe water back into the soil by leveling the soil.

## A Customer's View

As the owner of a valuable horse and a Grand Prix champion, Mindy Blackford believes, "without good feet, I don't have a horse." Blackford is the owner of Calidoza BD, an offspring of the famous Calido I. The competitive Holstein grey stands in Ohio at Blackford's Petrie Show Stables.

"Greys are prone to hoof problems, particularly white line disease. This is when bacteria get between the hoof wall and the feet and eat away at the hoof. Wet stalls are a major cause of the problem, and it is particularly bad when the mare comes in season.

"Using Envirostall has eliminated the problem. Calidoza has had no flare ups and she doesn't lose shoes. My furrier has been pleased with how she has regained the strength in her hoof walls.

"These horses are also prone to swelling in the legs from the moisture. Bacteria from white line can get into the legs and make it much worse. Using Envirostall has done wonders to prevent this. We used to have to wrap her legs or keep her in stockings to reduce the swelling. Since using Envirostall, Calidoza's legs no longer swell, and we have not had to wrap her legs.

"Another benefit of Envirostall is that over four years since I had it installed, the stall floor had stayed perfectly flat. My stalls no longer sink, and the soft pad is comfortable for Calidoza."

## Envirostall, LLC

A subsidiary of Crosswater

17130 Abbey Road, Chagrin Falls, OH 44023

**Craig Roeper, Chairman**

(216) 403-5788

[croeper@envirostall.com](mailto:croeper@envirostall.com)



**Daniel O'Neil, Sr., CEO**

216-346-8237

[dponeil@envirostall.com](mailto:dponeil@envirostall.com)

### Executive Vice Presidents

**Daniel O'Neil, Jr.,**

(440) 313-8284

[doneil@envirostall.com](mailto:doneil@envirostall.com)

**Paul Ganz**

(330) 612-9254

[pganz@envirostall.com](mailto:pganz@envirostall.com)

**Ronald Vrana**

(412) 298-6850

[rvrana@envirostall.com](mailto:rvrana@envirostall.com)