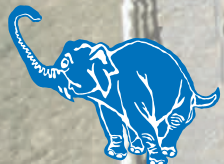


Welcome to our tour of

A&M Composting

Environmentally Safe Composting of Organic Waste for Beneficial Reuse



J. P. Mascaro & Sons

If it's service, it's us!

J.P. Mascaro & sons
2650 Audubon Road
Audubon, PA 19438
215-256-1900

A&M Composting
2022 Mountain Road
Manheim, PA 17545
717-664-2073

Advantages

Beneficial Reuse

Converts waste into useful compost, used for landscaping, land reclamation, soil blending, tree farming and agriculture. Product is approved by the EPA and the PA Department of Agriculture and other states' agriculture departments.

Environmental Protection

State-of-the-art environmental protection systems. Pioneering internal environmental compliance program. Groundwater protection and air quality systems. Fully bonded and insured.

Community

Long term commitment to the home community. Citizens advisory committee. 24 hour environmental hotline, 1-800-431-3336.

Transportation

Direct transportation routes. Short distance from Pennsylvania Turnpike interchange. Paved internal roads. Fast turn scale, unloading and loading operations. Truck wash-out facilities.

Engineering

Designed and managed by company's staff of highly experienced licensed professional engineers. Designed to exceed all state, federal and industry standards.

Management

Professional in-house environmental staff. Professional plant managers and technicians.

Infrastructure

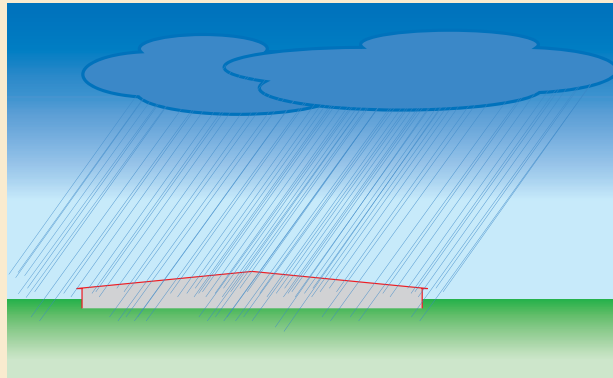
On site maintenance crews and equipment.



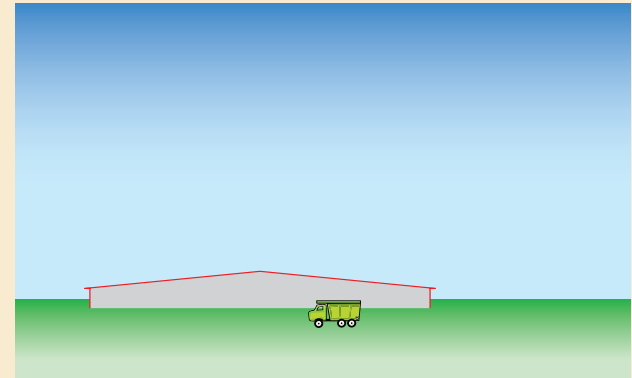
How our indoor compost facility provides total containment and harmony with the community and the environment!

Odor, noise, mud and dust are contained. Air and water quality are protected. Waste is converted into a beneficial product.

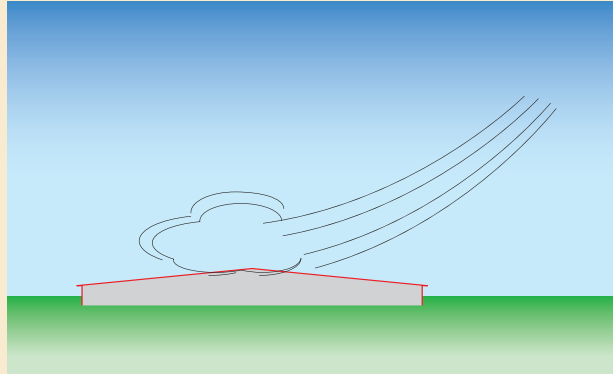
Nature recycling waste!



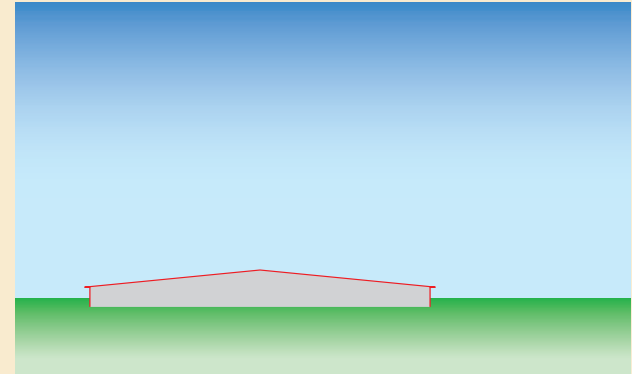
Protected from precipitation



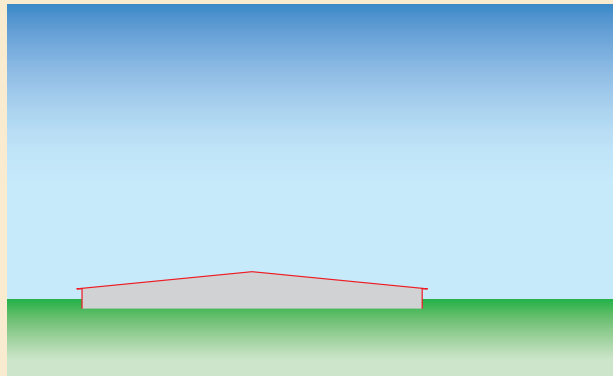
A few trucks a day



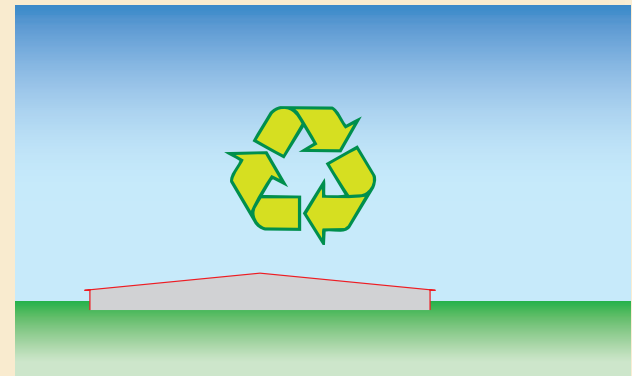
Everything stays in the building



Blends into the landscape



Odorous materials contained; biofilter eliminates odors

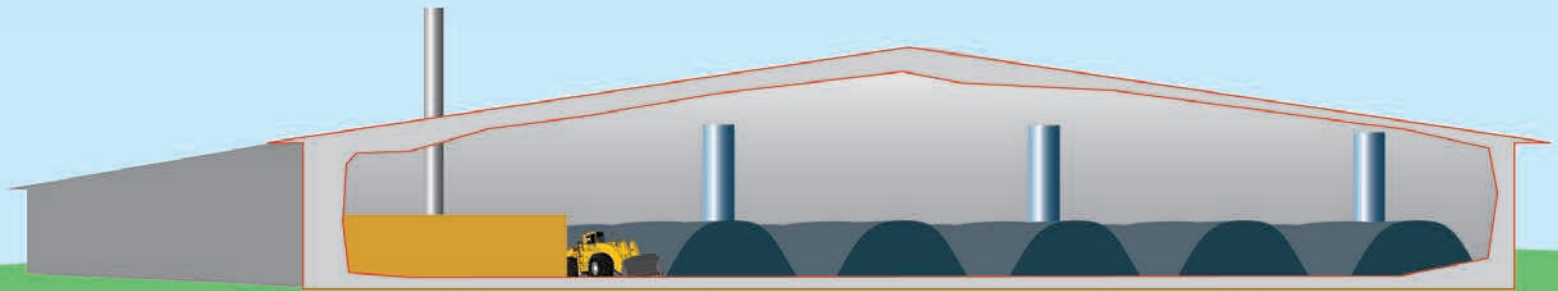


Waste beneficially reused

Indoor Composting

**Clean, efficient,
environmentally sound!**

Contains odors, noise, dust. Protects air and groundwater. Allows year-round composting. Converts organic waste into usable products. Reduces need for chemical fertilizers. Diverts waste from landfills. Uses natural biological processes.



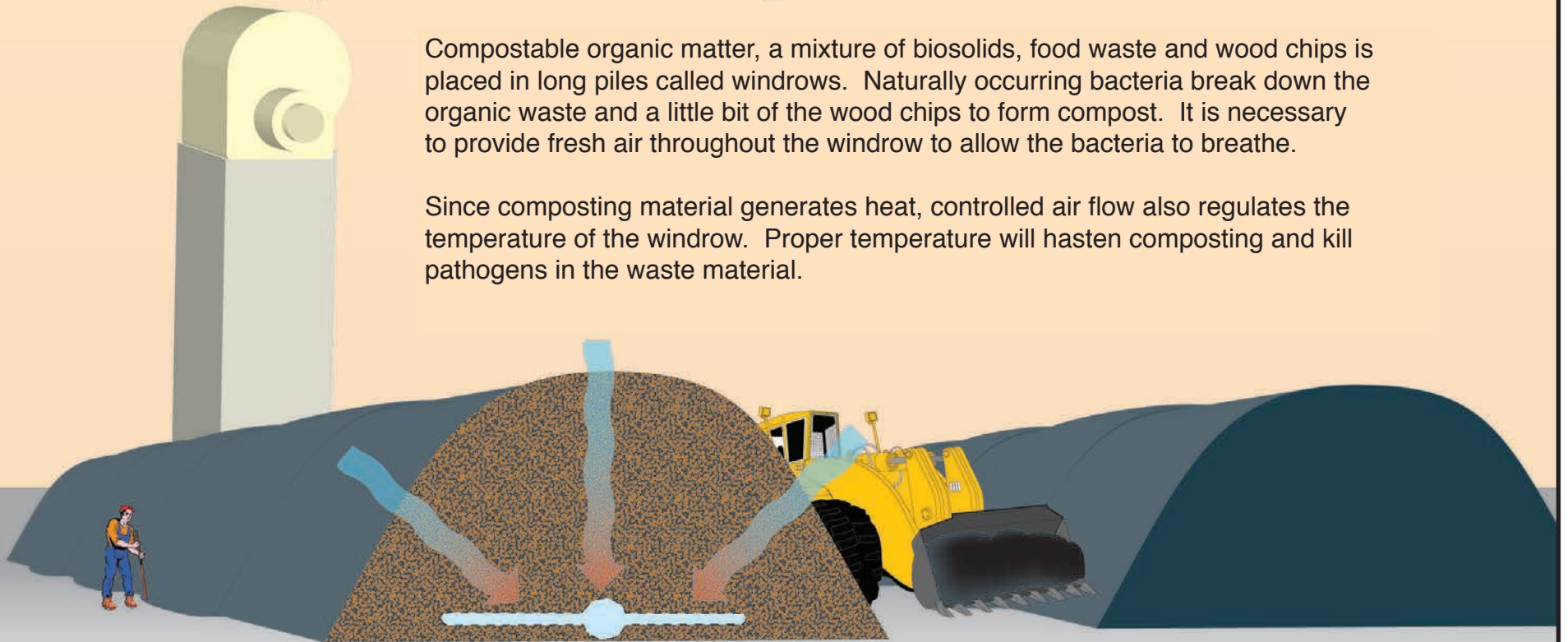
All composting, loading, unloading and material handling is done indoors. All air exiting the building passes through a biofiltration system that removes odors.

Active Windrow

Air is forced through the compost, producing a better, more uniform product in less time.

Compostable organic matter, a mixture of biosolids, food waste and wood chips is placed in long piles called windrows. Naturally occurring bacteria break down the organic waste and a little bit of the wood chips to form compost. It is necessary to provide fresh air throughout the windrow to allow the bacteria to breathe.

Since composting material generates heat, controlled air flow also regulates the temperature of the windrow. Proper temperature will hasten composting and kill pathogens in the waste material.



At Mascaro composting facilities, air is drawn through the windrows to the bottom. This air picks up heat and gases. It is then sent to the two-stage biofilter for treatment. Windrow conditions are regularly checked for temperature and moisture.

Air Flow System

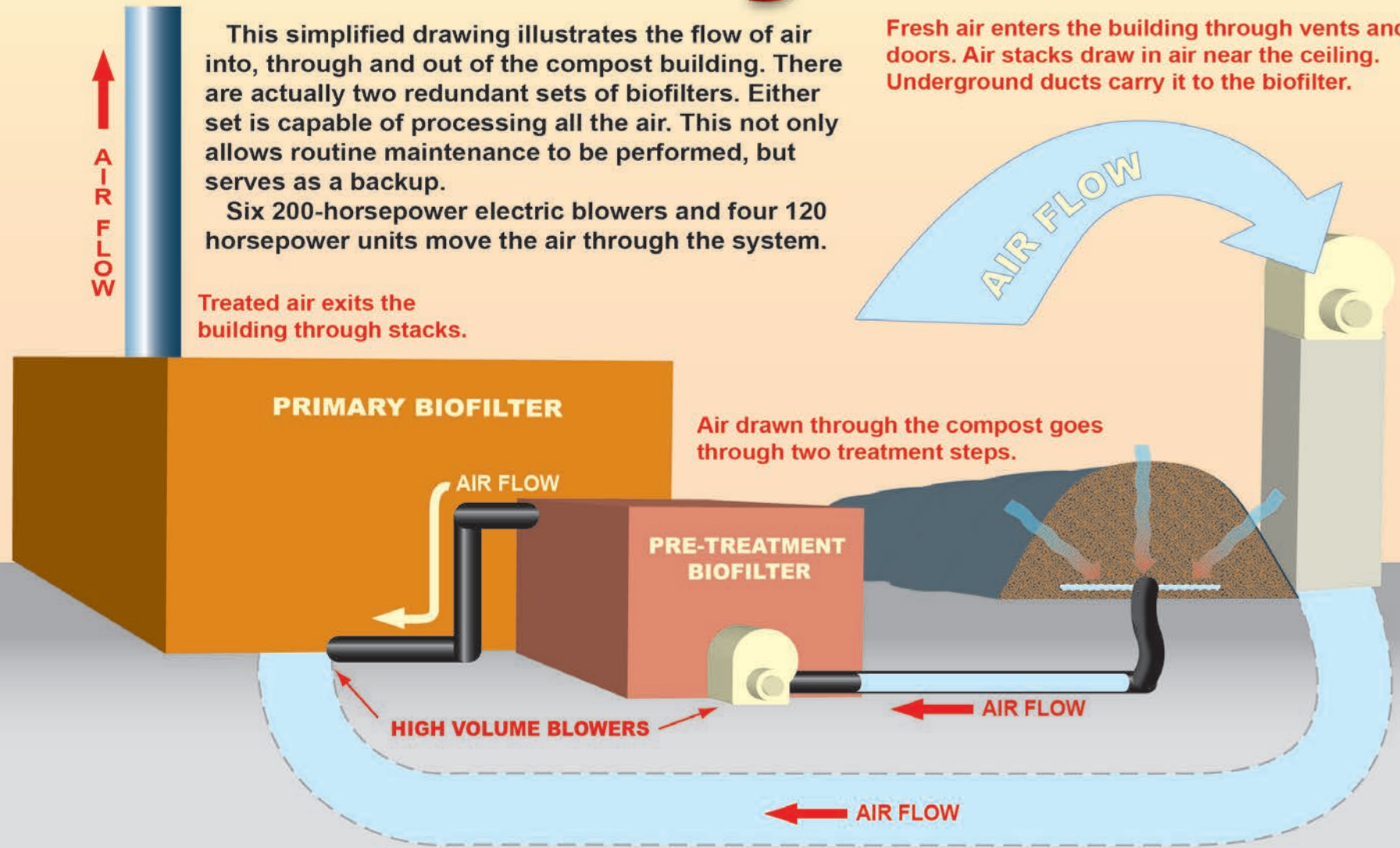
↑
AIR FLOW

This simplified drawing illustrates the flow of air into, through and out of the compost building. There are actually two redundant sets of biofilters. Either set is capable of processing all the air. This not only allows routine maintenance to be performed, but serves as a backup.

Six 200-horsepower electric blowers and four 120-horsepower units move the air through the system.

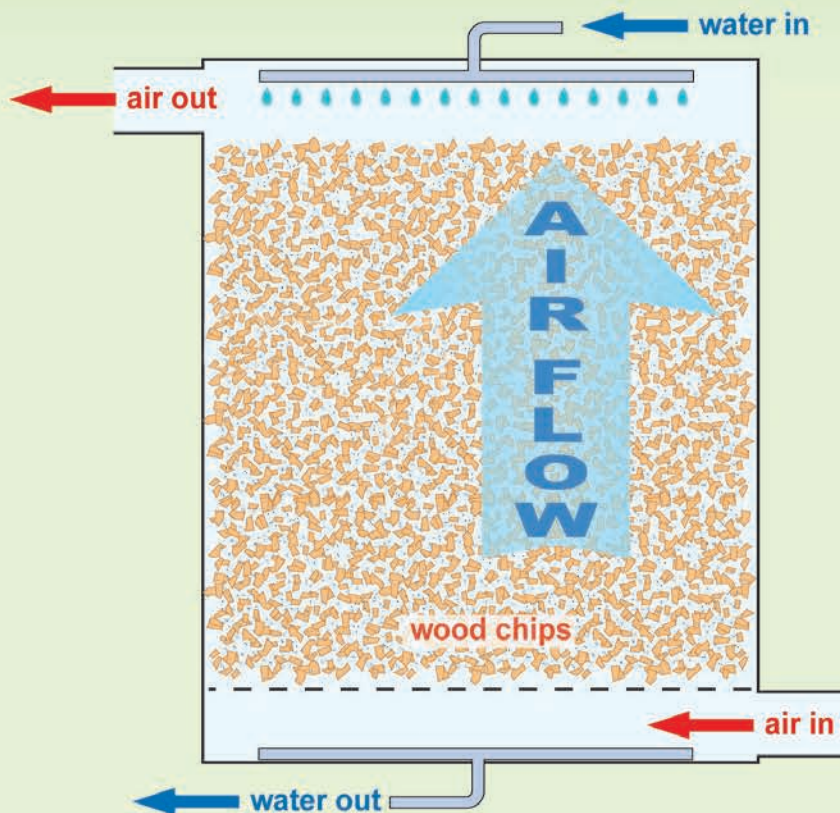
Treated air exits the building through stacks.

Fresh air enters the building through vents and doors. Air stacks draw in air near the ceiling. Underground ducts carry it to the biofilter.



Biofiltration

Naturally occurring microbes remove odor from the air!



Compost odor is caused by the sulfur and nitrogen compounds in the gases produced by decaying matter. Biofilters remove the odor by passing the air to be treated through an eight to ten foot thick matrix of moist wood chips. The moist wood chips are home to odor-eating bacteria; the odorous gases are their food.

As long as the wood chips are kept sufficiently moist and the temperature is kept in the proper range, the bacteria flourish, and virtually no odor emerges from the biofilter.

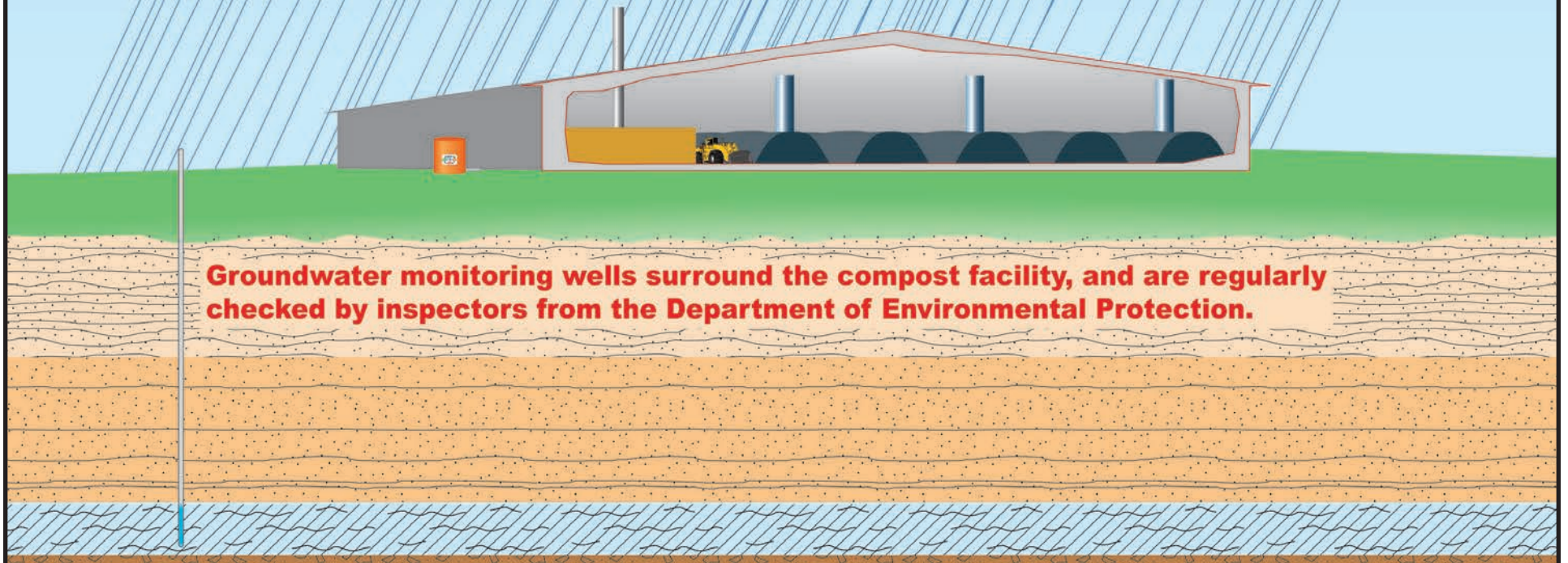
These bacteria occur naturally in the environment, so it is not necessary to introduce them to the biofilter. It is sufficient to provide them with air, water, food (the odorous gas) and proper moisture and temperature.

Biofilters require maintenance. Excess water must be drained from the biofilter and properly treated and managed. The wood chips must be periodically replaced. Temperature and moisture must be constantly monitored, and corrected, as needed.

Groundwater Protection

A fully enclosed building means stormwater never touches the compost or biofilter!

Water produced as part of the composting process is collected for proper treatment at an off-site wastewater plant. A large capacity double containment storage tank provides ample reserve capacity.



Groundwater monitoring wells surround the compost facility, and are regularly checked by inspectors from the Department of Environmental Protection.

Environmental Compliance

A&M Composting has an environmental management system second to none. While highly trained environmental professionals monitor all aspects of composting operations, everyone working at the facility is involved.

From handling materials, to inspecting infrastructure to maintaining cleanliness to sweeping mud from the roads, everyone pitches in! And everyone shares in the bonuses for 100 percent environmental compliance.

To learn more about our environmental programs, visit our web site, www.jpмасcaro.com.



Aesthetics

Landscaping and Property Management

Every effort is made to keep Mascaro's facilities clean and aesthetically pleasing. Paved internal roads are used throughout to eliminate dust and mud. Daily litter patrols keep the grounds spotless. A&M Composting is carefully landscaped to blend into the environment and the community. The grounds have an appearance of a well-groomed park.



Home Community



A&M Composting

Well buffered
Located in agricultural zone
Few homes in proximity to site
Adjacent to Turnpike and State Game Lands

Penn Township

in Lancaster County, Pennsylvania, is the home community of A&M Composting. Penn Township has an area of 18,940 acres in all.



Citizens Advisory Board

The A&M Citizens Advisory Board is a group comprised of involved citizens from the local area and the management of A&M Composting. The group meets periodically to discuss the operations of the plant and its impact on the community. The meetings are held in the evening and are open to the public.

The members of the Board discuss all aspects of the operation of the facility, complaints and concerns, and recommendations to improve the facility, with the goal of making A&M Composting a good corporate and environmental neighbor.

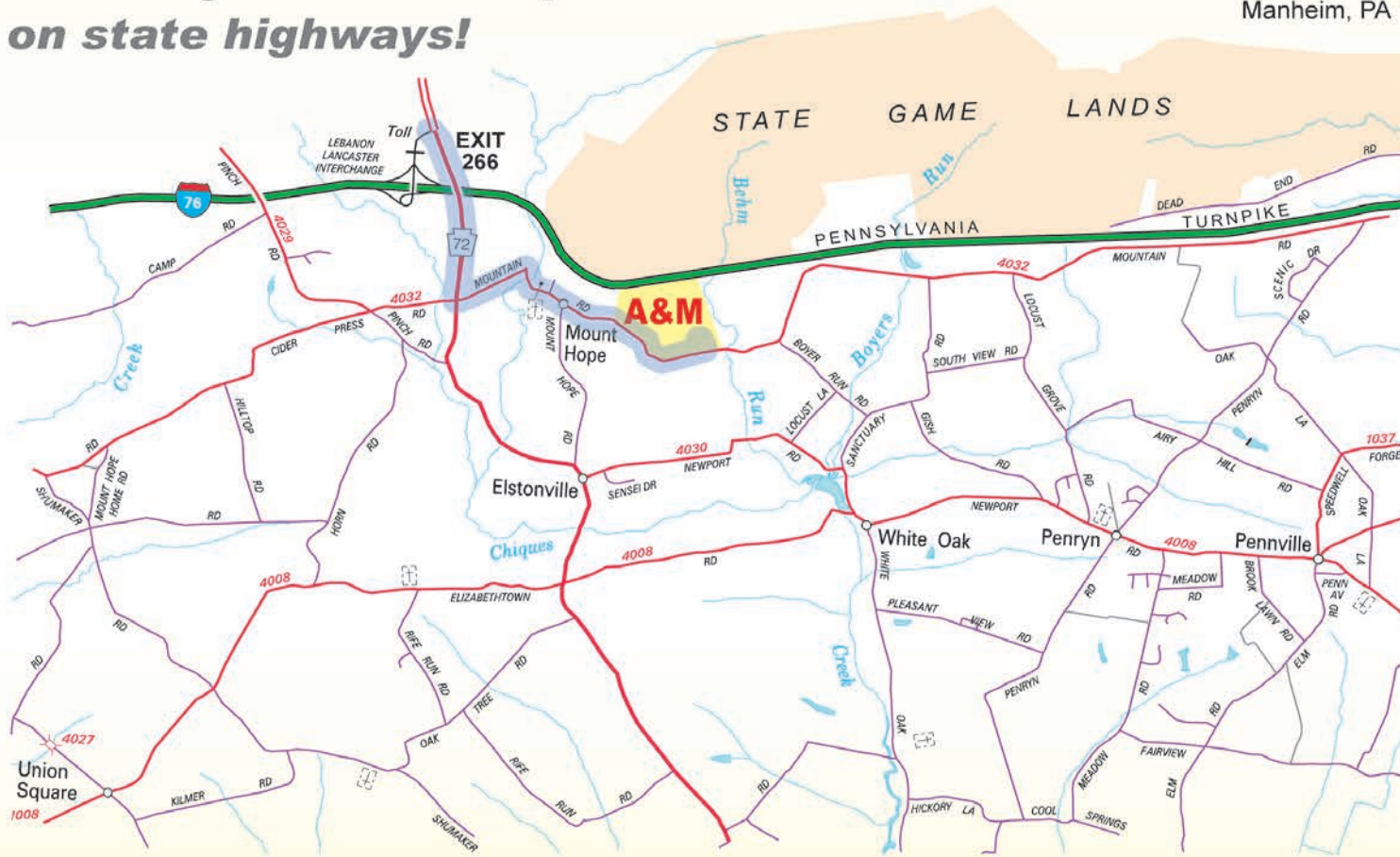
Direct Access

**Just 2.3 miles from Exit 266 of
the Pennsylvania Turnpike!**

All on state highways!

A&M Composting

2022 Mountain Road
Manheim, PA 17545



Landscapers' Advantage

Our Product

Compost produced at A&M and at the other Mascaro composting facilities is sold under the name of *Landscapers' Advantage*. It is sold in bulk to large users such as landscapers, nurseries, soil blenders, tree farmers and for land reclamation and soil improvement projects. It is Class A compost rated by the EPA and the PA Department of Agriculture and other states' agriculture departments.

Typical uses and application rates:

- Lawn maintenance - broadcast a half (0.5) pound of Class A Compost per square foot of lawn, per year.
- New lawns, flower gardens - till one (1) pound of Class A Compost per square foot of lawn or flower bed.
- Nursery and house plants - mix one part Landscapers' Advantage Class A Compost with four parts soil.
- Tree and shrub mulching - broadcast and/or mix one (1) pound of Landscapers' Advantage Class A Compost for every square foot of bed.



Typical analysis (dry weight)

Total Nitrogen 2-4%
Phosphorous 1-2%
Potassium 0.3-0.5%
pH varies from 7.0-8.0



Beneficial reuse!

Reliable and Secure Food Waste Composting

Our program is designed for businesses small or large. We offer diversified broad based services to meet your individual needs.

We are prepared to provide a no cost evaluation and provide a detailed proposal. We guarantee your program can be improved from all aspects including equipment, storage, transportation and processing via composting.

Our services are secured by multi-million dollar insurance and financial guarantees.

Visit our website at www.jpмасcaro.com to understand how our program precisely operates.



Turn This

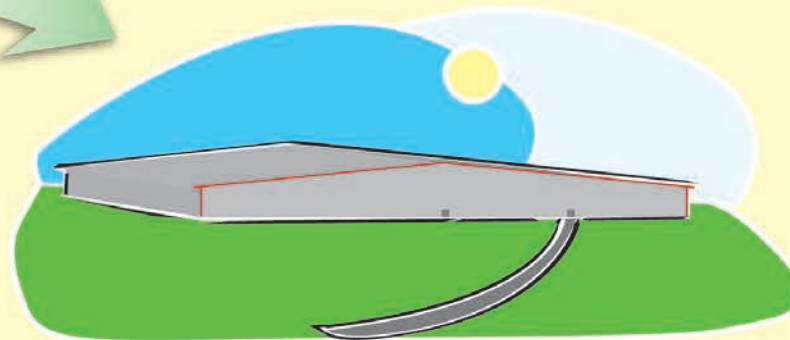


Into This!

We provide equipment, transportation and environmentally secure services to compost your food waste to a beneficial Class A Compost!

Beneficial Reuse

Communities produce biosolids from their municipal wastewater treatment plants and food waste.



Composting changes the biosolids, food waste, wood chips and other compostable organic material into a safe, usable fertilizer rich in natural plant nutrients.

Landscapers, soil blenders and agricultural users employ the compost to enrich soil. Communities benefit from the products grown and from landscaped parks and recreational areas

