



## Horse Manure Management

The proper disposal of animal waste is a challenge for every horse operation. Many stable owners consider the waste from stalls to be a nuisance because it attracts flies and is unsightly. Because of this perception, stable waste (manure plus bedding) has been improperly disposed of in remote areas on the farm such as gullies, wood edges and over the hillside. This method of disposal poses significant environmental risks due to runoff and leaching of nutrients from the manure that may contaminate ground and surface water. The Water Quality Improvement Act of 1998 requires Maryland horse operations to address the proper disposal and utilization of stable waste.

### **Stable waste can be handled in two ways:**

#### **1) Remove from the premises**

Removal may be an added expense to the operation. However, the cost can usually be passed on with small increases in boarding or other fees. Removal of waste from the farm can be accomplished through various avenues. Neighbors may be willing to pick up small amounts in the spring and fall for gardens, but this method is not always reliable. There are companies that will come to your facility and remove waste for a fee, such as a manure removal firm, excavating contractor or landscaper. Some enterprises will issue “roll off” boxes that can be filled with stable waste and later removed for a fee. Removal services range in price from \$4.00/cu. yd. to \$15.00/cu. yd. Proper storage of stable waste is essential to protect water quality. NOTE: A 1000 lb. horse stabled 50% of the time will produce 1-2 cu. ft. per day of stable waste. That’s 1-2 cu. yds/month. These volumes may vary between barns due to the type of horse and bedding used, time of year and the management of the stable.

#### **2) Spread on pasture, hay or crop fields**

Spreading stable waste on the land does not meet every ones needs. There must be enough acreage to accommodate the waste and the application rate must meet the recommendations of an approved nutrient management plan.

Application of raw stable waste to land also has disadvantages:

- Stable waste may contain a variety of internal parasites, bacteria and viruses that can reinfect the herd when applied to pastures or hay fields.
- Spreading waste should only be done in the fall and spring. Making numerous trips over fields throughout the year causes soil compaction. Compaction reduces water infiltration and retards the growth of pasture and hay grasses.

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### **What to do: Try composting your horse manure!**

Composting is a biological process where microorganisms convert organic materials such as manure, leaves, sawdust, straw, and paper into a soil like material called compost.

There are advantages to composting your stable waste:

- 1) Volume reduction - composting reduces the volume of stable waste by 40-60%.
- 2) Composting is environmentally friendly. It converts nutrients into a form that is more readily available for plant uptake.
- 3) Compost adds organic matter to the soil; improving soil fertility and moisture retention and increasing the yield potential of pasture and hay grasses.
- 4) Compost is a value added product and has many different uses. It can be spread over pasture and hay fields to improve grass production, used in the garden or in landscaping.

### **For helpful information on composting:**

- 1) On-Farm Composting Handbook  
Northeast Regional Agricultural Engineering Service  
Cooperative Extension                      607-255-7654 (phone)  
152 Riley-Robb Hall                              607-254-8770 (fax)  
Ithaca, NY 14853-5701                              E-mail [NRAES@CORNELL.EDU](mailto:NRAES@CORNELL.EDU)

<mailto:NRAES@CORNELL.EDU>

- 2) Bio-Cycle  
Journal of Composting & Recycling  
419 State Avenue  
Emmaus, PA 18049                              610-967-4135 (phone)  
A publication of JG Press Inc.                      [www.Biocycle.net](http://www.Biocycle.net)

<http://www.Biocycle.net>

- 3) The Compost Council  
114 South Pitt Street  
Alexandria, VA 22314                              703-739-2401(phone)  
E-mail:[comcouncil@aol.com](mailto:comcouncil@aol.com)                              703-739-2407(fax)

- 4) Local Soil Conservation Districts and Cooperative Extension Service offices

For more information on horse manure management and other soil conservation and water quality practices, contact you local Soil Conservation District. For more information contact your local Soil Conservation District/ Natural Resources Conservation Service/ (SCD/ NRCS) office or county Maryland Cooperative Extension (MCE) office. Addresses and phone numbers can be found at [http://www.mda.state.md.us/resource\\_conservation/technical\\_assistance/index.php](http://www.mda.state.md.us/resource_conservation/technical_assistance/index.php) , <http://www.md.nrcs.usda.gov/contact/directory> or <http://extension.umd.edu> or check the listing County Government for SCD/MCE or US Government, Department of Agriculture for NRCS of the phone book blue pages. The Horse Outreach Workgroup was established to provide information to horse owners on pasture and manure management issues. Technical assistance is available from local county Soil Conservation Districts/Natural Resource Conservation Service and the Maryland Cooperative Extension office. The workgroup consists of representatives from local Soil Conservation Districts, Maryland Department of Agriculture, Natural Resource Conservation Service, Cooperative Extension, University of Maryland, the Equiery, and the Maryland Horse Council. The Maryland Department of Agriculture's Office of Resource Conservation provides coordination for the workgroup. January 2003, revised January 2007