In 1998, the Maryland General Assembly passed the “Maryland Nutrient Management Law” that requires certain agricultural operations, including horse farms, to obtain a nutrient management plan. This document is intended to help horse farm operators determine if a plan is needed for their farm and what basic steps are necessary to obtain a plan.

What is the purpose of a Nutrient Management Plan?

Nutrient Management Plans (NMP’s) are designed to help farm operators minimize nutrient losses from their farms to the environment while balancing farm profits.

What is a Nutrient Management Plan?

An NMP is a written operation-specific document indicating the amount, placement and timing of manure and fertilizer application on the farm.

It’s the Law!

Maryland law states that anyone whose agricultural operation, including horse farms, GROSSES $2,500 per year or more OR has 8 or more animal units (1000 pounds = 1 animal unit) must have an NMP. Gross income from the selling or boarding of horses, as well as other horse related and agricultural activities, would count toward the $2,500 threshold in determining the need for an NMP.

Who writes the plan?

Plans are developed by a Maryland Department of Agriculture (MDA)-Certified Nutrient Management Consultant (public or private). Farmer-operators may become certified through the MDA to write their own plans. Information on current certified consultants and how to become certified is available on the MDA’s website. Costs for having a plan written vary. University of Maryland plan writers offer the service free of charge. Private consultants usually base fees on acreage and complexity.

Getting Started

If a horse operation is required to have an NMP, the best way to begin is to contact an MDA-certified nutrient management consultant to set up an appointment. The consultant will need some basic information from each operator to begin the plan writing process.

- **Soil Samples**: Soil samples are needed from every management unit on the farm property. Management units should ideally be each field that is used for crops, grazing or hay production. Pastures are included in fields that should be tested. Sacrifice lots and holding pens do not need to be tested unless there are plans to apply manure or fertilizer to them. Sampling information and a list of labs that will analyze the results is available from your county extension office or from the University of Maryland (UMD) Nutrient Management website.

- **Manure Samples**: If manure is to be applied to fields, a manure sample to determine nutrient concentrations will be required.

- **Property Tax ID Number**: The property tax ID number for each parcel of land that is farmed must be listed in the NMP. These numbers are public record and may be accessed through the Real Property Data Search website.

- **Property Maps**: Property maps may be hand drawn or made from a computer application such as Google Earth. Farm Service Agency (FSA) offices may be able to provide a copy of an aerial view of the property as well. The
main concerns are that the property and field boundaries are identified with acreage, and roads accessing the property are labeled.

- **Crop Grown:** Identify the predominant type of grass grown in the fields. Does it include clover?
- **Crop Yields:** If hay is grown and harvested from the fields, the amount produced per acre (tons/acre) is required.
- **Animals:** The total number, type and weight of animals (ex. 2 Ponies at 750 pounds each) is required.
- **Bedding:** The type and total amount of bedding used is required.
- **Turnout Schedule:** The number of hours horses are kept confined vs. allowed access to pasture is required. Turnout schedules may change depending on the time of year. If that is the case, list the number of days and hours that correspond (ex. 120 days confined 8 hours/day; 240 days confined 4 hours/day). The amount of time confined relates to the amount of manure that is collected.
- **Manure Storage:** Method of manure storage and dimensions of the storage structure are needed.
- **Manure Application Rate:** If manure is spread, the spreader must be calibrated to determine the rate of application (tons/acre). Fact sheets are available from the UMD Nutrient Management Program to assist in determining the rate of application and certified consultants can assist with having spreaders calibrated.
- **Transported Manure:** If manure is transported off the farm, information on where manure is transported must be recorded. This can be as simple as giving the contact information for commercial manure removal businesses or a sign out sheet for neighbors and others who take manure for their own use listing their name, address, date and amount taken.

All of this information will be entered into a computer program that is used to develop the plan. Once the plan is written, the consultant will share the end result with the farm operator. If this is the initial plan, it is the operator’s responsibility to fill out a *Nutrient Management Plan Reporting Form* and send, along with map(s), soil tests and a summary of recommendations, to the MDA office in that region. Addresses of regional MDA offices are on the reverse side of the reporting form.

**Now what?**

Every year farm operators will receive an Annual Implementation Report in the mail from the MDA. That form must be filled out, listing the amount and kinds of fertilizers used for each crop (including pasture). Please note that this is NOT updating the plan for the coming year! This is just a report for the MDA on what was actually done on the farm operation for the previous year.

All NMP’s must be updated at least every 3 years, as soil tests are only “viable” for 3 years. If there are changes to the operation, such as the number of animals or use of manure, the plan will need to have an updated NMP every year. A certified nutrient management consultant can help to determine the update needs of the operation. NMP's that are not updated appropriately are considered not in compliance with Maryland law and subject to a fine.

**Recordkeeping**

Recordkeeping is very important. Specific information must be recorded and available to MDA Nutrient Management Specialists for random compliance inspections. Crop yield records (hay, grain, etc.) must be kept for 5 years. Other records that must be kept for 3 years include:

- Nutrient Management Plan
- When, where, and how much fertilizer and manure was applied throughout the year
- Receipts for any purchased nutrients such as commercial fertilizer
- Records of where any exported manure has gone

While compiling what is necessary for a nutrient management plan and keeping records may seem like a daunting task, once an initial NMP is put together, it is much easier to maintain the information and records. Having an up-to-date NMP not only keeps a horse farm in compliance with the law, but following the plan recommendations assures that the operation is doing its part to protect the health of the Chesapeake Bay Watershed.
Additional Resources

Maryland Department of Agriculture’s Nutrient Management website: http://www.mda.state.md.us/resource_conservation/nutrient_management/index.php
Maryland Code of Regulations. §§ 15.20.04, 15.20.07, 15.20.08. (2004)
University of Maryland Extension Nutrient Management Program website: http://anmp.umd.edu/

Nutrient Management Plans for Maryland Horse Farms

Authored by:
Jennifer Reynolds, Extension Coordinator, University of Maryland Extension
jenreyn@umd.edu

Reviewed by:
Amy Burk, PhD. University of Maryland
Trish Steinhilber, PhD. University of Maryland
Jo Mercer, EdD. Maryland Department of Agriculture