

## What is an Act 6 plan?

As environmental concerns become bigger issues for the general population and legislators, livestock farming practices will continue to be put under a microscope. One option available to proactive producers is developing a voluntary nutrient management plan (NMP). Properly developed and implemented plans can provide protection to the producer from civil penalties and actions. It also sends a positive message to the public about how serious the dairy industry is in following sound environmental practices.

Currently, operations that are concentrated animal operations (CAOs) with more than 2 animal equivalent units (AEU) per acre of land suitable for manure spreading are required to develop and implement NMPs under Act 6, Pennsylvania Nutrient Management Law. Farms with less than 2 AEUs per acre are encouraged to voluntarily develop plans. Table 1 illustrates an example of a herd exceeding 2 AEU per acre.

Table 1. Example dairy farm that is a CAO.

	Number	Standard body weight (lbs.)	AEU <sup>1</sup>
Mature dairy cows	200	1300	260
Heifers	90	900	81
Calves	60	375	22
		Total	363
		Acres available for manure	170
		AEU/acre	2.14

<sup>1</sup> An AEU is 1000 pounds of live weight of livestock regardless of the actual number of individual animals comprising the unit.

Each NMP for a CAO will include 6 major components:

1. Farm identification
2. Nutrient application
3. Alternative uses for excess manure
4. Manure and barnyard management
5. Storm water runoff control
6. Summary of the plan

Farm identification is specific for the farm. Some of the information included is total acres of the operation owned and rented, total acres where manure will be applied and number AEUs per acre. Farm maps and aerial photos are included that show location and boundaries of the operation, field number and acreage, soil types and slopes and location of sensitive areas where manure application is restricted.

The most in-depth section of a NMP is nutrient application. This covers nutrients available, nutrient needs for crop production, application rates, and procedures. Features include inventory of animals, amount of manure produced, manure nutrient content, acreage and expected crop yields, total nitrogen applied from all sources, planned manure spreading periods, planned rates, and the application of winter spreading if applicable.

For CAOs where manure is to be used for other than land application on the operation, a plan for utilizing this manure is to be part of the NMP. For those producers voluntarily developing a plan, this section needs to list only the amount of manure to be used for other than land application on the operation annually, the intended season of the transfer, and the alternative method to be used.

The purpose of the manure and barnyard management section is to prevent surface water or groundwater pollution under normal climatic conditions. The practices that are reviewed include manure handling, collection, barnyard runoff control, storage, and spreading practices. The plans are to include a list of those best management practices (BMP) that are necessary to correct any identified water contamination sources and protect surface water and groundwater.

The storm water runoff control involves a review of the adequacy of the existing field runoff problem areas. The NMP needs to include any critical runoff problem areas and specific BMP to control any runoff.

The last part of the NMP contains a summary. It includes a chart listing the total amount of manure generated on the operation and the amount of manure used and exported annually. Other features are nutrient application rates by field and crop groups, plans for the utilization or proper disposal of excess manure, and implementing BMP concerning manure management practices and storm water runoff control practices.

Much more detailed information is available in Agronomy Facts 40 titled "Nutrient Management Legislation in Pennsylvania". It can be found on the web at <http://www.agronomy.psu.edu/Extension/Extension.html> Lists of certified nutrient management specialists for Pennsylvania are found at the following web address - <http://www.dep.state.pa.us/farmers/default.htm> (click on nutrient management program on the farm picture to get to the nutrient management page). Local sources such as the Pennsylvania Association of Conservation Districts, Inc. can be found at <http://www.pacd.org/>