

Section IV Record Keeping and Informational Requirements

Unless otherwise specified, records required under this program are **not to be submitted** to the Commission or delegated conservation district, but shall be retained at the agricultural operation subject to the requirements of the act. Records are required to be **retained on the operation for at least 3 years**. Record keeping should begin as soon as the nutrient management plan is approved. Appendix 1 in the NMP provides a summary of the required records that are to be kept by program participants. Also, you can access the “Record Keeping Packet” under Other Planning Resources of the Nutrient Management Program Website at:
http://panutrientmgmt.cas.psu.edu/pdf/pr_Act38_RKP0703.pdf.

1. Crop yield records.

Approximate **annual crop yield levels for each crop group shall be recorded**. These yields do not need to be determined using precision hand yield checks, these can be estimated by calculations based on estimated total amount harvested taken from a particular field (knowing the acres of the field).

Records of annual crop yields shall include: field or crop group identification, acres of crop harvested, and bushel or tons per acre.

2. Land application of nutrients.

The land application of nutrients on NMP operations shall be documented on an annual basis by **recording the following information** for each source of nutrients:

- a. The location and number of acres of nutrient application by field number or field identification label
- b. The dates of nutrient application
- c. The rate of nutrient application for each crop management unit. The number of tons or gallons of manure applied per acre (if the application is less than 5 tons/acre, the rate shall be estimated to the nearest 10th of a ton)
- d. The number of animals on pasture, the number of days on pasture and the average number of hours per day on pasture
- e. Rate per acre (to the nearest 5-pound increment) and analysis of **commercial fertilizer** or other sources of nutrients applied.

3. Annual manure production records.

Annual manure production records should include the amount of manure produced on the operation determined by either:

- a. Recording the actual amount of manure that was stored (knowing the storage capacity of the storage facility).
- b. Applied to the operation (knowing the number of loads applied over the year and the amount of manure applied per load) over the year's time.

4. Soil testing requirements.

After the approval of the initial plan, soil tests are **required at least every 3 years** from the date of the last test. At a minimum, the most recent soil test for each field shall be kept on site. If the operator does annual soil testing for the fields on the operation, he/she will need to retain the last 3 years worth of soil tests for the fields.

Records of soil tests should include: date of sampling; the testing facility that did the analysis; fields tested; crop and yield information; Phosphorous, Potassium, and pH levels, and the soil test recommendations for N, P₂O₅, and K₂O. All of this information must be entered in Appendix 4 for each crop management unit. See the section of the Technical Manual for Appendix 4 for more information.

5. Manure sampling records.

Records of manure testing results and testing of other nutrient sources shall be maintained consistent with the determination of available nutrients. The regulations require farmers that are taking manure tests to retain these records the same as any other item where records are required. Manure testing is required once every year for each manure group, except manure groups associated with less than five AEUs of livestock or poultry at the operation and manure groups representing grazing. For these small quantity manure groups and manure deposited on the pasture, nutrient content values are to be based on Penn State Agronomy Guide values and Phosphorus Source Coefficient (PSC) values are to be based on PSC values provided in Appendix 5. Manure analysis information for each animal group must be entered in Appendix 3. See the section of the Technical Manual for Appendix 3 for more information. There are no manure sampling records required for manure deposited on pasture or manure groups with less than 5 AEUs.

For those operations with less than one year storage capacity, which is open to receive rainfall, would have multiple manure groups requiring manure testing based on storage capacity and various degrees of dilution from rainfall. Multiple manure tests are not required when the storage does not receive rainfall.

During the implementation of the plan, operators of **NMP operations exporting manure are required to determine the nutrient content of the manure by using accepted manure sampling and chemical analysis methods** as outlined in the Penn State Agronomy Guide or the DEP Manure Management Manual.

Records of manure analysis shall include: date of sampling; the name of the testing facility; the type of manure analyzed; and the percent solids, amount of Total Nitrogen (as N), ammonium nitrogen (as NH₄-N), Total Phosphate (as P₂O₅), and Total Potash (as K₂O) per ton or gallon (or 1000 gallons).

6. Informational requirements when exporting manure off of the operation.

The importer has the primary responsibility for the application of the manure imported to his/her site. When an importer receives the manure from the exporter, the manure is changing ownership and it therefore becomes the importer's manure. Therefore it is the importer's responsibility to see that the manure is used correctly. The record keeping and informational requirements reflect this change of ownership, except in the case where the exporter is applying the manure. In this case, where the exporter applies the manure, the exporter retains some control of the application and therefore is required to record the field identification, the rate at which the manure was applied and the acres that the manure was applied to (See the Manure Export Sheet discussion below and Supplement 12 of this manual).

When manure is exported from a NMP operation for land application, the program requires the exporter to provide the importer with various informational items to allow the importer to best manage the manure being imported. The items required by the regulations to be provided by the exporter to the importer are:

- a. A completed manure export sheet,
 - A manure export sheet shall be used for all manure transfers from NMP operations. The **NMP operation is responsible for providing the export sheet to the importers**. These export sheets should be given to the NMP operation at the time when the operator is informed of his plan approval. **Computer-generated manure export forms** may be used if they contain the same information as, and are reasonably similar in format to, the manure export sheets provided by the program.
 - The **exporter is responsible** for the completion of Section 1 of the Manure Export Sheet. When the exporter, or person working under the direction of the exporter (such as a commercial hauler working for the exporter, or a hired farm worker working for the exporter), applies the manure to the importing farm, the exporter is also responsible for completion of Section 2 of the Manure Export Sheet.
 - A sample copy of a manure export sheet is attached in Supplement 12.

- b. The **applicable sections of the Pennsylvania Manure Management Manual**,
- The sections of the PA Manure Management Manual that are required to be transmitted during export are the "Manure Management for Environmental Protection" and the "Field Application of Manure" sections or their amendments. These booklets can be obtained from your regional DEP office or from the delegated conservation district.
- c. A concise **educational publication describing the key concepts of nutrient management**,
- The program has developed this publication as a fact sheet through Penn State titled: (Agronomy Facts 60) "Nutrient Management Planning, An Overview". This publication can be obtained from the county Penn State Cooperative Extension office or from the delegated conservation district.
- d. A **Nutrient Balance Sheet allowing for quick estimation of manure application rates**.

The conservation district or the Commission will provide the informational materials packet to the NMP operation for distribution to the importer. The NMP operation exporter is only required to provide those items that have been made available to the exporter by the conservation district or the Commission. The NMP operation exporter is responsible for providing the informational materials to the importer or broker only if the importer or broker does not already have a current copy of the informational materials. A new manure export sheet is required for each export transaction.

The detailed record keeping documentation described above is not needed for small quantity importers, specifically importers receiving less than the following amounts of manure per year:

5 tons of poultry manure
25 tons of non-poultry manure
10,000 gallons of liquid manure

Records for these exports can be documented on the sample quantity exports record keeping form included in Supplement 19 of this manual. These records are required to be maintained for all small quantity exports to document who received the manure, how much and when.

7. Record keeping requirements when exporting manure off of the operation.

NMP operations exporting manure for agricultural land use by importers identified in the plan need not submit manure export records to the agency approving the plan, but shall retain these records on site for a minimum of three years for possible review by the appropriate agency personnel.

8. BMP designs and certification for new liquid and semi-solid manure storage facilities.

During the implementation of the approved plan, the operator is responsible for obtaining the necessary BMP designs and associated operation and maintenance plans to implement the BMPs listed in the approved plan. These BMP designs and associated operation and maintenance plans shall be kept on record at the operation as a supplement to the plan.