

# Pennsylvania's Nutrient Management Program

## Description of Training Courses

Pennsylvania's Nutrient Management Certification and Education Program provides a series of classroom workshops and field trainings to familiarize persons interested in writing or reviewing nutrient management plans with nutrient management issues and program requirements.

Some of these workshops are mandatory trainings required for nutrient management specialist certification. The mandatory workshops for each certification category are listed below:

- **Commercial** - Nutrient Management Orientation, Stormwater Management, Phosphorus Index, Plan Writing, ACA & Manure Storage, and Pass the Examination
- **Public Review or Public Dual** - Nutrient Management Orientation, Stormwater Management, Phosphorus Index, Plan Writing, ACA & Manure Storage, Plan Review and Pass the Examination
- **Individual** - Nutrient Management Orientation, Stormwater Management, Phosphorus Index, Plan Writing, ACA & Manure Storage, and Pass the Examination

Other non-mandatory trainings are offered to provide background understanding and expertise in topics integral to nutrient management.

Below is a brief description of the workshops and courses regularly offered by Pennsylvania's Nutrient Management Certification and Education Program.

### **Nutrient Management Orientation**

---

**All commercial, public and individual nutrient management specialists must fully complete this mandatory training course in order to obtain provisional certification.** Training provides a comprehensive introduction and overview to the Act 38 regulatory requirements for nutrient management planning. Introductory nutrient management planning resources will be provided.

### **Plan Writing Workshop**

---

**All commercial, public and individual nutrient management specialists must fully complete this mandatory training course in order to obtain provisional certification.** Workshop prepares all plan writers in developing nutrient management plans that meet the requirements of Act 38 and provide a beneficial tool to farmers to manage their manure and fertilizer nutrients. Topics of discussion include plan requirements, BMP selection, animal and manure inventories, crop yields and nutrient requirements, maps and other program requirements. Participants will use information from a sample farm to develop a nutrient management plan. It is assumed that participants are familiar with the calculations and material presented in the Managing Manure Nutrients Workshop. Therefore, participation in that workshop is a suggested prerequisite for this training.

### **Plan Review Workshop**

---

**All public nutrient management specialists must fully complete this mandatory training course in order to obtain provisional certification.** Workshop focuses on Act 38 planning requirements and will provide public plan reviewers with necessary plan reviewing

parameters. Upon registration attendees will receive a copy of a sample plan in the mail to review prior to the workshop. **A review of this plan must be completed and submitted at the training to receive credit for the course.** Walk-ins will not receive credit. It is assumed that participants are familiar with the calculations and material presented in the Managing Manure Nutrients Workshop. Therefore, participation in that workshop is a suggested prerequisite for this training.

### **ACA & Manure Storage Workshop**

---

---

**All commercial, public and individual nutrient management specialists must fully complete this mandatory training course in order to obtain provisional certification.** This critical training prepares specialists to address the requirements of the manure management component of a nutrient management plan. Participants will learn how to identify manure storages and animal concentration areas, how to conduct an evaluation of the adequacy of manure management practices related to these areas to prevent water pollution, and how to identify BMPs to address identified inadequate manure management practices that must be included in an Act 38 nutrient management plan. These approaches are introduced in the classroom and practically applied with exercises using multiple on-farm situations.

### **Stormwater Management Workshop**

---

---

**All commercial and public nutrient management specialists must fully complete this mandatory training course in order to obtain provisional certification.** This training is also mandatory for certification of specialists who write or review nutrient management for the USDA-NRCS 590 Standard. Workshop provides critical classroom instruction and field exercises on basic concepts and methods used to evaluate field runoff control practices, identify Critical Runoff Problem Areas, and select BMPs to address these areas that must be included in an Act 38 nutrient management plan. These topics will be presented in the context of overall conservation treatment systems including the use of basic principles of soil erosion prediction to address sheet and rill erosion, considerations to address stormwater concentrated flow concerns, and soil quality issues.

### **Phosphorus Index Training**

---

---

**All commercial, public and individual nutrient management specialists must fully complete this mandatory training course in order to obtain provisional certification.** Training provides critical classroom and field exercises on understanding the background and purpose of the Pennsylvania Phosphorus Index, learning how to use the Index to complete a field-by-field evaluation of phosphorus loss to water bodies, and how to incorporate the Index results into the nutrient management planning process for Act 38.

### **Certification Examination**

---

---

Examinations for **commercial, public review, public dual and individual** nutrient management specialists are administered by the Department of Agriculture. A fee of \$50.00 is required for the commercial and public examination. There is no fee for individual examination.

### **Managing Manure Nutrients Workshop**

---

---

This crucial background-training workshop provides a foundational understanding of the primary crop nutrients - nitrogen, phosphorus and potassium. **Participation in this workshop is strongly suggested before attending the Plan Writing and Plan Review workshops.** Basic

soil fertility concepts are introduced - nutrient cycles and behavior, managing nutrients for crop production and environmental protection, soil sampling and analysis, and crop nutrient recommendations. Presentation of key manure nutrient management topics builds on this groundwork. This includes discussion on manure types and production calculations, manure variability, manure sampling, nutrient contents and availability factors, long term manure nutrient contributions and environmental impacts

### **NMP-NBS Spreadsheet Orientation**

---

---

This basic workshop is specifically designed to provide an introductory orientation to the Excel spreadsheets required for Act 38 nutrient management planning. The training will be held in a computer lab to provide hands on experience in using the NMP Spreadsheet and the NBS Spreadsheet both of which include the P Index Spreadsheet.

### **Introduction to Livestock Production Systems**

---

---

This basic workshop is specifically designed to provide background training for commercial and public specialists who may not have experience in one or more livestock production systems. The workshop provides an overview of the typical production systems in Pennsylvania for dairy, swine and poultry. A major focus of these discussions will be on manure handling. In addition, topics such as contracts, marketing, economics, biosecurity issues, and dead animal disposal are also addressed.

### **Soil, Hydrology and Liquid Manure Workshop**

---

---

This basic workshop provides an introduction to soil properties, soil quality and soil hydrology with a specific focus on how they affect liquid manure application with irrigation and injection equipment. Each topic will be addressed with both classroom and in-field sessions and irrigation and injection equipment are demonstrated.

### **Basic Pasture Management**

---

---

This basic workshop provides background training on pasture nutrient management. Nutrient loading by grazing animals is determined by pasture production and management approaches. The workshop focuses on the production of pasture forages and their response to various types of management. Both classroom and field sessions are utilized to introduce these approaches.