



AEM Tier 2 Worksheet

Pesticide Use

Glossary

Biological Control: Control of pests through the use of living organisms.

Certified Applicator: A commercial or private pesticide applicator who is certified by the NYS Department of Environmental Conservation (DEC) to use, supervise the use of, or train another individual in the use of any pesticide for agricultural use; or any individual who is certified to sell restricted-use pesticide.

Certified Commercial Pesticide Applicator: A certified applicator who is certified by the NYS Department of Environmental Conservation to use or supervise the use of any commercial application of pesticides, or to sell or supervise the sale of a restricted-use pesticide.

Certified Private Pesticide Applicator: A certified applicator who is at least 17 years old and uses or supervises the private application of restricted-use pesticides for purposes of producing any agricultural commodity.

Commercial Application of Pesticides: Any application of any pesticide except as defined in “Private Application of Pesticides (see “Private Application of Pesticides,” below).

(Continued on Page 2)

Background

Pesticides play an important role for pest management in crop production. Although many producers use a combination of practices to manage pests, pesticides help to increase production and quality, and enable producers to farm more acres with less labor. However, if pesticides are not carefully selected and properly applied, they have the potential to contaminate surface and groundwaters.

Integrated Pest Management (IPM) strategies should be employed to identify alternative crop production and crop protection practices which help minimize or avoid pest problems, reduce or eliminate pesticide use and costs, and maximize potential net profitability of crop production. These practices include, but are not limited to, crop rotation, use of disease-resistant varieties, cultivation, timing of planting or harvest, appropriate soil pH and fertility, and pest scouting.

Agricultural Water Quality Principle:

Methods and procedures for the selection and application of pesticides in farming operations should ensure that their potential discharge to surface and groundwater is prevented to the greatest practical extent. In addition, farm operations must be in compliance with state and federal laws and regulations, and with the applicable label requirements.

Glossary Continued...

Commercial Application of Pesticides: Any application of any pesticide except as defined in “Private Application of Pesticides (see “Private Application of Pesticides,” below).

Cultural Practices: Control of pests through tillage or cultivation.

Direct Supervision: The act or process in which the application of a pesticide is made by an individual acting under the instruction and control of a certified private pesticide applicator who is responsible for the actions of that individual. Direct supervision may be off-site (applicator must be able to contact the certified private applicator within a reasonable time) when a farm employee applies a pesticide that does not require on-site supervision on the label. Direct supervision must be on-site (within voice contact of the applicator) when so specified by the pesticide label, or whenever a farm employee applies a federally restricted -use pesticide.

Integrated Pest Management (IPM): A systematic approach to managing pests which focuses on long-term prevention or suppression with minimal impact on human health, the environment and non-target organisms. IPM incorporates all reasonable measures to prevent pest problems by properly identifying pests, monitoring population dynamics and utilizing cultural, physical, biological or chemical pest control methods to reduce pests to acceptable levels.

Leaching Potential: The possibility of downward movement through the soil of chemical substances dissolved in water.

Pesticide: Any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any insects, rodents, fungi, weeds or other forms of plant life, animal life or viruses, which the NYS Department of Environmental Conservation has declared to be a pest; and any substance or mixture of substances intended as a plant regulator, defoliant or desiccant.

Private Application of Pesticides: The application of a restricted-use pesticide for the purpose of producing an agricultural commodity: (1) on property owned or rented by the applicator or the applicator’s employer, or (2) if applied without compensation other than the barter of personal services between producers of agricultural commodities, on property owned or rented by a party to such a barter transaction.

Recharge Area: Land area where water readily seeps into a water-bearing soil or rock formation (aquifer).

Restricted-Use Pesticide: A pesticide that is classified for restricted use under the provisions of Article 33 of the Environmental Conservation Law, or under Section 3(d)(1)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended. A confirmation of a DEC-restricted pesticide may be obtained by referencing the NYS Pesticide Registration Data Base at <http://www.dec.state.ny.us/website/dshm/pestcid/pestcid.htm>.

Runoff Potential: The possibility for substances to move from a field in runoff water.

Setback Zone: Distances from a waterbody or other environmentally-sensitive area within which pesticides should not be applied.

U.S. EPA Worker Protection Standard (WPS): A regulation issued by the U.S. Environmental Protection Agency (EPA) under the authority of the 1992 Federal Worker Protection Standard (40CFR, Part 170) covering pesticides that are used in the production of agricultural plants on farms, forests, nurseries and greenhouses. The WPS requires producers to take steps to reduce the risk of pesticide-related illness and injury if they: (1) use pesticides with WPS requirements on the label, or (2) employ workers or pesticide handlers who are exposed to such pesticides.

AEM Tier 2 Worksheet: Pesticide Use		Potential Concern		
Factors Needing Assessment:	Lower 1	2	3	Higher 4
What is the distance of applications from a well or spring?	Applications are not made within the recharge area of a well or spring.	All geographic use restrictions and label precautions regarding groundwater are followed.		Applications are made adjacent to or over a well or spring.
Is the EPA Worker Protection Standard followed?	Owner is familiar with and fully complies with the U.S. EPA Worker Protection Standard program.		Owner is aware of the U.S. EPA Worker Protection Standard program and needs additional information to comply.	Owner does not know about the U.S. EPA Worker Protection Standard program.
What pesticide use records are kept?	Pesticide use records include: -pesticide used -where applied -date applied -quantity applied -rates applied -method of application -applicator's name -target pests -weather conditions -stage of crop development -stage of pest development -apparent effectiveness	Pesticide use records include: -pesticides used -where applied -date applied -quantity applied -rates applied -method of application -applicator's name -target pests		No records are kept. Chemicals used are known by memory and invoices only.
Are soil and field conditions considered when pesticide products are selected?	Product is selected considering soil leaching and runoff potential.			Product is not selected considering soil leaching and runoff potential.

AEM Tier 2 Worksheet: Pesticide Use Continued		Potential Concern		
Factors Needing Assessment	Lower 1	2	3	Higher 4
Are IPM principles considered in your pest management program?	IPM components: such as crop and pest scouting, biological control, cultural		Adequate and timely pest information is not available to make pest management decisions.	No IPM principals are considered.
What is the level of training of the business owner and the pesticide applications?	The applicator is appropriately certified as a commercial applicator AND pesticide labels are followed.	The owner is appropriately certified as a commercial or private applicator who is providing direct supervision to appropriately-trained or certified employees doing the application, AND pesticide labels are followed.	No one involved in application is certified, but labels are followed.	No one involved in application is certified AND Pesticide labels are not always followed.
Are weather conditions considered before applying pesticides?	Weather conditions are considered. Wind, storms, humidity and temperature are at levels favorable for spraying.			Pesticides are sprayed according to a pre-set schedule. Weather conditions are not considered.
Is application equipment properly and regularly calibrated?	Spray equipment is calibrated at the beginning of each season AND after every 250 hours of spraying. AND after changes of tractor wheels, nozzles or pressure gauges.	Spray equipment is calibrated at the beginning of each season AND after changes of tractor wheels, nozzles or pressure gauges.	Spray equipment is calibrated at the beginning of each season only.	Regular calibration of equipment is not practiced.

AEM Tier 2 Worksheet: Pesticide Use Continued		Potential Concern		
Factors Needing Assessment	Lower 1	2	3	Higher 4
Is the applicator aware of and following label set-back requirements:	Applications are kept at least 35 ft. from an open water source or tile drain inlet AND are in accordance with label directions; specifically, where set-back zones are required by the label; AND are in accordance with NRCS Standard NY-595, Pest Management.		Applications are made within 35 ft. of an open water source or tile drain inlet. OR The set-back zone requirement of the label is ignored.	Applications are made adjacent to or on top of a water source or tile drain inlet.

Other

1. Are the pesticides used on the farm currently registered for use in New York State?
2. Is a pesticide product currently being used that has a label containing a precautionary statement about use of that product on vulnerable soils?
3. Are pesticide drift and odor considered during application?
4. Are the neighbors notified prior to the application of pesticides?
5. Has the depth and design of wells on or near the property been a consideration when applying pesticides?