
CHAPTER 1

LAWS AND REGULATIONS

Pesticide use in the United States increased from approximately 300 million pounds of active ingredients in 1964 to approximately 1 billion pounds of active ingredients in 1991. Approximately 275 million pounds of active ingredients were used for nonagricultural purposes in 1991. New, highly sensitive measuring devices are able to detect pesticides in the environment where they were not initially applied. To protect the environment and human health, federal and state laws regulate the proper, safe use of pesticides.

To implement aquatic pest management strategies, you must obtain permits from the Michigan Department of Environmental Quality (MDEQ) in most cases. Pesticide applicators must have a working knowledge of the laws and regulations governing pesticide use for the safety of the client, themselves and the environment. Knowledge of regulatory guidelines demonstrates an applicator's proficiency and concern for safe procedures. Because the laws and their administrative rules may change, be sure to contact the appropriate authorities before beginning any pest management treatment. Some local units of government (townships, cities or villages) have enacted regulations that govern pesticide applications within their geographic and/or administrative boundaries. Applicators are responsible for knowing these regulations to avoid violations. In this chapter you will learn about the state and federal laws regulating pesticide applications and some laws specific to the use of pesticide applications in aquatic environments.

Federal Law

Several federal laws regulate pesticide use. Both state and federal agencies enforce these laws. The federal law regulating pesticides is the **Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)**. FIFRA provides states the authority to certify applicators, register pesticides and design programs to meet local needs.

Some of the provisions of FIFRA are that the EPA must register all pesticides before they can be sold or used. The pesticides must be classified as either "**general use**" or "**restricted use**." General use pesticides are those that can be purchased without restriction (i.e., no certification required). Restricted use pesticides (RUPs) are those that can be used only by (or under the direction or supervision of) a certified applicator and can be purchased only by certified applicators. FIFRA also stipulates that persons who misuse pesticides (in a way this is "inconsistent with the pesticide labeling") are subject to penalties.

More detailed information about FIFRA provisions and who enforces them is located in the chapter "**Laws & Regulations**" (Part A) of the *Pesticide Applicator Core Training Manual: Certification, Recertification and Registered Technician Training*, Extension bulletin E-2195, available from the Michigan State University Extension, Bulletin Office, 117 Central Services Bldg., East Lansing, MI 48824.

State Laws

The primary act regulating pesticides and their uses in Michigan is the **Natural Resources and Environmental Protection Act, Act No. 451 of 1994, Part 83, Pesticide Control**. Other important state laws regulating the use of aquatic pesticides in Michigan's surface waters are the **Public Health Code, P.A. 368**, and **Part 33, Aquatic Nuisance Control**, and **Part 4, Water Quality Standards** of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. P.A. 368 and Act 451, Part 33 and Part 4, establish the authority and the procedures for managing aquatic pests with pesticides, which are detailed later in this chapter.

Part 83 of the Natural Resources and Environmental protection Act gives the director of the Michigan Department of Agriculture (MDA) authority to register or certify private and commercial applica-

tors and to prescribe standards for certification and registration.

A **commercial applicator** is a person, other than a private applicator, who is certified to apply pesticides under the conditions described by the following two subclasses:

Subclass A - Any person (including homeowners) who uses or supervises the use of RUPs for a nonagricultural purpose.

Subclass B - Any person who either 1) applies pesticides other than general use ready-to-use pesticides in the course of his or her employment, or 2) applies a pesticide for a commercial purpose (for hire).

Ready-to-use pesticides are those that are applied directly from the manufacturer's original container (aerosols, pump sprays, strips, baits) with no need to mix or load into application equipment.

Applicators included in subclass A must be *certified* as commercial applicators. Those in subclass B have the option of becoming certified commercial applicators or registered technicians. Because pesticides are used in a wide variety of operations, commercial applicators are certified or registered in special commodity or site-specific categories. In Michigan, a person applying pesticides to bodies of water for commercial purposes must be certified or registered in category 5, aquatic pest management.

Certified Commercial Pesticide Applicator

To become a **certified commercial pesticide applicator**, a person must pass a "core" examination and an examination specific to the industry or site he/she will be servicing. A person can be certified in several categories.

When commercial applicators use a restricted use pesticide with a label that requires direct supervision, a certified applicator must make the application or supervise the restricted use pesticide application by being physically present at the time and place the pesticide is applied.

Once a person has become a certified commercial applicator, he/she may make commercial pesticide applications for three years. At the end of the three-year period, applicators must be **recertified** to continue applying pesticides commercially. There are two options for becoming recertified.

Recertification

One option is to pass a recertification exam, administered by the MDA, specific to the category(ies) in which the applicator was initially certified. An applicator may also become recertified by a process referred to as "**recertification by training meeting attendance.**" During the three-year certification period, pesticide applicators may earn credits toward recertification by attending preapproved pesticide application seminars. If by the end of the three-year certification period the applicator has earned the proper number of credits, he or she will be recertified without an exam. To be recertified in the aquatic pest management category, an applicator must earn 12 credits during the three-year certification period; 8 of those credits must be commercial core credits, and 4 credits must be category 5, aquatic pest management.

It is the pesticide applicator's responsibility to track the credits earned. MDA also maintains a record of credits earned based on seminar sign-in sheets. After three years, the applicator receives an MDA recertification packet and simply mails the recertification fee and the record of the pesticide training meetings attended to the MDA's Lansing office. MDA will compare its credit records with those on the applicator's record. MDA will review any discrepancies by examining the training meeting sign-in sheets to verify attendance.

For more information on the recertification process, contact a regional MDA office or the MDA office in Lansing.

Registered Technician

In 1988, the Michigan Department of Agriculture established a new category of applicators called **registered technicians**. This category is for people who are not *certified* applicators but are authorized to apply general use pesticides for a commercial purpose or apply general use pesticides as a scheduled work assignment. In general, registered technicians may apply RUPs only under the direct supervision of a certified applicator. However, certain restrictions may apply; see Act 451 for details. Unlike certified applicators, registered technicians may not purchase restricted use pesticides.

To become a registered technician, a person must pass a "core" pesticide examination that tests a person's knowledge on general pesticide information found in the *Pesticide Applicator Core Training Manual: Certification, Recertification and Registered Technician Training*. Next, the person must undergo category-specific training designed

to deliver specific information to prepare him/her for job tasks. The training must be approved by the MDA and administered by an MDA approved trainer.

All employees of golf courses, hospitals, schools, municipalities and licensed pesticide application businesses, such as aquatic pest management companies, who apply pesticides must be either certified applicators or registered technicians.

For more information about pesticide certification, registered technicians, registered technician training or "approved trainers," contact the Michigan Department of Agriculture, Pesticide and Plant Pest Management Division. P.O.Box 30017, Lansing, MI 48909, (517) 373-1087.

Commercial Pesticide Application Business License

Any business established to apply pesticides for hire must obtain a **commercial pesticide applicator license** by sending an application and fee to MDA. Such businesses must employ at least one certified commercial applicator with two years of experience or one year of experience and a related four-year college degree, before the license can be issued. The certified applicator supervises the use of any general use or restricted use pesticides by registered technicians. (Note that the business is licensed, not the applicator.) The business must also provide proof of insurance as required by Regulation 636.

The MDA is responsible for investigating pesticide misuse and failures of pesticides to perform when used in accordance with label instructions. If you have a complaint involving a pesticide, notify the nearest MDA office immediately. Delays in making a complaint greatly reduce the chances of a satisfactory investigation. The MDA must receive the complaint within 60 days of the action.

State Law: Regulation 636 – Pesticide Applicators

Regulation 636 of the Natural Resources and Environmental Protection Act directly affects those persons and businesses that apply pesticides to manage aquatic pests. The following are excerpts of the primary components of Regulation 636 of Act 451 and are not intended to represent the entire regulation. Read the actual document for details.

Record-keeping Requirements

All commercial applicators shall maintain records of pesticide use for a time period not less than the following:

-General Use Pesticides. One year following the application.

-Restricted Use Pesticides. Three years following the application.

The records shall contain the following:

- A) The name and concentration of the pesticide applied.
- B) The amount of pesticide applied.
- C) The target pest or purpose.
- D) The date the pesticide was applied.
- E) The address or location of pesticide application.
- F) Where applicable, the method of application.

These pesticide records must be made available to MDA upon request.

Registered Technician Classification

Registered technician is now the minimum competency standard for pesticide applicators as explained above. Part of Regulation 636 and the registered technician program involves **approved trainers**.

Approved Trainers

Approved trainers are certified applicators with two years of experience in the category in which they intend to train and have participated in a designated seminar to earn credentials making them eligible to train registered technicians.

Incidental Use

Regulation 636 also provides an exemption from some provisions of the act for **incidental use**. Individuals or firms must request from the MDA in writing, an exemption to the registered technician or certified applicator requirement if they meet the following conditions:

- A general use pesticide is used;
- The person is not regularly engaged in the application of pesticides for hire;
- The pesticide application is an integral part of another operation.

State Law: Regulation 637

Regulation 637 of the Natural Resources and Environmental Protection Act affects commercial pesticide applicators and their pest management operations in several ways. Regulation 637 became effective October 29, 1992. The rules of Regulation 637 include:

RULE –

- 1-3) Establishes definitions and terms.
- 4) Requires specific conduct of pesticide applicators to protect people and the environment.
- 5) Establishes a registry of persons who require notification prior to pesticide applications made on adjacent properties.
- 6-7) Requires the use of containment structures for certain mixing/loading and washing/rinsing operations.
- 8) Defines acceptable means for disposing of pesticides and pesticide-containing materials.
- 9) Requires the use of protective equipment.
- 10) Addresses avoidance of off-target drift and use of Drift Management Plans.
- 11) Calls for the posting of certain areas treated with pesticides and notification of the public prior to right-of-way and community pesticide applications.
- 12) Requires the use of service agreements.
- 13) Prohibits false claims regarding pesticide safety.
- 14) Requires applicator training in integrated pest management and use of IPM programs in certain areas.
- 15) Describes manners of pesticide use in and around schools.
- 16) Establishes a registry of certified organic farms.

It is vital that all commercial pesticide applicators obtain a copy of Regulation 637 to understand the components of each rule and how commercial pest management practices must comply.

State Law: Part 33, Aquatic Nuisance Control of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

Part 33 gives the authority to regulate the chemical treatment of waters of the state for the suppression of nuisance-producing organisms, including aquatic plants, algae and swimmer's itch, to the Michigan Department of Environmental Quality (MDEQ). Per the above

statute, a person shall not chemically treat any waters of the state or the Great Lakes or Lake St. Clair bottomlands for aquatic nuisance control unless the person has obtained from the department an individual permit or certificate of coverage. Permits and certificates of coverage expire on December 31 of the year in which they are issued.

If a single owner wants to treat a waterbody that has a surface area of less than 10 acres and does not have an outlet to other water sources, and there are no threatened or endangered species in the area, a permit is not required. If the waterbody has more than one owner, the person wishing to treat the area must obtain written permission from the other owners. The person conducting the treatment must also post the area and must maintain a record of the written permissions, treatment dates, chemicals applied, amounts applied, and a map indicating the area of impact for 1 year from the date of each chemical treatment. The MDEQ may view these records upon request.

The MDEQ also has the authority to revoke permits and may set the conditions for treating the water such as the timing of application and the appropriate safeguards. A person who fails to obtain the necessary permit in advance of undertaking the control work, or who violates the rules or conditions of the permit is guilty of a misdemeanor.

Part 33 details the requirements for obtaining a permit for the chemical treatment of Michigan waters. An "Aquatic Nuisance" is defined as any organism that "lives or propagates, or both, within the aquatic environment and that impairs the use or enjoyment of the waters of the state including the intermediate aquatic hosts for schistosomes that cause swimmer's itch." Part 33 also specifies that chemicals can not be used for aquatic nuisance control until they are registered with the EPA under FIFRA and the Michigan Department of Agriculture under Part 83 of Act 451. Applying for a permit requires:

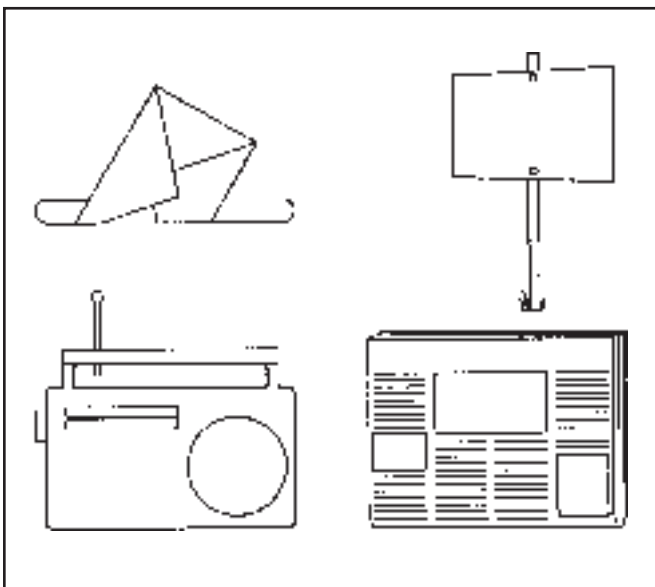
- Appropriate MDEQ forms (samples of all three application forms for an aquatic nuisance control permit are found in Appendix B).
- The applicant(s) must obtain authorization to chemically treat the proposed area of impact by obtaining written permission from each person who owns bottomlands in the area that may be impacted by the treatment. The written permissions should be maintained for one year from the expiration date of the permit.

- A map or maps that clearly show the area of impact.
- An application fee based on the size of the area to be treated.

The MDEQ must either approve or deny an application for a certificate of coverage by May 1 or within 15 working days after receipt of the completed application, whichever is later. The department must also approve an application for a permit in whole or part and issue the permit, or shall deny the application, by May 1 or within 30 working days after receipt of a completed application, whichever is later.

Some of the conditions of the permit that the MDEQ may require include:

- Notifying the MDEQ not less than 2 working days in advance of chemical treatment.
- Proceeding with chemical treatment only if the department representative is present.
- Allowing the MDEQ or its representative to collect a sample of the chemicals used before or during treatment.
- Taking special precautions to avoid or minimize potential impacts to human health, the environment, and nontarget organisms.
- Performing aquatic vegetation surveys according to the methodology approved by the MDEQ before submitting a permit application.
- Performing pretreatment monitoring of the target aquatic nuisance population according to the MDEQ approved methodology before submitting the permit application.



Pesticide applicators may be required to use several methods for communicating information about a pesticide application.

The MDEQ also requires posting of the area impacted by chemical treatment with signs that meet the following criteria:

- Each sign must be a brilliant color and made of sturdy, weather-resistant material and must be at least 8 1/2 by 11 inches and attached to a supporting device so that the bottom of the sign is at least 12 inches above the ground surface.
- The signs should be posted in the following locations:
 - For areas impacted by the treatment of less than 2 acres, posting must be done along the shoreline of the impacted area not more than 100 feet apart. The posting must also be done next to any riparian lands adjacent to that portion of the shoreline.
 - For areas of treatment impact greater than 2 acres, postings for shoreline and adjacent riparian lands must be done as described above. In addition, posting must be done at all access sites such as boat launching areas and private and public parks if permitted. Postings must be done in a conspicuous location such as at the entrance to the access site, on boat ramps, and on bulletin boards. If the access sites, launching areas, and parks are not to be treated or are not adjacent to the impacted area, then the sign must indicate the location of the area impacted by the treatment.

If a whole lake treatment is proposed, the applicant must provide a lake management plan as part of the application for a permit. An application for a whole lake evaluation treatment may include scientific evidence and documentation that use of the specific pesticide, application rate, or means of application will selectively control an aquatic nuisance without causing unacceptable harm to other aquatic plants or animals or to human health and the surrounding environment. In this situation, the MDEQ may require additional monitoring to document possible impacts to nontarget organisms.

These are just some of the conditions required by Part 33, Aquatic Nuisance Control. Obtain a copy of Part 33 for further details. Even after a permit is granted, the MDEQ may issue an order to prohibit or suspend the use of a chemical of aquatic nuisance control if it is suspected of causing unacceptable negative impacts to human health or the environment. The MDEQ may also make revisions to a permit to minimize any adverse effects or to improve aquatic nuisance control. The permittee may request minor revisions in writing by providing the proposed

changes to the permit, an explanation of the necessity for the change, and maps that clearly show the area affected plus any additional relevant information. The MDEQ may revoke a permit if violations to the conditions of the permit are found. Anyone who commits a violation that results in harm or a threat to the environment or human health is guilty of a misdemeanor.

State Law: Natural Resources and Environmental Protection Act. No. 451 of 1994, Part 31, Water Resources Protection

Another law which may affect Category 5 commercial pesticide applicators is Act 451, Part 31 Water Resources Protection. This law gives MDEQ the authority to protect the states water resources from pollution and unlawful discharges. Under this law, MDEQ establishes pollution standards for all Michigan waters and can issue permits to assure compliance with state standards for regulating municipal, industrial, and commercial discharges or storage of any substance that may affect the quality of the waters of the state. The MDEQ has authority to take all appropriate steps to prevent any pollution which is considered unreasonable or against public interest to any lake, river, stream or other waters of the state.

This law prohibits anyone from directly or indirectly discharging into the waters of the state any substance that may become injurious to public health, safety, or welfare; to domestic, commercial, industrial, agricultural, recreational, or other uses made by such waters; to the value or utility of riparian lands; or to livestock, wild animals, birds, fish, aquatic life, or plants. Anyone found to be in a violation of this law or to a permit issued by MDEQ may be subject to fines or even imprisonment.

The MDEQ also has regulatory jurisdiction over mosquito control strategies involving application of pesticides to surface waters of the state (Rule 323.1097 of the Water Quality Standards, promulgated under Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended). Rule 323.1097 states: "The application of materials for water resource management projects pursuant to state statutory provisions is not subject to the standards prescribed by these rules, but all projects shall be reviewed and approved by the commission before application. This also includes the application of pesticides to control mosquito larvae in vernal woodland pools, roadside ditches,

wetlands, catch basins, retentions ponds and detention ponds."

An entity is authorized to apply pesticides to surface waters of the state, wastewater treatment systems and catch basins by following the provisions under the appropriate General Rule 97, Certification of Approval Authorizing Mosquito Control. The type of waterbody system the pesticide is being applied to will determine what certification will be issued. The certifications are as follows:

For applications of certain pesticides directly to surface waters of the state, a General Rule 97 Certification of Approval Authorizing Mosquito Control in Surface Waters is necessary (Certification R97-05/001 - Appendix C). This process is initiated by submittal of a Notification of Intent and Waterbody Form by the applicant (Appendix C). Upon acknowledgement from the MDEQ that a Notification of Intent has been received, the applicant is authorized to commence pesticide treatment of surface waters in compliance with the certification. Acknowledgement of receipt of the Notification of Intent can be determined at www.michigan.gov/deq utilizing the MDEQ Site Map or by contacting the MDEQ, Water Bureau.

For application of certain pesticides to surface water storm water catch basins not covered by a National Pollutant Discharge Elimination System (NPDES) permit, a General Certification of Approval Authorizing Mosquito Control in Surface Water Storm Water Catch Basins is necessary (Certification R97-05/002 - Appendix C).

For any application of the pesticide temephos to control mosquito larvae, or any other pesticide application to waters of the state that is not authorized by Certifications R97-05/001 or R97-05/002, an Individual Rule 97 Certification of Approval must be obtained from the MDEQ. Upon receipt of approval by the MDEQ, the applicant is authorized to commence pesticide treatment under the individual Rule 97 approval.

Boating Regulations

Aquatic pesticide applicators work under different conditions than other commercial pesticide applicators. Rather than driving a tractor, walking across a lawn or flying over a crop, the aquatic pesticide applicator is usually in some type of boat. Michigan and federal laws governing general watercraft operation must be followed.

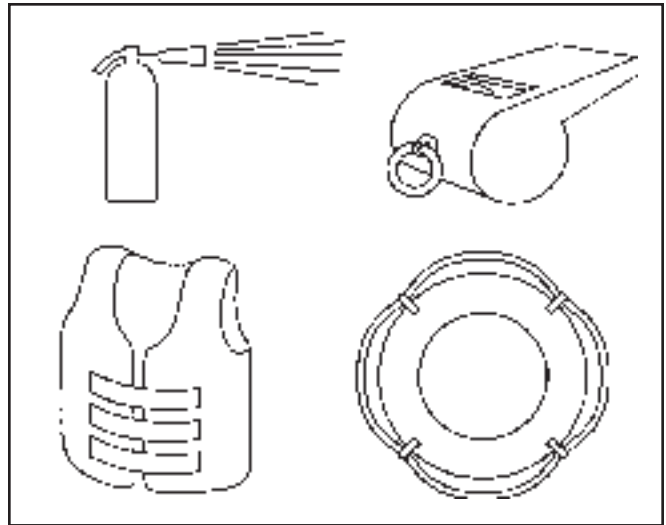
Keep your boat in legal working condition. Be familiar with the requirements in the Marine Safety Act (Act 451 of 1994 Part 801) as amended, and its rules. A few of the important requirements are:

1. The boat must be properly registered. Registrations are obtained at any Secretary of State office and are valid for three years.
2. The boat must be equipped with one readily available personal flotation device (life jacket or seat cushion) per passenger. If your pesticide applications require you to work over the edge of the boat, it is recommended that you wear the personal flotation device during applications and have an extra one on board.
3. The boat must have proper running lights in working order. These are critical if your work requires applications before dawn or into the evening.
4. A fire extinguisher appropriate for the vessel must be on board. It is recommended that a fire extinguisher appropriate for the pesticides you are using also be on board.
5. A sound device such as a horn, bell or whistle that can be heard for at least one-half mile is also required.

Weed harvesters are considered boats and must meet all the requirements for their size and class.

Though you are engaged in commercial work, your vessel is not considered a commercial vessel. In Michigan, the only boats that must be registered as commercial are livery boats, commercial fishing boats and boats carrying passengers for hire.

If a personal floatation device becomes splashed or contaminated with a pesticide solution, launder it with a heavy-duty liquid detergent in hot water separate from other family wash.



Have the required safety equipment on your boat.

Chapter 1 – Laws and Regulations Review Questions

Write the answers to the following questions, and then check your answers with those in the back of this manual.

1. The state law regulating pesticides is called FIFRA. True or False?
2. To what agency does the Natural Resources and Environmental Protection Act give the director the authority to register or certify private and commercial applicators and to prescribe standards for certification and registration?
 - a. MSU Extension.
 - b. Michigan Department of Environmental Quality.
 - c. Michigan Department of Agriculture.
 - d. Public Health Department.
3. Which statement is true about the Aquatic Nuisance Control Act (Part 33 of Act 451)?
 - a. Gives authority to MDA to regulate the chemical treatment of waters of the state.
 - b. Allows single owners to chemically treat waterbodies with a surface area greater than 10 acres.
 - c. Requires permits to chemically treat any waters of the state for aquatic nuisance control.
 - d. Does not regulate the treatment of waters of the state for control of swimmer's itch.
4. A person applying pesticides for commercial purposes must be either a certified applicator or a registered technician, and the company he/she works for must be licensed to provide pesticide application services. True or False?
5. Registered technicians are persons who are not certified commercial pesticide applicators but are authorized to apply general use pesticides for a commercial purpose. True or False?
6. What is the minimum employee requirement for commercial pesticide application businesses to obtain a commercial license?
7. According to Regulation 636, the minimum time period for keeping records after making a pesticide application is:
 - a. No requirement for general use pesticides; 1 year for restricted use pesticides.
 - b. No requirement for general use pesticides; 3 years for restricted use pesticides.
 - c. 1 year for general use pesticides; 3 years for restricted use pesticides.
 - d. 3 years for both general use and restricted use pesticides.
8. Which statement is true about Regulation 637?
 - a. Regulates the control of aquatic nuisance pests.
 - b. Lists what information should be recorded in pesticide application records.
 - c. Protects the state's water resources from pollution and unlawful discharges.
 - d. Requires specific conduct of pesticide applicators to protect people and the environment.
9. Which statement is true regarding Part 31 of Act 451 Water Resources Protection?
 - a. Gives MDEQ regulatory jurisdiction over mosquito control strategies involving application of pesticides to surface waters of the state.
 - b. Requires posting of an area impacted by a chemical treatment along the shoreline.
 - c. Requires providing a lake management plan as part of an application for a permit when whole lake treatments are proposed.
 - d. Requires keeping your boat in legal working condition.
10. Who administers and enforces the Aquatic Nuisance Control Act?