

Alaska Pesticide Applicators Core Manual



In general, applicators who apply pesticides to property other than their own, or act as a pesticide consultant must obtain certification from the Alaska Department of Environmental Conservation (DEC) Pesticide Program. Applicators who apply restricted-use pesticides must also be certified.

The *National Applicator Certification Core Manual* contains the majority of information needed to successfully complete the written examination on core content knowledge, required to obtain certification in any category in Alaska. However, additional knowledge about regulations and requirements in Alaska, as well as environmental conditions is also necessary. This supplemental manual provides additional information that is specific to Alaska.

You will also need to have a working knowledge of the information covered in the following documents and manuals:

- National Pesticide Applicator Certification Core Manual; and
- State of Alaska Pesticide Regulations in Title 18, Chapter 90 of the Alaska Administrative Code (18 AAC 90).

OBJECTIVES

In order to successfully pass the Core exam, you must be able to meet the following objectives:

Calculations

- Calculate speed, volume, odd shaped areas, mixing ratios, application rates, etc.

Commercial applications

- Define what is meant by a ‘custom, commercial, or contract’ application.
- List four specific requirements that commercial applicators must meet.

Record keeping requirements

- State how long records of pesticides applications must be kept.
- List the ten types of information that must be recorded each time a pesticide is applied commercially.
- State when records must be provided to DEC.

Public places

- List the three types of areas that are considered a public place.
- Explain who may apply pesticides in a public place.
- List the three types of information that must be included on a warning sign regarding pesticide application at a public place.
- Describe where warning signs must be posted prior to application of pesticide at a public place.
- Explain how long warning signs must remain posted at a public place.
- Describe the required size of a warning sign posted at a public place.
- List the types of pesticides which do not require posting when applied in a public place.

Schools

- Explain who may apply pesticides in a public place.
- List the four types of information that must be included on a warning sign regarding pesticide application at a school.
- Describe where warning signs must be posted prior to application of pesticide at a school.
- Explain how long warning signs must remain posted at a school.
- Describe the required size of a warning sign posted at a school.
- List the types of pesticides which do not require posting warning signs or notifying parents when applied at a school.
- Describe the three duties that a school administrator must comply with related to pesticide use at a school.

Conditions in Alaska

- Define photo degradation, microbial degradation, chemical degradation, and biological degradation.
- Explain why these degradation processes may take longer to occur in Alaska.
- List some factors which should be considered when applying near (but not directly to) a water body or wetland.

Permitting requirements

- Describe the three types of pesticide applications that require a pesticide-use-permit.
- List the minimum amount of time it will take to obtain a pesticide-use permit.

IPM requirements

- Describe the two types of pesticide applications that require compliance with IPM requirements.
- List the elements that must be included in an IPM Plan.

CALCULATIONS

Precise and accurate application is important for every pesticide application. Strong math skills, including the ability to calculate speed, volume, odd shaped areas, mixing ratios, rates of application, etc. will be necessary to successfully pass the Core examination. You will need to carefully review pages 164-165, and 190-192 in the National Core Manual. Additional resources for pesticide applicator math are available online from the Purdue Pesticide Program.

COMMERCIAL APPLICATION (18 AAC 90.990)

If you apply pesticides on someone else's property, this is considered a 'custom, commercial, or contract' application. This is true even if you are not paid for the work.

All commercial pesticide application must be conducted by a certified applicator. Applications may also be made by non-certified individuals as long as they are directly supervised by a certified applicator.

The only exception when certification is not required to apply pesticides to someone else's property is when all of the following criteria are met:

- Application is conducted by an employee as part of their work assignments;
- The employer does not engage in custom, commercial, or contract use of pesticides;
- Application is conducted on the employer's property only;
- The product applied is a general-use pesticide; and
- The application area is not considered a public place.

Examples of situations that fit these circumstances would be application of a rodenticide by a maintenance worker or use of sanitizers by a janitor, when used in a building owned by their employer.

In addition to the certification requirements, there are a number of other requirements that commercial applicators must meet:

- Detailed records must be kept of each application. More information on record keeping is provided below.
- Proof of liability insurance must be provided to DEC. Information on file must be kept current. Please review the requirements of 18 AAC 90.620.
- Pesticides must be stored correctly in a locked storage area, and warning signs must be posted on the outside of the storage area. Please review the requirements of 18 AAC 90.615.

RECORD KEEPING REQUIREMENTS (18 AAC 90.400-420)

State regulations require certified applicators to keep detailed records of **ALL** commercial pesticide applications. As explained above, this includes essentially any application of pesticides to property other than your own, whether or not you are paid for the work.

Records must contain the following information for both restricted use pesticides and general use pesticides:

1. Pesticide product name
2. EPA registration number
3. Date of application
4. Location/address of area treated
5. Application rate (*temperature and duration for fumigants*)
6. Dilution of pesticide
7. Total amount of pesticide applied (*pounds released for fumigants*)
8. Target pests
9. Site (e.g. front yard, living room, etc. or specific crop to which pesticide was applied)
10. Name of applicator

These records must be provided to DEC inspectors upon request and must be retained for at least two years.

Record keeping requirements for private agricultural applicators (Category Three) are somewhat different than the requirements listed above. The specific requirements for this category are detailed in the Category Three manual.

PUBLIC PLACES (18 AAC 90.300 and 630)

Due to the increased potential for exposure to pesticides at public places, there are additional restrictions that apply to use of pesticides in public places.

Public places are defined in statute. They include

- parks, playing fields, and similar areas;
- shared areas of apartment buildings such as hallways, laundry rooms, parking areas, or garden/lawn areas. This definition applies to buildings that contain four or more single-family residences; and
- public areas of governmental facilities.

All pesticides applied to public places (with the exception of anti-microbials and sanitizers) must be applied by a certified applicator. This differs from other types of applications, such as commercial applications or applications of restricted-use pesticides, where applications may be made by non-certified individuals as long as they are supervised by a certified applicator.

Before a pesticide may be applied in a public place, the applicator must post a written warning sign. The sign must include the following information

- the date and time of application;
- contact information, including a name, address, and telephone number of a person who can provide more information about the pesticide application; and
- the date and time when the area may be re-entered.

Signs must meet the following requirements

- posted prior to application of pesticide;
- posted at each access point;
- remain in place at least 24 hours, or the re-entry period specified on the label, whichever is longer;
- at least 8 ½ by 11 inches in size; and
- located between three feet and four feet above the ground, except when posted outdoors on a stake, when they must be at least 12 inches off the ground.

Posting requirements for public places do not apply to application of antimicrobials, rodenticides in tamper proof bait stations, or ready-to-use pastes, foams, or gels.

Record of the application, including all information required on the sign, must be maintained for at least two years after application.

PESTICIDE USE AT SCHOOLS (18 AAC 90.300 and 625)

Due to the potential for exposing children to pesticides, there are additional restrictions that apply to use of pesticides at schools. This includes use of pesticides within the school building, as well as on the school grounds, including products such as weed and feeds.

All pesticides applied to schools (with the exception of anti-microbials and sanitizers) must be applied by a certified applicator. This differs from other types of applications, such as commercial applications or applications of restricted-use pesticides, where applications may be made by non-certified individuals as long as they are supervised by a certified applicator.

Before a pesticide may be applied at a school, the certified applicator is responsible for posting a written warning sign. The sign must include the following information

- the name and EPA registration number of the product applied;
- the date and time of application;
- contact information, including a name, address, and telephone number of a person who can provide more information about the pesticide application; and
- the date and time when the area may be re-entered

Signs must meet the following requirements

- posted prior to application of pesticide;
- posted near where pesticides are applied;
- remain in place at least 24 hours, or the re-entry period specified on the label, whichever is longer;
- at least 8 ½ by 11 inches in size; and
- contain the required symbol of a school crossing sign with a red circle and line through it.

Posting and notification requirements do not apply to antimicrobials (sanitizers), tamper proof rodent bait stations, use of rodenticides in areas that children cannot access, or use of gels, pastes,

or foams in areas that children cannot access. The posting and notification requirements also do not apply in a school that is unoccupied for at least 72 hours following the application.

The school administrator has several duties related to pesticide use. Before a pesticide may be applied at a school, the school administrator is responsible for notifying parents. Notification must be provided at least 24-hours in advance. School administrators are also responsible for making sure warning signs remain posted and keeping children out of treated areas for at least 24 hours, or until the re-entry interval has expired. In addition, the school administrator is responsible for keeping records of pesticide applications and copies of parental notification. Applicators must be knowledgeable about these requirements, and should be able to provide necessary information to school administrators.

CONDITIONS IN ALASKA

Residual Effects

Pesticides break down and become inactive in several ways. They may be broken down into component parts by sunlight (**photodegradation**), micro-organisms such as bacteria and fungus (**microbial degradation**), or natural chemical reactions in soil such as oxidation, reduction, or hydrolysis (**chemical degradation**). They may be also taken up by plants and metabolized or neutralized (**biological degradation**). Many of these processes slow or cease during the long winter season in Alaska. As a result, some pesticides may persist in the environment longer than expected. Applicators must consider this effect when choosing products and determining when to apply pesticides.

Presence of Water

There are many creeks, lakes, and swamps covering Alaska. Special care must be taken to ensure pesticides do not impact nearby water bodies. Applicators must consider any nearby water bodies or wetlands when choosing products, application methods, and treatment area.

Pre-Emergent and Pre-Plant Herbicides

For pre-emergent herbicides, timing of application in Alaska can be tricky. These products must be applied during the short time frame that occurs after soil is no longer frozen, but before seeds begin germination.

Biological Controls

Insects, animals, or pathogens can sometimes be used to control pests. However, there are no biological controls recommended for use in Alaska.

PESTICIDE USE PERMIT REQUIREMENTS (18 AAC 90.500-540)

By state law, a DEC Pesticide Use Permit is required before you may apply pesticide under the following circumstances:

Application Type:
Aquatic: Application of pesticide to a water body, including creeks, rivers, streams, ponds, wetlands, and swamps, regardless of who owns the surrounding lands.
Aerial: Application of pesticide from any type of aircraft or hovercraft, regardless of who owns the land being treated.
Public Project On Multiple Properties: Application of pesticide to more than one property by a government entity (state, borough, or city).

The permitting process is rigorous and takes a minimum of 100 days to complete. Applicators should plan well in advance to ensure that a valid Pesticide Use Permit can be obtained for the planned pesticide application.

The permitting process requires detailed information about the specifics of the proposed pesticide use. Once all the required information is submitted, the application is opened to a public comment and review period, and may require a public hearing. Once the public review period is complete, DEC will conduct a thorough review of the proposed project and determine whether or not to issue a Pesticide Use Permit. If a Permit is issued, it does not become valid until after a 40 day waiting period, to allow time for the public to appeal the decision.

Pesticide use often raises concern in local communities, and may become contentious. Public resistance to the proposed pesticide use may impact your ability to obtain a Pesticide Use Permit.

Failure to obtain a permit is a violation of state law, and can result in significant penalties under Alaska Statute 46.03.760. It is the responsibility of the pesticide applicator to ensure that all required permits and approvals are in place before applying pesticides.

INTEGRATED PEST MANAGEMENT REQUIREMENTS (18 AAC 90.640-650)

New regulations, effective March 7, 2013, require agencies to comply with Integrated Pest Management (IPM) requirements before applying pesticide under the following circumstances:

Application Type:
State Owned Land: Application of pesticide on more than one acre of state owned or leased land.
State Right-of-Way: Application of pesticide on more than one acre of state owned or leased right-of-way.

IPM requirements do not apply to applications of pesticide to less than one acre of state land or state right-of-way, to use of antimicrobial pesticides (sanitizers) or personal use insect repellents, or to applications of pesticides inside buildings or structures.

Prior to applying pesticides on state lands or rights-of-way, agencies must develop an IPM Plan, which must include a description of:

- Preventive methods;
- Pest monitoring activities;
- Threshold for allowable pest presence;
- Potential mechanical or physical controls;
- Pesticide name;
- EPA registration number; and
- Identity of the Person In Charge.

Each agency must identify a Person in Charge, who develops, implements, and ensures compliance with the IPM Plan, keeps records, and acts as the point of contact for the pesticide project or program.

Pesticides applied under an IPM plan must be applied by certified applicator. The IPM Plan must be published on the DEC website prior to use of pesticide. IPM regulations also include specific requirements for notifying DEC, nearby drinking water systems, and the public about the pesticide application. If pesticide is applied to 20 acres or more in one year, the agency must post a report with additional information about the pesticide use.

OTHER REGULATIONS

There are a number of other regulations and requirements that apply to pesticide use and commercial applicators. It is YOUR job to be familiar with these requirements. You will need to be familiar with the regulations in 18 AAC 90 to pass the core exam.

Before Using Any Pesticide

STOP

All pesticides can be harmful to health and environment if misused.

Read the label carefully. Use only as directed.