

## U.S.

### ■ **FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT (AERIAL APPLICATOR CERTIFICATION)**

**TERMS:** In addition to meeting the certification requirements that apply to other categories of pesticide applicators, as outlined in the previous entry, individuals seeking certification to apply restricted pesticides using an airplane or helicopter are required to demonstrate practical knowledge of pest problems and pest control practices, including (among others) the following:

- (1) Labeling requirements and restrictions specific to application of pesticides from the air.
- (2) How to choose, calibrate and maintain aerial application equipment.
- (3) Weather-related factors to consider before and during aerial application.
- (4) Methods for minimizing off-target pesticide drift.
- (5) Competency in performing aerial applications that avoid drift and assure individual and public safety.

Private applicators who use or supervise the use of restricted pesticides applied by aircraft are subject to very similar certification requirements.

**ENFORCEMENT:** Any state that has adopted adequate pesticide use laws and regulations, has adequate procedures for their enforcement, and agrees to keep required records and make required reports, may enter into an agreement with the federal government for the enforcement of pesticide use restrictions. Under such an agreement, the state has primary responsibility for enforcing the provisions described above.

**All states except Wyoming currently have such authority.** For agency information, see the first entry under "*Pesticides & Agricultural Chemicals*" for the state of interest.

In Wyoming and in any other state where the cooperating state agency fails to take appropriate action to assure compliance, the Act is enforced directly by the *Office of Pesticide Programs, Office of Chemical Safety and Pollution Prevention, U.S. Environmental Protection Agency, Washington, D.C. 20460 (703-305-7090)*.

### ■ **FEDERAL AVIATION ACT OF 1958**

**TERMS:**

**Certification** — With few exceptions, it is illegal for anyone to apply pesticides and other agricultural chemicals from the air without an agricultural aircraft operator certificate issued by the Federal Aviation Administration.

Before such a certificate maybe granted, the applicant must have a commercial or private pilot's license and pass both a written examination and a flight skill test. Among other subjects, the written test covers the applicant's knowledge of safe handling and proper disposal of pesticides, the effects of pesticide exposure and precautions to be taken, the symptoms of pesticide poisoning and emergency procedures, and safe flight and pesticide application techniques.

In addition to pilot-related qualifications, an agricultural aircraft operator certificate will not be issued unless the aircraft to be used by the applicant is fit for operation in the air, as certified by the enforcement agency.

**Operating Rules** — Pilots applying pesticides and other agricultural chemicals must follow specific rules concerning aircraft design, equipment, and operating procedures. Among other restrictions, no one may apply any substance from an aircraft in a manner that creates a hazard to persons or property on the ground. Aerial applicators may not apply any pesticide for a use other than that for which it is registered, or contrary to any safety instructions or use restrictions on its label.

**Records and Reports** — Every holder of a commercial agricultural aircraft operator certificate must keep records showing (1) the name and address of each person for whom agricultural aircraft services were provided, (2) the date each service was performed, (3) the name and quantity of the pesticide applied, and (4) the name, address and certificate number of each pilot involved in the operation and the date each pilot met the knowledge and skill requirements described above.

**ENFORCEMENT:** *Enforcement Division, Federal Aviation Administration, U.S. Department of Transportation, Washington, D.C. 20591 (202-267-5158)*. Anyone with knowledge of a violation of these provisions may report it to any FAA regional or district office.

## Alaska

### ■ **STATE ENVIRONMENTAL CONSERVATION LAWS (*AERIAL PESTICIDE APPLICATIONS*)**

**TERMS:** It is unlawful for anyone to apply pesticides from an airplane or helicopter without first obtaining a permit from the state to do so. The aerial permit application form requires detailed information regarding the pesticide product to be used, the location and size of the target area, the method of application, the type and condition of the aircraft to be used, and related details.

**ENFORCEMENT:** *Pesticide Control Program, Division of Environmental Health, Department of Environmental Conservation, Wasilla, Alaska 99654 (800-478-2577).*

## Arizona

### ■ ARIZONA PESTICIDE CONTROL LAW (*AERIAL APPLICATORS*)

TERMS:

**Aerial Applicator Licensing** — No person may operate an aircraft for the purpose of applying pesticides to crops unless the person has a valid license for that purpose issued by the state. To qualify for such a license, the applicant must pass an examination testing knowledge and understanding of pesticide use and safety, safe flight and application procedures, pesticide laws and regulations, and other subjects. Aerial applicators must also have a valid commercial pilot's certificate issued by the Federal Aviation Administration.

**Aerial Equipment Licensing** — Like other pesticide application equipment, any aircraft used to apply pesticides for hire must have a valid state equipment license, as well as a certificate issued by the Federal Aviation Administration.

**Application Restrictions** — Certain designated highly toxic pesticide products may not be applied from the air within prescribed distances from schools, daycare centers, health care institutions and residences. Similarly, within designated urban areas that border on farmlands and have a history of problems or complaints concerning aerial pesticide applications, applicators must notify the state agency at least 24 hours prior to applying certain chemical compounds from the air.

ENFORCEMENT: *Environmental Services Division, Arizona Department of Agriculture, Phoenix, Arizona 85007 (602-542-3578).*

No sooner than 60 days after first filing a complaint with the Department of Agriculture, anyone who is negatively affected by a violation of the pesticide control law may file a lawsuit against the violator in civil court, using a private attorney or a public legal service program.

## California

### ■ **STATE PEST CONTROL LAWS (*AIRCRAFT OPERATION REGULATION*)**

**TERMS:** It is unlawful for anyone to apply pesticides by air unless the pilot flying the aircraft holds a valid pest control pilot's certificate issued by the state. Before an initial certificate is granted, the applicant must pass an examination to demonstrate the pilot's ability to legally and safely conduct pest control operations and the pilot's knowledge of the nature and effect of pest control materials. After a period of aerial pest control operations under the supervision of a journeyman pilot, the apprentice pilot may qualify to take the journeyman pilot exams.

Pesticide aircraft operators must also have a commercial pilot's certificate and a current medical certificate issued by the Federal Aviation Administration, and must be registered with the county agricultural commissioner in each county where they operate.

**ENFORCEMENT:** *California Department of Pesticide Regulation, Sacramento, California 95814 (916-324-4100)*. These provisions are also enforced by county agricultural commissioners.

## Colorado

### ■ **PESTICIDE APPLICATORS' ACT (*AERIAL APPLICATORS*)**

TERMS: Commercial applicators are prohibited from applying pesticides from the air without a license permitting them to do so. Each person applying for such a license must present proof that the applicant, or at least one pilot employed by the applicant, is certified by the Federal Aviation Administration for aerial pesticide operations.

The license-holder is required to notify the state agency whenever there is no longer a certified pilot employed, and the license-holder must cease aerial pesticide operations until satisfactory proof of certification of a new pilot is provided to the state agency.

ENFORCEMENT: *Pesticides Programs Section, Colorado Department of Agriculture, Broomfield, Colorado 80021 (303-869-9056).*

## Connecticut

### ■ CONNECTICUT PESTICIDE CONTROL ACT (*AERIAL APPLICATORS*)

TERMS:

**Certification of Aerial Applicators** — No one may apply any pesticide or fertilizer by aircraft without first obtaining a certificate from the state authorizing such operations. Each applicant must be qualified to fly an aircraft, must pass an examination demonstrating competence to apply pesticides safely and effectively, and must have prescribed amounts of liability insurance.

**Aerial Application Permits** — Before any pesticide or fertilizer may be applied to a crop from the air, the owner of the crop must obtain a permit from the state. A permit may not be granted until the target area and surrounding property have been inspected and the applicant produces proof that the material to be applied and the method of application will not harm public health, water, animal life or property.

**Application Restrictions** — No pesticide may be applied from the air to a field less than 10 acres in size, unless the field is part of a larger parcel of at least 10 acres. Before an aerial spray operation may be performed, a written release is generally required from any resident whose property is within 300 feet of the flight path of the airplane to be used, or within 200 feet in the case of application by helicopter.

ENFORCEMENT: *Pesticide Management Program, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, Hartford, Connecticut 06106 (860-424-3369).*

## Florida

### ■ **FLORIDA PESTICIDE LAW (AERIAL APPLICATORS)**

TERMS: Among other provisions contained in the regulations adopted under the Florida Pesticide Law, aerial applicators must comply with these requirements:

**Aircraft Registration** — Each aircraft used for aerial application of pesticides must be registered with the state each year.

**Proof of Insurance** — The individual or company applying for registration must put up a surety bond in the minimum amount of \$100,000 covering damage or injury to people or property as the result of aerial pesticide application by the registered aircraft. As an alternative, the applicant may file a certificate of insurance, verifying insurance coverage of not less than \$100,000 for property damage and \$300,000 for bodily injury.

ENFORCEMENT: *Bureau of Licensing and Enforcement, Division of Agricultural Environmental Services, Department of Agriculture and Consumer Services, Tallahassee, Florida 32399 (850-617-7997)*. A worker or other person who suffers injury or property damage stemming from application of a pesticide should file a written statement with the Department.

## Hawaii

### ■ HAWAII PESTICIDES LAW (*AERIAL APPLICATORS*)

TERMS:

**Certification of Aerial Applicators** — Aerial pest control applicators must demonstrate knowledge regarding pesticide drift and drift control, weather, aerial equipment and application techniques, and the potential for damage to people, beneficial insects, wildlife, livestock, and non-target plants.

**Recertification** — To qualify for renewal of an aerial applicator certificate, the holder must complete 25 hours of prescribed training or pass a written examination.

**Special Permit** — No one may apply a restricted pesticide by aircraft without obtaining a special permit issued by the state agency. Among other requirements that must be met before a permit is issued, the plantation or farm applying for the permit must state the purpose of the aerial treatment, identify the pesticide and dosage to be used, and submit a map or sketch showing the proposed site and the surrounding homes, roadways, waterways and agricultural fields.

**Aerial Equipment** — Spray equipment must be leakproof and equipped with prescribed pressure control devices and pressure gauges.

ENFORCEMENT: *Pesticides Branch, Plant Industry Division, Hawaii Department of Agriculture, Honolulu, Hawaii 96814 (808-973-9401).*



## Idaho

### ■ **STATE PESTICIDE LAWS (AERIAL APPLICATORS)**

TERMS: During pesticide spray operations from the air, pilots are prohibited from turning or flying low over towns or heavily populated areas without written authorization, or directly over an occupied structure (such as a housing facility or school) without permission from the owner of the structure. Aerial pesticide application is forbidden at any location when the sustained wind speed is over 10 miles per hour, when wind conditions are outside safe limits as specified on the pesticide product label, or when wind conditions could cause drift beyond the area intended for treatment.

ENFORCEMENT: *Enforcement Program, Division of Agricultural Resources, Idaho State Department of Agriculture, Boise, Idaho 83712 (208-332-8613).*

## Louisiana

### ■ LOUISIANA PESTICIDE LAW (*AERIAL APPLICATORS*)

TERMS:

**Aerial Applicator Certification** — No one may apply pesticides by aircraft without being certified as a commercial aerial applicator.

**Application Standards** — With the single exception of mosquito control applicators, commercial applicators applying pesticides from an airplane must comply with very specific aerial spray equipment requirements and restrictions on the amount of pesticides applied per acre.

**Time and Location Limitations** — Aerial application of pesticides is prohibited while it is raining. In general, no pesticide may be applied from the air within 100 feet of any inhabited structure, or within 1,000 feet of any school grounds during normal school hours.

ENFORCEMENT: *Pesticide and Environmental Programs Division, Louisiana Department of Agriculture and Forestry, Baton Rouge, Louisiana 70806 (225-922-1234; toll-free 866-927-2476)*. A person who believes that he or she has suffered damages as a result of a pesticide application may file a damage complaint with the Department.

## Maine

### ■ **BOARD OF PESTICIDES CONTROL LAW (AERIAL APPLICATIONS)**

TERMS: The state pesticide control agency has established standards governing pesticide applications by aircraft, including the following:

**Target Site Identification** — A farm operator or other person who contracts for an aerial pesticide application must ensure that the target area is positively identified beforehand, using GPS, site markings visible to the applicator, or some other method approved by the state agriculture department.

**Site Plans** — Before any aerial application within 1,000 feet of a sensitive area that is likely to be occupied, the farm operator or other person contracting for the application must provide the applicator with a site plan that includes a map marking the area's boundaries and property lines and showing significant landmarks, flight hazards and the sensitive areas involved.

**Application Checklist** — Before conducting an aerial application within 1,000 feet of a sensitive area, the applicator is required to complete a state-approved checklist for each target site. Among other things, the checklist must include (1) the date and time, a description of the target site, and the name of the applicator, (2) confirmation that any required notifications have been carried out, (3) wind speed and direction, and (4) confirmation that there are no humans visible in or near the target area.

**Wind Speed Limits** — Unless otherwise specified on the pesticide product label, an applicator may not conduct an aerial application within 1,000 feet of a sensitive area likely to be occupied unless the wind speed is between 2 and 10 miles per hour.

ENFORCEMENT: *Board of Pesticides Control, Maine Department of Agriculture, Conservation and Forestry, Augusta, Maine 04333 (207-287-2731).*

### ■ **MAINE AERONAUTICS ACT (AGRICULTURAL AVIATION)**

TERMS: Anyone applying pesticides from the air must follow federal regulations governing certification of pilots and aircraft and agricultural aircraft operations (*see entries, U.S. — Pesticides & Agricultural Chemicals — Aerial Application Standards*).

ENFORCEMENT: *Division of Aeronautics, Maine Department of Transportation, Augusta, Maine 04330 (207-624-3000).*

## Massachusetts

### ■ MASSACHUSETTS PESTICIDE CONTROL ACT (*AERIAL APPLICATORS*)

TERMS:

**Aerial Applicator Certification** — No one is allowed to apply pesticides by aircraft unless specifically certified by the state as an aerial applicator.

**Application Permits** — At least 21 days before an airplane may be used to apply pesticides to a particular field, a permit must be obtained from the state, authorizing treatment of the field. The state agency will not issue such a permit until it can be determined that aerial application will not, among other things, be likely to cause injury to humans.

**Prior Notice of Aerial Applications** — Agricultural fields that are within 500 feet of a protected area (such as a school, hospital, residence or other building where people gather) and that are targeted for treatment by pesticides from the air must be posted with warning signs between 2 and 24 hours before the application. The signs must remain in place at least 48 hours after the field is treated and be removed no sooner than the expiration of the product's restricted entry interval. Each sign — at least 14 inches by 16 inches in size, and in at least one-inch lettering — must include the words "Danger," "Pesticides," "Keep Out," and the corresponding terms in Spanish.

**Application Restrictions** — Among other restrictions, aerial agricultural applications are prohibited when there is visible drift to non-target areas, and pilots are generally forbidden to make turns over protected areas and bodies of water.

ENFORCEMENT: *Pesticide Enforcement, Division of Crop and Pest Services, Massachusetts Department of Agricultural Resources, Boston, Massachusetts 02114 (617-626-1781).*

## Michigan

### ■ **NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (*AERIAL PESTICIDE APPLICATORS*)**

TERMS: Before performing any pesticide application by aircraft, a private agricultural or commercial applicator must meet at least one of these requirements:

- (1) Must have been licensed as a commercial aerial applicator before December 27, 1988.
- (2) Must have at least 3 years of experience, with not fewer than 200 hours of agricultural aerial application experience under the supervision of a commercial aerial applicator.
- (3) Must successfully complete a state-recognized aerial applicator training program.

In addition, once every 3 years, an aerial applicator must either (1) participate in a state-approved application flight-efficiency clinic, using an aircraft that the applicator operates, or (2) retake the certification examinations and submit to an inspection by the enforcement agency of the applicator's aircraft, equipment and spray operations.

ENFORCEMENT: *Pesticide and Plant Pest Management Division, Michigan Department of Agriculture and Rural Development, Lansing, Michigan 48909 (517-284-5639; toll-free 800-292-3939).*

## Mississippi

### ■ AGRICULTURAL AVIATION LICENSING LAW OF 2009

**TERMS:** The Agricultural Aviation Licensing Law regulates the licensing of individuals and businesses engaged in the aerial application of pesticides, poisons, seeds, fertilizer and chemicals on agricultural lands in Mississippi.

**Licensing and Registration** — It is unlawful for anyone to apply any pesticide, fertilizer or seed by aircraft unless the person has an applicator's license or pilot's license issued by the state agriculture department for that purpose. Likewise, all aircraft used for aerial application of agricultural substances must be registered with the department.

**Financial Responsibility** — Every individual or company seeking a license for aerial agricultural operations must obtain a surety bond or a liability insurance policy, covering damages resulting from aerial applications. Liability coverage must be in an amount not less than \$100,000 for personal injury, \$300,000 for multiple injuries, and \$100,000 for property damage.

**Recordkeeping** — Aerial applicators are required to keep a record of each pesticide application. The record must include the date of the application, the product used, the rate of application, the crop or site treated, the target pest involved, the number of acres treated, the location of the site, the identity of the property owner, the wind velocity and other conditions at the time of application, the name of the pilot, the registration number of the aircraft used, and a write-up on any accidents or other unusual occurrences during the application.

**Duties of the Chief Pilot** — The person designated as the chief pilot of an agricultural aircraft operation is responsible for supervising the operation, for regularly checking records to assure compliance with the law, and for making sure each pilot is aware of and complies with his or her responsibilities under state and federal regulations.

**Prohibited Activities** — The enforcement agency may suspend an aerial applicator's or pilot's right to do business in Mississippi if the agency finds that the applicator or pilot has, among other violations, applied pesticides in a faulty or negligent manner, failed or refused to keep required records or make required reports, performed work that the applicator or pilot is not licensed to perform, or been convicted of a violation of the federal pesticide laws. It is illegal for anyone in the state to use or apply a pesticide product in a manner contrary to its labeling.

**Application Restrictions** — The regulations adopted under the Agricultural Aviation Licensing Law include numerous restrictions on the conditions under which aerial pesticide applications may be conducted, and require applicators and pilots to have equipment on hand for measuring and recording the exact location of treatment sites, wind speed and direction, and air temperatures. Spray equipment is subject to very specific standards for prevention of drift.

**ENFORCEMENT:** *Bureau of Plant Industry, Mississippi Department of Agriculture and Commerce, Mississippi State, Mississippi 39762 (662-325-3390).*

## Nebraska

### ■ **PESTICIDE ACT (*AERIAL APPLICATORS*)**

TERMS: No one may apply pesticides by use of an aircraft unless he or she holds a Nebraska aerial pesticide business license, or is employed by a licensed pesticide business. Likewise, a person licensed as a commercial applicator may apply pesticides from an aircraft only under the direct supervision of a person holding a Nebraska aerial pesticide business license. The license application must include, among other things, the FAA registration number of all aircraft owned, rented or leased by the applicant that will be utilized for aerial pesticide operations.

Aerial applicators must demonstrate practical knowledge specifically related to aerial spraying, including equipment calibration and maintenance, target crops and pests, pesticide drift and potential for non-target injury, and re-entry intervals.

ENFORCEMENT: *Pesticide Program, Animal and Plant Health Protection, Nebraska Department of Agriculture, Lincoln, Nebraska 68509 (402-471-2351; toll-free 877-800-4080).*

## New Hampshire

### ■ PESTICIDE CONTROL LAW (*AERIAL APPLICATION*)

TERMS: The state pesticide control board has established rules regulating the application of pesticides by aircraft.

**Prior Approval of Aerial Applications** — No one may apply pesticides using an airplane, helicopter or other aircraft without first obtaining a permit to do so from the enforcement agency.

#### **Public Notifications** —

***Non-Residential Areas*** — If a proposed aerial application is in a non-residential area, the applicant for a permit must publish a notice about it in a general-circulation newspaper in the affected area. The applicant must also provide written notice to property owners within 1,320 feet of the treatment area and to certain public officials, summarizing the proposed aerial treatment and advising all parties that they have 15 days from the date of the notice to submit written comments to the state agency.

***Residential, Commercial and Institutional Buildings*** — If residential, commercial or institutional buildings (such as schools and hospitals, for example) are located within 200 feet of the proposed treatment area, a written notice of an aerial pesticide application must be submitted to all persons owning, living in or using the properties, no sooner than 60 days and no later than 14 days before the application is to begin. The notice must include a description of the treatment area, the name of and contact information for the applicator or the person requesting the treatment, the purpose of the application, the pesticides to be used, the dates during which the treatment will take place, the telephone number of the state pesticide enforcement agency, the telephone number of the New Hampshire Poison Control Center, and the public-related precautions that appear on the pesticide product label.

ENFORCEMENT: *Division of Pesticide Control, New Hampshire Department of Agriculture, Markets and Food, Concord, New Hampshire 03301 (603-271-3550).*



## New Jersey

### ■ **PESTICIDE CONTROL ACT OF 1971 (AERIAL APPLICATION)**

TERMS: Equipment used in the application of pesticides from the air must be properly adjusted, free of leaks, and equipped with a positive shut-off system. Spray equipment must be thoroughly rinsed before applying a different pesticide.

Among other restrictions, pesticides applied in liquid or dust form from an aircraft must generally be released within 15 feet above the crop. Pesticide granules or pellets generally may not be released from an altitude any higher than 40 feet above the target.

As a rule, no pesticide may be applied by aircraft any closer than 100 feet from a private residence without the written consent of the occupant, or within 300 feet of an occupied school, hospital, nursing home, or any building used for business, social or religious purposes.

ENFORCEMENT: *Bureau of Pesticide Compliance and Enforcement, Division of Waste Enforcement, Pesticides and Release Prevention, New Jersey Department of Environmental Protection, Trenton, New Jersey 08625 (609-984-6568).*

## North Carolina

### ■ NORTH CAROLINA PESTICIDE LAW OF 1971 (*AERIAL APPLICATORS*)

#### TERMS:

**Licensing** — The contractor and each pilot involved in application of pesticides from the air must be licensed. Among other qualifications for licensing, a pilot must generally have at least 125 hours and one year's flying experience in aerial pesticide application activities.

**Aircraft Inspection** — Each aircraft used in the application of pesticides must be inspected each year and must carry a license plate or decal issued by the state enforcement agency. The agency may also conduct unannounced aircraft inspections, to determine if equipment is properly calibrated and maintained.

**Compliance with Federal Requirements** — A license to perform aerial application of pesticides will not be granted to an applicant who has not met federal requirements for agricultural aviation operations (*see entries, U.S. — Pesticides & Agricultural Chemicals — Aerial Application Standards*).

**Application Standards** — Among many other restrictions and conditions, no pesticide may be applied from the air while anyone other than those assisting in the application are in the target area. Aerial spray equipment must be free of leaks and have shut-off systems to prevent release of pesticides over non-target areas. Pilots are required to take certain precautions to prevent drift, and to comply with special rules when applying pesticides in restricted areas such as the immediate vicinity of houses, public roads, and public buildings.

**Handling and Loading of Pesticides** — Pilots or workers handling or loading any pesticide product whose label displays the word "Danger" must wear approved respirators and protective clothing, including chemical-resistant gloves and boots. Water and detergent for personal washing must be available at all handling and loading sites.

ENFORCEMENT: *Pesticide Section, Structural Pest Control and Pesticide Division, North Carolina Department of Agriculture and Consumer Services, Raleigh, North Carolina 27699 (919-733-3556).*

## North Dakota

### ■ **AERONAUTICS LAWS (*AERIAL SPRAYING*)**

TERMS:

**Aerial Applicator Licensing** — Every person or firm involved in applying pesticides by aircraft must be licensed by the state as an aerial applicator. As a condition for licensing, pilots generally must have at least 250 hours of flight time in the type of aircraft to be used for agricultural spraying, along with other qualifications. In addition, operators of aerial application businesses (or their chief pilots) must attend state-approved training, attend an annual aerial applicator safety meeting, or receive the information provided at the annual meeting.

FAA-licensed private pilots may apply pesticides by aircraft to their own land, provided they (1) meet experience requirements similar to those applicable to commercial aerial applicators, (2) provide the state licensing agency with a legal description of the land they own or farm, and (3) do not offer pesticide application services to others for hire or for any other form of compensation.

**Aircraft Registration** — Airplanes and helicopters used for aerial application of pesticides must be registered with the state prior to actual use and prior to issuance of an aerial applicator's license to the aircraft's owner or operator. Each such aircraft must be in good functional condition, free from obvious points of leakage and equipped with prescribed shut-off valves to prevent release of pesticides over non-target areas.

ENFORCEMENT: *North Dakota Aeronautics Commission, Bismarck, North Dakota 58502 (701-328-9650).*

## Rhode Island

### ■ PESTICIDE CONTROL ACT (*AERIAL APPLICATION*)

TERMS:

**Certification** — Individuals who intend to apply pesticides from an aircraft must be certified as aerial applicators. In addition to qualifications related to experience and competency, aerial applicators are required to post a \$100,000 performance bond, or obtain and keep in force a liability insurance policy with bodily injury coverage limits of at least \$100,000 per occurrence and \$200,000 aggregate, and property damage coverage of at least \$100,000.

**Prior Authorization of Aerial Applications** — No one may apply any pesticide by aircraft without prior written approval from the state.

ENFORCEMENT: *Division of Agriculture, Rhode Island Department of Environmental Management, Providence, Rhode Island 02908 (401-222-2781).*

## South Carolina

### ■ SOUTH CAROLINA PESTICIDE CONTROL ACT (*AERIAL APPLICATION*)

TERMS:

**Licensing and Certification** — Anyone who applies restricted pesticides by aircraft must either be licensed and certified by the state, or work under the direct supervision of a certified licensed applicator. Licensing and certification require successful completion of a basic examination covering general subject matter and a specific test for aerial operators.

**Aircraft Loading Zones** — Areas where pesticide aircraft are loaded must be adequately marked, and must also be posted with general warnings that toxic pesticides or pesticide containers may be stored in the area and that pesticides may have been spilled on the ground within the loading zone.

**Application Disclosures** — With respect to each application of a pesticide, aerial applicators must provide their customers with a statement containing, at a minimum, (1) the name and address of the spraying firm or company, (2) the identity of the target pest or purpose of the pesticide application, (3) the chemical or common name of the pesticide's active ingredient, and (4) the name of the responsible licensed applicator.

ENFORCEMENT: *Department of Pesticide Regulation, Regulatory Services Division, Clemson University, Pendleton, South Carolina 29670 (864-646-2164).*

## Tennessee

### ■ **AERIAL PESTICIDE APPLICATION LAW**

TERMS: Before applying any pesticide by aircraft, a pilot must obtain a license from the state to do so. Among other requirements, issuance of a commercial aerial applicator's license requires the applicant (1) to have a valid license issued by the Federal Aviation Administration authorizing agricultural aircraft operations, and (2) to demonstrate competency in aerial pesticide application, by meeting the requirements for certification in that category of operation.

Aircraft licenses must be displayed in plain sight on each aircraft, and each pilot must carry his or her license at all times while performing pesticide application activities.

No aerial applicator's license may be issued unless the applicant submits proof of liability insurance coverage, in the minimum amount of \$100,000.

ENFORCEMENT: *Pesticide Section, Consumer and Industry Services Division, Tennessee Department of Agriculture, Nashville, Tennessee 37220 (615-837-5148).*

## Texas

### ■ AGRICULTURE CODE (*AERIAL PESTICIDE APPLICATION*)

#### TERMS:

**Right to Notification** — Anyone who works or lives within 1/4 mile of a field to which pesticides may be applied may request that the operator of the farm where the field is located provide notice before pesticides are applied to the field using an airplane or helicopter. The request must be in writing and include the name and address of the person making the request, a telephone number where the person can be reached, the date of the request, and the location of the field for which the request is being made. The request must be sent to the farm operator by certified mail.

**Effective Dates** — A request for notification remains in effect through December 31 of the year the request is received. Under normal circumstances, the farm operator must begin providing notice within 10 days of receiving the request.

**Time and Method of Notification** — In general, notification must be given no later than on the day before each scheduled aerial application. The notification can be given either (1) by raising a flag or posting a sign, or (2) by providing the notification in writing, in person or by telephone. The notice must be in English and, when appropriate, in Spanish.

**Content of Notice** — Regardless of how the notification is given, it must include (1) the planned date and approximate time of the pesticide application, (2) the name of the pesticide to be applied, and (3) the location of the field to which the application will be made.

**Removal of Flags or Signs** — If flags or signs are used to provide the required notification, they must be lowered or removed within 24 hours after the re-entry period specified on the pesticide label expires. In no case may flags or signs be left up for more than 72 hours after the end of the re-entry period.

**Mandatory Notification of Farm Labor Camps** — A farm operator planning any aerial pesticide application to a field within 1/4 mile of a licensed farm labor camp, or a field next to labor housing owned or operated by the farm operator, is required to provide prior notification of the application, *without any request by the occupants of the housing*. No later than the day before each such aerial application, the farm operator must provide notification either (1) by telephone or in person to the head of each household residing in the camp, or (2) by written notice posted on a bulletin board accessible to camp occupants.

ENFORCEMENT: *Pesticide Programs, Agricultural and Consumer Protection Division, Texas Department of Agriculture, Austin, Texas 78711 (512-475-1620; toll-free 800-835-5832)*. Anyone who has properly requested prior notification of aerial pesticide applications and who believes that the required warnings described above were not properly given prior to application — or who experiences adverse effects from a pesticide application — may file a complaint with the Department.

## Vermont

### ■ **PESTICIDE CONTROL LAW (AERIAL APPLICATORS)**

TERMS: Individuals who apply pesticides from the air must be certified as aircraft pest control applicators and must obtain certification in the specific category of activity in which they will engage, which may include agriculture.

To qualify for certification, the applicant must pass prescribed examinations to assure the individual's skill and knowledge regarding the safe application of pesticides from the air. Among the topics tested are weather and drift, calibration of aerial equipment, pesticide loading procedures, and labeling.

Before treating agricultural commodities, aerial operators must obtain an annual permit.

ENFORCEMENT: *Pesticide Management Section, Vermont Agency of Agriculture, Food and Markets, Montpelier, Vermont 05620 (802-828-2431).*

### ■ **STATE AERONAUTICS LAWS (OPERATION OF AIRCRAFT)**

TERMS: At least 10 days before making a flight for the purpose of crop dusting or spraying pesticides, the owner of the aircraft to be used must apply to the state for a permit. Permission to conduct aerial pesticide operations must be renewed annually.

The applicator is also required to have a valid pesticide operator's or applicator's license issued by the state agriculture department for the appropriate type of aerial pesticide application to be performed.

ENFORCEMENT: *Aviation Section, Operations Division, Vermont Agency of Transportation, Montpelier, Vermont 05633 (802-828-2723).*

The agency responsible for licensing pesticide applicators in the state is the *Pesticide Management Section, Vermont Agency of Agriculture, Food and Markets, Montpelier, Vermont 05620 (802-828-3475).*



## West Virginia

### ■ **WEST VIRGINIA PESTICIDE CONTROL ACT OF 1990 (AERIAL APPLICATION)**

**TERMS:** In addition to demonstrating competence in agricultural plant pest control by passing a state-administered written examination, applicants for certification as aerial pesticide applicators must hold a valid agricultural applicator certificate from the Federal Aviation Administration.

Like most other classes of commercial applicators, individuals or businesses that apply pesticides using aircraft must have liability insurance or other financial security covering potential legal damages caused by their operations, in the minimum amount of \$300,000 for bodily injury or death, and \$100,000 for property damage.

**ENFORCEMENT:** *Pesticide Regulatory Unit, Regulatory and Environmental Affairs Division, West Virginia Department of Agriculture, Charleston, West Virginia 25305 (304-558-2209).*

## Wisconsin

### ■ PESTICIDE LAWS (*AERIAL APPLICATION*)

TERMS:

**Certification** — No one may apply a pesticide from the air unless certified as an aerial applicator. In addition to the requirements for general certification, an aerial operator must (1) provide proof that he or she is licensed and fully trained to operate and apply pesticides with each type of aircraft used for that purpose, and (2) demonstrate competency and practical knowledge of aerial pest control, the health and environmental hazards related to aerial applications, and the prevention of pesticide over-spray and drift.

**Aircraft Requirements and Operations** — Aircraft used to apply pesticides must meet state and federal standards, and must be operated in accordance with state and federal operating procedures.

**Prior Notification of Aerial Applications** — At least 24 hours before the application of any pesticide by aircraft, the owner of the land to be treated is required to notify the operator of any migrant labor camp immediately adjacent to the targeted areas, and to notify the residents of any closely adjoining property who give written request for prior notice. The notification may be oral or written, but must include the intended date and time of the application, the identity of the pesticide product to be applied, and the location of the application site.

ENFORCEMENT: *Bureau of Agrichemical Management, Division of Agricultural Resource Management, Wisconsin Department of Agriculture, Trade and Consumer Protection, Madison, Wisconsin 53708 (608-224-4545).*

## Wyoming

### ■ WYOMING ENVIRONMENTAL PESTICIDE CONTROL ACT OF 1973 (*AERIAL APPLICATION*)

TERMS:

**Certification of Aerial Applicators** — In addition to the general knowledge and competencies required of all categories of pesticide applicators, applicants for aerial certification must demonstrate practical knowledge of aerial equipment calibration and maintenance, as well as methods of avoiding problems associated with pesticide application from the air, such as drift and non-target injury.

**Registration of Aircraft** — Any person or business applying pesticides by air must register each aircraft used for that purpose with the state each year. The registrant must provide the state agency with (1) the name of the aircraft's manufacturer, its model and type, (2) the identification number assigned to the aircraft, (3) the name of the aircraft's owner, and (4) the name of the user of the aircraft, if different from the owner. There is a \$25 annual registration fee.

ENFORCEMENT: *Pesticide Section, Technical Services Division, Wyoming Department of Agriculture, Cheyenne, Wyoming 82002 (307-777-7321; toll-free 800-877-9975).*