

01 DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY

026 BOARD OF PESTICIDES CONTROL

Chapter 22: STANDARDS FOR OUTDOOR APPLICATION OF PESTICIDES BY POWERED EQUIPMENT IN ORDER TO MINIMIZE OFF-TARGET DEPOSITION

SUMMARY: These regulations establish procedures and standards for the outdoor application of pesticides by powered equipment in order to minimize spray drift and other unconsented exposure to pesticides. The primary purpose of these regulations is to implement the legislative mandate of the Board, as expressed by 7 M.R.S.A. §606(2)(G), to design rules which “minimize pesticide drift to the maximum extent practicable under currently available technology.”

SECTION 1. EXEMPTIONS

The regulations established by this chapter shall not apply to pesticide applications in any of the following categories:

- A. Applications of pesticides confined entirely to the interior of a building;
- B. Applications of pesticides by non-powered equipment;
- C. Applications of pesticides exclusively in granular or pelletized form;
- D. Applications of pesticides injected underground or otherwise injected directly into the target medium. Such applications must involve no spraying of pesticides whatsoever.

SECTION 2. STANDARDS OF CONDUCT FOR PESTICIDE APPLICATIONS

All pesticide applications subject to these regulations shall be undertaken in compliance with the following standards of conduct:

- A. **Equipment**
 - I. Pesticide spray equipment shall be used in accordance with its manufacturer’s recommendations and instructions, and shall be in sound mechanical condition, free of leaks and other defects or malfunctions which might cause pesticides to be deposited off-target.
 - II. Pesticide spray equipment shall be properly calibrated consistent with Board or University published guidance. Sufficient records to demonstrate proper calibration must be maintained and made available to representatives of the Board upon request.

- III. Pesticide application equipment shall have properly functioning shut-off valves or other mechanisms which enable the operator to prevent direct discharge and minimize drift to non-target areas. Spray equipment designed to draw water must also have a properly functioning antisiphoning device.

B. Weather Conditions

- I. Spray applications shall not be undertaken when weather conditions favor pesticide drift onto Sensitive Areas or otherwise prevent proper deposition of pesticides on target.
- II. Pesticide application must cease immediately when visual observation reveals or should reveal that spray is not being deposited on target.
- III. Without limitation of the other requirements herein, under no circumstances shall pesticide application occur when wind speed in the area is in excess of 15 miles per hour.

C. Identifying and Recording Sensitive Areas

- I. Prior to spraying a pesticide, the applicator must become familiar with the area to be sprayed and must identify and record the existence, type and location of any Sensitive Area located within 500 feet of the target area. Applicators shall prepare a site map or other record, depicting the target area and adjacent Sensitive Areas. The map or other record shall be updated annually. The site map or other record shall be retained by the applicator for a period of two years following the date of applications and shall be made available to representatives of the Board upon request.
- II. This requirement shall not apply to commercial applications conducted under categories 3A (outdoor ornamental tree and plant), 3B (turf), 6A (rights-of-way vegetation management), 6B (industrial/commercial/municipal vegetation management), or 7E (biting fly & other arthropod vectors [ticks]).
- III. Applications conducted under category 6A (rights-of-way vegetation management) and to sidewalks and trails under category 6B (industrial/commercial/municipal vegetation management) require the applicator to implement a drift management plan.

D. Presence of Humans, Animals

Pesticide applications shall be undertaken in a manner which minimizes exposure to humans, livestock and domestic animals.

The applicator shall cease spray activities at once upon finding evidence showing the likely presence of unprotected persons in the target area or in such proximity as to result in unconsented exposure to pesticides.

E. Other Requirements

These regulations are intended to be minimum standards. Other factors may require the applicator to take special precautions, beyond those set forth in these regulations, in order to avoid adverse impacts on off-target areas and to protect public health and the environment.

SECTION 3. STANDARDS FOR AERIAL APPLICATION OF PESTICIDES**A. Positive Identification of the Target Site**

The person contracting for an aerial pesticide application shall ensure that the application site (i.e., target area) is positively identified prior to application, using a unique and verifiable method, including;

- I. An onboard, geo-referenced electronic mapping and navigation system (e.g., GPS); or
- II. Effective site markings visible to the applicator; or
- III. Other method(s) approved by the Board.

B. Site Plans Required

Prior to spraying by aerial application within 1,000 feet of a Sensitive Area Likely to Be Occupied, the person contracting for the application shall provide to the applicator a site plan that includes:

- I. a site map drawn to scale that:
 - (i) delineates the boundaries of the target area and the property lines;
 - (ii) depicts significant landmarks and flight hazards;
 - (iii) depicts the type and location of any Sensitive Area Likely to Be Occupied within 1,000 feet of the target area; and
 - (iv) depicts other Sensitive Areas within 500 feet of the target area.
- II. If applicable, a school bus schedule shall accompany the site map.
- III. The site plan and site map with identified sensitive areas required under Section 3(B) shall be retained by the applicator for a period of two years following the date of applications and shall be made available to representatives of the Board upon request.
- IV. Compliance with this section satisfies the requirements of Section 2(C).

C. Site-Specific Application Checklist

Prior to conducting an aerial pesticide application within 1,000 feet of a Sensitive Area Likely to Be Occupied, the applicator shall complete a Board-approved pre-application checklist for each distinct field or target site. The checklist shall be maintained by the applicator for a period of two years and shall be available for inspection by representatives of the Board at reasonable times, upon request. The checklist shall include, at a minimum, the following elements:

- I. The date, time, description of the target site and name of the applicator;
- II. Confirmation that the notification requirements contained in CMR 01-026, Chapters 28 and 51, have been carried out;
- III. Confirmation that the target site has been positively identified;
- IV. The location of where weather conditions are measured and a description of the equipment used to measure the wind speed and direction;
- V. Confirmation that conditions are acceptable to treat the proposed target site, considering the location of any Sensitive Area Likely to Be Occupied and current weather conditions;
- VI. Wind speed and direction;
- VII. The measures used to protect all Sensitive Areas;
- VIII. Confirmation that there are no humans visible in or near the target area.

D. Buffer Zones for any Sensitive Area Likely to Be Occupied

Aerial applicators shall employ site-specific buffer zones adjacent to any Sensitive Area Likely to Be Occupied sufficient to prevent unlawful pesticide drift, unless consent has been granted by the landowner, lessee and occupant (when applicable), consistent with the provisions of Section 4(C) of this rule.

E. Wind Speeds for Aerial Applications

Unless otherwise specified by the product label, an applicator may not conduct an aerial application of pesticides within 1,000 feet of a Sensitive Area Likely to Be Occupied unless the wind speed is between 2 and 10 miles per hour.

SECTION 4. GENERAL STANDARDS FOR OFF-TARGET PESTICIDE DISCHARGE AND RESIDUE

A. Prohibition of Unconsented, Off-Target Direct Discharge of Pesticides

Pesticide applications shall be undertaken in a manner which does not result in off-target direct discharge of pesticides, unless prior authorization and consent is obtained from the owner or lessee of the land onto which such discharge may occur in a manner consistent with the pesticide label.

B. Standards for Unconsented, Off-Target Drift of Pesticides

- I. **General Standard.** Pesticide applications shall be undertaken in a manner which minimizes pesticide drift to the maximum extent practicable, having due regard for prevailing weather conditions, toxicity and propensity to drift of the pesticide, presence of Sensitive Areas in the vicinity, type of application equipment and other pertinent factors.
- II. **Prima Facie Evidence.** Pesticide residues in or on any off-target Sensitive Area Likely to Be Occupied resulting from off-target drift of pesticides from a nearby application that are 1% or greater of the residue in the target area are considered prima facie evidence that the application was not conducted in a manner to minimize drift to the maximum extent practicable. The Board shall review the site-specific application checklist completed by the applicator and other relevant information to determine if a violation has occurred. For purposes of this standard, the residue in the target area, and the residue in the Sensitive Area Likely to Be Occupied, may be adequately determined by evaluation of one or more soil, foliage or other samples, or by extrapolation or other appropriate techniques.
- III. **Standard of Harm.** An applicator may not apply a pesticide in a manner that results in:
 - (i) Off-target pesticide residue detected in or on any nearby crop which violates EPA tolerances for that crop, as established under 40 CFR, Part 180.
 - (ii) Off-target pesticide residue detected in or on any nearby organic farm or garden which causes the agricultural products thereof to be excluded from organic sale in accordance with 7 CFR, Part 205, Section 205.671.
 - (iii) Off-target pesticide residue detected on any nearby persons or vehicles using public roads.
 - (iv) Documented human illness. For this standard to be met, the Board must receive verification from two physicians that an individual has experienced a negative health effect from exposure to an applied pesticide and that the effect is consistent with epidemiological documentation of human sensitivity to the applied pesticide.
 - (v) Off-target damage or injury to any organism.
- IV. **Enforcement Considerations.** The Board shall consider the particular circumstances of violations arising from Subsections 4(B)(I) and (III) in determining an appropriate response, including, but not limited to:

- (i) The standard of care exercised by the applicator;
- (ii) The degree of harm or potential harm that resulted from or could have resulted from off-target drift from the application;
- (iii) The risk (toxicity and exposure) of adverse effects from the pesticide applied.

C. **Consent**

- I. **Consent, How Given.** Authorization and consent by the owner or lessee and occupant (when applicable) of land receiving a pesticide discharge or drift in a manner consistent with the pesticide label may be given in any manner, provided that the consent is reasonably informed and is given prior to the onset of the spray activity in question. The burden of proof shall be upon the applicator to demonstrate that requisite authorization and consent has been given. For this reason, applicators are encouraged to obtain such consent in writing and to maintain records thereof.
- II. The residue and harm standards in Sections 4(B)(II) and (III) for off-target drift do not apply where the owner, lessee and occupant (when applicable) of the off-target area receiving the pesticide drift have given authorization and consent as prescribed in Section 4(C).
- III. Except with the prior written approval of the Board, no authorization or consent may be given with regard to off-target direct discharge or off-target drift of pesticides upon any bodies of water or critical areas as defined in CMR 01-026, Chapter 10, "Definitions; Sensitive Area."

SECTION 5. **VARIANCES FROM STANDARDS**

A. **Variance Permit Application**

An applicator may vary from any of the standards imposed under this chapter by obtaining a permit to do so from the Board. Permit applications shall be made on such forms as the Board provides and shall include at least the following information:

- I. The name, address, and telephone number of the applicant;
- II. The area(s) where pesticides will be applied;
- III. The type(s) of pesticides to be applied;
- IV. The purpose for which the pesticide application(s) will be made;
- V. The approximate date(s) of anticipated spray activities;

- VI. The type(s) of spray equipment to be employed;
- VII. The particular standards from which the applicant seeks a variance;
- VIII. The particular reasons why the applicant seeks a variance from such standards, including a detailed description of the techniques to be employed to assure a reasonably equivalent degree of protection and of the monitoring efforts to be made to assure such protection;
- IX. The names and addresses of all owners or lessees of land within 500 feet of the proposed spray activity, and evidence that such persons have been notified of the application. The Board may waive this requirement where compliance would be unduly burdensome and the applicant attempts to notify affected persons in the community by another means which the Board finds reasonable.

B. Board Review; Legal Effect of Permit, Delegation of Authority to Staff

- I. Within 60 days after a complete application is submitted, the Board shall issue a permit if it finds that the applicant will achieve a substantially equivalent degree of protection as adherence to the requirements of this chapter would provide and will conduct spray activities in a manner which protects human health and the environment. Such permit shall authorize a variance only from those particular standards for which variance is expressly requested in the application and is expressly granted in the permit. The Board may place conditions on any such permit, and the applicant shall comply with such conditions. Except as conditioned in the permit, the applicant shall undertake spray activities in accordance with all of the procedures described in the application and all other applicable legal standards. Permits issued by the Board under this section shall not be transferable or assignable except with further written approval of the Board and shall be valid only for the period specified in the permit.
- II. The Board may delegate authority to review applications and issue permits to the staff as it feels appropriate. All conditions and limitations as described in Section 5(B) I shall remain in effect for permits issued by the staff. If the staff does not grant the variance permit, the applicator may petition the Board for exemption following the requirements set forth in 22 MRSA §1471-T, "Exemptions."

SECTION 6. EMERGENCIES

- A. In the event that severe pest or weather conditions threaten to cause a significant natural resource and/or economic loss, as determined by the Commissioner of the Maine Department of Agriculture, Conservation and Forestry, the requirements contained in Section 3 of this Chapter shall be waived, subject to the following conditions:
 - I. The severe pest and/or weather conditions must necessitate immediate wide-scale aerial application of pesticides.

- II. The immediate need for aerial pesticide application does not provide sufficient time to complete the requirements of Section 3 of this Chapter,
 - III. Prior to any aerial application, the Commissioner shall issue a press release notifying residents of affected regions about the emergency, the likelihood of aerial application in the affected regions and the approximate dates that the emergency may continue.
 - IV. The Commissioner, in consultation with the Board's staff, shall specify the requirements in Section 3 that will be waived.
 - V. Land managers and aerial applicators shall make good faith efforts to comply with the intent of Section 3 and minimize off-target drift to Sensitive Areas.
- B. When the Maine Center for Disease Control and Prevention (CDC) recommends control of disease vectors, government sponsored vector control programs are exempt from Sections 2C, 2D, 3B, 3C, 3D, 3E and 4 of this chapter, provided that reasonable efforts are made to avoid spraying non-target areas.

June 12, 2009 amendments become effective on January 1, 2010

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22 M.R.S.A. §1471-M(2)(D)

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