

General Drift Minimization

Introduction: The following drift minimization measures are permit conditions for pesticides, in addition to the drift minimization measures described on the pesticide label. Applicators are encouraged to utilize these measures for other pesticides whenever possible to minimize environmental contamination from drift.

I. AIRCRAFT

A. Aircraft application equipment used to apply a pesticide spray solution shall be configured as follows:

1. Functional boom length, measured from outboard nozzle to outboard nozzle, shall not exceed 75% of the overall wing span or rotor length.
2. Boom pressure shall not exceed 40 pounds per square inch of pressure for the nozzles being used.
3. The flow of liquid from each nozzle shall be controlled by a positive shutoff system.
 - (A) Each individual nozzle shall be equipped with a check valve and the flow controlled by a suckback device or a boom pressure release device; or
 - (B) Each individual nozzle shall be equipped with a positive action valve.
4. Nozzle orifices shall be directed backward parallel, neutral to the airstream of the aircraft in flight.
5. Aircraft shall be equipped with:
 - (a) Jet nozzles having an orifice of not less than one-sixteenth of an inch in diameter. Nozzles shall not be equipped with any device or mechanism which would cause a sheet, cone, fan, or similar type dispersion of the discharged material, except helicopters operating at 60 miles per hour or less shall be equipped with a number 46 (or equivalent) or larger whirlplate;
 - (b) Helicopters operating at 60 miles per hour or less may, instead of (a), be equipped with fan nozzles with a fan angle number not larger than 80 degrees and a flow rate not less than one gallon per minute at 40 pounds per square inch pressure (or equivalent); or
 - (c) The Microfoil® boom (a coordinated spray system including airfoil-shaped nozzles with each orifice not less than 0.013 inches in diameter) or equivalent type approved by the director.

B. Aerial applications of a pesticide spray solution shall meet the following requirements:

1. Apply only when there is a positive air flow. Wind speed shall not be more than ten miles per hour at the application site, as measured by an anemometer positioned four feet above the ground.
2. Discharge shall start after entering the target site; discharge height shall not exceed ten feet above the crop or target; discharge shall be shut off whenever necessary to raise the equipment over obstacles; discharge shall be shut off before exiting the target site.

II. GROUND

A. Vehicle-mounted or towed ground equipment, other than handguns, used to make applications shall be equipped with:

1. Nozzles having an orifice not less than one-sixteenth of an inch in diameter (or equivalent) and operated at a boom pressure not to exceed 30 pounds per square inch pressure for the nozzles being used; or
2. Low-pressure fan nozzles with a fan angle number not larger than 80 degrees and nozzle orifice not less than 0.2 gallon per minute flow rate (or equivalent) and operated at a boom pressure not to exceed 15 pounds per square inch.

B. Applications of a pesticide spray solution made by vehicle-mounted or towed ground equipment shall meet the following requirements:

1. Apply only when wind speed is ten miles per hour or less at the application site, as measured by an anemometer positioned four feet above the ground.
2. Discharge shall start after entering the target site; discharge shall be shut off before exiting the target site.