H: CHLORPYRIFOS

These recommendations apply to products containing chlorpyrifos labeled for the production of an agricultural commodity. Follow the most restrictive requirement, whether it is the label, regulations, or county agricultural commissioner (CAC) conditions.

Definitions

Application Block - A field or portion of a field treated in a 24-hour period that typically is identified by visible indicators, maps, or other tangible means. The perimeter of the application block is the border connecting the outermost edges of the total area treated.

Buffer zone – An area that surrounds a pesticide application block in which certain activities are restricted for a specified period of time to protect human health and safety from existing or potential adverse effects associated with a pesticide application.

Sensitive Site - As described by labels, sensitive sites are areas frequented by non-occupational bystanders (especially children). These include residential lawns, pedestrian sidewalks, outdoor recreational areas such as school grounds, athletic fields, parks, and all property associated with buildings occupied by humans for residential or commercial purposes. Sensitive sites include homes, farmworker housing, or other residential buildings, schools, daycare centers, nursing homes, and hospitals. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses, are not included in the prohibition.

Setback distance - Distance in feet that must separate sensitive sites from the application block. The distance must extend outward from the perimeter of the sensitive site to the perimeter of the application block. Setback distances must be established for chlorpyrifos applications near sensitive sites.

Notice of Intent

The notice of intent (NOI) must be submitted to the CAC at least 48 hours before the application begins and include the time application is scheduled to begin. The NOI must include a map showing the border of the site and the border of the application block(s), the 1320-foot buffer zone and 150-foot setback, and all sensitive sites within these distances. The NOI must include copies of all written permissions for the buffer zone to extend into other properties, as described below. The NOI must be accompanied by the PCA recommendation that identifies the allowed type of application that will be made, as described in the Allowed Applications.

Buffer Zone Requirements

The operator of the property and certified applicator must establish a buffer zone of 1320 feet (1/4 mile) for every chlorpyrifos application. The buffer zone extends outward from the perimeter of the application block. Only chlorpyrifos handling activities and transit are allowed within the buffer zone. The buffer zone is in effect during the application and for 24 hours after the end of the application. The buffer zone may extend into adjoining property, if the adjoining property operator gives written permission prior to the application. The written permission must specify that the operator of the other property and other persons will stay out of the buffer zone during the buffer zone period. The buffer zone may extend across streets, roads, roads within agricultural property, highways, and other similar transit areas. Buffer zones may overlap, but the total acreage for all application blocks within ½ mile cannot exceed 40 acres in a 24-hour period. Exceptions: Granular and drip applications do not require a buffer zone. When applications exceed 40 acres in a 24-hour period please refer to “Alternative for Application Blocks Larger than 40-Acres” section of these permit conditions.
**Setback Requirements**
In addition to the buffer zone, a setback distance of 150 feet to a sensitive site must be established for every chlorpyrifos application. The setback distance must extend outward from the perimeter of the sensitive site to the perimeter of the application block. A setback must be established even if the sensitive site is not occupied during the buffer zone period. No chlorpyrifos applications are allowed within the setback distance. Exceptions: Granular and drip applications do not require a setback.

**Figure of Chlorpyrifos Buffer Zone and Setback**

**Application Method Restrictions**
1) Aerial applications are prohibited.
2) All allowed applications must take place with a minimum wind speed of 3 mph and not more than 10 mph as measured at a height of 4 feet above the ground.
3) The size of an application block cannot exceed 40 acres in a 24-hour period.
4) Airblast applications:
   a. Spray the three outside crop rows from outside in, directing the spray into the treatment area and shutting off nozzles on the side of the sprayer away from the treatment area.
   b. Shut off top nozzles when treating smaller trees, vines, or bushes to minimize spray movement above the canopy.
   c. Shut off spray delivery when passing gaps in the crop canopy within rows.
5) Chemigation applications:
   a. The permittee or permittee's authorized representative, who is knowledgeable of the irrigation system, must be present at the treatment site during the application and must be trained as a pesticide handler.
6) Granular applications:
a. Immediately incorporate or clean-up granules that are spilled during loading or are visible on the soil surface in turn areas.

**Allowed Applications**

Permits can only be issued for the following chlorpyrifos applications that use ground-based equipment. A PCA recommendation that identifies the type of application listed below is required, and the PCA recommendation must accompany the NOI.

**General critical use applications for any commodity**

1) Applications made under an emergency exemption from registration (Section 18).
2) Applications made under a Special Local Need (Section 24(c)) registration.
3) Applications required by the U.S. Department of Agriculture, the California Department of Food and Agriculture, or CAC to control, suppress, or eradicate pests.

**Specific commodity/pest critical use applications**

4) Applications to alfalfa for
   a. Weevils
   b. Blue alfalfa aphid
   c. Cowpea aphid
5) Applications to almonds for
   a. Leaffooted bug
   b. Stink bugs
6) Applications to asparagus for
   a. Garden symphylans
   b. Asparagus aphid
7) Applications to citrus for ants
8) Applications to cole leafy vegetables, radish, rutabaga, or turnip for root maggots
9) Applications to cotton for
   a. Cotton aphid
   b. Sweetpotato whitefly
10) Applications to garlic for root maggots
11) Applications to grapes for
    a. Ants
    b. Vine mealy bugs
12) Applications to onions for root maggots
13) Applications to peppermint for
    a. Garden symphylans
    b. Mint root borer
14) Applications to walnuts for borers

**Low drift potential applications for any commodity**

15) Applications using a precision sprayer that meets the following criteria of the California Office of the Natural Resources Conservation Service’s Environmental Quality Incentives Program, Practice Standard 595:
    a. The precision pest control application must provide at least a 20% reduction in emissions over conventional application.
    b. Precision pesticide spray technologies that have peer-reviewed research documentation of the drift-reducing capabilities are allowed.
c. Not allowed are non-photo ID targeting applicators, spray nozzle modification technology, electro-static spray, open flame desiccation, or other non-target recognition technologies.

16) Applications using a granular product.
17) Applications using drip chemigation.

APPLICATION BLOCKS LARGER THAN 40-ACRES

In addition to the previous definitions, buffer zone requirements, setback requirements, application method restrictions, and allowed applications. The following alternative to the 40-acre limit may be used at the discretion of the CAC, and in consultation with the California Department of Pesticide Regulation. These recommendations apply to products containing chlorpyrifos labeled for the production of an agricultural commodity. Follow the most restrictive requirement, whether it is the label, regulations, or CAC conditions.

Notice of Intent
The notice of intent (NOI) must be submitted to the CAC at least 5 business days before the application begins and include the time application is scheduled to begin. The NOI must include a map showing the border of the site with acreage and dimensions and the border of the application block(s), the 1320-foot buffer zone and 150-foot setback, and all sensitive sites within these distances. The NOI must include copies of all written permissions for the buffer zone to extend into other properties, as described below. The NOI must be accompanied by the PCA recommendation that identifies the allowed type of application that will be made, as described in the Allowed Applications.

Application Restrictions
The size of an application block cannot exceed 80 acres in a 24-hour period. An application block larger than 40 acres cannot exceed one-pound active ingredient per acre.

All other permit conditions are unchanged, including the buffer zone of ¼ mile and the setback of 150 feet. The longest side of the 80-acre application block can be no more than ½ mile (2640 feet) to enable the buffer zone and setback to provide adequate protection. For example, an 80-acre block could be ½ mile (2640 feet) by ¼ mile (1320 feet).

This alternative also applies to granular and drip applications, but they are exempted from the buffer zone and setback requirements.

All the labels directions must be followed in addition to these permit conditions.