



Notice of Intent and Pest Control Recommendation Requirements

A written notice of intent (NOI) and recommendation shall be in the possession of the Agricultural Commissioner's Office at least 24 hours prior to the start of any application of restricted materials unless a specific waiver is granted by the Commissioner or if fumigants are being applied (see 'Fumigants'). The date and hour of the intended start time shall be on the NOI, must reflect at least 24 hours from when the NOI is received by this office, and the application shall not begin before the intended start time. The NOI will be valid until 11:59 p.m. on the fourth calendar day following the proposed date of application.

The Recommendation/NOI shall indicate that warning signs are required to be posted around the intended treatment area whenever required by the recommended pesticide product labeling or whenever the recommended application will result in a Restricted Entry Interval greater than 48 hours.

Protection of Waterways

No pesticides included on the permit shall be applied to any field during irrigation where run-off is likely to occur.

Maps and Mitigation Measures

Each application site shall be identified on a clear and legible map. Sensitive sites (3CCR§6428) and all areas where health, environment, or property may be adversely impacted by a pesticide application shall be clearly identified on the map, including the distances from the treatment site to the impacted areas.

Site-specific map conditions shall be clearly indicated on the map. Permittee and applicator are responsible for complying with all conditions. The written recommendation must not conflict with any conditions.

Aerial applications to fields adjacent to inhabited properties or sensitive environmental areas shall utilize a buffer zone of at least 100 feet to prevent adverse impact to these areas. The written recommendation shall include a statement or map identifying areas where the 100-foot buffer zone extends into any portion of the area to be treated.

When pesticide product labeling requires warning signs to be posted for worker notification, the operator of the property shall post signs around the intended treatment area prior to the start of the application. If a pest control business is performing the application, the application shall not begin until warning signs have been posted around the intended treatment area.

Residential Area: Three or more contiguous and inhabited properties.

Applications Near Schools or Daycares

- **No aerial applications within 1/4 mile** of school or daycare grounds within 12 hours of when the school or daycare will be in session.
- **No aerial applications within 1 mile** of school or daycare grounds when the school or daycare is in session or when school or daycare grounds are occupied.
- **No ground applications within 1/2 mile** of school or daycare grounds when the school or daycare is in session or when school or daycare grounds are occupied.

Protection of Bees

Pesticides whose labeling includes a statement that it is toxic to bees shall not be applied to fields that have bloom, including weed bloom, at any time when bees are visiting the treatment area. Applications of pesticides toxic to bees may be approved based on one of the following conditions:



1. The Recommendation/NOI states that there is no bloom at the treatment site.
2. The Recommendation/NOI states that the application shall start no earlier than 1 hour after sunset and finish no later than 2 hours before sunrise.
3. The licensed Pest Control Advisor establishes on the Recommendation that “Bees are not visiting the treatment area at the time of the application.” (This statement is not required on applications to corn fields which will be completed no later than 2 hours after sunrise.)
4. The Recommendation/NOI establishes that there are no registered beekeepers requesting notification within 2 miles of the application site.

In all cases, the more restrictive conditions or specific label requirements for bloom or bee protection must be complied with.

Phenoxy Herbicide Restrictions

Phenoxy herbicides, including 2,4-D; 2,4-DB; DMA salt of Dicamba (Banvel); and DGA salt of Dicamba (Clarity), shall not be applied except under the following conditions or by special job permit granted by the Commissioner:

- A statement establishing the following shall be included on the Recommendation/NOI:
 - No applications of **2,4-D** shall be performed when there are peppers, tomatoes, or cotton within 1 mile or cucurbits within 1/2 mile of the application site, which are in a susceptible stage of growth.
 - No applications of **2,4-DB** or **DMA salt of Dicamba** (Banvel) shall be performed when there are peppers, tomatoes, cotton, or cucurbits within 1/2 mile of the application site, which are in a susceptible stage of growth.
 - No applications of **DGA salt of Dicamba** (Clarity) shall be performed when there are peppers, tomatoes, cotton, or cucurbits within 1/4 mile of the application site, which are in a susceptible stage of growth.
- All crops which are susceptible to the phenoxy herbicide being applied within 500 feet of the treatment area, shall be clearly identified by common name on the Recommendation/NOI.
- No aerial applications of phenoxy herbicides shall be performed between March 15 and September 30.

Fumigants

Most fumigants require a complete, site-specific Fumigant Management Plan (FMP) as specified by the product labeling be submitted to and approved by the Commissioner each permit year for each application site. The FMP shall include a map detailing the application site, all applicable buffer zones, any sensitive areas, etc.

The first fumigant application at each site, each permit year, requires the Recommendation/NOI be submitted to the Commissioner at least 1 week prior to the intended application time. Subsequent NOI/Recommendations for the same fumigant at the same site shall be submitted at least 72 hours prior to the intended application time.

Chlorpyrifos – (Lorsban, Govern, Stallion, Vulcan, Warhawk, etc.)

- ❖ Introduction: 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.



❖ 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.

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.

❖ Application Method Restrictions:

1. All 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;
2. Airblast applications:
 - a. Spray the two 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;
3. Chemigation applications:
 - 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;
4. Granular applications:
 - Incorporate or clean-up granules that are spilled during loading or are visible on the soil surface in turn areas.

❖ Determining Application Rate – converting liquid volume to lbs AI/ac

Active ingredient (AI) application rate determines setback distance and is expressed as pounds of active ingredient per acre (lbs AI/ac). Liquid product labels usually have the application rate as pints or quarts of product per acre. To determine lbs AI/ac, the volume of product applied needs to be converted to pounds of active ingredient based on the amount of chlorpyrifos active ingredient in the product.

Generalized formula:

$$(lbs\ AI/gallon\ indicated\ on\ the\ label) \times (product\ volume\ converted\ to\ gallons)$$

Example – Lorsban Advanced

- Proposed application rate is 2 pints/acre
- Label states it contains 3.755 pounds of chlorpyrifos per gallon of product.
- 8 pints in a gallon.
- $lbs\ AI/ac = 3.755\ lbs\ AI\ /gal \times 2\ pints/ac \div 8\ pints/gal = 0.939\ lbs\ AI/ac.$

❖ Determining Application Rate – converting row feet rate to lbs AI/ac



Setback distances are for a broadcast application. When labels specify the application rate as fluid ounces per 1000 feet of row or 100 feet of row, the “broadcast equivalent application rate” is the rate of active ingredient (lbs AI/ac) within the entire application block. The “broadcast equivalent application rate” must be calculated to determine the setback distance.

Generalized formula converting fl oz per row feet to pints per acre:

$$(fl\ oz\ per\ 1000\ row\ feet) \div (row\ width\ in\ inches) \times 32.67^*$$

*32.67 is a factor combining several unit conversions, including inches to feet, square feet to acres, and fluid ounces to pints. For rates expressed as fl oz / 100 row feet, use 326.7 instead.

Example – Lorsban Advanced

- Label application rate for onions is 0.37 fluid ounces per 1000 feet of row, if the row spacing is 6 inches.
- Pints/acre = $0.37 \times 32.67 \div 6 = 2.01$ pints/acre.
- 2.01 pints /acre is converted to lbs AI/ac using the calculation above.

❖ Setback Distances

A setback distance must be established for every chlorpyrifos application near a sensitive site. The setback distance must extend outward from the perimeter of the sensitive site to the perimeter of the application block.

Use the following application and rate-specific setback distance tables for all chlorpyrifos applications.

Aerial application – fixed wing or rotary

Application Rate (lbs AI /ac)	Occupied Sensitive Site Setback Distance (feet)
≤1	250
>1– 2.3	500

Ground applications

Application Rate (lbs AI/ac)	Occupied Sensitive Site Setback Distance (feet)	
	Sprinkle Chemigation or ground boom	Airblast
≤1	150	150
>1 – 2	350	350
>2 – 4	400	400
>4 – 6	prohibited	500

The CAC may use the setback distances in the table below if non-occupational bystanders will not occupy the sensitive site anytime during the application and for 1 hour after the end of the application.

To ensure sensitive sites are not occupied anytime during the application and for 1 hour after the application, the certified applicator must do one of the following:

- enter into written vacating agreements for sites that could trigger the occupied sensitive site setbacks,
- or observe / monitor at the setback perimeter during the application and for 1 hour after the application.



Application Method	Unoccupied Sensitive Site Setback Distance (feet)
Ground Boom	25
Sprinkler Chemigation	50
Airblast	50*
Aerial	150

*Dormant Applications must comply with 3 CCR § 6960