

## TEXT OF PROPOSED REGULATIONS

---

Current wording is indicated by regular type.  
Originally proposed deletions are indicated by ~~strikeout~~.  
Originally proposed additions are indicated by underline.

---

### DIVISION 6. PESTICIDES AND PEST CONTROL OPERATIONS CHAPTER 2. PESTICIDES SUBCHAPTER 4. RESTRICTED MATERIALS ARTICLE 4. FIELD FUMIGATION USE REQUIREMENTS

Amend section 6447(h) to read:

#### **6447. Chloropicrin and Methyl Bromide Field Fumigation - General Requirements.**

The provisions of this section and sections 6447.1, 6447.2, 6447.3, and 6784(b) pertain to field soil fumigation using methyl bromide. For purposes of these sections, field soil fumigation does not apply to golf courses, replant of individual vine or tree-sites (tree holes) less than one contiguous acre, raised-tarpaulin nursery fumigations of less than one acre, potting soil, and greenhouses and other similar structures.

(a) In addition to the requirements of section 6428, the operator of the property to be treated shall submit a proposed work site plan to the commissioner for evaluation at least seven days prior to submitting a notice of intent. The proposed work site plan shall include, but is not limited to, method of application to be used, acreage and identification of each application block to be treated, application rate to be used, description of the notification procedure to property operators pursuant to section 6447.1(b), description of any activities within the buffer zone(s) as specified in section 6447.2(e) and (f), description of any workday/work hour limitations and respiratory protection as specified in sections 6784(b)(2)(C) and (b)(3), and if applicable, description of the tarpaulin repair response plan, and tarpaulin removal. The commissioner shall retain the proposed worksite plan for one year after the expiration of the permit.

(b) The commissioner, pursuant to section 6432, shall evaluate local conditions and the proposed work site plan.

(c) The commissioner shall include at least the following when conditioning a permit: the buffer zone requirements, work-hour restrictions, notification requirements, any other restrictions to address local conditions, and if applicable, description of the tarpaulin repair response plan and tarpaulin removal. The commissioner shall complete the evaluation and complete conditioning the permit prior to the submission of the notice of intent.

(d) An application block shall not exceed 40 acres unless approved by the Director.

(e) Except for experimental research purposes pursuant to a valid research authorization issued according to section 6260, or a reduced volatile organic compound emission fumigation method approved pursuant to section 6452, tarpaulins shall have a permeability factor of no less than 5 and no more than 8 milliliters methyl bromide per hour, per square meter, per 1,000 parts per million of methyl bromide under the tarpaulin at 30 degrees Celsius, and be approved by the Department. A list of approved tarpaulins is available from the Department.

(f) Tarpaulins shall be buried under at least four inches of firmly packed soil at the end of the rows. The tarpaulins shall remain in place for the time specified in section 6447.3.

(g) Fumigation equipment shall be operated to eliminate pesticide drip by clearing the fumigant from the injection device before it is lifted or removed from the soil.

(h) ~~The Department, in coordination with eCounty agricultural commissioners,~~ shall ensure that agricultural use ambient air concentrations of methyl bromide does not exceed an average daily non-occupational exposure of nine parts per billion 171,625 pounds in a township in a calendar month. County agricultural commissioners shall deny any permit or notice of intent that would cause the 171,625 pound limit to be exceeded.

NOTE: Authority cited: Sections 11456, 12976, 12981, 14005 and 14102, Food and Agricultural Code. Reference: Sections 11501, 12981, 14006 and 14102, Food and Agricultural Code.

Amend section 6447.2 to read:

### **6447.2. Methyl Bromide Field Fumigation Buffer Zone Requirements.**

(a) The commissioner shall ~~approve~~ set buffer zone sizes and durations based upon local conditions. The commissioner may not allow a buffer zone that is smaller or a duration that is less in permit conditions than those listed shall rely upon the information provided in Methyl Bromide Field Fumigation Buffer Zone Determination, Est. 2/04 Rev. 3/10, hereby incorporated by reference, ~~to condition restricted material permits, unless the commissioner determines based on other information that a deviation from the information in Methyl Bromide Field Fumigation Buffer Zone Determination, Est. 2/04, can be made in a way that assures equal or less exposure. At no time shall the inner buffer zone be less than 30 feet, and the outer buffer zone be less than 60 feet, or the buffer zone durations be less than 36 hours.~~

(b) The operator of the property to be treated shall assure that all buffer zone distances are measured from the perimeter of the application block.

(c) The buffer zone restrictions shall begin at the start of fumigation. The buffer zone restrictions shall remain in effect for at least 36 hours after the completion of the injection to the application block.

(d) Two buffer zones, an inner and outer for each application block, shall be approved by the commissioner after the proposed worksite plan is submitted.

(e) Inner Buffer Zone Restrictions.

(1) The inner buffer zone shall be at least 30 feet.

(2) The operator of the property to be treated shall assure that no persons are allowed within the inner buffer zone except to transit and perform fumigation-handling activities.

(3) The inner buffer zone shall not extend into adjoining property except as provided below:

(A) The inner buffer zone may extend into adjoining agricultural property if the adjoining property operator gives written permission and allows the operator of the property to be treated to post the inner buffer zone boundary on the adjoining property with signs. If such written permission is given, the operator of the property to be treated shall assure that:

1. the inner buffer zone boundaries on the adjoining property are posted with signs while the buffer zone is in effect; and

2. the signs are posted so that the wording is clearly visible, to persons with normal vision, from a distance of 25 feet and shall contain the following words: "METHYL BROMIDE INNER BUFFER ZONE" and "KEEP OUT" and "NO ENTRE"; and

3. the signs are posted at intervals not exceeding 200 feet.

(B) With approval from the commissioner, the inner buffer zone may extend across sites only where transit activities may occur, including streets, roads, roads within agricultural property, highways, and other similar sites of travel. Written permission and posting requirements in 6447.2(e)(3)(A) shall not apply.

(f) Outer Buffer Zone Restrictions.

(1) The outer buffer zone shall be at least 60 feet.

(2) The operator of the property to be treated shall assure that no persons are allowed within the outer buffer zone except to transit, perform fumigation-handling activities, and commissioner-approved activities as identified in the restricted materials permit conditions. In no instance shall persons be allowed within the outer buffer zone for more than 12 hours in a 24-hour period.

(3) The outer buffer zone may extend into other properties with permission from the operators of these other properties. In no instances shall the outer buffer zone contain occupied residences or occupied onsite employee housing while the outer buffer zone is in effect. The outer buffer zone shall not extend into properties that contain schools, convalescent homes, hospitals, or other similar sites determined by the commissioner.

(4) The outer buffer zone may extend across roads, highways, or similar sites of travel or sites approved by the commissioner.

(g) The operator of the property to be treated shall assure that the operator of the other properties specified in (e)(3)(A) and (f)(3) above, notify the following persons that a buffer zone(s) has been established on the property: onsite employees, including those of a licensed pest control business or farm labor contractor. The notice to employees shall be given prior to the commencement of the employee's work activity. Notification to farm labor contractor employees may be done by giving written notice to the farm labor contractor who shall then give the notice to the employee. Employee notification shall be in a manner the employee can understand, and include information required in section 6447.1(b)(2).

(h) The operator of the property to be treated shall assure that specific notification of the date and time of the start of the fumigation and anticipated expiration of buffer zones is provided to the other property operator, if the operator of the other property is required to notify his/her employees as specified in (g). This specific fumigation notification shall be provided to the other property operator at least 48 hours prior to starting the fumigation. If the fumigation of an application block does not commence within the time frame specified in 6447.1(a)(2), then a new notification must be provided to the other property operator specified in (e)(3)(A) and (f)(3), but the 48-hour requirement shall not apply unless required by the commissioner.

(i) When a school property is within 300 feet of the perimeter of the outer buffer zone, the injection shall be completed no less than 36 hours prior to the start of a school session. School session shall be those times when students are attending scheduled classes.

NOTE: Authority cited: Sections 11456, 12976, 12981, 14005 and 14102, Food and Agricultural Code. Reference: Sections 11501, 12981, 14006 and 14102, Food and Agricultural Code.

CHAPTER 3. PEST CONTROL OPERATIONS  
SUBCHAPTER 3. FIELD WORKER SAFETY  
ARTICLE 4. FUMIGATION

Amend section 6784 to read:

**6784. Field Fumigation.**

(a) Signs required to be posted in accordance with section 6776(f) shall remain in place until aeration is complete.

(b) The provisions of this subsection pertain to field soil fumigations using methyl bromide applied pursuant to the fumigation methods described in section 6447.3.

(1) Employer Recordkeeping. The employer shall maintain records for all employees performing fumigation-handling activities. The records shall identify the person, work activity(ies), date(s), duration of handling, the U.S. Environmental Protection Agency Registration Number, and the brand name of the methyl bromide product handled. The employer shall maintain these use records at a central location for two years.

(2) Employee Protection Requirements.

(A) Employees involved primarily in shoveling shall work only at the ends of the application rows.

(B) At least two trained employees shall be present during introduction of methyl bromide and removal of tarpaulins, if used.

(C) When required by this section, employees shall wear National Institute for Occupational Safety and Health (NIOSH)-certified respiratory protection specifically recommended by the manufacturer for use in atmospheres containing ~~less than~~ five parts per million or less methyl bromide. Employees shall wear the required respiratory protection during the entire duration of the fumigation-handling activity. NIOSH-approved, air-supplying respiratory protection may be used in lieu of chemical cartridge respirators.

(3) Limited Work Hours and Workdays.

(A) No employee may work in fumigation-handling activities more than the hours specified in Table 1--Maximum Work Hours during the injection period and during the restricted-entry interval.

1. An employee may perform fumigation-handling activities without the work-hour limitations specified in Table 1--Maximum Work Hours if a full-face respirator is worn during the entire duration of the activity.

2. Multiple-Task Employees. An employee may work in more than one work task and/or application method in a 24-hour period as long as the employee's total work hours do not exceed the lowest total hours specified in Table 1--Maximum Work Hours for any one work task or application method performed.

(B) Notwithstanding subsection (b)(3)(A), an employee may work in fumigation-handling activities in a 24-hour period for the work hours specified in Table 2--Maximum Work Hours in a Maximum Three (3) Workdays Per Calendar Month during the injection period and during the restricted-entry interval, provided the employee's total workdays performing fumigation-handling activities do not exceed three days in a calendar month.

1. An employee may perform fumigation-handling activities without the work-hour limitations specified in Table 2--Maximum Work Hours in a Maximum Three (3) Workdays Per Calendar Month if a half-face respirator is worn during the entire duration of the activity.

2. Multiple-Task Employees. An employee may work in more than one work task and/or application method in a 24-hour period as long as the employee's total work hours do not exceed the lowest total hours specified in Table 2– Maximum Work Hours in a Maximum Three (3) Workdays Per Calendar Month for any one work task or application method performed.

Table 1. Maximum Work Hours

Fumigation Method/Activities	Maximum Application Rate (lbs. of actual methyl bromide <u>per acre</u> )	Maximum Work Hours in a 24-Hour Period Wearing Half-Face Respirator During Entire Fumigation-Handling Activity
Nontarpaulin/Shallow/Bed: Tractor Equipment Driving Supervising	200 lbs.	<del>9</del> <u>8</u> * <del>9</del> <u>8</u> *
Nontarpaulin/Deep/Broadcast: Tractor Equipment Driving Supervising	400 lbs.	<del>10</del> <u>8</u> * <del>no limitation</del> <u>8</u> <sup>1</sup>
Tarpaulin/Shallow/Broadcast: Tractor Equipment Driving Shoveling, Copiloting Supervising Tarpaulin Cutting Tarpaulin Removal	400 lbs.	<del>8</del> <u>7</u> * <del>4</del> <u>3</u> * <del>4</del> <u>3</u> * <del>no limitation</del> <u>10</u> <sup>1</sup> no limitation <u>2</u>
Tarpaulin/Shallow/Bed: Tractor Equipment Driving Shoveling, Copiloting Supervising Tarpaulin Cutting Tarpaulin Removal	250 lbs.	no limitation <del>8</del> <u>6</u> * <del>8</del> <u>6</u> * <del>no limitation</del> <u>10</u> <sup>1</sup> no limitation <u>2</u>
Tarpaulin/Deep/Broadcast: Tractor Equipment Driving Shoveling, Copiloting Supervising Tarpaulin Cutting Tarpaulin Removal	400 lbs.	<del>8</del> <u>7</u> * <del>4</del> <u>3</u> * <del>4</del> <u>3</u> * <del>no limitation</del> <u>10</u> <sup>1</sup> no limitation <u>2</u>
Drip System – Hot Gas: Applicators Supervising Tarpaulin Cutting Tarpaulin Removal	225 lbs.	<del>5</del> <u>4</u> * <del>5</del> <u>4</u> * <del>no limitation</del> <u>10</u> <sup>1</sup> no limitation <u>2</u>

<sup>1</sup> Exception: An employee may perform this activity without a half-face respirator provided the employee does not work more than one hour in a 24-hour period. The maximum one-hour work limitation may be increased in accordance with the formula located below.

<sup>2</sup> Exception: An employee may perform this activity without a half-face respirator provided the employee does not work more than three hours in a 24-hour period. The maximum three-hour work limitation may be increased in accordance with the formula located below.

\* If the actual methyl bromide application rate is less than the maximum application rate shown above in Table 1 or below in Table 2 for the particular fumigation method used, the maximum work hours may be increased in accordance with the following formula:

$$\left( \frac{\text{maximum application rate for method}}{\text{actual application rate}} \right) \times \begin{matrix} \text{maximum} \\ \text{work hours in a} \\ \text{24-hour period} \end{matrix} = \begin{matrix} \text{revised maximum} \\ \text{work hours in a} \\ \text{24-hour period} \end{matrix}$$

Table 2. Maximum Work Hours in a Maximum Three (3) Workdays Per Calendar Month

Fumigation Method/Activities	Maximum Application Rate (lbs. of actual methyl bromide <u>per acre</u> )	Maximum Work Hours in a 24-Hour Period Without the Use of Respirators
Nontarpaulin/Shallow/Bed: Tractor Equipment Driving Supervising	200 lbs.	4* 4*
Nontarpaulin/Deep/Broadcast: Tractor Equipment Driving Supervising	400 lbs.	4* 7*
Tarpaulin/Shallow/Broadcast: Tractor Equipment Driving Shoveling, Copiloting Supervising Tarpaulin Cutting Tarpaulin Removal	400 lbs.	4* 3* 3* 4 7
Tarpaulin/Shallow/Bed: Tractor Equipment Driving Shoveling, Copiloting Supervising Tarpaulin Cutting Tarpaulin Removal	250 lbs.	4* 4* 4* 4 7

Tarpaulin/Deep/Broadcast: Tractor Equipment Driving Shoveling, Copiloting Supervising Tarpaulin Cutting Tarpaulin Removal	400 lbs.	4* 3* 3* 4 7
Drip System – Hot Gas: Applicators Supervising Tarpaulin Cutting Tarpaulin Removal	225 lbs.	2* 2* 4 7

(C) No employee shall be allowed to alternate between the workday and work-hour requirements specified in subsection (b)(3)(A) and (B) unless the employee did not perform fumigation-handling activities during the previous 30 days.

(4) Tarpaulin Cutting and Removal Procedures.

(A) Tarpaulin cutting and tarpaulin removal shall be discontinued if the presence of gas is readily evident (onset of eye irritation or odor).

(B) Tarpaulins used for broadcast fumigations shall be cut using only mechanical methods, including all-terrain vehicle or a tractor with a cutting wheel. Each tarpaulin panel used for broadcast fumigations shall be cut lengthwise.

(5) Tarpaulin Repair.

(A) The operator of the property shall assure that a "tarpaulin repair response plan" is provided to the commissioner. The tarpaulin repair response plan shall identify the responsibilities of the licensed pest control business and/or the permittee with regard to tarpaulin damage detection and repair activities. At a minimum, the tarpaulin repair response plan shall indicate the parties responsible for the repair and incorporate the applicable elements listed in (B) below.

(B) The "tarpaulin repair response plan" approved by the commissioner in the work site plan must state with specificity the situations when tarpaulin repair must be conducted. The situations should be based on, but not limited to, hazard to the public, residents, or workers; proximity to occupied structures, size of the damaged area(s); timing of damage; feasibility and response time of repair; and environmental factors such as wind speed and direction.

(C) The ambient air in the damaged areas of the tarpaulin to be repaired must be tested for methyl bromide concentration by a certified applicator of the licensed pest control business that made the application, or by a certified applicator employee of the permittee, or certified applicator permittee, using a testing device as specified by the labeling. The certified applicator must wear self-contained breathing apparatus when conducting these tests.

(D) All repair work areas must test less than five parts per million methyl bromide before any employee without respiratory protection shall be allowed to enter and conduct tarpaulin repair. Such employee is limited to one work hour in a 24-hour period, unless respiratory protection specified in subsection (b)(2)(C) is worn.

NOTE: Authority cited: Sections 11456 and 12981, Food and Agricultural Code. Reference: Section 12981, Food and Agricultural Code.