

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. PESTICIDE REGULATORY PROGRAM
SUBCHAPTER 1. DEFINITION OF TERMS
ARTICLE 1. DEFINITIONS FOR DIVISION 6

Amend section 6000 to read:

6000. Definitions.

...

"**Handle**" means mixing, loading, transferring, applying (including chemigation), or assisting with the application (including flagging) of pesticides, maintaining, servicing, repairing, cleaning, or handling equipment used in these activities that may contain residues, working with opened (including emptied but not rinsed) containers of pesticides, adjusting, repairing, or removing treatment site coverings, incorporating (mechanical or watered-in) pesticides into the soil, entering a treated area during any application or before the inhalation exposure level listed on pesticide product labeling has been reached or greenhouse ventilation criteria have been met, or performing the duties of a crop advisor, including field checking or scouting, making observations of the well-being of the plants, or taking samples during an application or any restricted entry interval or entry restricted period listed on pesticide product labeling or other handling activities specified by the label. Handle does not include ~~local, state, or federal officials performing~~ inspection, sampling, or other similar official duties performed by local, state, or federal officials.

...

"**Treated field**" means a field that has been treated with a pesticide or had a restricted entry interval or entry restricted period in effect within the last 30 days. A treated field includes associated roads, paths, ditches, borders, and headlands, if the pesticide was also directed to those areas. A treated field does not include areas inadvertently contaminated by drift or over spray.

...

NOTE: Authority cited: Sections 11456, 11502, 12111, 12781, 12976, 12981, 13145, 14001, and 14005, Food and Agricultural Code. Reference: Sections 11401.2, 11408, 11410, 11501, 11701, 11702(b), 11704, 11708(a), 12042(f), 12103, 12971, 12972, 12973, 12980, 12981, 13145, 13146, and 14006, Food and Agricultural Code.

CHAPTER 2. PESTICIDES
SUBCHAPTER 4. RESTRICTED MATERIALS
ARTICLE 4. FIELD FUMIGATION USE REQUIREMENTS

Amend section 6445 to read:

6445. Fumigation-Handling Activities.

For purposes of sections 6447-6447.3, and 6784(b), fumigation-handling activities are limited to employees involved in assisting with covering the tarpaulin at the end of the rows (shoveling); assisting in the overall operation, ensuring proper tarpaulin placement and condition, and changing cylinders (copiloting); operating tractor equipment (driving); supervising the fumigation operation; operating chemigation equipment and assisting in chemigation application and leak repair (chemigating); tarpaulin cutting; tarpaulin or chemigation equipment removal prior to the expiration of the entry restricted entry interval period; and other handling activities specified by the label.

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

Amend section 6447 to read:

6447. 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~~ must include, but is not limited to, method of application to be used, acreage and identification of each application block to be treated, broadcast equivalent 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(~~ec~~) and (~~fd~~), description of any workday/work hour limitations as specified in section 6784(b)(3) and respiratory protection as specified ~~in sections 6784(b)(2)(C) and (b)(3) and on the label~~, 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~~ must 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~~ must 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. This includes tarpaulins that have been tested for permeability and determined by the U.S. Environmental Protection Agency to qualify for at least 60 percent buffer zone reduction credit. The use of this tarpaulin will not allow the reduction of buffer zone distances specified on the label. A list of approved tarpaulins is available from the Department.

(f) Tarpaulins ~~shall~~ must be buried under at least four inches of firmly packed soil at the end of the rows. The tarpaulins ~~shall~~ must 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.~~

~~(hg)~~ County agricultural commissioners shall ensure that agricultural use of methyl bromide does not exceed 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 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 ~~in Methyl Bromide Field Fumigation Buffer Zone Determination, Rev. 3/10, hereby incorporated by reference specified on the label.~~

~~(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.~~

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

~~(ec)~~ Inner Buffer Zone Restrictions.

(1) The inner buffer zone ~~shall~~ must 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 on public and private roadways by vehicles or bicycles; ~~and or to perform fumigation-handling activities.~~

(3) The inner buffer zone ~~shall~~ must 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 with wording criteria in accordance with the label; 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, and highways, and other similar sites of travel. Written permission and posting requirements in 6447.2 (ec)(3)(A) shall not apply.

(fd) Outer Buffer Zone Restrictions.

(1) The outer buffer zone ~~shall~~ must 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 on public and private roadways by vehicles or bicycles, 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 written permission from the operators of these other properties. In no instances shall the outer buffer zone contain occupied residences or buildings, or occupied onsite employee housing while the outer buffer zone is in effect. The outer buffer zone ~~shall~~ must 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.

(ge) The operator of the property to be treated shall assure that the operator of the other properties specified in (ec)(3)(A) and (fd)(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~~ must 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~~ must be in a manner the employee can understand, and include information required in section 6447.1(b)(2).

(hf) 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 (ge). This specific fumigation notification ~~shall~~ must 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 (ec)(3)(A) and (fd)(3), but the 48-hour requirement shall not apply unless required by the commissioner.

(ig) ~~When~~ No fumigant application with an outer buffer zone greater than 300 feet is permitted within ¼ mile of a school property is within 300 feet of the perimeter of the outer buffer zone, the injection shall be completed no unless the school is scheduled to be unoccupied during the application period and for less than 36 hours thereafter, 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.

Amend section 6447.3 to read:

6447.3. Methyl Bromide Field Fumigation Methods.

(a) The methyl bromide field soil fumigation must be made using only the methods described in this section. However, within the San Joaquin Valley, Southeast Desert, or Ventura ozone nonattainment areas, the following methods are prohibited during the May 1 through October 31 time period: ~~(1), (2), (4), and (6);~~ and if applied as alternating fumigated and unfumigated areas (strip fumigation), methods (3) and (5). In addition to labeling requirements for each of these methods, the following requirements shall apply:;

- (1) ~~Nontarpaulin/Shallow/Bed (Reserved)~~
 - ~~(A) Application rate shall not exceed 200 pounds of methyl bromide per acre.~~
 - ~~(B) The application tractor shall be equipped with an air fan dilution system.~~
 - ~~(C) Rearward-curved (swept-back) chisels shall be used with:
 - 1. closing shoes and bed-shaper, or closing shoes and compaction roller; and
 - 2. chisel injection points positioned beneath and ahead of the closing shoes.~~
 - ~~(D) Injection depth shall be between 10 and 15 inches. The injection depth to preformed beds must not be below the bed furrow.~~
 - ~~(E) Injection spacing shall be 40 inches or less.~~
 - ~~(F) The soil shall not be disturbed for at least three days (72 hours) following completion of injection to the application block.~~
 - ~~(G) The application block restricted entry interval shall be three days.~~
- (2) Nontarpaulin/Deep/Broadcast
 - (A) Broadcast equivalent Application rate shall must not exceed 400 pounds of methyl bromide per acre.
 - (B) Forward-curved chisel shall must be used with:
 - 1. An application tractor equipped with an air fan dilution system, and the injection depth shall must be at least 20 inches; or
 - 2. Closing shoes and compaction roller and the injection depth shall must be at least 24 inches.
 - (C) Injection spacing shall must be 68 inches or less.
 - (D) The soil shall must not be disturbed for at least four days (96 hours) following completion of injection to the application block.
 - ~~(E) The application block restricted entry interval shall be four days.~~
- (3) Tarpaulin/Shallow/Broadcast
 - (A) Broadcast equivalent Application rate shall must not exceed 400 pounds of methyl bromide per acre.
 - (B) Application shall must be made using ~~either:~~
 - 1. ~~A~~an application tractor equipped with an air fan dilution system, and with a plow consisting of horizontal v-shaped blades mounted by a vertical arm to the tool bar. The fumigant shall must be injected laterally beneath the soil surface; ~~or~~
 - 2. ~~Rearward-curved (swept-back) chisels, closing shoes, and compaction roller shall be used.~~
 - (C) Injection depth shall must be at least 10 and no greater than 15 inches.
 - (D) Injection spacing shall must be 12 inches or less.

(E) The tarpaulin ~~shall~~ must be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor.

(F) ~~The tarpaulin shall not be cut until a minimum of five days (120 hours) following completion of injection to the application block. If using a tarpaulin that has been tested for permeability and determined by the U.S. Environmental Protection Agency to qualify for at least 60 percent buffer zone reduction credit, the tarpaulin must not be cut or perforated until a minimum of nine days following completion of injection to the application block. The tarpaulin shall be cut pursuant to section 6784(b)(4).~~

(G) Tarpaulin removal shall begin no sooner than 24 hours after tarpaulin cutting has been completed.

~~(H) The application block restricted entry interval shall end at completion of tarpaulin removal, and shall be at least six days.~~

(4) Tarpaulin/Shallow/Bed

(A) ~~Broadcast equivalent~~ Application rate shall must not exceed 250 pounds of methyl bromide per acre.

(B) Rearward-curved (swept-back) chisels shall must be used with either:

1. Closing shoes and compaction roller. The closing shoes shall must cover the chisel marks with soil just ahead of the compaction roller, and the tarpaulin shall must be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or

2. Bed shaper. The chisels shall must be placed with the injection point under the bed shaper, and the tarpaulin shall must be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor; or

3. Combination bed former and bed shaper. The chisels shall must be placed between the bed former and the bed shaper. The tractor with the tarpaulin-laying equipment shall must immediately follow the application tractor.

(C) Injection depth shall be between 6 and 15 inches. The injection depth to preformed beds must not be below the bed furrow.

(D) Injection spacing shall must be 12 inches or less.

~~(E) The tarpaulin shall not be cut until at least five days (120 hours) following completion of injection to the application block. If using a tarpaulin that has been tested for permeability and determined by the U.S. Environmental Protection Agency to qualify for at least 60 percent buffer zone reduction credit, the tarpaulin must not be cut or perforated until a minimum of nine days following completion of injection to the application block.~~

(F) If tarpaulins are removed before planting, tarpaulin removal shall begin no sooner than 24 hours after tarpaulin cutting has been completed. ~~The application block restricted entry interval shall end at completion of tarpaulin removal, and shall~~ entry restricted period must be at least six days, or 10 days if using tarpaulin described in (E).

(G) If tarpaulins are not to be removed before planting, the application block entry restricted-entry interval period shall must either:

1. consist of the five-day period ~~described in subsection (E)~~ plus an additional 48 hours after holes have been cut for planting if using a tarpaulin not described in subsection (E), or

2. consist of a nine-day period plus an additional 48 hours after holes have been cut for planting, if using a tarpaulin described in subsection (E), or

3. be at least 14 days. If this option is chosen, the methyl bromide air concentration underneath the tarpaulin must test less than five parts per million before planting begins.

(5) Tarpaulin/Deep/Broadcast

(A) ~~Broadcast equivalent~~ Application rate shall must not exceed 400 pounds of methyl bromide per acre.

(B) Forward-curved chisels shall must be used with either:

1. An air fan dilution system on the application tractor; or
2. Closing shoes and compaction roller.

(C) Injection depth shall must be at least 20 inches.

(D) Injection spacing shall must be 66 inches or less.

(E) The tarpaulin shall must be laid down simultaneously (with fumigant injection) by tarpaulin-laying equipment mounted on the application tractor.

~~(F) The tarpaulin shall not be cut until at least five days (120 hours) following completion of injection to the application block. If using a tarpaulin that has been tested for permeability and determined by the U.S. Environmental Protection Agency to qualify for at least 60 percent buffer zone reduction credit, the tarpaulin must not be cut or perforated until a minimum of nine days following completion of injection to the application block. The tarpaulin shall be cut pursuant to section 6784(b)(4)~~

(G) Tarpaulin removal shall must begin no sooner than 24 hours after tarpaulin cutting has been completed.

~~(H) The application block restricted entry interval shall end at completion of tarpaulin removal, and shall be at least six days.~~

(6) Drip System - Hot Gas

A hot gas application through a subsurface drip irrigation system to tarpaulin-covered beds may be used if all of the following criteria are met:

(A) ~~Broadcast equivalent~~ Application rate shall must not exceed 225 pounds of methyl bromide per acre.

(B) The fumigant shall must be injected beneath the soil surface at a minimum depth of one inch.

(C) The portion of the drip system used in the fumigation shall must be physically disconnected from the main water supply during the fumigation to prevent possible contamination of the water supply.

(D) All fittings and emitters underneath the tarpaulin shall must be buried in the soil to a minimum depth of one inch.

(E) Prior to the start of the fumigation, all drip tubing shall must be checked for blockage, and the irrigation system connections and fittings checked for blockage and leaks using pressurized air and/or water. The end of each drip tubing shall must be placed under the tarpaulin prior to introduction of fumigant.

(F) The tarpaulin shall must be placed and inspected for tears, holes, or improperly secured edges prior to fumigating. Repairs and adjustments shall must be made before the fumigation begins.

(G) Prior to the start of the fumigation, all fittings above ground and outside of the tarpaulin shall must be pressure-tested with compressed air, water, or nitrogen gas to a maximum pressure of 50 pounds per square inch. A soap solution shall must be used to check the fittings for leaks if using air or nitrogen. All apparent leaks shall must be eliminated prior to the fumigation. All drip tubing with emitters connected to the distribution manifold not covered by the tarpaulin shall must be sealed to prevent fumigant loss through the emitters.

(H) Prior to introducing the fumigant, the drip system shall must be purged of water by means of pressurized gas, such as CO₂ or nitrogen.

(I) The drip system shall must be purged prior to disconnecting any line containing the fumigant.

(J) After purging, drip tubing ~~shall~~ must be pinched off and then disconnected from the distribution manifold. All disconnected tubing leading into the treated field ~~shall~~ must be secured to prevent gas from escaping.

(K) All fittings used for connecting or disconnecting the heat exchanger to the irrigation system manifold ~~shall~~ must be of a positive shut-off design.

(L) All persons ~~shall~~ must wear the eye protection specified on the label when working with a manifold system or tubing containing the fumigant under pressure.

(M) The entire fumigation system (heater, valves, and manifold) ~~shall~~ must be purged of the fumigant at the end of each day's fumigation.

(N) ~~The tarpaulin shall not be cut until at least five days (120 hours) following completion of injection to the application block. If using a tarpaulin that has been tested for permeability and determined by the U.S. Environmental Protection Agency to qualify for at least 60 percent buffer zone reduction credit, the tarpaulin must not be cut or perforated until a minimum of nine days following completion of injection to the application block.~~

(O) If tarpaulins are removed before planting, tarpaulin removal shall begin no sooner than 24 hours after tarpaulin cutting has been completed. ~~The application block restricted entry interval shall end at completion of tarpaulin removal and shall~~ entry restricted period must be at least six days, or 10 days if when using tarpaulin described in (N).

(P) If tarpaulins are not to be removed before planting, the application block entry restricted-entry interval period shall must either:

1. consist of the five-day period ~~described in subsection (N)~~ plus an additional 48 hours after holes have been cut for planting, if using a tarpaulin not described in subsection (N), or

2. consist of a nine-day period plus an additional 48 hours after holes have been cut for planting, if using a tarpaulin described in subsection (N), or

3. be at least 14 days. If this option is chosen, the methyl bromide air concentration underneath the tarpaulin must test less than five parts per million before planting begins.

(b) Notwithstanding section 6770, the operator of the property shall assure that only persons performing fumigation-handling activities are allowed in an application block before the entry restricted entry interval period expires. Persons performing activities other than tarpaulin cutting, removal, and repair described in sections 6784(b)(3), ~~(4)~~, and (5) shall wear a full-face respirator that meets the requirements ~~of section 6784(b)(2)(C)~~ specified on the label.

(c) Notwithstanding subsection (a), a reduced volatile organic compound emission field fumigation method approved pursuant to section 6452 or a method for experimental research purposes pursuant to a valid research authorization issued according to section 6260 may be allowed.

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 6448.1 to read:

6448.1. 1,3-Dichloropropene Field Fumigation Methods.

(a) ~~Broadcast equivalent A~~ Application rate must not exceed 332 pounds of 1,3-Dichloropropene active ingredient per acre.

~~(b) If there are no labeling requirements specifying soil moisture, then at time of application soil must contain at least enough moisture above the depth of application to meet the following test appropriate to the soil texture for:~~

(1) ~~coarse soils (sand and loamy sand) at least enough moisture to form a ball when compressed by hand, that may break when tapped;~~

(2) ~~loamy, moderately coarse, or medium textured (coarse sandy loam, sandy loam, fine sandy loam) at least enough moisture so that soil forms a ball that holds together when tapped;~~

(3) ~~fine texture soils (clay loam, silty clay loam, sandy clay, silty clay, sandy clay loam and clay) at least enough moisture so that the soil is pliable, not crumbly.~~

(eb) Fumigation methods using post-water treatments must be applied at a rate of 0.15-0.25 inches per hour and meet one of the following water requirements depending on soil texture:

(1) coarse soils - a minimum of 0.40 inches of water per acre.

(2) loamy, moderately coarse, or medium texture soils - a minimum of 0.30 inches of water per acre.

(3) fine texture soils - a minimum of 0.20 inches of water per acre.

(c) If an application is made alternating fumigated and unfumigated areas (strip fumigation), the treated application block cannot be retreated with the same active ingredient between May 1 through October 31 during the same calendar year.

(d) The 1,3-Dichloropropene field soil fumigation must be made using only the methods described in this section. However within the San Joaquin Valley, Southeast Desert, or Ventura ozone nonattainment areas, methods (1) is prohibited; method (2) is prohibited unless applied as a broadcast fumigation using a tarpaulin that has been tested for permeability and determined by the U.S. Environmental Protection Agency to qualify for at least 60 percent buffer zone reduction credit; and method (5) is prohibited when 1,3-Dichloropropene is used in combination with chloropicrin unless applied as alternating fumigated and unfumigated areas (strip fumigation). In addition to labeling requirements for each of these methods, the following requirements shall apply.

(1) Nontarpaulin/Shallow/Broadcast or Bed

~~(A) Injection point must be at least 12 inches below the soil surface.~~

~~(B) Chisel trace must be eliminated by use of tillage equipment to mix the soil to a depth of at least three inches. Broadcast fumigation must be followed by compaction of the soil surface.~~

(2) Tarpaulin/Shallow/Broadcast or Bed

(A) Injection point must be at least 12 inches below the soil surface.

(B) Chisel trace must be eliminated by use of tillage equipment to mix the soil to a depth of at least three inches. Broadcast fumigation must be followed by compaction of the soil surface.

(C) Tarpaulins must be buried under at least four inches of firmly packed soil at the end of the rows.

(D) If using a tarpaulin that has been tested for permeability and determined by the U.S. Environmental Protection Agency to qualify for at least 60 percent buffer zone reduction credit, the tarpaulin must not be cut or perforated until a minimum of nine days following completion of injection to the application block.

(E) The operator of the property shall maintain a "tarpaulin repair response plan" pursuant to subsection (e).

(3) Nontarpaulin/Shallow/Broadcast or Bed/Three Post-Fumigation Water Treatments

~~(A) Injection point must be at least 12 inches below the soil surface.~~

~~(B) Chisel trace must be eliminated by use of tillage equipment to mix the soil to a depth of at least three inches. Broadcast fumigation must be followed by compaction of the soil surface.~~

~~(C) Fumigation must be completed in a time that allows compliance with the post-fumigation water treatments below and meet the requirements in subsection (eb):~~

1. Water must be applied by an irrigation method that uniformly covers the treated area in the entire application block.

2. On the day of fumigation, the first water treatment must begin within 30 minutes of the completion of fumigation. A second post-fumigation water treatment must start no earlier than one hour prior to sunset on the day of fumigation and completed by midnight.

3. On the day following fumigation, a third post-fumigation water treatment must be applied starting no earlier than one hour prior to sunset and completed by midnight.

4. Additional post-fumigation water treatment(s) may be applied at any time provided the treatments required above are completed in the specified time periods.

(4) Tarpaulin/Shallow/Bed/Three Post-Fumigation Water Treatment

~~(A) Injection point must be at least 12 inches below the soil surface.~~

~~(B) Chisel trace must be eliminated by use of tillage equipment to mix the soil to a depth of at least three inches.~~

~~(C) Tarpaulins must be buried under at least four inches of firmly packed soil at the end of the rows.~~

~~(D) If using a tarpaulin that has been tested for permeability and determined by the U.S. Environmental Protection Agency to qualify for at least 60 percent buffer zone reduction credit, the tarpaulin must not be cut or perforated until a minimum of nine days following completion of injection to the application block. Tarpaulin removal must not begin sooner than 24 hours after tarpaulin cutting has been completed.~~

(D) Fumigation must be completed in a time that allows compliance with the post-fumigation water treatments below and meet the requirements in subsection (e):

1. Water must be applied by an irrigation method that uniformly covers the untarped area in the entire application block.

2. On the day of fumigation, the first water treatment to the untarped areas must begin within 30 minutes of the completion of fumigation. A second post-fumigation water treatment to the untarped areas must start no earlier than one hour prior to sunset on the day of fumigation and completed by midnight.

3. On the day following fumigation, a third post-fumigation water treatment to the untarped areas must be applied starting no earlier than one hour prior to sunset and completed by midnight.

4. Additional post-fumigation water treatment(s) may be applied at any time provided the treatments required above are completed in the specified time periods.

(E) The operator of the property shall maintain a "tarpaulin repair response plan" pursuant to subsection (e).

(5) Nontarpaulin/Deep/Broadcast ~~or Bed~~

(A) Injection point must be at least 18 inches below the soil surface.

(B) Chisel trace must be eliminated by use of tillage equipment to mix the soil to a depth of at least three inches. Broadcast fumigation must be followed by compaction of the soil surface.

(6) Tarpaulin/Deep/Broadcast ~~or Bed~~

(A) Injection point must be at least 18 inches below the soil surface.

(B) Chisel trace must be eliminated by use of tillage equipment to mix the soil to a depth of at least three inches. Broadcast fumigation must be followed by compaction of the soil surface.

(C) Tarpaulins must be buried under at least four inches of firmly packed soil at the end of the rows.

(D) The operator of the property shall maintain a "tarpaulin repair response plan" pursuant to subsection (e).

(7) Chemigation (Drip System)/Tarpaulin

(A) Drip system must be filled with water and tested for pressure variation, clogged emitters, and leaks before chemigation. The pressure must not exceed the pressure rating of the drip tape,

and the pressure variation in the drip tape throughout the field must be less than three pounds per square inch. Drip system must be free of leaks and clogged emitters.

(B) The tarpaulin ~~shall~~ must be placed and inspected for tears, holes, or improperly secured edges prior to fumigating. Repairs and adjustments ~~shall~~ must be made before the chemigation begins.

(C) Ends of drip tape not covered by tarpaulin must be covered by at least two inches of soil.

(D) After chemigation, the drip system must be flushed with a volume of water at least three times the volume of the mainline and laterals of the drip system.

(E) The operator of the property shall maintain a "tarpaulin repair response plan" pursuant to subsection (e).

(e) Tarpaulin Repair.

(1) If a tarpaulin is used, the operator of the property shall maintain a "tarpaulin repair response plan." The tarpaulin repair response plan ~~shall~~ must 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~~ must indicate the parties responsible for the repair and incorporate the applicable elements listed in (2) below.

(2) The "tarpaulin repair response 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.

(f) Notwithstanding subsection (d), a reduced volatile organic compound emission field fumigation method approved pursuant to section 6452 or a method for experimental research purposes pursuant to a valid research authorization issued according to section 6260 may be allowed.

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 6449.1 to read:

6449.1. Chloropicrin Field Fumigation Methods.

~~(a) Application rate must not exceed 400 pounds of chloropicrin per acre.~~

~~(b)~~ For products containing chloropicrin as the sole active ingredient, the field soil fumigation must be made using only the methods described in section 6447.3 or 6448.1. However within the San Joaquin Valley, Southeast Desert, or Ventura ozone nonattainment areas the methods described in the following sections are prohibited:

(1) 6447.3(a)(1),(2), ~~(4)~~, and (6); and 6448.1(d)(1) and (5);

(2) 6448.1(d)(5), unless applied as alternating fumigated and unfumigated areas (strip fumigation); and

(3) 6447.3 (a)(4), 6447.3(a)(3) and (5) if applied as alternating fumigated and unfumigated areas (strip fumigation), ~~methods 6447.3(a)(3) and (5); 6448.1(d)(1) and (5); and 6448.1(d)(2) if applied as a bed fumigation, 6448.1(d)(2) unless a tarpaulin that has been tested for permeability and determined by the U.S. Environmental Protection Agency to qualify for at least 60 percent buffer zone reduction credit is used.~~

(c) ~~If there are no labeling requirements specifying soil moisture, then at time of application soil must contain at least enough moisture above the depth of application to meet the following test appropriate to the soil texture for:~~

~~(1) coarse soils (sand and loamy sand) at least enough moisture to form a ball when compressed by hand, that may break when tapped;~~

~~(2) loamy, moderately coarse, or medium textured (coarse sandy loam, sandy loam, fine sandy loam) at least enough moisture so that soil forms a ball that holds together when tapped;~~

~~(3) fine texture soils (clay loam, silty clay loam, sandy clay, silty clay, sandy clay loam and clay) at least enough moisture so that the soil is pliable, not crumbly.~~

(b) If an application is made alternating fumigated and unfumigated areas (strip fumigation), the treated application block cannot be retreated with the same active ingredient between May 1 through October 31 during the same calendar year.

(d) Tarpaulin Repair.

~~(1) If a tarpaulin is used, the operator of the property shall maintain a "tarpaulin repair response plan." 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 described in (2) below.~~

~~(2) The "tarpaulin repair response 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.~~

(ec) Notwithstanding subsection (ba), a reduced volatile organic compound emission field fumigation method approved pursuant to section 6452 or a method for experimental research purposes pursuant to a valid research authorization issued according to section 6260 may be allowed.

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 6450.1 to read:

6450.1. Metam-Sodium and Potassium N-methyldithiocarbamate (Metam-Potassium) Field Fumigation Methods.

~~(a) Application rate must not exceed 320 pounds active ingredient per acre for metam-sodium. Broadcast equivalent Application rate must not exceed 350 pounds active ingredient per acre for potassium N-methyldithiocarbamate (metam-potassium).~~

~~(b) Except for the method described in subsection (e)(9), if there are no labeling requirements specifying soil moisture, then at time of application soil must contain at least enough moisture above the depth of application to meet the following test appropriate to the soil texture for:~~

~~(1) coarse soils (sand and loamy sand) at least enough moisture to form a ball when compressed by hand, that may break when tapped;~~

~~(2) loamy, moderately coarse, or medium textured (coarse sandy loam, sandy loam, fine sandy loam) at least enough moisture so that soil forms a ball that holds together when tapped;~~

~~(3) fine texture soils (clay loam, silty clay loam, sandy clay, silty clay, sandy clay loam, and clay) at least enough moisture so that the soil is pliable, not crumbly.~~

(eb) Fumigations must start no earlier than one hour after sunrise and must be completed no later than one hour before sunset except for the method described in subsection (~~ed~~)(9), (10), and (11).

(~~ed~~) Fumigation methods using post-water treatments must be applied at a rate of 0.15-0.25 inches per hour and meet one of the following water requirements depending on soil texture:

(1) coarse soils - a minimum of 0.40 inches of water per acre.

(2) loamy, moderately coarse, or medium texture soils - a minimum of 0.30 inches of water per acre.

(3) fine texture soils - a minimum of 0.20 inches of water per acre.

(~~ed~~) The metam-sodium or potassium N-methyldithiocarbamate (metam-potassium) field soil fumigation must be made using only the methods described in this section. However, within the San Joaquin Valley, Southeast Desert, or Ventura ozone nonattainment areas, methods (1), (4), and (9) are prohibited. In addition to labeling requirements for each of these methods, the following requirements shall apply.

(1) Sprinkler/Broadcast or Bed/One Post-Fumigation Water Treatment

(A) Fumigation must be completed in a time that allows compliance with the post-fumigation water treatment below and meet the requirements in subsection (~~ed~~):

1. Water must be applied by an irrigation method that uniformly covers the treated area in the entire application block.

2. On the day of fumigation, one post-fumigation water treatment must begin within 30 minutes of the completion of fumigation.

3. Any additional post-fumigation water treatment(s) may be applied at any time.

(2) Sprinkler/Broadcast or Bed/Two Post-Fumigation Water Treatments

(A) Fumigation must be completed in a time that allows compliance with the post-fumigation water treatments below and meet the requirements in subsection (~~ed~~):

1. Water must be applied by an irrigation method that uniformly covers the treated area in the entire application block.

2. On the day of fumigation, the first post-fumigation water treatment must begin within 30 minutes of the completion of fumigation. A second post-fumigation water treatment must start no earlier than one hour prior to sunset on the day of fumigation and completed by midnight.

3. Additional post-fumigation water treatment(s) may be applied at any time provided the treatments required above are completed in the specified time periods.

(3) Sprinkler/Broadcast or Bed/Three Post-Fumigation Water Treatments

(A) Fumigation must be completed in a time that allows compliance with the post-fumigation water treatments below:

1. Water must be applied by an irrigation method that uniformly covers the treated area in the entire application block.

2. On the day of fumigation, the first post-fumigation water treatment must begin within 30 minutes of the completion of fumigation. A second post-fumigation water treatment must start no earlier than one hour prior to sunset on the day of fumigation and completed by midnight.

3. On the day following fumigation, a third post-fumigation water treatment, be applied starting no earlier than one hour prior to sunset and completed by midnight.

4. Additional post-fumigation water treatment(s) may be applied at any time provided the treatments required above are completed in the specified time periods.

(4) Nontarpaulin/Shallow/Broadcast or Bed/One Post-Fumigation Water Treatment

(A) Fumigation must be completed in compliance with the post-fumigation water treatments pursuant to subsection (ed)(1)(A).

(5) Nontarpaulin/Shallow/Broadcast or Bed /Two Post-Fumigation Water Treatments

(A) Fumigation must be completed in compliance with the post-fumigation water treatments pursuant to subsection (ed)(2)(A).

(6) Nontarpaulin/Shallow/Broadcast or Bed/Three Post-Fumigation Water Treatments

(A) Fumigation must be completed in compliance with the post-fumigation water treatments pursuant to subsection (ed)(3)(A).

(7) Chemigation (Drip System)

(A) Drip system must be filled with water and tested for pressure variation, clogged emitters, and leaks before chemigation. The pressure must not exceed the pressure rating of the drip tape and the pressure variation in the drip tape throughout the field must be less than three pounds per square inch. Drip system must be free of leaks and clogged emitters.

(B) After chemigation, the drip system must be flushed with a volume of water at least three times the volume of the mainline and laterals of the drip system.

(8) Rotary Tiller/Power Mulcher/Soil Capping

(A) Application equipment must be followed immediately by soil compaction equipment.

(9) Flood

(A) The fumigant must be applied with at least four inches of water per acre.

(10) 1:00 AM Start/Nontarpaulin/Shallow/Broadcast/Two Post-Fumigation Water Treatments

(A) The fumigation application must start no earlier than 1:00 a.m.

(B) Fumigation must be completed in compliance with the post-fumigation water treatments pursuant to subsection (ed)(2)(A).

(C) The following application equipment and procedures must be used:

~~1. No more than 24 hours before application, thoroughly cultivate the field to remove clods with a disc or spring tooth bar. Soil must contain at least enough moisture pursuant to subsection (b).~~

21. The application equipment must meet the following criteria:

i. The shanks must be set on three application tool bars, with the bars spaced 12 to 16 inches apart from front to back. The shanks must be staggered on each tool bar to produce a final overall shank spacing of 9 to 11 inches.

ii. Injection depth on each shank must be 3 to 4 inches, 6 to 7 inches, and 9 to 10 inches.

iii. Nitrogen must be used to purge the system before applicator bar is lifted out of the ground at any time.

iv. The application tool bars must be followed by a ring roller that is at least as wide as the application tool bars, with four gauge wheels controlled by hydraulic cylinders to control depth and/or pressure; or with a coil packer that is at least as wide as the application tool bars.

(11) 4:00 AM/ Start/Sprinkler/Broadcast or Bed/Two Post-Fumigation Water Treatments

(A) Notwithstanding (a), in the San Joaquin Valley, Southeast Desert, and Ventura ozone nonattainment areas the broadcast equivalent application rate must not exceed 260 pounds active ingredient per acre for metam-sodium or 290 pounds active ingredient per acre for potassium N-methyldithiocarbamate (metam-potassium).

(B) Fumigation must start no earlier than 4:00 a.m.

(C) Fumigation must be completed in compliance with post-fumigation water treatments pursuant to (ed)(2)(A).

(12) Drench

(A) Notwithstanding (a), in the Sacramento Metro and South Coast ozone nonattainment areas, broadcast equivalent application rate must not exceed 246 pounds active ingredient per acre for metam-sodium or 270 pounds active ingredient per acre for potassium N-methyldithiocarbamate (metam-potassium). In the San Joaquin Valley, Southeast Desert, and Ventura ozone nonattainment areas, broadcast equivalent application rate must not exceed 90 pounds active ingredient per acre for metam-sodium or 98 pounds active ingredient per acre for potassium N-methyldithiocarbamate (metam-potassium).

(B) Fumigation must be completed in compliance with the post-fumigation water treatments pursuant to subsection (ed)(2)(A).

(~~fe~~) Notwithstanding subsection (ed), a reduced volatile organic compound emission field fumigation method approved pursuant to section 6452 or a method for experimental research purposes pursuant to a valid research authorization issued according to section 6260 may be allowed.

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 6452 to read:

6452. Reduced Volatile Organic Compound Emissions Field Fumigation Methods.

(a) For the Sacramento Metro and South Coast ozone nonattainment areas, the Director may approve use of a field fumigation method not described in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, and 6451.1 if the request is accompanied by scientific data documenting the volatile organic compound (VOC) emissions. The emission rating specified in section 6881 or the maximum emission rate (emission rating multiplied by the maximum broadcast equivalent application rate) must be no greater than any one of the methods for the same fumigant described in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, and 6451.1.

(b) For the San Joaquin Valley, Southeast Desert, and Ventura ozone nonattainment areas, upon written request, the Director may approve use of a field fumigation method either not described or excluded from use in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, or 6451.1 if the request meets the following criteria:

(1) The request is accompanied by scientific data documenting the VOC emissions;

(A) The emission rating, as specified in section 6452.4, is no greater than any one of the methods for the same fumigant allowed for use in the San Joaquin Valley, Southeast Desert, and Ventura ozone nonattainment areas as specified in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, or 6451.1, or

(B) The maximum emission rate (emission rating multiplied by the maximum broadcast equivalent application rate) is no greater than any one of the methods for the same fumigant allowed for use in the San Joaquin Valley, Southeast Desert, and Ventura ozone nonattainment areas as specified in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, or 6451.1.

(c) Criteria the Director shall consider includes whether:

(1) the data and information provided are sufficient to estimate emissions;

(2) the results are valid as indicated by the quality control data; and

(3) the conditions studied represent agricultural fields fumigated.

(d) The Director shall publish a notice of interim approval for a field fumigation method on the Department's Web site. The interim approval expires three years after the date of approval.

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

Amend section 6452.2 to read:

6452.2 Volatile Organic Compound Emission Limits.

(a) The Director shall establish field fumigant volatile organic compound (VOC) emission limits in the Annual Volatile Organic Compound Emissions Inventory Report issued pursuant to section 6881 for the Sacramento Metro, South Coast, Southeast Desert, and Ventura ozone nonattainment areas where the difference between emissions in the most recent inventory report and the benchmarks for that area is five percent or less of the benchmarks or exceeds the benchmarks listed below during the May 1 through October 31 time period:

| Ozone Nonattainment Area | Total Agricultural and Structural VOC Emissions Inventory Benchmarks from May 1 to October 31 |
|---------------------------------|--|
| Sacramento Metro | 820,000 lbs. (2.2 tons/day average) |
| South Coast | 3,200,000 lbs. (8.7 tons/day average) |
| Southeast Desert | 340,000 lbs. (0.92 tons/day average) |
| Ventura | 1,100,000 lbs. (3.0 tons/day average) |

(1) If a VOC emission limit is in effect pursuant to (a) that limit must remain in effect until the commissioner does not condition permits to include a fumigant emission allowance specified in (c)(1) or (d)(1), and does not deny any permit or notice of intent specified in (c)(2) or (d)(2) in order to comply with the fumigant emission limit for two consecutive years.

(b) The Director shall calculate the field fumigant VOC emission limits specified in (a) by subtracting the nonfumigant pesticide VOC emissions from the total agricultural and structural VOC emissions inventory benchmarks. Nonfumigant pesticide product emissions will be the summation of the pounds of each pesticide product used multiplied by the VOC content (emission potential) for the specific product.

(c) For the Ventura ozone nonattainment area, the commissioner shall ensure that the fumigant limits specified in (a) are not exceeded during the May 1 through October 31 time period using one or more of the following methods for field soil fumigations:

- (1) Condition permit to include fumigant emission allowances.
- (2) Deny any permit or notice of intent that would cause the fumigant limit to be exceeded.
- (3) Condition permit to prohibit or require any of the methods allowed by sections 6447.3(a), 6448.1(ed), 6449.1(ba), 6450.1(d), or 6452 during the May 1 through October 31 time period.

(d) For ozone nonattainment areas other than Ventura, the Director shall select one or more of the following methods to ensure the fumigant limits specified in (a) are not exceeded during the May 1 through October 31 time period:

(1) The Director establishes a fumigant emission allowance for each permittee, based on information provided the commissioners within the ozone nonattainment area. The total allowances in each ozone nonattainment area must not exceed the fumigant limit established for that area. Commissioners shall issue permits or amend existing permits to comply with the fumigant emission allowance(s) established by the Director. Commissioners shall deny any notice of intent that does not comply with the permittees' fumigant emission allowances.

(2) Commissioners deny any permit or notice of intent that would cause the fumigant limit to be exceeded.

(3) Commissioners condition permits to prohibit or require any of the methods allowed by sections 6447.3(a), 6448.1(ed), 6449.1(ba), 6450.1(d), or 6452 during the May 1 through October 31 time period.

(e) No person may apply a field fumigant during the May 1 through October 31 time period in an ozone nonattainment area for which a fumigant emission limit has been established pursuant to (a), unless their restricted material permit includes conditions specified in (c) or (d), or notice of intent is approved in writing.

(f) For the San Joaquin Valley ozone nonattainment area, if the difference between emissions in the most recent emissions inventory report and the 6,700,000 pound (18.1 tons per day) benchmark for this area is five percent or less of the benchmark or exceeds this benchmark during the May 1 through October 31 time period, the provisions of section 6884 shall apply.

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

CHAPTER 3. PEST CONTROL OPERATIONS
SUBCHAPTER 3. PESTICIDE 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~~ must 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 five parts per million or less methyl bromide. a certified respiratory protection as specified on the label. 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~~entry restricted period.

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 entry restricted entry interval period, 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 per acre) | 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. | 8* 8* |
| Nontarpaulin/Deep/Broadcast: Tractor Equipment Driving Supervising | 400 lbs. | 8* 8 ^{1/} |
| Tarpaulin/Shallow/Broadcast: Tractor Equipment Driving Shoveling, Copiloting Supervising Tarpaulin Cutting Tarpaulin Removal | 400 lbs. | 7* 3* 3* 10 ^{1/} no limitation ² |
| Tarpaulin/Shallow/Bed: Tractor Equipment Driving Shoveling, Copiloting Supervising Tarpaulin Cutting Tarpaulin Removal | 250 lbs. | no limitation 6* 6* 10 ^{1/} no limitation ^{2/} |
| Tarpaulin/Deep/Broadcast: Tractor Equipment Driving Shoveling, Copiloting Supervising Tarpaulin Cutting Tarpaulin Removal | 400 lbs. | 7* 3* 3* 10 ^{1/} no limitation ^{2/} |
| Drip System – Hot Gas: Applicators Supervising Tarpaulin Cutting Tarpaulin Removal | 225 lbs. | 4* 4* 10 ^{1/} no limitation ^{2/} |

^{1/} 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.

^{2/} 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:

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

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 per acre) | 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. (Reserved)~~

~~(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~~ must 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~~ must 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~~ shall 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) on the label~~ is worn.

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