8/2/11

(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.

(e) Notwithstanding subsection (b), 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.

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. 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.

(c) 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 (e)(9), (10), and (11).

(d) 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.

(e) 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 (d):

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 (d):

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 and meet the requirements in subsection (d):

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 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) 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 (e)(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 (e)(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 (e)(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 (e)(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).

2. 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 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 (e)(2)(A).

(12) Drench

(A) Notwithstanding (a), in the Sacramento Metro and South Coast ozone nonattainment areas, 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, 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 (e)(2)(A).

(f) Notwithstanding subsection (e), 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.

6452.2 Fumigant 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 6452.4 for 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
Ventura in 2011	1,200,000 lbs. (3.3 tons/day average)
Ventura in 2012 and later	1,100,000 lbs. (3.0 tons/day average)

(1) Notwithstanding (a), if a VOC emission limit is in effect 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.