

Laws and Regulations Pertaining to Fumigant Use

Topics

- Volatile Organic Compounds - 2008 - 2010
 - May 1 – October 31
- Volatile Organic Compound Re-Allocation Process
- Permit Conditions for 2010
- Fumigant Labels for 2011-2012
- Proposed Changes to Methyl Bromide
- Proposed Registration of Methyl Iodide

2008 VOC Information

- Permittees requesting an emission allowance – 67
- Total acres proposed to be fumigated – 17,686
- Total pounds of emissions requested by Permittees – approximately 2,500,000
- Department of Pesticide Regulation allocated for Ventura County 1,214,000 pounds of emissions.
- Permittees fumigated approximately 14004 acres
- Permittees used approximately 528,500 pounds of emissions

2009 VOC Information

- Permittees requesting an emission allowance – 77
- Total acres proposed to be fumigated – 28,260
- Total pounds of emissions requested by Permittees – 2,355,233
- Department of Pesticide Regulations allocated for Ventura County 1,325,000 pounds of emissions
- Permittees fumigated approximately 10,103 acres
- Permittees used approximately 584,885 pounds of emissions

2010 VOC information

- Permittees requesting an emission allowance - 60
- Permittees requested 2,353,714 pounds of emissions
- Permittees requested to fumigate acres 16,896
- Department of Pesticide Regulations allocated for Ventura County 1,143,000 pounds of emissions

Re-allocation Process

- This process was created so as to get unused emission allowance to those who needed it.
- 2009 was the first year that we implemented the process.
- In 2009 we had 201,400 lbs. of unused emission allowance returned to the Agricultural Commissioner.
 - 25 permittees put in requests
 - 97,809 lbs. of emissions were re-allocated
- Reallocation process will continue in 2010. Growers please return any unused emission allowance to Agricultural Commissioner.

Inversion Layer Forecasts

- Daily forecasts to Ag. Comm. Office from Weather by Schaeffer from July - October.
- The forecasts include the height of the inversion at daybreak and a characterization of the inversion/non-inversion during the afternoon. There is also a characterization of the dispersion quality of the air shed. There will be a projection for the dispersion and inversion/non-inversion height for the coming night and the following day.

Inversion continued

- The inversion height must meet the following height in order for a proposed fumigation proceed within 500 feet of a sensitive site.
- 2008 inversion requirement – 1000 feet
- 2009 inversion requirement – 800 feet
- 2010 inversion requirement – 700 feet

Sensitive Sites

- Sensitive Sites are known as:
- Areas zoned residential, schools, occupied residential areas such as parks and athletic fields, hospitals, convalescent facilities and day care facilities and any other locations the Ag. Comm. considers to be sensitive.
- The Ag. Comm. also considers history of complaints in the area
- Any usual conditions at the site that have caused problems in the past
- Compliance history of the applicant

Permit Conditions for 2010

- **Complaints and Incidents**
 - Chloropicrin

- **Review permits and maps**
 - update Grower information
 - provide more detailed maps

- **Permit Conditions**
 - Chloropicrin
 - Block Size Restrictions
 - Notice of Intent information
 - Water Treatments - Sprinkler Systems
 - Tarpaulins

Block Size Restrictions

- Within a 1/4 mile of any occupied structure, no more than 20 acres can be treated in any 48-hour period.
- More than 1/4 mile from an occupied structure, no more than 40 acres can be treated in any 48-hour period.
- Block size limits are based on 200 lbs. per acre. If you use a lower rate we can adjust the acreage limit.
- For more information please contact our office and speak with one of our Inspectors.

Notice of Intent Information

- The NOI must indicate which device is used to protect backflow into groundwater.
- The NOI should include any adjustment to the effective rate of chloropicrin, tarp information, water seal schedule.
- 1,3-Dichloropropene (1,3-D) – a recommendation from the registrant-authorized pest control advisor and the following information must be provided in the NOI.
 - a. Application depth and type
 - b. The total gallons of the pesticide formulation
 - c. The pounds per gallon of 1,3-D formulation
 - d. The percent by weight of active ingredient
 - e. The total pounds of active ingredient
 - f. The application factor appropriate for the proposed application
 - g. The adjusted total pounds of active ingredient for the proposed application
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Water Treatments

- A water treatment/seal reduces emissions as follows:
 - First seal immediately after application reduces emissions 20%.
 - Second seal at sunset of the same day reduces emissions 15%.
 - Third seal the following morning reduces emissions 15%.
 - A sprinkler system with a separate line from the chemigation is required.
- The water seal reduces the effective rate of chloropicrin for the purposes of block size limits.
- Each water seal must be at least $\frac{1}{4}$ inch/hour.
- This water seal plan information must be included in the NOI.

Tarpaulins

- A gas confining tarp must be in place over the preformed bed prior to introduction of the fumigant
- Standard embossed tarps shall not be used within a $\frac{1}{4}$ mile of an occupied structure.
- When using 2 mil or greater standard non-embossed Polyethylene tarp or when using VIF, TIF or micro-embossed VIF tarps you will increase your acreage limit by 50%, so you can treat up to 30 acres in any 48-hour period.
- The tarp shall be extended to cover the drip tape connections at the ends of the beds.

New Fumigant Labels

- Federal Environmental Protection Agency(EPA) is in the process of rewriting all fumigant labels.
- Labels are expected to be out late 2010-2012
 - Increased notification/monitoring requirements
 - Sensitive/Difficult to evacuate sites
 - Increased buffer zones
 - Tarp requirements
 - Work site plans
 - And more...
 - One page handout of Soil Fumigants Implementation Schedule is available.

Notice of Proposed Action on Methyl Bromide

- DPR is proposing to amend 3CCR Sections 6447, 6447.2 and 6784.
 - Section 6447(h) reducing the max. amount of Methyl Bromide that can be applied for ag. use in any township in a calendar month down to 171,625. (Ventura County max. monthly usage for 2007=110,848 lbs. and for 2008=79,080 lbs.)
 - 6447.2(a) does not allow the County Agricultural Commissioner's to make buffer zones smaller or shorten the buffer zone duration from the buffer zones set in regulations.

Methyl Bromide continued

- Section 6784(b)(2)(C) will be amended to clarify that when respiratory protection is required, employee must wear NIOSH-certified respiratory protection specifically recommended for use in atmospheres containing 5 ppm or less of Methyl Bromide.
- Section 6784(b)(3)(B) will be amended by revising the work hours in “Table 1 Maximum Work Hours” to reduce target level of 13 ppb (24-hour time weighted average concentration) to workers.
- Handouts are available and written comments must be received no later than 5:00pm on June 1, 2010.

Methyl Iodide

- The Department of Pesticide Regulation proposes to register pesticide products containing the new active ingredient, methyl iodide or iodomethane.
- Before DPR will take a final action on the registration of Methyl Iodide, the concentration target levels for both bystanders and worker exposures and mitigation measures that address the target levels need to be addressed by DPR and the Registrant.

DPR's Methyl Iodide Mitigation Strategies

- Methyl Iodide will be a California Restricted Material requiring a permit from the County Agricultural Commissioner
- There will be minimum buffer zones based on acreage, pounds per acre, method of application and use of VIF tarp.
- No occupied structures within ½ mile of the fumigated area.
- Overlapping of buffer zones prohibited

Methyl Iodide Mitigation Strategies

- Maintaining of buffer zones could require posting as well as trained employee patrols until 48 hours following the end of the application.
- Prevent leaching into groundwater
- Limited acreage treated per application
 - drip application 30 acres
 - Shank applications 20 acres
- All applications will require Virtually Impermeable Film (VIF) tarps
- Applications at night prohibited
- Established maximum rates of methyl iodide

Methyl Iodide Mitigation Strategies

- Require a minimum 14 days before workers can reenter the field for other activities
- Deep injection Auger-probe application method will be limited to 25 sites per acre
- Fumigation equipment to be operated in a manner that eliminates pesticide drip by using check valves close to the injection points, or clearing the fumigant from the injection device before it is removed from the soil
- Handout available

Ventura County Agricultural Commissioner's Office

- Office Hours 7 – 4
- Inspectors Hours 7:30-9:30 and 12:30-2:30
- Closed 11:30 – 12:30
- We recommend appointments for worksite plans, permits, etc..

Thank you