

**NOTICE OF MODIFICATIONS TO TEXT OF PROPOSED CHANGES
IN THE REGULATIONS PERTAINING TO
FIELD FUMIGANT EMISSIONS REDUCTION**

Pursuant to the requirements of Government Code section 11346.8(c) and section 44 of Title 1 of the California Code of Regulations (CCR), the Department of Pesticide Regulation (DPR) is providing notice of changes made to the proposed text of sections 6000, 6445, 6445.5, 6447, 6447.2, 6447.3, 6448, 6448.1, 6449, 6449.1, 6450, 6450.1, 6450.2, 6451, 6452, 6452.1, 6452.2, 6452.3, 6452.4, 6536, 6624, 6626, and 6784 of Title 3, CCR. These changes are in response to comments received during the public comment period. The public comment period on the originally proposed regulatory action closed on July 13, 2007. The Director finds that the modifications are sufficiently related to the original text of the proposed action. The modified text is being made available to the public for 15 days, during which written comments on the modifications will be received as provided in Government Code section 11346.8(c).

DPR will accept written comments relevant to the modifications between October 3, 2007, and 5:00 p.m. on October 18, 2007. Written comments relevant to the modifications may be sent via e-mail <dpr07002@cdpr.ca.gov>; or may be directed to Ms. Linda Irokawa-Otani, Regulations Coordinator, Department of Pesticide Regulation, 1001 I Street, P.O. Box 4015, Sacramento, California 95812-4015. FAX: (916) 324-1452.

In response to the comments received, DPR has made sufficiently related changes to the text from that which was originally proposed.

- Revised section 6000 to add the definition for "ozone nonattainment area" to clarify the geographic locations that applies to the nonattainment areas.
- Revised section 6445 to clarify that operating chemigation equipment is a fumigation-handling activity.
- Revised section 6445.5 to require when a field fumigation application made by a licensed pest control business to have a qualified applicator licensee holding a license to perform work in the subcategory of field fumigation pest control. Based on comments received, it may not be economically feasible to require all fumigations to be made by a licensed pest control business.

Also, deleted the requirement of having a qualified applicator holder licensed or certified in the proposed subcategory "O" present at the application site during fumigation handling activities. At this time, DPR has determined that this requirement may not be practical.

- Revised sections 6447, 6448, 6449, 6450, and 6451 to clarify that the field soil fumigation requirements do not apply to replant of individual vine or tree-sites when an application is made to less than one contiguous acre. The intent was to allow fumigations for individual vine and tree replacement within a vineyard or orchard, and to exclude the method to treat entire orchards or vineyards. VOC emissions associated with a fumigation to tree-site less than one contiguous acre would be negligible.

- Revised subsections 6447(a) and (c) to include the phrase "if applicable" for clarity, as some methods that were originally proposed to be deleted will be allowed. Subsection (e) was also revised for clarity.
- Revised section 6447.2(a) to include the original publication date of the *Methyl Bromide Field Fumigation Buffer Zone Determination* document. Revisions to this publication are not needed.
- Revised section 6447.3(a) to include the three methyl bromide methods originally proposed to be repealed. However, specific methods will be prohibited in the San Joaquin Valley, Southeast Desert, or Ventura [ozone nonattainment areas (NAA)] during the May 1 through October 31 time period, to further reduce VOC emissions in these areas. These methods can be used in Sacramento and South Coast NAAs because additional VOC reductions are not needed in these two NAAs.
- DPR revised sections 6448, 6449, 6450, and 6451 to specify that the provisions pertaining to field soil fumigations using 1,3-Dichloropropene, chloropicrin, metam sodium, potassium N-methyldithiocarbamate (metam-potassium), dazomet, or sodium tetrathiocarbonate applies only to the Sacramento Metro, San Joaquin Valley, South Coast, Southeast Desert, and Ventura NAAs during the May 1 through October 31 time period. Standardized fumigation methods and requirements will be required in the five nonattainment areas during the peak ozone period. Standardized methods include fumigation methods with known emission rates. Fumigation methods with known emission rates must be used within the five NAAs during May-October in order to track emissions and determine compliance with the emissions limits. Field fumigation outside of the five nonattainment areas would remain consistent with existing regulations and permit conditions. Additional revisions were made for clarity purposes.
- For clarity and enforceability purposes, revised section 6448.1(b) moisture requirements by replacing the percent of moisture with a "feel" method that is commonly used to measure soil moisture, and is included on some product labels. Additionally, moisture shall be measured above, instead of "at", the depth of the application. The appropriate soil moisture is needed between the application and the soil surface.
- DPR revised section 6448.1(c) to prohibit the use of specific 1,3-Dichloropropene methods in the San Joaquin Valley, Southeast Desert, and Ventura NAAs to further reduce VOC emissions in these areas. These methods can be used in Sacramento and South Coast NAAs because additional VOC reductions are not needed in these two NAAs.
- DPR revised the post-fumigation water levels in section 6448.1(c)(3)(C) and (4)(D) and section 6450.1(d)(1)(A) and (3)(A) from 0.25 to 0.20 inches. Comment and subsequent evaluation on nozzles and irrigation systems determined that 0.20 is more a more appropriate irrigation rate.

- Revised subsection 6448.1(c)(4) to remove the word "Broadcast." This was an oversight-- tarpaulin/shallow/broadcast with three post-fumigation water treatments is not a valid method. DPR also clarified the requirements of the three post-fumigation water treatments to the untarped areas of a bed fumigation. Also, subsections (c)(1-7)(B) remove specific tillage or compaction equipment. As long as the requirements of eliminating chisel trace and compacting the soil can be met, specifying the type of equipment to be used is not necessary. Subsections (c)(1), (2), (3), (5), and (6) were clarified to specify that compaction equipment would only be required for broadcast fumigations since compaction equipment is not used in bed fumigations.
- Deleted methods (7) and (8), nontarpaulin/deep/broadcast or bed/three post-fumigation water treatments and tarpaulin/deep/broadcast or bed/three post-fumigation water treatments, in section 6448.1. DPR is unsure if the three-post water treatments for these methods are effective in reducing VOC emissions. Renumbered method (9) chemigation (drip system)/tarpaulin to (7) and made clarifying changes to the requirement that the pressure must not exceed the pressure rating of the drip tape. Subsection (9)(C) was also reworded for clarity.
- Revised section 6449.1 to prohibit the use of specific methods for products containing chloropicrin as the sole active ingredients in the San Joaquin Valley, Southeast Desert, and Ventura NAAs to further reduce VOC emissions in these areas. These methods can be used in Sacramento and South Coast NAAs because additional VOC reductions are not needed in these two NAAs. Also, included soil moisture requirements for these applications, as well as tarpaulin repair requirements when applicable.
- For clarity and enforceability purposes, revised section 6450.1(b) moisture requirements. This is consistent with the changes in section 6448.1.
- DPR revised the post-fumigation water levels in section 6450.2(b)(1) from 0.25 to 0.20 inches. Comment and subsequent evaluation on nozzles and irrigation systems determined that 0.20 is more a more appropriate irrigation rate.
- Subsection 6450.1(d) has been revised to prohibit the use of certain metam sodium and N-methyldithiocarbamate (metam-potassium) methods in the San Joaquin Valley, Southeast Desert, and Ventura NAAs during the May 1 through October 31 time period to further reduce VOC emissions in these areas. These methods can be used in Sacramento and South Coast NAAs because additional VOC reductions are not needed in these two NAAs.
- Revised section 6450.1(d) to add sprinkler/broadcast or bed/two post-fumigation water treatments, and nontarpaulin/shallow/broadcast or bed/two post-fumigation water treatments. DPR received an additional study that indicates that these methods are effective in reducing VOC emissions. Additional editorial changes were made to reflect the addition of these two methods.
- Deleted the requirement in subsections 6450.1(d)(1)(A) and (3)(A) requiring the fumigation must be made over a minimum of six hours and in a minimum of 0.80 inch of water, or applied at a concentration of no more than one gallon of product per 290 gallons of water.

Because of temperature and timing restrictions, the requirement is not feasible.

- Clarifying changes to subsection 6450(d)(7) were made to the pressure rating of drip tape. The requirement of drip tape covered with tarpaulin or two inches of soil at the end of the rows was removed. There was no difference in VOC emissions from tarped or untarped drip tape.
- Revised the criteria in section 6452 that allows the use of a field fumigation method that results in no greater emission than any of the fumigant methods either not described or excluded from use in sections 6447.3, 6448.1, 6449.1, 6450.1, 6450.2, or 6451.1. This will still provide the necessary flexibility for innovations that reduce emissions to occur. This change in criteria would provide for a more complete evaluation in determining emission rates. Emission rates depend on the emission rating and the application rate. The change in criteria allows DPR to consider both factors. Some new fumigation methods may be entirely different and not comparable to any existing methods, so this criterion was deleted.
- DPR revised section 6452.1. The actual record keeping and reporting requirements of fumigant applications has been relocated to sections 6624 and 6626. Only references of these two sections are made in section 6452.1. Based on comments received, beginning January 1, 2009, reporting fumigant use in the five NAAs will be incorporated into the existing pesticide use reporting system. Implementation of incorporating these reporting requirements into the existing use report system will be delayed due to necessary changes to DPR's infrastructure.
- Deleted the requirements in section 6452.2 that would require registrants to track and report their fumigant emissions. Since registrants will no longer be required to track and report their emissions, the percentage of emissions associated with each fumigant and method has also been deleted. DPR will require permittees in the five NAAs to report their fumigant use to the Department. The change in tracking responsibility provides greater availability of the records. The change requires a minor revision to the existing Pesticide Use Reporting system, while the original proposal required a greater burden on the regulated community for a new reporting system.
- Revised and renumbered section 6452.3 to 6452.2. DPR is proposing two options in establishing field fumigant VOC emissions limits for the NAAs.

The overall limit Pesticide VOC emissions benchmark of 2.63 tons-per-day in Ventura corresponds to the emission reduction target of the 1994 Pesticide Plan and the Court order. The fumigant emission limit of 2.0 tons-per-day in 2008 is designed to achieve that goal in the first year of the regulations. Even with full implementation of the best available controls, growers in Ventura cannot meet this limit next year without reducing historically fumigated acreage by between 5,800 and 7,500 acres. The most likely result will be that land will be taken out of agricultural production creating significant risk of economic dislocation and pressure to develop the land for non-agricultural uses. To mitigate these risks, the Department proposes to phase-in implementation of the final emissions target in Ventura between 2008 and 2012 (Option 1). Option 1 allows regulated entities more time and flexibility to plan and develop strategies to meet the emission limits without necessarily taking land out of

agricultural production and is consistent with the Air Board's planning for the 8-hour ozone standard.

To remove any uncertainty as to whether Option 1 complies with the Court's order to "propose, adopt and submit to EPA for approval, and implement regulations no later than January 1, 2008, to achieve" the overall limit in Ventura, the Department is seeking the Court's permission to implement Option 1. If the Court denies such permission then the Department will adopt Option 2 (no phase-in).

DPR is revising the process to determine the fumigant limits. The revised process will provide greater assurance that the 1994 State Implementation Plan (SIP) commitments will be met. The 1994 SIP requires reductions in the total agricultural and structural (fumigant plus non-fumigant) pesticide VOC emissions. A fixed fumigant limit in regulation, as originally proposed, would not ensure that DPR meets the overall agricultural and structural pesticide reductions. The proposed change allows DPR the flexibility to adjust the fumigant limit, depending on increases or decreases in non-fumigant emissions. There are no proposed requirements for non-fumigants. DPR will use information from existing reporting for non-fumigants to update the fumigant limits each year.

The requirement to limit registrant emissions to their allocations in areas where DPR has allocated fumigant emissions has been deleted. Fumigant emissions allowances have been moved to section 6452.3.

- Revised section 6452.3 to require field fumigant VOC emission allowances to permittees applying a field fumigant in an ozone NAA for which a fumigant emission limit has been established so that each ozone nonattainment area does not exceed the fumigant emission limit. DPR has determined that establishing field fumigant allowances to permittees would be a more effective process than establishing registrant allowances who would then allocate to the permittees. Changing registrant allowances to permittee allowance is more compatible with the existing regulatory structure (restricted materials permitting). It also provides a more transparent means for ensuring compliance with emission limits. DPR does not need to evaluate complex pest management needs or the impact of new fumigants, as required under the original proposal.
- In section 6452.4, deleted the establishment of an interim percentage of VOC emissions for new fumigants. Registration of new fumigant chemicals will require the chemical to be designated as a restricted material. This action will require rulemaking; at that time additional mitigation measures associated with its use will be adopted into regulation.

Replaced this section with the annual VOC emissions inventory report.

- Added in section 6452.4 the requirement that the Director will issue an annual emissions inventory report for the five NAAs. The department will base the fumigant emission limits on the most current annual emission inventory report. The report will include all the analysis of pesticide VOC emissions, emission potential, and regulatory strategies that will be imposed in the upcoming year to reduce VOC emissions. The report will be subjected to a 45-day public comment period. The emission inventory and all the factors (emission potentials, emission

ratings, analyses) of the report analysis will be subject to public comment.

The pesticide VOC emission inventory has been the basis of the VOC program since 1994. DPR will put into regulation the methodology that has been followed and is described in the 1994 SIP. The use of the emission inventory will ensure that annual tracking of non-fumigant pesticide emissions are part of and accounted for in the strategy to reduce pesticide VOC.

- Editorial correction was made to section 6536(a).
- Amended section 6624 to add the fumigant use records requirements originally in section 6452.1 to subsection (f).
- Amended section 6626 to add the use reporting requirements originally in section 6452.1 to subsection (d). Also, added subsection (e) to require the information be reported through the existing pesticide use reporting system beginning January 1, 2009.
- Revised section (b)(3)(B)2. Table 1. Maximum Work Hours and Table 2. Maximum Work Hours in a Maximum Three (3) Workdays Per Calendar Month to add back in nontarpaulin shallow/bed, nontarpaulin/deep/broadcast, and drip system--hot gas application methods, since these methods will now being allowed except for in San Joaquin Valley, Southeast Desert, and Ventura ozone NAAs.

Current wording of the regulation is shown in normal type. Originally proposed additions are shown by underline. Originally proposed deletions are shown by ~~strikeout~~. New proposed deletions are indicated by ~~*italics and strikeout*~~. New wording to be added by the modifications is shown in **bold double underline**.

All written comments received by 5:00 p.m. on October 18, 2007, which pertain to the indicated changes, will be reviewed and considered in this rulemaking. Please limit your comments to the modifications of the text.

This Notice of Modifications to the Proposed Text and the text of modified regulations are also available on DPR's Internet Home Page <<http://www.cdpr.ca.gov>>.

Paul H. Gosselin, Chief Deputy Director
Department of Pesticide Regulation

Date