

FINAL STATEMENT OF REASONS AND PUBLIC REPORT
DEPARTMENT OF PESTICIDE REGULATION

Title 3. California Code of Regulations
Amend Sections 6000, 6445, 6447, 6447.2, 6447.3, 6448.1,
6449.1, 6450.1, 6452, 6452.2, and 6784
Pertaining to Field Fumigant Use Requirements

UPDATE OF THE INITIAL STATEMENT OF REASONS

The proposed regulatory action was noticed in the *California Regulatory Notice Register* on August 7, 2015. During the 45-day public comment period, the Department of Pesticide Regulation (DPR) received comments on the proposed text. The comments are discussed under the heading “Summary and Response to Comments Received” of this Final Statement of Reasons. Based upon the comments received from the public and for reasons below, DPR modified the text from that originally proposed.

DPR received comments addressing the modified text during the 15-day public comment period. These comments are discussed under the subheading “Comments Received During the 15-Day Public Comment Period.”

Changes to the Text of Proposed Regulations

- In proposed section 6447.2(a), the Methyl Bromide Field Fumigation Buffer Zone Determination, Rev. 3/10, incorporated by reference, was deleted since methyl bromide product labels include the same buffer zone requirements that are specified in this document. However, DPR has reverted back to its current regulatory language in section 6447.2(a) since the label language incorrectly references the document and may cause confusion as to the appropriate buffer zone determination.
- Revise proposed section 6449.1(a)(2) to add the maximum broadcast equivalent application rate of 210 pounds of chloropicrin per acre when using the nontarpaulin/deep/broadcast method applied as alternating fumigated and unfumigated areas (strip fumigation). This maximum rate is necessary to ensure that the emission rate is reduced to 134 from 224, thereby classifying this as a low emission method. This maximum broadcast equivalent application rate was included in the *Director’s Decision Concerning TriCal, Inc.’s Request for Approval of Reduced Volatile Organic Compound Emissions Field Fumigation Method*, July 31, 2014.

DPR has amended Title 3, California Code of Regulations sections 6000, 6445, 6447, 6447.2, 6447.3, 6448.1, 6449.1, 6450.1, 6452, 6452.2, and 6784. In summary, this action adds and revises existing field fumigation methods in the Sacramento Metro, San Joaquin Valley, South Coast, Southeast Desert, and Ventura ozone nonattainment areas (NAAs) when using methyl bromide, 1,3-Dichloropropene (1,3-D), chloropicrin, metam-sodium, and potassium N-methyldithiocarbamate (metam-potassium), and makes changes to be consistent with product labeling.

PUBLIC HEARING

DPR scheduled and held a public hearing on September 22, 2015 in Bakersfield, California. A transcript of the hearing is contained in the rulemaking file.

SUMMARY AND RESPONSE TO COMMENTS RECEIVED DURING 45-DAY COMMENT PERIOD

- *Anne Katten, California Rural Legal Assistance Foundation, et. al (44 organizations)*

Comment: The SIP must be revised to require 20 percent pesticide VOC emission reduction for the San Joaquin Valley to insure parity with other air basins.

Response: This comment is outside the scope of the proposed regulations – no response necessary.

Comment: We acknowledge that data indicates that use of TIF tarps should reduce emission of chloropicrin and 1,3-D to some extent compared with use of standard tarps. We dispute the validity of the very low emission ratings of 7 percent assigned to all chloropicrin TIF tarp fumigation methods, 10 percent assigned to broadcast 1,3-D TIF tarp methods and 21 percent assigned to 1,3-D TIF tarp deep injection broadcast strip fumigations.

Response: DPR disagrees. The methods were assigned emission ratings based on fumigant emission studies as discussed in “Director’s Decision Concerning Environmental Monitoring Branch’s Request for Approval of Reduced Volatile Organic Compound Emissions Field Fumigation Method” dated April 29, 2013. The commenter did not provide additional study/data to support the comment.

Comment: Question the validity of the 10 percent emission rating for 1,3-D shallow and deep broadcast fumigations using TIF tarps because it is based on results of a study in which TIF tarps were not cut until 10 or 15 days after application while the proposed regulation allows the tarp to be cut after 9 days.

Response: Analysis of the emissions measured during the study as discussed in “Hydrus Simulation of Chloropicrin and 1,3-Dichloropropene Transport and Volatilization in the Lost Hills Fumigation Trials” dated February 8, 2013, indicates if the tarp was cut at 9 days or more, emissions after tarp cutting would be negligible. The commenter did not provide additional study/data to support the comment.

Comment: DPR has yet to complete the process to certify which TIF tarps maintain integrity under wet condition though a DPR official has stated that his certification should be in place by the end of the year.

Response: The regulations refer to 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. There is no indication that these tarpaulins are less effective than standard (non-TIF) tarpaulins.

Comment: Object to deleting the methyl bromide buffer zone table referenced in the regulations to this change on the grounds that the California specific label could be changed without opportunity for public comment or involvement by Office of Environmental Health Hazard Assessment (OEHHA) in evaluation of the effect on worker safety. Furthermore, the larger California specific methyl bromide buffer zones are only included in web links provided on the labels and the Great Lakes Terro--gas labels include a link to an out of date DPR document rather than the current DPR methyl bromide buffer zone tables.

Response: Section 6447.2(a) has been reverted back to its current language since without reference to the document, “Methyl Bromide Field Fumigation Buffer Zone Determination, Rev. 3/10,” the label language may cause confusion in determining which document is to be used when establishing buffer zones.

Comment: Oppose the proposed deletion of the respiratory protection language from the regulation because the California label could be changed without opportunity for public comment or involvement by OEHHA of review of the effect on worker safety.

Response: It is unnecessary and redundant to include language that is on a label. It is a violation of Federal law to use a product in a manner inconsistent with its label. Any label change would require a notice to the public and OEHHA and an opportunity to comment.

Comment: Concerned that DPR hasn’t evaluated methyl bromide exposure levels to tarp cutters, removers and hole burners after the 9 days when tarps can be cut and the subsequent day when they can be removed. Since data on methyl bromide emissions using TIF tarps is limited and variable and some studies indicate that methyl bromide does not degrade in soil, we are concerned that exposure when cutting TIF tarps after 9 days could be higher than when cutting standard tarps after 5 days. For added protection we recommend limiting work hours for cutting or removing TIF tarps to 3 hours per day from fields treated with products containing more than 50 percent methyl bromide and requiring an aeration period of 48 hours after tarp cutting for these applications. We do not recommend relying on respirators for reducing exposure to methyl bromide because we have concerns about efficacy of the cartridges labeled for methyl bromide use that we have detailed in previous comments.

Response: The regulations pertain to the reduction of VOC emissions and provide the same level of protection as current regulations that allow cutting on standard (non-TIF) tarpaulins after five days. The regulations do not address worker exposure

Comment: Concerned that exposure of tarp cutters, tarp removers and hole burners to 1,3-D has not been evaluated and recommend a requirement of use of full- face respirators for this work.

Response: This comment is outside the scope of the proposed regulations – no response necessary. See response above.

Comment: The ISR states that DPR is proposing to replace “application rate” with “broadcast equivalent application rate” in multiple sections of the regulations because the latter is used to calculate VOC emissions from strip and bedded applications. However, the proposed changes in regulation could be interpreted to make the broadcast equivalent rate the maximum application rate. This is not acceptable because maximum application rates and at least some fumigation buffer zone requirements are based on the treated area application rate.

Response: The proposed terminology is consistent with current labeling. The change was not made to calculate VOC emission from strip applications. Labels refer to the “broadcast equivalent application rate” as the fumigant applied within the entire perimeter of the application block. Replacing the term “application rate” with “broadcast equivalent” does not affect the maximum application rate that can be applied to an area of the application block. Buffer zones were determined based on the broadcast equivalent application rate.

Comment: The proposed change in section 6448.1(a) would allow a 1,3-D broadcast equivalent rate of 332 lb./acre for any method which would increase the maximum allowable application rates in the treated portions of the field for bedded applications of 1,3-D. In addition, it doesn’t follow that for the strip fumigation applications in proposed changes to section 6448.1(d) the maximum broadcast equivalent rate would be 210 lb./acre when the maximum broadcast equivalent application rate is set at 332 lb./acre earlier in section 6448.1(a).

Response: DPR agrees and has modified the proposed text to specify the maximum broadcast application of 210 pounds per acre of chloropicrin when using the method specified in section 6448.1(d)(5) as alternating fumigated and unfumigated strips, in order for this method to be classified as a low emission method. The 210 lb/acre rate is a maximum broadcast application rate for chloropicrin with a strip application which is applied at the maximum application rate of 350 lb/acre to strips that cover 60 percent of the application block.

- *Mark Martinez, California Strawberry Commission*

Comment: Supports the proposed amendments to the Field Fumigant Use Requirements.

Response: No response necessary.

- *James Wells, Environmental Solutions Group, LLC on behalf of AgSIP*

Comment: While supportive of the amendments in general, the proposed amendment to section 6447.2, Methyl Bromide Field Fumigation Buffer Zone Requirements subsection (a) eliminates the reference to the Methyl Bromide Field Fumigation Buffer Zone Determination, Rev. 3/10, thereby referring the user to buffer zones specified on the label. However, in determining Methyl Bromide buffer zones on the label, U.S. Environmental Protection Agency recognized DPR's longstanding buffer zones and requires users to follow the buffer zones incorporated into DPR regulations. The Workgroup requests that the original language in this section be retained.

Response: DPR agrees. Section 6447.2(a) has been reverted back to its current language.

Comment: Supports changes which remove repetitive language and additional changes which are intended to provide more clarity to the DPR regulations.

Response: No response necessary.

- *Stephen Wilhelm, Chloropicrin Manufacturers' Task Force*

Comment: Supports DPR's goals to (1) harmonize its regulations regarding the application of chloropicrin and other fumigants with the federal labels recently amended by the reregistration of certain soil fumigants including chloropicrin; and, (2) codify in DPR's regulations certain low-emission application methods.

Response: No response necessary.

- *Michael S. Stanghellini, TriCal, Inc.*

Comment: Overall, support the proposed amendments to the Field Fumigant Use Requirements.

Response: No response necessary.

Comment: The elimination of the reference to the "Methyl Bromide Field Fumigation Buffer Zone Determination, Rev. 3/10" is problematic. Because DPR's successful implementation of methyl bromide regulations pre-dated the federal Phase II label changes by many years, the USEPA gave special consideration to end-users in California. Specifically, the federal methyl bromide field fumigant labels state that, in California, the label buffer zones do not apply, and that end-users in California must refer to, and use, the DPR's methyl bromide regulations. The federal label buffer zones for methyl bromide products were developed by the USEPA from a nation-wide perspective, and are significantly different than those in use in California since the early 2000s. To change the basis for buffer zones at this time would not only create confusion, it would incur severe hardships for growers.

Response: DPR agrees. Section 6447.2(a) has been reverted back to its current language.

- *Sal Partida, Committee for a Better Arvin*

Comment: The kind of chemicals that are being sprayed should be modified to a more sensitive type of chemical. The schools should be a mile from where there is spraying.

Response: Comment is not within the scope of the proposed regulations – no response necessary.

Comment: The schools should be a mile from where there is spraying.

Response: Comment is not within the scope of the proposed regulations – no response necessary.

- *Jose Chavez*

Comment: The regulation is not effective. San Joaquin Valley has a lot of issues—12 percent should be increased to 20 percent.

Response: Comment is not within the scope of the proposed regulations – no response necessary.

Comment: The fumigant buffer zone should be at least one mile away from schools.

Response: Comment is not within the scope of the proposed regulations – no response necessary.

- *Cesar Aguirre*

Comment: The TIF tarps are a band-aid. Basic needs of the community does not seem to be the priority of the people taking care of the regulations.

Response: Comment is not within the scope of the proposed regulations – no response necessary.

- *Valerie Gorospe, Center on Race, Poverty, and the Environment*

Comment: DPR must put in place a 20 percent pesticide VOC emission reduction requirement in the San Joaquin Valley.

Response: This comment is outside the scope of the proposed regulation - no response necessary.

Comment: Even the most high-tech TIF tarps are an unreliable method of controlling the release of volatile fumigants into the air. DPR claims that using TIF tarps will control emissions so that only seven percent of chloropicrin fumigant and ten percent of Telone fumigant applied to the soil will be released into the air. Under this proposed rule, only seven to ten pounds of these fumigants will be counted as VOC emissions for every 100 pounds applied to the soil. This is based on limited information from small field experiments.

Response: DPR disagrees. The methods were assigned emission ratings based on several fumigant emission studies as discussed in “Director’s Decision Concerning Environmental Monitoring Branch’s Request for Approval of Reduced Volatile Organic Compound Emissions Field Fumigation Method” dated April 29, 2013. The commenter did not provide additional study/data to support the comment.

Comment: DPR has yet to complete the process to certify which TIF tarps reliable control emissions under wet conditions through DPR claims that this certification should be in place by the end of this year. Through an interim rule this low-emission rates for the TIF tarps were already used in the 2013 pesticide VOC inventory. DPR reported a 44 percent decrease in, and “adjusted,” end quote, pesticide VOC emissions in Ventura due to a widespread use of TIF tarps,

tarp methods for applying the fumigant or chloropicrin. The only failsafe way to reduce pesticide fumigant levels in the air is to phase out fumigants. DPR needs to set much higher emission rates that take real-world application conditions into account.

Response: The regulations refer to 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. There is no indication that these tarpaulins are less effective than standard (non-TIF) tarpaulins.

COMMENTS RECEIVED DURING THE 15-DAY COMMENT PERIOD

- *Anne Katten, California Rural Legal Assistance (CRLA) Foundation; Michael Meuter, CRLA, Inc.; and Sarah Aird, California for Pesticide Reform*

Comment: Support the proposed modifications to section 6447.2(a) and 6449.1(a)(2).

Response: No response necessary.

Comment: Incorporate by reference comments raised in initial comment letter dated September 23, 2015.

Response: These comments are not relevant to the proposed modified text - no response necessary.

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

DPR has determined that the proposed regulatory action does not impose a mandate on local agencies or school districts requiring reimbursement by the State pursuant to Part 7 (commencing with section 17500) of Division 4 of the Government Code because the regulatory action does not constitute a “new program or higher level of service of an existing program” within the meaning of section 6 of Article XIII B of the California Constitution. DPR has also determined that no nondiscretionary costs or savings to local agencies or school districts will result from this regulatory action.

ALTERNATIVES DETERMINATION

The Director has determined that no alternative considered by DPR would be more effective in carrying out the purpose for which this regulation is proposed, or would be as effective and less burdensome to affected private persons or businesses than the adopted regulations, or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of the law. This determination is supported by the *Director’s Decision Concerning Environmental Monitoring Branch’s Request for Approval of Reduced Volatile Organic Compound Emissions Field Fumigation Method*, April 29, 2013; *Director’s Decision Concerning Environmental Monitoring Branch’s Request for Approval of Reduced Volatile Organic Compound Emissions Field Fumigation Method*, July 31, 2014; and *Director’s Decision Concerning TriCal, Inc.’s Request for Approval of Reduced Volatile Organic*

Compound Emissions Field Fumigation Method, July 31, 2014, which are contained in the rulemaking file as "Documents Relied Upon."

POSTING REQUIREMENT

Title 3, California Code of Regulations, section 6110, states in part that, "The public report shall be posted on the official bulletin boards of the Department, and of each commissioner's office, and in each District office of the DPR [Division of Pest Management, Environmental Protection and Worker Safety] for 45 days." DPR has posted its Initial Statement of Reasons and Public Report on its official bulletin board, which consists of the Department's Internet Home Page <<http://www.cdpr.ca.gov>>. In addition, copies were provided to the offices listed above for posting.