

TITLE 3. DEPARTMENT OF PESTICIDE REGULATION
Health Risk Mitigation and Volatile Organic Compound Emission Reduction
for 1,3-Dichloropropene
DPR Regulation No. 22-005

NOTICE OF PROPOSED REGULATORY ACTION

AND

NOTICE OF PUBLIC HEARING
ON A PROPOSED OZONE STATE IMPLEMENTATION PLAN AMENDMENT
REGARDING PESTICIDE EMISSIONS IN THE SACRAMENTO METRO,
SAN JOAQUIN VALLEY, SOUTH COAST, SOUTHEAST DESERT,
AND VENTURA NONATTAINMENT AREAS

The Department of Pesticide Regulation (DPR) proposes to adopt sections 6448.3 and 6448.4; amend sections 6448, 6449.1, 6452, 6452.2, 6624, 6626, and 6881; and adopt new section 6448.1, and renumber and amend previous section 6448.1 as section 6448.2 of Title 3, California Code of Regulations. In summary, the proposed action will restrict the use of 1,3-dichloropropene (1,3-D) to mitigate the potential 72-hour acute risk and 70-year lifetime cancer risk to non-occupational bystanders. The proposed mitigation measures will also further reduce the emissions of 1,3-D as a volatile organic compound (VOC). The proposed action will allow the use of 1,3-D only for the production of agricultural commodities, effectively prohibiting other uses that are not currently registered; establish mandatory setbacks (distances from occupied structures where 1,3-D cannot be applied); set limits on the application rate and acres treated for individual field soil fumigations; place restrictions on multiple field soil fumigations that do not meet distance or time separation criteria; limit the allowed methods to apply 1,3-D, including establishing criteria for acceptable types of tarpaulins that can be used; require an annual report from DPR that includes evaluations of 1,3-D use and air monitoring results; and require the inclusion of certain information in existing pesticide use records and pesticide use reports. DPR also proposes to incorporate “1,3-Dichloropropene Field Fumigation Requirements, Est. January 1, 2024” by reference in proposed sections 6448, 6448.2, 6624, and 6626. A copy of this document is included in the rulemaking file and is available upon request.

DPR will conduct a public hearing to accept comments on these amendments that may become part of the ozone state implementation plan (SIP). The federal Clean Air Act requires each state with nonattainment areas to submit a SIP for achieving and maintaining federal ambient air quality standards for ozone. California's SIP contains an element to reduce pesticidal sources of VOCs. These proposed regulations amend and add to regulations that were previously submitted to the U.S. Environmental Protection Agency (U.S. EPA) to support commitments made in the 2022 State Strategy for the SIP. Opportunity to comment and a hearing on the proposed regulations as part of the SIP amendment are being provided in conjunction with this rulemaking. If adopted, DPR will provide these amendments to the California Air Resources Board to submit to U.S. EPA as a revision to the California SIP.

WRITTEN COMMENT PERIOD

Any interested person may present comments in writing about the proposed action to the agency contact person named below. The public comment period for this regulatory action will begin on November 18, 2022. DPR will accept written comments that are submitted via U.S. mail and postmarked no later than January 18, 2023. Comments regarding this proposed action may also be transmitted via e-mail to <dpr22005@cdpr.ca.gov> or by facsimile at 916-324-1491 and must be received no later than 5:00 p.m. on January 18, 2023.

PUBLIC HEARING

A public hearing has been scheduled for the date and time stated below to receive oral and/or written comments regarding the proposed action.¹ This public hearing will occur in a hybrid format with both a physical location and an option to participate from a remote location.

DATE: January 18, 2023

TIME: 9:30 a.m.

PLACE: **Physical Location:**
CalEPA Headquarters Building
Byron Sher Auditorium
1001 I Street, 2nd Floor
Sacramento, California 95814

Remote Location:

Zoom

Webinar ID: 826 1358 3257

Password: 045724

Direct link to join the meeting from a web browser or Zoom client:

<<https://us02web.zoom.us/j/82613583257?pwd=UGJ0WkxtbFIFYUdrQmJYb3V3QyszUT09>>

One tap to join from a mobile phone: +16699009128,,82613583257#,,,,*045724#

Or call from a landline: +1 669 900 9128 – and enter the Webinar ID and Password (above) when prompted

The hearing will also be accessible via public webcast for persons who would like to watch this hearing without participating. The public webcast can be accessed by visiting the following web address: <<https://video.calepa.ca.gov/#/>>

A DPR representative will preside at the hearing. Persons who wish to speak at the physical location will be asked to register before the hearing. The registration of speakers will be conducted at the physical location from 8:00 a.m. to 9:00 a.m. Persons who are participating from a remote location and wish to speak will be asked to utilize Zoom’s “raise hand” feature. Persons at the physical location will be called upon first, followed by persons participating from a remote location. Generally, registered persons at the physical location will be heard in the order

¹ If you have questions, comments, or require additional information, please contact the contact person named below. If you require reasonable accommodation or language assistance to participate, please provide notice at least 10 business days before the public meeting by contacting DPR’s Reasonable Accommodation Coordinator at 916-322-4553. TTY/TDD speech-to-speech users may dial 7-1-1 for the California Relay Service.

of their registration and persons participating from a remote location will be heard in the order that they raised their hands in Zoom. Any other person who wishes to speak during the hearing will be afforded the opportunity to do so after persons who have registered at the physical location or who have raised their hands in Zoom have been heard. If a person participating from a remote location experiences technical difficulties during the hearing, they may e-mail written comments to <dpr22005@cdpr.ca.gov>. DPR will also accept written comments that are submitted via U.S. mail and postmarked on the day of the hearing. If the number of persons in attendance warrants, the hearing officer may limit the time for each oral comment in order to allow everyone wishing to speak the opportunity to be heard. Oral comments presented at a hearing carry no more weight than written comments.

Participants will be given instructions on how to provide oral comment once they have accessed the hearing. The hearing will continue on the date noted above until all testimony is submitted. DPR requests, but does not require, that persons who make oral comments at the hearing also submit a written copy of their testimony via e-mail.

EFFECT ON SMALL BUSINESS

DPR has determined that the proposed regulatory action does affect small businesses.

INFORMATIVE DIGEST/POLICY STATEMENT OVERVIEW

DPR's mission is to protect public health and the environment by regulating pesticide sales and use, and by fostering reduced-risk pest management. DPR's oversight includes product evaluation and registration; statewide licensing of commercial and private applicators, pest control businesses, dealers, and advisers; enforcement; and continuous evaluation of registered pesticides to ensure the protection of human health and the environment. DPR's program of continuous evaluation includes environmental monitoring and data collection. DPR also performs human health risk assessments of registered pesticides to carry out its statutory responsibilities. Upon completion of a risk assessment, DPR determines whether the use of a particular pesticide results in an unacceptable risk to human health or the environment, and may implement additional mitigation or control measures on the pesticide's sale, distribution and use through a variety of regulatory tools, such as conditions on registration, passing regulations, or cancellation. This statutory scheme is set forth primarily in Food and Agricultural Code (FAC) Divisions 6 and 7.

1,3-D is a fumigant used to control nematodes, insects, and disease organisms in soil. Under existing regulations, 1,3-D is designated as a restricted material (3 CCR section 6400(e)). As a restricted material, the purchase and use of 1,3-D is allowed only under a restricted materials permit from the local county agricultural commissioner (CAC). Before issuing a permit, the CAC must evaluate the permit application to determine whether the intended use may cause a substantial adverse environmental impact based on local conditions at the application site. Depending on the results of this review, the CAC may deny the permit or impose permit conditions including the use of specific mitigation measures. As part of the permit for any restricted material, applicators must provide a notice of intent to the CAC before any application. The notice of intent includes application-specific information, such as the number of acres being treated and date the application is intended to commence.

Additionally, 1,3-D is listed as a toxic air contaminant (TAC) in 3 CCR section 6860(b) based on its designation as a hazardous air pollutant under the federal Clean Air Act. As a TAC and hazardous air pollutant for which a risk assessment has been completed, DPR must determine the “need for and appropriate degree of control measures” pursuant to FAC section 14023(f). Control or mitigation measures that DPR develops for TACs must follow the requirements specified by FAC section 14024, including consulting with specified agencies.

1,3-D is also a VOC and its emissions to the air contribute to the formation of ozone, a major air pollutant in California. Currently, 3 CCR sections 6448 and 6448.1 specify VOC requirements for 1,3-D field soil fumigations. The VOC requirements are mandated by the pesticide element of the ozone SIP for the federal Clean Air Act. The pesticide SIP element pertains to five regions in California that exceed the federal ozone standard (nonattainment areas) during the May–October peak ozone season.

To mitigate the 1,3-D cancer risk to non-occupational bystanders, DPR currently implements a “township cap” program that includes a yearly use limit within designated 6x6 mile areas. The township cap program includes six elements that address non-occupational bystander exposure. First, a notice of intent must be submitted to the CAC at least 48 hours before the fumigation begins. Second, the CAC will deny the notice of intent if the proposed application exceeds the township cap. Third, use reports for 1,3-D must include the field fumigation method code. Fourth, 1,3-D field soil fumigations are prohibited within 100 feet of any occupied structure, measured from the perimeter of the application block to any occupied residences, onsite employee housing, schools, convalescent homes, hospitals, or other similar sites identified by the CAC. If a structure is within 100 feet of the application block, no person shall be present at this structure at any time during the application and during the seven consecutive day period after the application is complete. 1,3-D product labels have a similar but less stringent occupied structure requirement. Fifth, field soil fumigations in December are prohibited. And finally, the maximum application rate is 332 pounds active ingredient per acre. The 1,3-D township cap program, intended to mitigate cancer risk to non-occupational bystanders, was successfully challenged in court by petitioners Juana Vasquez, Californians for Pesticide Reform, and Pesticide Action Network North America. As a result, DPR is proposing regulations that will address acute and cancer risks to non-occupational bystanders from the use of 1,3-D.

The proposed regulations will place additional and more stringent restrictions on the use of 1,3-D for production agricultural purposes by establishing mandatory setbacks (distances from occupied structures where 1,3-D cannot be applied for a specified period of time); setting limits on the application rate and acres treated for individual applications; placing additional restrictions on seasonal applications and multiple applications that do not meet distance or time separation criteria; requiring more stringent soil moisture content for applications; and limiting applications to specific fumigation methods with corresponding setbacks and restrictions.

The broad objectives of the proposed regulations are to mitigate the potential 72-hour acute risk and 70-year lifetime cancer risk to non-occupational bystanders from the use of 1,3-D, and to reduce VOC emissions from 1,3-D field soil fumigations. Adoption of these regulations will provide a benefit to public health and the environment by mitigating the potential acute and lifetime cancer risk to non-occupational bystanders from 1,3-D use, and by reducing VOC emissions to reduce ozone levels.

During the process of developing these regulations, DPR conducted a search of any similar regulations on this topic and concluded that these proposed regulations are not inconsistent or incompatible with existing state regulations. DPR is the only state agency that has the authority to regulate the use of pesticides.

Document Incorporated By Reference:

1,3-Dichloropropene Field Fumigation Requirements, Est. January 1, 2024

IMPACT 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, nor does it require 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 of the California Constitution. DPR has also determined that no nondiscretionary costs or savings to local agencies or school districts are expected to result from the proposed regulatory action.

CAC offices will be the local agencies responsible for enforcing the proposed regulations. DPR anticipates that there will be no fiscal impact to these agencies. DPR negotiates an annual work plan with the CACs for enforcement activities. CACs currently evaluate, condition, and enforce 1,3-D restricted materials permits, and the proposed regulations should result in a similar permitting workload.

COSTS OR SAVINGS TO STATE AGENCIES

The proposed regulatory action is anticipated to result in costs to DPR. Under the proposed regulations, DPR will be required to develop and maintain a list of approved totally impermeable film (TIF) tarpaulins; monitor and analyze the use of 1,3-D in each township; conduct a detailed analysis of use in the top ten townships in different counties; and develop an annual report describing the outcome of the analysis and solicit public feedback. DPR estimates that this will result in a cost of \$195,000 in the 2023-2024 Fiscal Year (FY), and a total of \$390,000 in the two subsequent FYs (2024-2025 and 2025-2026).

EFFECT ON FEDERAL FUNDING TO THE STATE

DPR has determined that no costs or savings in federal funding to the state will result from the proposed action.

EFFECT ON HOUSING COSTS

DPR has made an initial determination that the proposed action will have no effect on housing costs.

SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESS

DPR has made an initial determination that adoption of these regulations will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states.

COST IMPACTS ON REPRESENTATIVE PRIVATE PERSONS OR BUSINESSES

In reasonable compliance with the proposed action, growers using 1,3-D for the production of an agricultural commodity are anticipated to incur costs. Under the proposed regulations, growers will need to comply with a combination of requirements regarding application rate, application method, setbacks to occupied structures, and maximum application block size, which may result in switching to a different application method or reducing the size of their application block. The average total cost for all growers using 1,3-D for the production of an agricultural commodity to comply with these regulations is estimated to be \$1,365,832 per year. The initial cost is estimated to be to \$849-\$2,187 to each impacted grower, regardless of whether the grower is a small business. The annual cost is estimated to be \$2,187 to each grower who is impacted annually, regardless of whether the grower is a small business. Costs to each grower will vary based on whether annual or perennial crops are grown. Annual crops are reoccurring, so those businesses will have initial and annual ongoing costs. However, businesses planting perennial crops will only use it once in the lifetime of the orchard, so those businesses will only have an initial cost since perennials are one-time applications.

RESULTS OF THE ECONOMIC IMPACT ANALYSIS

Impact on the Creation, Elimination, or Expansion of Jobs/Businesses: DPR determined it is not likely the proposed regulatory action will impact the creation or elimination of jobs, the creation of new businesses or the elimination of existing businesses, or the expansion of businesses currently doing business within the State of California. DPR proposes to establish setbacks and fumigation method restrictions for each 1,3-D application, and the proposed requirements are similar to current requirements for other fumigants. As with other fumigants, DPR anticipates businesses will manage the setbacks by shifting to fumigation methods with lower emissions and/or breaking up large fields into smaller blocks and fumigate sequentially over several days. The proposed regulations require minimal changes in processes, services, and equipment for compliance, and the changes can easily be achieved by existing businesses.

The Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment: The proposed action is designed to reduce and mitigate the potential acute and cancer risk of 1,3-D to non-occupational bystanders and reduce VOC emissions to reduce ozone levels. While the proposed regulations will reduce the health risk, the reduction will vary depending on several factors including a person's distance from a 1,3-D application, the amount of 1,3-D applied, and weather conditions during applications. DPR is not aware of any methods to quantify the health benefits or monetary value of actions to reduce acute or cancer risk to pesticides. Moreover, the uncertainties in evaluating risk make estimating benefits even more difficult. For example, while DPR has established specific target concentrations, exceeding the targets increases the probability that adverse health effects might occur, not that they will occur. Quantifying the benefits for 1,3-D is particularly difficult because DPR's risk characterization document indicates that the 55 ppb regulatory target concentration

for acute risk is to mitigate a potential decrease in weight gain for infants and children. While other health impacts might be associated with this effect, the direct benefits of avoiding this effect are uncertain.

CONSIDERATION OF ALTERNATIVES

DPR must determine that no reasonable alternative considered by the agency, or that has otherwise been identified and brought to the attention of the agency, would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons or businesses than the proposed regulatory action or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of the law.

AUTHORITY

This regulatory action is taken pursuant to the authority vested by Food and Agricultural Code sections 11456, 12976, 14005, and 14024.

REFERENCE

This regulatory action is to implement, interpret, or make specific Food and Agricultural Code sections 11501, 14006, and 14024.

AVAILABILITY OF STATEMENT OF REASONS AND TEXT OF PROPOSED REGULATIONS

DPR has prepared an Initial Statement of Reasons and the express terms of the proposed action, all of the information upon which the proposal is based, and a rulemaking file. A copy of the Initial Statement of Reasons and the proposed text of the regulations may be obtained from the agency contact person named in this notice. The information upon which DPR relied in preparing this proposal and the rulemaking file are available for review at the address specified below.

AVAILABILITY OF CHANGED OR MODIFIED TEXT

After the close of the comment period, DPR may make the regulations permanent if they remain substantially the same as described in the Informative Digest. If DPR does make substantial changes to the regulations, the modified text will be made available for at least 15 days prior to adoption. Requests for the modified text should be addressed to the agency contact person named in this notice. DPR will accept written comments on any changes for 15 days after the modified text is made available.

AGENCY CONTACT

Written comments about the proposed regulatory action; requests for a copy of the Initial Statement of Reasons, and the proposed text of the regulations; and inquiries regarding the rulemaking file may be directed to:

Lauren Otani, Senior Environmental Scientist (Specialist)
Department of Pesticide Regulation
1001 I Street, P.O. Box 4015
Sacramento, California 95812-4015
916-445-5781

Note: In the event the contact person is unavailable, questions on the substance of the proposed regulatory action may be directed to the following person at the same address as noted below:

Minh Pham, Environmental Program Manager II
Environmental Monitoring Branch
916-445-0979

This Notice of Proposed Action, the Initial Statement of Reasons, and the proposed text of the regulations are also available on DPR's Internet Home Page <<http://www.cdpr.ca.gov>>. Upon request, the proposed text can be made available in an alternate form as a disability-related accommodation.

AVAILABILITY OF FINAL STATEMENT OF REASONS

Following its preparation, a copy of the Final Statement of Reasons mandated by Government Code section 11346.9(a) may be obtained from the contact person named above. In addition, the Final Statement of Reasons will be posted on DPR's Internet Home Page and accessed at <<http://www.cdpr.ca.gov>>.