

TITLE 3. DEPARTMENT OF PESTICIDE REGULATION
1,3-Dichloropropene Field Fumigation Method – Tree-hole Method
DPR Regulation No. 26-006

NOTICE OF PROPOSED REGULATORY ACTION

The Department of Pesticide Regulation (DPR) proposes to amend Title 3, California Code of Regulations (3 CCR) sections 6448, 6448.2, 6624, and 6626. DPR also proposes to amend existing document “1,3-Dichloropropene Field Fumigation Requirements, Rev. January 1, 2026” incorporated by reference in sections 6448, 6448.2, 6624, and 6626. The pesticide regulatory program activities affected by the proposal are those pertaining to restricted materials and pesticide use enforcement. In summary, the proposed action allows for the use of 1,3-dichloropropene (1,3-D) to fumigate individual tree-holes (also known as tree planting sites), making permanent the three-year interim approval of the method granted in September 2024. The proposed action also establishes additional restrictions on use of the tree-hole method, including more stringent limits on the number of tree-holes per acre.

SUBMITTAL OF COMMENTS

Any interested person may present comments in writing about the proposed action to the agency contact person named below. DPR will accept written comments that are submitted via U.S. mail and postmarked no later than December 14, 2026. Comments regarding this proposed action that are transmitted via SmartComment online public comment portal at <https://cdpr.commentinput.com?id=CBrjsbfHg> or via e-mail at dpr26006@cdpr.ca.gov must be received no later than December 14, 2026.

Please note that under the California Public Records Act (Government Code section 7920.000 et seq.), your written and oral comments, attachments, and any associated contact information (e.g., your address, phone number, or email address) become part of the public record and can be released to the public upon request. You do not have to provide contact information when submitting a comment using the SmartComment portal.

A public hearing is not scheduled. However, one will be scheduled if any interested person submits a written request to DPR no later than 15 days prior to the close of the written comment period.¹

EFFECT ON SMALL BUSINESS

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

INFORMATIVE DIGEST/POLICY STATEMENT OVERVIEW

DPR protects human health and the environment by fostering sustainable pest management and regulating pesticides. DPR's strict oversight includes: product evaluation and registration; statewide licensing of commercial and private pesticide applicators, pest control businesses,

¹ If you have special accommodation or language needs, please include this in your request for a public hearing. TTY/TDD speech-to-speech users may dial 7-1-1 for the California Relay Service.

dealers, and advisers; environmental monitoring; and residue testing of fresh produce. This statutory scheme is set forth primarily in Food and Agricultural Code (FAC) Divisions 6 and 7.

1,3-Dichloropropene (1,3-D) was introduced in California in 1970 as a fumigant used to control nematodes, insects, and disease organisms in the soil. 1,3-D is currently listed as a restricted material in 3 CCR section 6400(e). As a restricted material, the purchase and use of 1,3-D for agricultural production purposes are 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 the 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. Pursuant to FAC section 14023(f), for TACs and hazardous air pollutants (HAP-TACs) for which a risk assessment has been completed, DPR must determine the “need for and appropriate degree of control measures.” Control or mitigation measures that DPR develops for HAP-TACs must also follow the requirements specified by FAC section 14024, including consulting with specified agencies.

1,3-D is also a volatile organic compound (VOC) and contributes to the formation of ozone, a major air pollutant in several regions of California. Under the federal Clean Air Act, California’s State Implementation Plan for ozone includes an element to track and reduce VOC emissions from pesticides.

Certain product labels for 1,3-D allow for a specialized type of application known as a “tree-hole” or “tree planting site” application (henceforth referred to as “tree-hole” fumigations). Such applications are typically used in orchard replant scenarios where dead or diseased trees must be selectively removed and replaced. Whereas most 1,3-D applications involve the tillage and application of 1,3-D throughout an entire field via shank injection, tree-hole applications are akin to a spot treatment whereby applications are performed individually or in isolated clusters within an existing orchard.

Prior to January 1, 2024, tree-hole applications were not considered field soil fumigations and were exempt from the requirements now described in 3 CCR section 6448.2. The modifications to 3 CCR section 6448.2(d) that DPR adopted in 2024 specify that applications of 1,3-D are only allowed if they have been assigned a field fumigation method code as specified in DPR’s document incorporated by reference, 1,3-D Field Fumigation Requirements. While tree-hole applications have long been allowed by product labels and used within California, no specific code previously existed for their reporting and uses were reported under a broad “Other Application Method” code which is now prohibited. Hence, following adoption of the modifications in 3 CCR section 6448, the tree-hole method was disallowed. Following a formal request from the Tehama County Agricultural Commissioner (CAC), DPR granted a three-year interim approval for this method on September 3, 2024, pursuant to 3 CCR sections 6448.3 and 6452, with continued use beyond its expiration in September 2027 requiring further regulatory

action. DPR is therefore proposing to make permanent the interim approval of the individual tree-hole method, with restrictions that go beyond the interim-approved application method such that emissions from tree-hole applications are no greater than those of a low-emission reference method (FFM 1242) at the average rate for a non-tree-and-grape crop on a per-acre basis. The interim approval currently includes restrictions on the application rate; number of tree holes fumigated during calendar year; spacing between tree holes; setback requirements; and minimum amount of time between fumigation of adjacent tree holes. As part of this rulemaking, DPR proposes additional restrictions to the method, including lower per-acre limits on the number of fumigated tree-holes in a given year, as compared to the current provisions of the interim approval.

The broad objective of the proposed regulation is to allow for use of the tree-hole method, including for use in tree replant scenarios. In consideration of historical usage information, cost relative to broadcast applications, and orchard planting density, the following use restrictions are proposed:

- A maximum per hole application rate of 1.85 pounds of active ingredient (AI).
- The minimum distances between any two tree-hole planting sites must be 15 feet center to center. If trees are planted less than the 15-foot minimum, tree-hole applications must be separated by at least 24 hours.
- A maximum number of 60 tree-holes per acre in a calendar year.
- The minimum injection depth for fumigant is 36 inches.
- Tilling, soil, and application requirements.

Adoption of this regulation will provide a benefit to public health and the environment by allowing growers to extend the productive lifetime of an orchard through individual tree replacement and delay wholesale orchard replanting, thereby increasing the interval between broadcast or strip fumigations that are associated with greater emissions of 1,3-D. With the proposed limits on treated tree-holes per acre, this approach will utilize lower amounts of 1,3-D on a per-acre basis than are used in broadcast or strip orchard planting or replanting scenarios. The injection depth for the tree-hole method, which varies between 36-60 inches below the soil surface, is estimated to emit proportionally less 1,3-D pound-for-pound than the dominant methods used in large-scale orchard replant scenarios.

During the process of developing these proposed regulations, DPR conducted a search of any similar regulations on this topic and has concluded that these proposed regulations are neither inconsistent nor incompatible with existing state regulations. DPR is vested with statewide jurisdiction and primacy of authority to regulate the registration, sale, use, and transportation of pesticides.

Document Incorporated by Reference:

1,3-Dichloropropene Field Fumigation Requirements, rev. September 1, 2027

CONSULTATION WITH OTHER AGENCIES

DPR formed a TAC workgroup to comply with the consultation required by FAC section 14024. In addition to County Agricultural Commissioners and Sealers Association and the Air Pollution Control Districts required by FAC section 14024, the TAC workgroup included representatives from California Air Resources Board and Office of Environmental Health Hazard Assessment. The TAC workgroup also included a representative of the California Department of Food and

Agriculture to fulfill the consultation specified in FAC section 11454, and January 15, 2019, Memorandum of Understanding developed pursuant to FAC section 11454.2. In compliance with FAC section 14024, the TAC workgroup provides comments on the draft regulation text and related documents.

DPR also consulted with the Agricultural Pest Control Advisory Committee, as required by FAC section 12047, on December 9, 2026, and the Pesticide Registration and Evaluation Committee on November 20, 2026.

IMPACT ON LOCAL AGENCIES OR SCHOOL DISTRICTS

DPR determined that the proposed regulatory action does not impose a mandate on local agencies or school districts. DPR also determined that there are no costs to any local agency or school district requiring reimbursement pursuant to Government Code section 17500 et seq.

OTHER NONDISCRETIONARY COST OR SAVINGS IMPOSED UPON LOCAL AGENCIES

There are no other nondiscretionary costs or savings imposed upon local agencies that are expected to result from the proposed regulation action.

COSTS OR SAVINGS TO STATE AGENCIES

DPR determined that no savings or increased costs to any state agency will result from the proposed regulatory action.

EFFECT ON FEDERAL FUNDING TO THE STATE

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

EFFECT ON HOUSING COSTS

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

SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESSES

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

COST IMPACTS ON REPRESENTATIVE PRIVATE PERSONS OR BUSINESSES

DPR is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

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 with the State of California because the proposed regulatory action allows for the continued use of an application method that is currently allowed under interim approval. The additional restrictions on the application method as part of the proposed action are not expected to adversely affect businesses, based on an analysis of available use data. Failure to adopt the proposed action will likely negatively impact businesses as growers either confront additional costs related to the use of application methods with buffer zones or experience a loss in yields as individual dead or diseased trees within an otherwise productive orchard are not replaced.

The Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment: As stated on page 3 under “Informative Digest/Policy Statement Overview,” adoption of this regulation will provide a benefit to public health and welfare and the environment by continuing to allow growers the use of a low-emission fumigation method for use in either individual tree planting or tree replacement situations. This enables growers to remove dead and/or diseased trees from orchards and use target “spot” treatments of 1,3-D prior to replanting, which may help extend the productive life of the orchard and delay large-scale orchard fumigation and replacement, thereby increasing the interval between broadcast or strip fumigations that are associated with greater emissions of 1,3-D. With the proposed limits on treated tree-holes per acre, this approach will utilize lower amounts of 1,3-D on a per-acre basis than are used in broadcast or strip orchard replant scenarios. The injection depth for the method, which varies between 36-60 inches below the soil surface, is estimated to emit proportionally less 1,3-D pound-for-pound than the dominant methods used in large-scale orchard replant scenarios. Hence, the proposed action may reduce the overall impact of orchard fumigations on air quality as compared to a situation where the method is no longer allowed. Implementation of the proposed regulations will not adversely affect worker safety.

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, would be as effective and less burdensome to affected private persons 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 FAC sections 11456, 12976, 14005, and 14024.

REFERENCE

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

AVAILABILITY OF STATEMENT OF REASONS AND TEXT OF PROPOSED REGULATIONS

DPR prepared an Initial Statement of Reasons and is making available 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 regulation 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 regulation permanent if it remains substantially the same as described in the Informative Digest. If DPR does make substantial changes to the regulation, 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 regulation; and inquiries regarding the rulemaking file may be directed to:

Ashley Anderson, Regulations Coordinator
Department of Pesticide Regulation
1001 I Street, P.O. Box 4015
Sacramento, California 95812-4015
279-399-8005

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

Maziar Kandelous, Environmental Program Manager II
Environmental Monitoring Branch
916-445-0981

This Notice of Proposed Action, the Initial Statement of Reasons, and the proposed text of the regulation are also available on DPR's Internet Home Page <<http://www.cdpr.ca.gov>>. Upon request, the documents can be made available in another language, or 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>.