

ECONOMIC AND FISCAL IMPACT STATEMENT**(REGULATIONS AND ORDERS)**

STD. 399 (Rev. 10/2019)

ECONOMIC IMPACT STATEMENT

DEPARTMENT NAME Department of Pesticide Regulation	CONTACT PERSON Jagjinder Sahota	EMAIL ADDRESS Jagjinder.Sahota@cdpr.ca.gov	TELEPHONE NUMBER 916-324-4116
DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400 Health Risk Mitigation for 1,3-Dichloropropene (1,3-D)			NOTICE FILE NUMBER Z

A. ESTIMATED PRIVATE SECTOR COST IMPACTS *Include calculations and assumptions in the rulemaking record.*

1. Check the appropriate box(es) below to indicate whether this regulation:

- | | |
|--|--|
| <input checked="" type="checkbox"/> a. Impacts business and/or employees | <input type="checkbox"/> e. Imposes reporting requirements |
| <input checked="" type="checkbox"/> b. Impacts small businesses | <input checked="" type="checkbox"/> f. Imposes prescriptive instead of performance |
| <input type="checkbox"/> c. Impacts jobs or occupations | <input type="checkbox"/> g. Impacts individuals |
| <input type="checkbox"/> d. Impacts California competitiveness | <input type="checkbox"/> h. None of the above (Explain below): |

*If any box in Items 1 a through g is checked, complete this Economic Impact Statement.**If box in Item 1.h. is checked, complete the Fiscal Impact Statement as appropriate.*

2. The [Department of Pesticide Regulation](#) estimates that the economic impact of this regulation (which includes the fiscal impact) is:
(Agency/Department)

- ☒ Below \$10 million
- ☐ Between \$10 and \$25 million
- ☐ Between \$25 and \$50 million
- ☐ Over \$50 million [If the economic impact is over \$50 million, agencies are required to submit a [Standardized Regulatory Impact Assessment](#) as specified in Government Code Section 11346.3(c)]

3. Enter the total number of businesses impacted: [915](#)Describe the types of businesses (Include nonprofits): [Growers of agricultural crops who treat their field with 1,3-Dichloropropene](#)Enter the number or percentage of total businesses impacted that are small businesses: [82% - 88%](#)4. Enter the number of businesses that will be created: [0](#) eliminated: [0](#)Explain: [N/A](#)

5. Indicate the geographic extent of impacts: ☒ Statewide

☐ Local or regional (List areas): _____

6. Enter the number of jobs created: [0](#) and eliminated: [0](#)

Describe the types of jobs or occupations impacted: _____

7. Will the regulation affect the ability of California businesses to compete with other states by making it more costly to produce goods or services here? ☒ YES ☐ NO

If YES, explain briefly: [Increase in production cost](#)

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ECONOMIC IMPACT STATEMENT (CONTINUED)**B. ESTIMATED COSTS** *Include calculations and assumptions in the rulemaking record.*1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime? \$ 493,458a. Initial costs for a small business: \$ 115 - 133 Annual ongoing costs: \$ 99 Years: 5b. Initial costs for a typical business: \$ 115 - 133 Annual ongoing costs: \$ 99 Years: 5c. Initial costs for an individual: \$ N/A Annual ongoing costs: \$ N/A Years: N/Ad. Describe other economic costs that may occur: None.2. If multiple industries are impacted, enter the share of total costs for each industry: 100% agricultural commodity producers3. If the regulation imposes reporting requirements, enter the annual costs a typical business may incur to comply with these requirements.
Include the dollar costs to do programming, record keeping, reporting, and other paperwork, whether or not the paperwork must be submitted. \$ N/A4. Will this regulation directly impact housing costs? ☐ YES ☒ NO

If YES, enter the annual dollar cost per housing unit: \$ _____

Number of units: _____

5. Are there comparable Federal regulations? ☐ YES ☒ NO

Explain the need for State regulation given the existence or absence of Federal regulations: _____

To mitigate the potential lifetime cancer risk of 1,3-D to occupational bystandersEnter any additional costs to businesses and/or individuals that may be due to State - Federal differences: \$ 0**C. ESTIMATED BENEFITS** *Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.*1. Briefly summarize the benefits of the regulation, which may include among others, the health and welfare of California residents, worker safety and the State's environment: _____
The proposed regulations will mitigate the potential lifetime cancer risk of 1,3-D to occupational bystanders2. Are the benefits the result of: ☐ specific statutory requirements, or ☒ goals developed by the agency based on broad statutory authority?Explain: Food and Agricultural Code section 129813. What are the total statewide benefits from this regulation over its lifetime? \$ Unquantifiable4. Briefly describe any expansion of businesses currently doing business within the State of California that would result from this regulation: _____
There will not be any expansion in business due to this regulation.**D. ALTERNATIVES TO THE REGULATION** *Include calculations and assumptions in the rulemaking record. Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.*1. List alternatives considered and describe them below. If no alternatives were considered, explain why not: See attachment.

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ECONOMIC IMPACT STATEMENT (CONTINUED)

2. Summarize the total statewide costs and benefits from this regulation and each alternative considered:

Regulation: Benefit: \$ Unquantifiable Cost: \$ 493,458Alternative 1: Benefit: \$ Unquantifiable Cost: \$ 130,000,000

Alternative 2: Benefit: \$ _____ Cost: \$ _____

3. Briefly discuss any quantification issues that are relevant to a comparison of estimated costs and benefits for this regulation or alternatives:

None.

4. Rulemaking law requires agencies to consider performance standards as an alternative, if a regulation mandates the use of specific technologies or equipment, or prescribes specific actions or procedures. Were performance standards considered to lower compliance costs?

☒ YES☐ NOExplain: See attachment.**E. MAJOR REGULATIONS** *Include calculations and assumptions in the rulemaking record.****California Environmental Protection Agency (Cal/EPA) boards, offices and departments are required to submit the following (per Health and Safety Code section 57005). Otherwise, skip to E4.***1. Will the estimated costs of this regulation to California business enterprises **exceed \$10 million?** ☐ YES ☒ NO***If YES, complete E2. and E3******If NO, skip to E4***

2. Briefly describe each alternative, or combination of alternatives, for which a cost-effectiveness analysis was performed:

Alternative 1: _____

Alternative 2: _____

(Attach additional pages for other alternatives)

3. For the regulation, and each alternative just described, enter the estimated total cost and overall cost-effectiveness ratio:

Regulation: Total Cost \$ _____ Cost-effectiveness ratio: \$ _____

Alternative 1: Total Cost \$ _____ Cost-effectiveness ratio: \$ _____

Alternative 2: Total Cost \$ _____ Cost-effectiveness ratio: \$ _____

4. Will the regulation subject to OAL review have an estimated economic impact to business enterprises and individuals located in or doing business in California exceeding \$50 million in any 12-month period between the date the major regulation is estimated to be filed with the Secretary of State through 12 months after the major regulation is estimated to be fully implemented?

☐ YES☒ NO*If YES, agencies are required to submit a [Standardized Regulatory Impact Assessment \(SRIA\)](#) as specified in Government Code Section 11346.3(c) and to include the SRIA in the Initial Statement of Reasons.*

5. Briefly describe the following:

The increase or decrease of investment in the State: _____

The incentive for innovation in products, materials or processes: _____

The benefits of the regulations, including, but not limited to, benefits to the health, safety, and welfare of California residents, worker safety, and the state's environment and quality of life, among any other benefits identified by the agency: _____

ECONOMIC AND FISCAL IMPACT STATEMENT**(REGULATIONS AND ORDERS)**

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FISCAL IMPACT STATEMENT**A. FISCAL EFFECT ON LOCAL GOVERNMENT** *Indicate appropriate boxes 1 through 6 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*

- ☐ 1. Additional expenditures in the current State Fiscal Year which are reimbursable by the State. (Approximate)
(Pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code).

\$ _____

- ☐ a. Funding provided in _____
Budget Act of _____ or Chapter _____, Statutes of _____

- ☐ b. Funding will be requested in the Governor's Budget Act of _____
Fiscal Year: _____

- ☐ 2. Additional expenditures in the current State Fiscal Year which are NOT reimbursable by the State. (Approximate)
(Pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code).

\$ _____

Check reason(s) this regulation is not reimbursable and provide the appropriate information:

- ☐ a. Implements the Federal mandate contained in _____
- ☐ b. Implements the court mandate set forth by the _____ Court.

Case of: _____ vs. _____

- ☐ c. Implements a mandate of the people of this State expressed in their approval of Proposition No. _____
Date of Election: _____

- ☐ d. Issued only in response to a specific request from affected local entity(s).

Local entity(s) affected: _____

- ☐ e. Will be fully financed from the fees, revenue, etc. from: _____
Authorized by Section: _____ of the _____ Code;

- ☐ f. Provides for savings to each affected unit of local government which will, at a minimum, offset any additional costs to each;

- ☐ g. Creates, eliminates, or changes the penalty for a new crime or infraction contained in _____

- ☐ 3. Annual Savings. (approximate)

\$ _____

- ☐ 4. No additional costs or savings. This regulation makes only technical, non-substantive or clarifying changes to current law regulations.

- ☐ 5. No fiscal impact exists. This regulation does not affect any local entity or program.

- ☒ 6. Other. Explain [See attachment.](#)

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FISCAL IMPACT STATEMENT (CONTINUED)**B. FISCAL EFFECT ON STATE GOVERNMENT** *Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*☒ 1. Additional expenditures in the current State Fiscal Year. (Approximate)\$ \$432,527*It is anticipated that State agencies will:*☒ a. Absorb these additional costs within their existing budgets and resources.☐ b. Increase the currently authorized budget level for the _____ Fiscal Year☐ 2. Savings in the current State Fiscal Year. (Approximate)

\$ _____

☐ 3. No fiscal impact exists. This regulation does not affect any State agency or program.☒ 4. Other. Explain See attachment.**C. FISCAL EFFECT ON FEDERAL FUNDING OF STATE PROGRAMS** *Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*☐ 1. Additional expenditures in the current State Fiscal Year. (Approximate)

\$ _____

☐ 2. Savings in the current State Fiscal Year. (Approximate)

\$ _____

☒ 3. No fiscal impact exists. This regulation does not affect any federally funded State agency or program.☐ 4. Other. Explain _____

FISCAL OFFICER SIGNATURE


Christina Bugai

Christina Bugai (May 21, 2025 09:55 PDT)

DATE

05/21/2025

The signature attests that the agency has completed the STD. 399 according to the instructions in SAM sections 6601-6616, and understands the impacts of the proposed rulemaking. State boards, offices, or departments not under an Agency Secretary must have the form signed by the highest ranking official in the organization.

AGENCY SECRETARY




DATE

5/30/2025

Finance approval and signature is required when SAM sections 6601-6616 require completion of Fiscal Impact Statement in the STD. 399.

DEPARTMENT OF FINANCE PROGRAM BUDGET MANAGER


Digitally signed by Andrew March
Date: 2025.11.06 08:02:57 -08'00'

DATE

Economic and Fiscal Impact Statement

Attachment to Std. 399

Summary of Economic Impact Statement

A. ESTIMATED PRIVATE SECTOR COST IMPACTS

3. An August 1, 2024 memorandum from the California Department of Food and Agriculture (CDFA) provided the Department of Pesticide Regulation (DPR) with the number of farms using 1,3-Dichloropropene (1,3-D), offering a reasonable estimate of the total affected businesses. CDFA reported that between 2019 and 2023, an estimated 703 to 1,021 farms used 1,3-D, with an average of 915 farms per year. CDFA also estimated that between 82% and 88% of these farms qualify as small businesses, according to the definition of a “small business” in Government Code section 11346.3(b)(4)(B).

B. ESTIMATED COSTS

1. To determine this number, DPR relied on the “1,3-Dichloropropene Occupational Safety Regulation Economic Impact Report” prepared by CDFA and the University of California, Davis, dated August 1, 2024. The report provides the total cost for impacted businesses from 2019-2023. The average initial compliance costs for implementing the newly proposed buffer zone distances and duration periods and the annual cost of acquiring written agreements from neighboring properties were estimated at \$113,887 for the initial year and \$94,893 annually after the first year. These estimates are based on the assumption that neighboring properties will allow the proposed buffers on their land, allowing growers to avoid additional expenses.

1.a-b. The U.S. EPA estimates it takes 30 minutes to understand soil fumigation labels. CDFA used this to estimate the cost associated with planning and implementing the new buffer zones on neighboring fields. Growers also need to obtain a written agreement from neighboring property owners annually, which adds an extra hour to the process. This means 1.5 hours are required for the first year, followed by 1 hour annually thereafter. The Bureau of Labor Statistics estimates the mean hourly wage rate for farmers and ranchers in California to be \$54.58/hour (BLS, 2023). Therefore, the one-time learning cost is \$27.29 per grower/business, and the annual cost of acquiring the agreement is \$54.58 per 1,3-D application. CDFA's analysis projected the total initial expenses for compliance is \$113,887 on average, which includes the one-time adjustment to the newly recommended buffer zone distances and time spans and the yearly cost of obtaining written agreements from adjacent properties. The estimated average annual recurring cost is approximately \$94,893.

The cost estimate assumes that all neighboring properties will agree to buffer implementation, allowing growers to avoid additional expenses. However, if a neighbor refuses, growers will need alternative compliance measures, with the Totally Impermeable Film (TIF) application being the most cost-effective option since no buffer zone is proposed for most crops. However, there is a proposed TIF buffer for tree and grape crops. In that scenario, the buffer could be left bare or planted with other crops, or the grower would need to use fumigant alternatives. To determine the upper bound cost, the potential net revenue loss for tree and grape growers who may need to incorporate a 100-ft buffer within their orchard/vineyard due

to lack of a neighbor agreement was estimated to be \$17.8 to \$35.6 million. This is an upper bound cost estimate because denying permission to extend buffers into adjoining agricultural fields should rarely occur with the proposed 100-ft buffer distance and 48-hr buffer duration. All other field fumigants have similar requirements with minimal impact. An estimated 20,276 acres of row crops might need to switch to TIF tarp, with annual total statewide cost increases of \$26.1 million (\$21.3 million without drip tape) for row crops.

CDFA's "Number of farms using 1,3-dichloropropene-updated" memorandum provided the number of farms/businesses growing annual crops and the number of farms/businesses growing perennial crops. They also provided the total cost each year from 2019-2023, separated by annual and perennial crops. Annual crops reoccur so those businesses will have initial and ongoing yearly costs. However, farms planting perennials 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.

The average cost of annual crops per year is \$62,352, and the average number of farms/businesses growing annual crops is 544. The initial cost per business is estimated at \$115 ($\$62,352/544 \text{ businesses} = \$115/\text{business}$). In addition, because these costs are recurring, the annual cost per business is estimated at \$99 ($\$53,936/544 \text{ businesses} = \$99/\text{business}$) as well.

The average cost for perennial crops per year is \$51,971, and the average number of farms/businesses growing perennial crops is 392. The initial cost per business is estimated at \$133 ($\$51,971/392 \text{ businesses} = \$133/\text{business}$). Because perennials will only be used once in the lifetime of the orchard, there will be no annual costs.

While the costs will vary depending on whether annual or perennial crops are grown, the cost per business will be the same for both small and typical businesses. The initial costs for a small or typical business range from \$115 to \$133, and the annual costs will be \$99. The total statewide cost for businesses to comply with this regulation over its lifetime is estimated to be \$493,458 over five years. This number represents the sum of the average initial cost for the first year and the average annual cost over four years: $[\$113,886.8 + (4 * \$94,892.8)] = \$493,458$.

D. ALTERNATIVES TO THE REGULATION

1. List alternatives considered and describe them below.

If neighboring properties refuse to sign the buffer zone agreement, growers will need alternative compliance measures. DPR has not identified any feasible alternatives to the proposed regulatory action that would lessen any adverse impacts, including any impacts on small businesses. TIF applications are considered the most cost-effective option, but it is only an option for row crops and 20,000 acres of row crops may need to transition to TIF tarps. The estimated annual cost of switching to TIF tarps is \$26 million, resulting in a total lifetime cost of approximately \$130 million over a 5-year period. Despite this significant impact on businesses, it is noted that this alternative is not more health-protective than the proposed fumigation methods.

4. Performance standards were considered and included where possible but were not appropriate for all proposed requirements as specific requirements are necessary for enforcement.

Summary of Fiscal Impact Statement

A. FISCAL EFFECT ON LOCAL GOVERNMENT

6. Other. Explain.

The proposed regulation likely has little or no fiscal impact on county agricultural commissioners (CACs). CACs currently evaluate, condition, and enforce 1,3-D restricted materials permits, and the proposed regulation should result in a similar permitting workload.

B. FISCAL EFFECT ON STATE GOVERNMENT

4. Other. Explain.

Fiscal impacts on state government are analyzed for the fiscal year (FY) the proposed regulatory amendments will become effective (FY 2026-2027) and the four subsequent fiscal years (FY 2027-2028, FY 2028-2029, FY 2029-2030, and FY 2030-2031).

The proposed regulations require DPR's Air Program to:

Issue a draft annual 1,3-Dichloropropene Report for each calendar year by November 1 of the following year or as soon thereafter as is reasonably practicable. Starting with the report covering calendar year 2027, the draft Annual 1,3-Dichloropropene Report specified by section 6448.4(a) must include an evaluation to determine if the estimated 1,3-Dichloropropene air concentrations in any township exceeds 0.21 parts per billion (ppb) using the following data:

1. for the report covering calendar year 2027, a three-year average of 2025-2027 data;
 2. for the report covering calendar year 2028, a four-year average of the 2025-2028 data;
 3. for the report covering calendar year 2029, a five-year average of the 2025-2029 data;
 4. For the report covering calendar year 2030 and subsequent years, a five-year average of the most recent data.
- a) The 0.21 ppb air concentration is a time-weighted average during a work period of 8:00 AM to 4:00 PM. However, the Air Program shall determine if estimated air concentrations exceed 0.21 ppb using alternative work periods if warranted for specific townships and times of the year when 1,3-Dichloropropene applications occur. If there is an exceedance of 0.21 ppb, the Air Program shall identify the factors causing the exceedance in the township(s), such as non-compliance with current requirements, fumigation method, weather conditions, application amount, or application frequency, and include a discussion of whether those factors are likely to continue.
- b) If the Department, in consultation with the Office of Environmental Health Hazard Assessment (OEHHA), determines that the factors causing 0.21 ppb to be exceeded are likely to continue in a township or townships, the Air Program will develop interim mitigation measures for 1,3-Dichloropropene that will result in an air concentration of no more than 0.21 ppb based on the relevant periods specified in subsection (a) and identify the relevant township(s) for the measures. The Department will include a description of the interim mitigation measures and relevant township(s) and an estimated timeline for publication of the interim mitigation measures in the Annual 1,3-Dichloropropene Report.

The Air Program will need two positions to fulfill its anticipated commitments related to the 1,3-Dichloropropene (1,3- D) regulation listed above. Air Program anticipates that staff will need to monitor and analyze 1,3-D use data throughout the year, perform intensive modeling to track chronic and acute concentrations and develop annual reports based on the monitoring and modeling data.

Table 2. Air Program Staffing Cost for Increased Workload

These expenditures are necessary to support DPR’s Air Program. DPR submitted a Budget Change Proposal (BCP) request for these expected expenditures.

Classification	Research Scientist (III) and Environmental Scientist
Fiscal Year (FY)	FY 2026- 2027
Total Number of Positions	2
Cost for 2 PY-Salaries and Wages	\$210,000
Cost for 2 PY – Staff Benefits	\$130,000
Compensation for 2PY	\$340,000
OE&E for 2PY	\$54,000
Total Cost for 2PY	\$394,000
Total Cost for 1FY - year 1	\$394,000
Total Cost for 1FY - year 2	\$394,000
Total Cost for 1FY - year 3	\$394,000
Total Cost for 1FY - year 4	\$394,000
Total Cost for 1FY - year 5	\$394,000
Total Cost for 5FY	\$1,970,000

Classification: Job position required to complete work tasks implementing the proposed regulations. These positions are permanent.

Fiscal Year (FY): Cost represented one Fiscal Year for each job position.

Total Number of Positions: Number of job positions for each classification required to complete work tasks.

Cost for 2 PY – Salaries and Wages: Cost of job position for two positions during one Fiscal Year (not including benefits).

Cost for 2 PY – Staff Benefits: Benefit-cost of job position for two positions during one Fiscal Year. This includes OASDI and Medicare, Retirement, and Healthcare.

Compensation for 2 PY: Cost of job positions for two positions during one Fiscal Year (Salary & Wages and Benefits Combined).

OE&E for 2 PY: Cost of operating expense and equipment (OE&E) for two positions during one Fiscal Year
Total Cost for 2 PY: Cost of job positions for two positions during one Fiscal Year (Salary & Wages and Benefits Combined).

Total Cost for 1 FY: Cost of the total number of positions in each category for one Fiscal Year (Salary & Wages, OE&E, and Benefits Combined).

Total Cost for 5 FY/Grand Total: Total cost to support all the positions for a lifetime period of five Fiscal Years, assuming compensation for the four subsequent Fiscal Years remains the same.

Table 2.1. Work Tasks of Air Program Staff Position (Note, not complete duty statement/tasks, but a brief overview)

Classification	Work Tasks
Research Scientist (III)	Lead the modeling, data analysis, and mitigation effort. The task includes: Monitoring and analyzing the use of 1,3-D in each township. Conducting complex modeling and detailed data analysis. Developing mitigation measures. Drafting the annual report.
Environmental Scientist	Monitoring and analyzing the use of 1,3-D in each township and preparing data for detailed analysis and modeling. Help with data analysis and NOI review. Preparing weather data for modeling to track chronic and acute concentrations.