

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

STD. 399 (Rev. 10/2019)

**ECONOMIC IMPACT STATEMENT**

|  |                                    |   |   |
|--|------------------------------------|---|---|
| DEPARTMENT NAME<br><b>Department of Pesticide Regulation</b>   | CONTACT PERSON<br><b>Minh Pham</b> | EMAIL ADDRESS<br><b>Minh.Pham@cdpr.ca.gov</b> | TELEPHONE NUMBER<br><b>916-445-0979</b> |
| DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400<br><b>Health Risk Mitigation and Volatile Organic Compound Emission Reduction for 1,3-Dichloropropene</b> |                                    |   | NOTICE FILE NUMBER<br><b>Z</b>          |

**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 checked="" 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  
(Agency/Department) estimates that the economic impact of this regulation (which includes the fiscal impact) is:

- 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: 1,087Describe the types of businesses (Include nonprofits): Growers of agricultural crops who treat their field with 1,3-DichloropropeneEnter the number or percentage of total businesses impacted that are small businesses: 90%-95%4. Enter the number of businesses that will be created: 0 eliminated: 0Explain: N/A5. 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  NOIf YES, explain briefly: Increase in production cost

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

STD. 399 (Rev. 10/2019)

**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? \$ 6,829,160
- a. Initial costs for a small business: \$ \$849-2,187 Annual ongoing costs: \$ \$2,187 Years: 5
- b. Initial costs for a typical business: \$ \$849-2,187 Annual ongoing costs: \$ \$2,187 Years: 5
- c. Initial costs for an individual: \$ N/A Annual ongoing costs: \$ N/A Years: N/A
- d. 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 producers

3. 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.* \$ 692.55

4. 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 acute exposure and lifetime cancer risk of 1,3-D to non-occupational bystanders, and reduce VOC emissions to reduce ozone levels.

Enter 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 acute exposure and lifetime cancer risk of 1,3-D to non-occupational bystanders, and reduce VOC emissions to reduce ozone levels.

2. 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 14024

3. What are the total statewide benefits from this regulation over its lifetime? \$ Unquantifiable

4. 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.

**ECONOMIC AND FISCAL IMPACT STATEMENT**

**(REGULATIONS AND ORDERS)**

STD. 399 (Rev. 10/2019)

**ECONOMIC IMPACT STATEMENT (CONTINUED)**

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

Regulation: Benefit: \$ Unquantifiable Cost: \$ 6,829,160

Alternative 1: Benefit: \$ Unquantifiable Cost: \$ 8,627,670

Alternative 2: Benefit: \$ Unquantifiable Cost: \$ 245,000,000

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  NO

Explain: 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)**

**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](#).  
\_\_\_\_\_  
\_\_\_\_\_

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

STD. 399 (Rev. 10/2019)

**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)\$ 195,000*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 2023-2024 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

*Originally digitally signed by Leslie C. Ford*

DATE

10-10-2022

*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

*Originally digitally signed by Eric Jarvis*

DATE

11/02/2022

*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



DATE

## Economic and Fiscal Impact Statement Attachment to Std. 399

### Summary of Economic Impact Statement

#### **A. ESTIMATED PRIVATE SECTOR COST IMPACTS**

3. In a memorandum, *Number of farms using 1,3-dichloropropene*, prepared by the California Department of Food and Agriculture (CDFA) and dated August 4, 2022, CDFA provided DPR with the number of farms using 1,3-Dichloropropene (1,3-D), which is a reasonable approximation of the total number of impacted businesses. CDFA provided the total number of farms using 1,3-D each year from 2017-2020. Based on the average number of farms using 1,3-D each year from 2017-2020, the total number of farms, or impacted businesses, is estimated to be 1,061. CDFA also estimated that 90-95% of these farms are small businesses based on the definition of a “small business” in Government Code section 11346.3(b)(4)(B).

#### **B. ESTIMATED COSTS**

1. The total statewide dollar costs that businesses may incur to comply with these regulations over its lifetime (5 years) is estimated to be \$6,829,160. To determine this number, DPR relied on *Addendum to the June 2022 Economic and Pest Management Evaluation of Proposed 1,3-Dichloropropene* (Addendum) prepared by CDFA and the University of California, Davis, and dated June 30, 2022. The Addendum provides the total cost for impacted businesses from 2017-2020. The average cost per year to comply with these regulations is \$1,365,832. Over a lifetime of 5 years, the total lifetime cost is estimated to be \$6,829,160.

1.a-b. CDFA’s 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 2017-2020 separated by annual and perennial crops. Annual crops are reoccurring, so those businesses will have initial and annual ongoing 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 for annual crops per year is \$1,312,176 and the average number of farms/businesses growing annual crops is 600. The initial cost per business is estimated to be \$2,187 ( $\$1,312,176/600$  businesses = \$2,187/business). In addition, because these costs are reoccurring, the annual cost is estimated as \$2,187 as well.

The average cost for perennial crops per year is \$413,360 and the average number of farms/businesses growing perennial crops is 487. The initial cost per business is estimated to be \$849 ( $\$413,360/487$  businesses = \$849/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 based 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 ranges from \$849-2,187, and the annual costs for a small or typical business will be \$2,187.

3. The annual cost a typical business may incur to comply with the proposed tarpaulin plan requirements is estimated to be \$692.55 based on the memorandum prepared by CDFA dated August 4, 2022. The cost could be higher if a business makes more than one application. Many businesses are already in compliance with this requirement as these plans are already required for certain types of pesticide applications and are unlikely to incur costs.

#### **D. ALTERNATIVES TO THE REGULATION**

1. List alternatives considered and describe them below.

DPR considered the following alternatives during the development of this proposed action.

##### *Alternative 1:*

*Prohibit December applications* – DPR’s current recommended 1,3-D permit conditions prohibit applications during December. This requirement is based on air monitoring data showing higher air concentrations during this month, primarily due to longer nights with low wind speeds and more stable atmospheric conditions. The proposed setbacks are based on computer modeling (verified by comparison to monitoring data) that indicates air concentrations during January are slightly higher than in December. While air concentrations during November and February are lower than in December and January, they are higher than in other months. DPR compared two different setback requirements: one for a December prohibition using weather data for the January – November 11-month period and a second one for seasonal setbacks during November – February, and March – October. Shifting to two seasonal setbacks resulted in less stringent setbacks for both seasons in comparison to a December or longer prohibition. Moreover, this analysis used the higher air concentrations during December and January and excluded the lower air concentrations for November and February in determining the setback and other requirements for a 4-month winter season. The economic analysis by CDFA and the University of California, Davis shows that the total cost of this alternative during the 5-year lifetime is about \$8,627,670.

##### *Alternative 2:*

*Require TIF tarpaulins* – DPR considered requiring the use of totally impermeable film (TIF) tarpaulins to reduce emissions of 1,3-D. However, DPR determined that this alternative would be very costly to implement. TIF tarps cost approximately \$1,150 per acre and can only be used once (Goodhue, et al., 2022a). In 2020, over 60,000 acres were treated with 1,3-D, and only 17,000 acres used TIF tarps. The estimated cost of requiring every grower to use TIF tarps is \$49 million annually. Over a lifetime of 5 years, the total lifetime cost of this alternative is approximately \$245 million. This would pose a significant impact on businesses without being more health-protective than the proposed fumigation methods, which have been identified through DPR’s pilot project as achieving emissions reductions comparable to TIF tarping.

4. Explain. (STD. 399 pg. 3)

Performance standards were considered and included where possible. For example, the proposed requirements for a TIF tarpaulin include a performance standard for permeability of 0.046 centimeters per hour. TIF tarpaulin manufacturers have the discretion to meet this standard by adjusting the tarp composition, the number of layers or layer thickness to meet the standard.

## **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 the proposed regulatory amendments will become effective (FY 2023-2024) and the two subsequent fiscal years (FY 2024-2025 and FY 2025-2026).

The proposed regulations ask DPR's Air Program to:

- 1- Develop and maintain a list of approved totally impermeable film (TIF) tarpaulins.
- 2- Monitor and analyze the use of 1,3-D in each township.
- 3- Conduct a detailed analysis of use in the top 10 townships in different counties.
- 4- Develop annual reports describing the outcome of the analysis and solicit public feedback.

The Air Program will need 1 position 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, 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**

| Classification                   | Research Scientist (III) |
|----------------------------------|--------------------------|
| Fiscal Year (FY)                 | FY 2023- 2024            |
| Total Number of Positions        | 1                        |
| Cost for 1 PY-Salaries and Wages | 106,000.00               |
| Cost for 1 PY – Staff Benefits   | 62,000.00                |
| Compensation for 1PY             | 168,000.00               |
| OE&E for 1PY                     | 27,000.00                |
| Total Cost for 1PY               | 195,000.00               |
| Total Cost for 1FY               | 195,000.00               |
| Total Cost for 3FY               | 585,000.00               |

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

**Cost for 1 PY – Staff Benefits:** Benefit-cost of job position for one position during one Fiscal Year. This includes OASDI and Medicare, Retirement, and Healthcare.

**Compensation for 1 PY:** Cost of job position for one position during one Fiscal Year (Salary & Wages and Benefits Combined).

**OE&E for 1 PY:** Cost of operating expense and equipment (OE&E) for one position during one Fiscal Year

**Total Cost for 1 PY:** Cost of job position for one position 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 3 FY/Grand Total:** Total cost to support all the positions for a period of three Fiscal Years, assuming compensation for the two 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 and data analysis effort. The task includes:<br>Monitoring and analyzing the use of 1,3-D in each township.<br>Conducting modeling and detailed data analysis.<br>Drafting the annual report. |