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County of Alameda

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SUPERIOR COURT OF THE STATE OF CALIFORNIA  
COUNTY OF ALAMEDA (UNLIMITED JURISDICTION)

ROCIO ORTIZ, an individual; ANA  
BARRERA, an individual; CALIFORNIANS  
FOR PESTICIDE REFORM, an unincorporated  
association; PESTICIDE ACTION AND  
AGROECOLOGY NETWORK, a California  
non-profit corporation,

Petitioners,

vs.

CALIFORNIA DEPARTMENT OF  
PESTICIDE REGULATION; DOES 1-20,  
inclusive,

Respondents.

Case No.: **26CV168280**

**VERIFIED PETITION FOR WRIT OF  
MANDATE AND COMPLAINT FOR  
DECLARATORY RELIEF**

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## INTRODUCTION

1. PETITIONERS come, for a third time, to this Court, seeking relief from the California Department of Pesticide Regulation's ("DPR" or "Respondent") continued failure to meet its legal obligations to protect farm workers and other members of the public from 1,3-Dichloropropene ("1,3-D"), a toxic, cancer-causing fumigant.

2. 1,3-D is extremely harmful to human health as it causes several types of cancer, including lungs, lymphoma, pancreas, esophagus, liver, skin, and stomach cancer. Yet it is one of the most applied fumigants in California. From 2010 through 2024, at least 169.3 million pounds of 1,3-D have been applied to California farmlands. In 2024 alone, more than 7 million pounds of 1,3-D were applied on 43,000 acres across the State. As a result, at least tens of thousands of Californians are exposed to and impacted by the widespread use of this dangerous pesticide.

3. In the past decade, this Court has intervened twice to ensure that DPR regulates the use of 1,3-D in a lawful, health-protective manner.

4. In 2017, DPR issued a guidance document to County Agricultural Commissioners ("CACs") increasing caps on the total pounds of 1,3-D that could be applied in six-by-six-mile townships throughout the State, from 90,250 pounds per township to 136,000 pounds per township. After impacted communities sought review, this Court struck down DPR's guidance document in 2018, finding that the document was an underground regulation that failed to meet notice, comment, and other procedural requirements. This Court directed DPR to issue a regulation on 1,3-D that addresses cancer risks to bystanders. The First District Court of Appeals affirmed the trial court's decision in 2021.

5. Following the Appellate Court's remand to this Court, DPR yet again failed to comply with applicable law requiring it to protect public health when it proposed a regulation that mitigated cancer risks only for people who live near fields treated with 1,3-D ("non-occupational bystanders") while ignoring the impacts to nearby agricultural workers ("occupational bystanders"). There too, this Court ordered DPR to do more and directed DPR to issue regulations that protect both non-occupational *and* occupational bystanders.

6. DPR's non-occupational bystander regulation ("Regulation No. 22-005") went

1 into effect on January 1, 2024. DPR's occupational bystander regulation went into effect on  
2 January 1, 2026 ("Regulation No. 24-001"). Both regulations miss the mark and allow for the  
3 continued use of 1,3-D in a way that neither satisfies DPR's mandatory legal obligations nor  
4 sufficiently protects public health.

5 7. The non-occupational bystander and occupational bystander regulations both fail  
6 to comply with statutory frameworks that require DPR to protect public health and safety. As  
7 such, the regulations violate sections 14006 and 14024 of the California Food and Agricultural  
8 Code ("FAC"). Additionally, the regulations are inconsistent with FAC sections 14006 and  
9 14024 and are inconsistent with one another. The occupational bystander regulation is also  
10 unclear to nearby agricultural workers who are directly impacted by the regulations. As such, the  
11 regulations are in violation of the consistency and clarity standards of the California  
12 Administrative Procedure Act ("APA"), Government Code sections 11340 et seq.

13 8. PETITIONERS, ROCIO ORTIZ, ANA BARRERA, CALIFORNIANS FOR  
14 PESTICIDE REFORM ("CPR"), and PESTICIDE ACTION AND AGROECOLOGY  
15 NETWORK ("PAN") ("PETITIONERS") by this verified Petition for Writ of Mandate, request  
16 that the Court issue a peremptory writ of mandate directing DPR to adopt a regulation to protect  
17 occupational and non-occupational bystanders from 1,3-D, in compliance with the  
18 Administrative Procedures Act, Food and Agricultural Code, and all other applicable laws.

19 **PARTIES**

20 9. PETITIONER ROCIO ORTIZ supported herself and her family for many years  
21 by working near fields treated with 1,3-D while simultaneously living near these treated fields in  
22 the vicinity of Watsonville, California. She and her family continue to live near agricultural areas  
23 where 1,3-D is used. PETITIONER ROCIO ORTIZ is a member of CPR. She and her family  
24 have a genuine interest in the strong regulation of 1,3-D that protects all bystanders, including  
25 the thousands of farm workers who also live near fields, in their workplaces, homes, and schools.  
26 PETITIONER ROCIO ORTIZ has paid, in the year preceding the filing of this action, and does  
27 pay sales tax in the State of California.

28 10. PETITIONER ANA BARRERA supported herself and her family for many years

1 by working near fields treated with 1,3-D in Salinas, California. For the past 18 years, ANA  
2 BARRERA has been a schoolteacher at Everett Alvarez High School in Salinas, California that  
3 is located across the street from agricultural areas fumigated with 1,3-D. She lives about three  
4 blocks from fields where 1,3-D is used. PETITIONER ANA BARRERA is a member of CPR.  
5 She and her family have a genuine interest in the strong regulation of 1,3-D that protects all  
6 bystanders, including the thousands of farm workers who also live near fields, in their  
7 workplaces, homes, and schools. PETITIONER ANA BARRERA has paid, in the year preceding  
8 the filing of this action, and does pay sales tax in the State of California.

9 11. PETITIONER CALIFORNIANS FOR PESTICIDE REFORM (“CPR”) is a  
10 California coalition of more than 200 organizations dedicated to protecting public health,  
11 improving environmental quality, and supporting a just agricultural system. CPR was founded in  
12 1996 to fundamentally shift the way pesticides are used in California. CPR and its members have  
13 an interest in the reduction in use, and the safe and sustainable application of pesticides on  
14 agricultural lands on California’s central coast. CPR and its members have an interest in  
15 protecting the public from unnecessary exposure to pesticides and other hazardous materials,  
16 including exposures to 1,3-D.

17 12. PETITIONER PESTICIDE ACTION & AGROECOLOGY NETWORK (“PAN”)  
18 is a California non-profit corporation dedicated to creating a just, healthy, and equitable food  
19 system. PAN and its members have an interest in the safe and sustainable application of  
20 pesticides on agricultural lands on California’s central coast. PAN and its members have an  
21 interest in protecting the public from unnecessary exposure to pesticides and other hazardous  
22 materials, including exposures to 1,3-D.

23 13. PETITIONERS PAN and CPR, as well as ROCIO ORTIZ and ANA BARRERA  
24 (as individual members of CPR), have submitted written comments and participated in the public  
25 processes preceding the adoption of the regulations.

26 14. As a result of DPR’s failure to comply with the law, PETITIONERS, as well as  
27 the public at large, will suffer injury and will continue to be prejudiced by DPR’s unlawful  
28 actions until and unless this Court provides the relief prayed for in this Petition.

15. RESPONDENT CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION (“DPR”) is a department of the California Environmental Protection Agency (“Cal EPA”). DPR was established in 1991 by then Governor Pete Wilson when he reorganized the Cal EPA. (*See* Gov. Reorg. Plan No. 1, 1991, § 27, effective July 17, 1991; Cal. Food & Agric. Code, §§ 11452-11477). As a result, DPR is a state government agency organized under the laws of the State of California. DPR is empowered, among other duties, to undertake the promulgation of regulations as part of the Pesticide Regulatory Program in California, subject to the obligations and limitations of all applicable state, federal, and other laws, including the FAC and the APA (Gov. Code, §§ 11340 et seq.). DOES 1 through 20, inclusive, are, on information and belief, persons, agencies, or subdivisions of a state agency or any other person or entity that claims any interest in the regulations or is responsible in some manner for the actions described herein. PETITIONERS will amend the Petition to specifically identify each such Respondent as required and as the capacity and identity of each such Respondent becomes known.

## **STATEMENT OF FACTS**

## **1,3-D is a Toxic Fumigant that is Harmful to Human Health and the Environment**

16. 1,3-Dichloropropene (“1,3-D”), also known as “Telone,” is an extremely toxic liquid fumigant with a penetrating odor. The fumigant kills most if not all living organisms in the soil, including nematodes, insects, weed seeds, and fungi.

17. To apply 1,3-D, pesticide applicators inject it into the soil as a liquid, where it rapidly converts into gas to kill organisms in the soil. As 1,3-D converts from a liquid to gaseous form, it can escape from the soil into the ambient air. As a gas, it can drift from application sites into nearby fields and residential neighborhoods, increasing the likelihood that other nearby living organisms, including humans, will inhale and be harmed by the fumigant.

18. In humans, 1,3-D can have both acute and serious chronic effects. Acute exposure can cause upper respiratory tract irritation, chest tightness, watery eyes, or dizziness. Common effects of long-term exposure include damage to the lining of the urinary bladder and the lining of the nasal mucosa. Even at low levels, long-term 1,3-D exposures can cause various types of cancer, including lung, lymphoma, pancreas, esophageal, liver, skin, and stomach cancer. A

1 study published in a peer-reviewed scientific journal found an elevated risk of cancer mortality  
2 among residents of Zip codes where 1,3-D use is high.

3 19. Use of 1,3-D in California has fluctuated annually since its reintroduction in 1995.  
4 From 2010 through 2024, at least 7 million pounds of 1,3-D have been applied to California  
5 farmlands each year.

6 20. In 2024, California growers applied over 7 million pounds of 1,3-D on more than  
7 43,000 acres of land. In 2024, the 10 counties with townships with the largest application of 1,3-  
8 D (in order by highest use) were Fresno, Merced, Kern, Stanislaus, Tulare, Monterey, Imperial,  
9 Santa Barbara, San Joaquin, and Tehama.

10 21. Growers apply 1,3-D as a pre-plant treatment for fruit and nut trees, strawberries,  
11 grapes, carrots, sweet potatoes, and other crops in California. California is the largest producer of  
12 specialty crops in the United States, accounting for 99% of production of almonds and walnuts,  
13 and 90% of grapes and strawberries nationwide. Therefore, Californians experience an increased  
14 risk of exposure to these fumigant pesticides.

15 22. At least tens of thousands of Californians are regularly exposed to the toxic  
16 effects of 1,3-D. Growers routinely apply 1,3-D in rural or agricultural communities, allowing  
17 for far higher exposure to the people living and working in these areas, who are predominantly  
18 low-income farm workers. Approximately 84 percent of all California farm workers are Hispanic  
19 or identify as Indigenous. Additionally, agricultural workers tend to live in agricultural  
20 areas close to where they work. Thus, a high percentage of agricultural workers are exposed to  
21 pesticides, including 1,3-D, at both work and at home.

22 23. Many countries have prohibited 1,3-D's use due to its cancer-causing effects. The  
23 United States Environmental Protection Agency ("U.S. EPA") lists 1,3-D as a Hazardous Air  
24 Pollutant. Under California law, 1,3-D is a "restricted material." (3 Cal. Code of Regulations, §  
25 6400(e)). Restricted materials require a permit from the CAC prior to its application, pursuant to  
26 Food and Agricultural Code Section 14006. California listed 1,3-D as a carcinogen pursuant to  
27 Proposition 65 on January 1, 1989 (27 Cal. Code of Regs., § 25701). 1,3-D is also listed as a  
28 volatile organic compound ("VOC") (3 Cal. Code of Regs., § 6191). DPR has listed 1,3-D as a

Toxic Air Contaminant at (3 Cal. Code of Regs., § 6860(b), pursuant to FAC, § 14021).

### **1,3-D Cancer Risk Thresholds**

24. DPR has determined that there is a need for control measures and has set levels of no significant adverse health effects for the use of 1,3-D pursuant to FAC section 14024.

25. On January 1, 1989, OEHHA, the lead state agency responsible for the implementation of the Safe Drinking Water and Toxic Enforcement Act of 1986 (commonly referred to as “Proposition 65”) and for conducting health risk assessments on environmental contaminants, listed 1,3-D as a chemical known to the State of California to cause cancer.

26. After years of scientific analysis of toxicology and exposure assessments of pesticide handlers, occupational bystanders, and residential bystanders, DPR issued a Risk Characterization Document (“RCD”) for 1,3-D on December 31, 2015. OEHHA criticized DPR’s RCD, objecting to DPR’s decision about the appropriate exposure route. DPR chose a “portal of entry” exposure route, meaning that only the amount of 1,3-D that entered the lungs was relevant. OEHHA disagreed because similar tumors were found in mice exposed through drinking water or through breathing. OEHHA supported a comprehensive, “systemic” exposure route. OEHHA also concluded that where there are two possible exposure routes, the more health-protective one should be used, which is the systemic effect route.

27. Drawing from the RCD analysis, on October 6, 2016, DPR issued its Risk Management Directive and Mitigation Guidance for Cancer Risk from 1,3-Dichloropropene (“2016 RMD”) which set forth DPR’s decision on how it would “address cancer risks of bystanders.” (2016 RMD, p. 1.) By using the “portal of entry” scenario, DPR raised the regulatory target air concentration from 0.14 ppb to 0.56 ppb, allowing for more exposure to 1,3-D. The 2016 RMD established a regulatory target level of 0.56 ppb for non-occupational bystanders.

28. DPR issued a subsequent Risk Management Directive for 1,3-D cancer risks of occupational bystanders on May 6, 2024, which set the regulatory target level at 0.21 ppb.

29. In both the 2016 and 2024 1,3-D Risk Management Directives, DPR states that its objective is to reduce cancer risks to or below  $1 \times 10^{-5}$ , which means there would be no more

1 than one additional cancer case per 100,000 people exposed to 1,3-D over a lifetime, above  
2 background cancer rates.

3 30. On October 22, 2021, OEHHA set a no significant risk level (“NSRL”) for 1,3-D  
4 at 3.7 micrograms per day (“ug/day”) which is equivalent to an air concentration rate of 0.04  
5 parts per billion (“ppb”), the level expected to cause no more than one additional cancer case per  
6 100,000 people. (27 Cal. Code Reg., § 25705.)

### 7 **1,3-D Monitoring and Modeling**

8 31. Even though millions of pounds of 1,3-D are applied in California’s agricultural  
9 fields each year, DPR only has minimal data measuring 1,3-D air concentration levels to which  
10 people who live and/or work near fields are actually exposed. For example, DPR maintains a  
11 total of six pesticide air monitoring stations across the entire state. DPR analyzes 1,3-D air  
12 monitoring results for up to 52 daily samples (1 day per week) at each of the monitoring stations.  
13 This is up to 312 one-day measurements per year in the face of more than 43,000 acres treated  
14 with 1,3-D in 2024.

15 32. In 2017 and 2018, both single day and annual air concentration levels of 1,3-D  
16 reached alarmingly high levels at several air monitoring stations. For example, in 2017, DPR’s  
17 1,3-D monitoring location in Parlier, California recorded an average of 0.62 ppb, above even  
18 DPR’s 0.56 ppb regulatory target. In 2018, the monitoring site in Shafter, California had a single  
19 day reading of 50.5 ppb, and the Parlier station had a single day reading of 111 ppb, both far  
20 above the 30 ppb that had triggered a 5-year ban in 1990.

21 33. Because of the dearth of monitoring data for 1,3-D, DPR relies heavily on  
22 predictive models to estimate exposure levels and the exposure reduction from mitigation  
23 measures compared to air concentration levels in its 1,3-D regulations. DPR’s model  
24 underestimates the revised annual average monitoring data for the years 2011-2017 for values  
25 over 0.2ppb in every case, sometimes substantially.

26 34. A number of DPR’s assumptions about the efficacy of mitigation measures have  
27 been called into question by some of the air monitoring results. For example, for three of the six  
28 DPR Air Monitoring Network (“AMN”) stations, the total pounds of 1,3-D used near the stations



1 decreased in 2024 as compared to 2023, yet the measured 1,3-D air concentration levels actually  
2 increased in 2024 compared to air concentration levels measured in 2023.

### 3 **The Township Cap Program**

4 35. 1,3-D was first registered for use as a soil fumigant in California in 1970.  
5 However, in 1990, concerning high concentrations of 1,3-D at an air monitoring location in  
6 Merced County caused DPR to suspend its use. Five years later, DPR reintroduced 1,3-D's use in  
7 California.

8 36. When 1,3-D was reintroduced in 1995, DPR regulated 1,3-D through various  
9 mitigation measures. In subsequent years, DPR modified mitigation measures by negotiating  
10 with Dow-Elanco, the manufacturer of 1,3-D. Notably, the two parties negotiated without public  
11 notice or comment opportunities. Those negotiations led to the 2002 "California Management  
12 Plan: 1,3-Dichloropropene" ("the Plan"). In the Plan, DPR agreed to allow Dow to restructure its  
13 program for managing the use of 1,3-D. The new system for limiting 1,3-D exposure capped its  
14 use in each 6 x 6 mile "township" at 90,250 adjusted total pounds ("ATP") per year. This cap  
15 aimed to control annual average air concentrations to keep cancer risk levels below the 1 in  
16 100,000 level. Alarming, under what DPR called its "Township Cap Program" ("TCP"), the  
17 process was revised in 2002, over the objections of DPR scientists to allow that if a local CAC  
18 permitted less than the 90,250 ATP in a particular township, the CAC could rollover the unused  
19 amount into subsequent years, allowing growers in a township to apply up to 180,500 ATP per  
20 year. Additionally, exceedances were subsequently allowed in specific Townships without public  
21 notification, let alone input.

22 37. To implement the policy decisions made in its 2016 RMD, DPR revised its TCP  
23 to eliminate rollovers and exceedances and prohibit 1,3-D fumigation in the month of December  
24 when air conditions are most stagnant while increasing the cap by 50%, to 136,000 pounds per  
25 township annually.

26 38. The TCP stated: "An annual township (36 square-mile area) cap is necessary to  
27 minimize the levels of the amount of 1,3-D in the atmosphere and mitigate the potential for  
28 chronic exposure." The TCP was designed to address "the levels ... in the atmosphere,"

1 suggesting it was designed to protect all persons in the township who breathed or had exposed  
2 skin. Impacted communities criticized the increase in the township cap which matched the  
3 increase in the cap requested by industry and was based on only protecting to the 0.56 ppb  
4 annual average air level.

5 **PROCEDURAL HISTORY**  
6 **Prior 1,3-D Litigation in This Court**

7 39. In January 2017, Juana Vasquez, CPR and PAN filed a petition for writ of  
8 mandate against DPR challenging the TCP as an underground regulation that was implemented  
9 without formal rulemaking (*Vasquez v. Department of Pesticide Regulation* (2021) 68  
10 Cal.App.5th 672, Alameda County Superior Court Case No. RG17847563). PETITIONERS  
11 sought a declaration that the existing regulations were invalid, and a writ of mandate compelling  
12 DPR to promulgate lawful regulations in their stead. On May 14, 2018, the trial court entered  
13 judgment in favor of PETITIONERS and declared that the TCP constituted a regulation within  
14 the APA and that DPR failed to comply with rulemaking requirements under the APA before  
15 adopting the TCP.

16 40. The judgment and resulting writ required DPR to submit to the OAL a notice of  
17 proposed regulatory action to address potential cancer risks to bystanders from the use of 1,3-D,  
18 consistent with the APA and FAC sections 12980 and 12981, within one year of the writs'  
19 issuance. It also maintained the township cap, stating that "until formal rulemaking is  
20 completed," the township cap of 136,000 adjusted total pounds as well as the prohibition against  
21 applications of 1,3-D in the month of December would remain in place as interim measures to  
22 address potential cancer risks to bystanders.

23 41. Following the appeal of Intervenor Dow Agrosiences LLC, ("DAS"), the First  
24 Appellate District, in a published decision, affirmed this Court's Order granting summary  
25 judgment to the Plaintiffs on their First cause of action (that the DPR's action violated the  
26 Administrative Procedure Act and found the township cap to be an underground regulation)  
27 (*Vasquez v. Dept. of Pesticide Regulation* (2021) 68 Cal.App.5th 672).

28 42. Following the Appellate Court's remand to the Alameda County Superior Court,  
DPR submitted to the Office of Administrative Law ("OAL") a regulation designed to address

lifetime cancer risks of non-occupational bystanders in November of 2022. On November 19, 2022, DPR filed a Return to Writ to this Court alleging that its submission of a proposed non-occupational bystander regulation satisfied its obligations under the Writ issued on May 14, 2018.

43. PETITIONERS CPR and PAN opposed DPR's Return to Writ. In an Order dated March 9, 2023, this Court found that DPR's regulations submitted to OAL were "designed only to protect 'non-occupational/residential bystanders' and not designed to protect occupational bystanders." (See *Vasquez v. Department of Pesticide Regulation*, Alameda County Superior Court Case No. RG17847563). As such, this Court ordered "that the writ issued 5/14/18 is not discharged" because DPR's "proposed regulation to the OAL is not in compliance with the writ." (Id. at p. 5.) This Court's Order also allowed DPR to either issue a single regulation that protects both non-occupational bystanders and occupational bystanders, or two separate regulations with one designed to protect non-occupational bystanders and a second designed to protect occupational bystanders. (Ibid.)

#### **The Non-occupational Bystander Regulation**

44. On November 9, 2022, DPR issued its Notice of Proposed Regulation, the text of its proposed regulation, and supporting documents for DPR Regulation Number 22-005 to address Health Risk Mitigation and Volatile Organic Compound Emission Reduction for 1,3-D. DPR proposed this regulation to address cancer risks only of people who live near fields treated with 1,3-D who are referred to as "non-occupational bystanders." The adopted regulation 22-005 codified at 3 Cal. Code of Regulations sections 6448-6448.4 went into effect on January 1, 2024 ("Regulation No. 22-005").

45. Regulation No. 22-005 1,3-D purported to mitigate cancer risks for non-occupational bystanders to 1 out of 100,000. DPR assumed that non-occupational bystanders are exposed to 1,3-D over a 70-year lifetime, 7 days per week, 24 hours per day. DPR established a regulatory target concentration of 0.56 ppb. An air concentration of 0.56 ppb results in people being exposed to 50 micrograms of 1,3-D per day.

46. Further, Section 6448.4(b)(2) requires DPR to evaluate where monitored air

1 concentrations of 1,3-D exceed the evaluation levels of 0.27 ppb over a one-year average, or 55  
2 ppb over a 24-hour period in the previous calendar year, as well as to evaluate estimated 1,3-D  
3 concentrations for 10 townships with the highest 1,3-D use. Additionally, if high levels of  
4 monitored and estimated 1,3-D air concentrations are “higher than expected in comparison to  
5 previous data,” DPR must include a description of the actions it will take to address the high  
6 levels of 1,3-D in an annual report.

### 7 **The Occupational Bystander Regulation**

8 47. On November 14, 2024, DPR initiated a second regulatory process to attempt to  
9 limit the harm to people exposed to 1,3-D. This proposal, Regulation Number 24-001, was  
10 intended to address the cancer risks of people who work near fields treated with 1,3-D, who are  
11 referred to as “occupational bystanders.” This rulemaking process amended 3 Cal. Code of  
12 Regulations sections 6448 & 6448.2, and added new 3 Cal. Code of Regulations section 6448.5.  
13 These regulations went into effect on January 1, 2026 (“Regulation No. 24-001”). To achieve the  
14 cancer risk goal of 1 in 100,000 for occupational bystanders, DPR established the regulatory  
15 target concentration of 0.21 ppb as an eight-hour time weighted average during an 8:00 a.m. to  
16 4:00 p.m. work period, unless an alternative work period is deemed warranted in specific  
17 townships and times of year. An air concentration of 0.21 ppb results in people being exposed to  
18 9.5 micrograms of 1,3-D per eight-hour workday over 40 years of work but does not count any  
19 1,3-D exposure during years or hours when not working (when farm workers are at home)  
20 towards the cancer risk goal of 1 in 100,000.

21 48. Additionally, Section 6448.5(c) states that should an exceedance of 0.21 ppb  
22 occur in a township or townships, DPR will, in consultation with OEHHA, develop interim  
23 mitigation measures that will result in an air concentration of no more than 0.21 ppb, provided  
24 that DPR determines that factors causing the exceedance are “likely to continue” in a township  
25 or townships. Section 6448.5(d) also requires DPR to publish final interim mitigation measures  
26 as recommended conditions for restricted material permits, where the interim recommended  
27 restricted material permit conditions would expire within three years of the date of publication.

28 49. DPR’s model for 1,3-D air concentrations assumes agricultural employees

1 working near fields treated with 1,3-D work exclusively eight hours per day from 8:00 a.m. to  
2 4:00 p.m., five days per week, for a total of 40 hours per week for forty years. This modeling  
3 assumption is problematic because there is a dramatic drop-off in emissions during the day  
4 between 8:00 a.m. and 4:00 p.m.

5 50. In reality, most agricultural workers in California start their workday well before  
6 8:00 a.m., either starting their day at daybreak or working entire shifts during evening hours.  
7 Many agricultural workers also typically work more than eight hours per day or more than five  
8 days per week. A 2022 study performed by UC Merced surveying over 1,000 fieldworkers found  
9 that 60% of farm workers start their shifts before 7:00 a.m., and only 2.8% started between 8:00  
10 a.m. and 8:59 a.m.

11 51. Section 6448(d) added a new requirement of buffer zones, and incorporated by  
12 reference the document “1,3-D Field Fumigation Requirements, rev. January 1, 2026” (“FFR”).  
13 The FFR is 54 pages in length and contains multiple tables setting forth minimum “setback  
14 distances” from 1,3-D applications, a buffer zone table, and technical information about 1,3-D  
15 application methods, maximum application rates, application block size limits, and soil moisture  
16 requirements.

17 52. According to the FFR, buffer zones are 100-foot buffer distances around the  
18 perimeter of a fumigated field which people are generally not allowed to enter for a 48-hour  
19 period after completion of the 1,3-D fumigation.

20 53. The FFR states that buffer zones are required where ‘standard non-tarped and  
21 non-[Total Impermeable Film (“TIF”)] tarp’ 12-inch and 18-inch injection methods, or  
22 ‘Chemigation (drip)/non-TIF tarp’ methods are used. Buffer zones for all other methods (e.g.,  
23 24-in injection and TIF methods), are not required except for application on ‘tree and grape’  
24 crops. In other words, DPR requires buffer zones for only some 1,3-D application methods  
25 depending on injection depth or application style.

26 54. Notably, Section 6448(d) and the FFR do not require agricultural owners or  
27 operators to post warning signs around the areas where 1,3-D has been applied or provide any  
28 notification or warning to agricultural workers or the general public about the existence, location

1 and boundaries, or the dates and duration of a buffer zone, or of the fumigation method(s) used,  
2 or crop(s) to be planted.

3 55. If a required buffer zone extends onto any property not owned by the agricultural  
4 operator applying the 1,3-D, section 6448(d)(1) requires the property owner applying the 1,3-D  
5 to obtain a written voluntary agreement from the neighboring property owners certifying that the  
6 neighbor and their employees and tenants will stay out of the buffer zone while it is in effect.

7 56. DPR acknowledges the challenges of relying so heavily on the air dispersion  
8 models in the occupational bystander regulation. OEHHA recommended (and DPR agreed) that  
9 DPR will monitor and track the implementation of new fumigation methods, conduct air  
10 monitoring as feasible, and assess ambient air concentrations to ensure they remain at or below  
11 the evaluation level of 0.21 ppb.

#### 12 **EXHAUSTION OF ADMINISTRATIVE REMEDIES**

13 57. Petitioner Rocio Ortiz attended several 1,3-D hearings and made comments  
14 opposing the regulations, including the adverse health effects pesticides have on farm workers.

15 58. Petitioner Ana Barrera attended 1,3-D public hearings, made comments opposing  
16 the regulations, including commenting on the adverse health and scholastic impacts that  
17 pesticides have on students.

18 59. PETITIONERS CPR and PAN and their members submitted numerous comment  
19 letters to DPR regarding the regulations, including three comment letters on the development of  
20 Regulation No. 24-001, on August 14, 2024, January 22, 2025, and June 20, 2025.

21 60. PETITIONERS have exhausted all available administrative remedies and have no  
22 other adequate remedy at law.

#### 23 **VENUE**

24 61. The alleged violations of the California Food and Agricultural Code and  
25 California Administrative Procedure Act have occurred in the state of California. Pursuant to  
26 California Code of Civil Procedure section 401, when an action or proceeding is commenced  
27 against a state agency, it may be commenced and tried in any city and county in which the  
28 Attorney General has an office. The Attorney General has an office in Oakland, Alameda

County. Therefore, venue is proper in this Court under Code of Civil Procedure section 401.

**FIRST CAUSE OF ACTION**  
**VIOLATIONS OF THE FOOD AND AGRICULTURAL CODE**  
[Cal. Food & Agric. Code, §§ 14006, 14024; Code Civ. Proc., § 1085]

62. PETITIONERS reallege and herein incorporate by reference each preceding paragraph of the Petition herein.

63. DPR was, at all times relevant to this Petition, under a clear and present duty to comply with all the requirements of the Food and Agricultural Code, including sections 14006 and 14024.

64. DPR's promulgation of the regulations fails to comply with FAC sections 14006 and 14024.

65. FAC section 14024 states that the DPR Director "shall develop control measures designed to reduce emissions [of pesticides] sufficiently so that the source will not expose the public to the levels of exposure which may cause or contribute to significant adverse health effects."

66. FAC section 14006 states that regulations adopted by the DPR Director "shall prescribe ... the conditions under which a restricted material may be used [and] [t]his usage shall be limited to those situations in which it is reasonably certain that no injury will result, or no nonrestricted material or procedure is equally effective and practical."

67. DPR's 1,3-D regulations, codified in Title 3 of the California Code of Regulations sections 6448 to 6448.5, fail to comply with the requirements of FAC section 14024 because they permit the public to be exposed to levels of 1,3-D exposure which may cause or contribute to significant adverse health effects or injury.

68. DPR's 1,3-D regulations fail to comply with the requirements of FAC section 14006 because the level of usage allowed is not limited to situations in which it is reasonably certain that no injury will result.

69. The regulations fail to comply with legal mandates placed on DPR by sections 14006 and 14024 because they expressly allow residents to be exposed to 1,3-D air

1 concentrations of 0.56 ppb averaged over a 70-year lifetime. This is inconsistent with the  
2 determination DPR and OEHHA jointly made that workers should not be exposed to average air  
3 concentrations of 0.21 ppb over 40 years during work hours. This is equivalent to an exposure of  
4 0.04 ppb over 70 years, so the different air concentration levels permitted by the regulations are  
5 inconsistent by a factor of 14.

6 70. Further, the regulation fails to consider cumulative exposures for occupational  
7 bystanders who both work near treated fields and live near fields with 1,3-D applications.

8 71. DPR found that limiting occupational bystander exposure of 1,3-D to 0.21 ppb  
9 would reduce cancer risks to 1 out of 100,000 (or  $1 \times 10^{-5}$ ). However, this determination assumes  
10 that occupational bystanders are only exposed to 1,3-D eight hours per day for 40 years of their  
11 life.

12 72. Many occupational bystanders who live near farms that apply 1,3-D would be  
13 exposed to 1,3-D outside of an eight-hour workday and for longer than 40 years.

14 73. As a result, cumulative 1,3-D exposures for occupational bystanders who are also  
15 residential bystanders will be above 0.21 ppb during their working lifetime and above 0.04 ppb  
16 during their full lifetimes and therefore subject them to cancer risks above 1 out of 100,000.

17 74. By failing to account for farm workers' cumulative exposure to 1,3-D both during  
18 work and while living near 1,3-D applications (and therefore allowing additional cancer risks  
19 from the cumulative exposures) the regulations fail to comply with requirements to protect  
20 public health under FAC Sections 14006 and 14024.

21 75. DPR also fails to meet its duty to protect farm workers in its occupational  
22 bystander regulation by ignoring the ignoring the evidence that farm workers often work early in  
23 the morning and night hours when air concentrations of 1,3-D are highest. By modeling air  
24 concentrations only daytime hours, 8:00 a.m. to 4:00 p.m., when air emissions from 1,3-D are  
25 dramatically lower, DPR fails to account for the 90 percent of farm workers who work outside of  
26 the 8:00am to 4:00pm timeframe.

27 76. By failing to account for farm workers who work during nighttime hours, the  
28 regulations also fail to comply with the requirements to protect public health under FAC sections



14006 and 14024.

77. Additionally, DPR's publication of interim mitigation measures as "recommended conditions" for restricted material permits to address 1,3-D air concentrations exceeding 0.21 ppb in a township or township fails to comply with the requirements to protect public health under FAC sections 14006 and 14024 because, among other reasons, these permit conditions expire within three years of publication regardless of whether the need for mitigation measures remains or not.

78. Furthermore, DPR abused its discretion by assuming that farm workers work from 8:00 a.m. to 4:00 p.m., without substantial evidence in the administrative record to support its findings.

79. As a result, Respondent failed to proceed in the manner required by law and rendered a decision that is arbitrary, capricious, and unsupported by the evidence.

80. A writ of mandate should be issued to compel DPR to comply with FAC sections 14006 and 14024.

81. PETITIONERS have no plain, speedy or adequate remedy in the ordinary course of law and will be irreparably harmed, unless the Court grants the requested writ of mandate and declaratory relief requiring DPR to create 1,3-D regulations which comply with the requirements of FAC sections 14006 and 14024.

**SECOND CAUSE OF ACTION**  
**VIOLATIONS OF THE ADMINISTRATIVE PROCEDURE ACT:**  
**LACK OF CONSISTENCY**

[Gov. Code, §§ 11340 et seq.; Code Civ. Proc., § 1085]

82. PETITIONERS reallege and herein incorporate by reference each preceding paragraph of the Petition herein.

83. DPR was, at all times relevant to this Petition, under a clear and present duty to comply with all the requirements of the APA, specifically the Government Code's requirement that all regulations meet the standards for necessity, authority, clarity, consistency, reference, and non-duplication. (Cal. Gov. Code, §11349.1(a)(1)-(6).)

84. DPR abused its discretion, acted in excess of its statutory power and authority,

1 and failed to proceed in the manner required by law by adopting 1,3-D regulations that did not  
2 meet the APA standards for consistency. (Cal. Gov. Code, § 11349.1(a)(4).) Consistency means  
3 being in harmony with, and not in conflict with or contradictory to, existing statutes, court  
4 decisions, or other provisions of law. (Cal. Gov. Code, § 11349(d).)

5 85. The regulations adopted by DPR, which are codified at Title 3 of the California  
6 Code of Regulations sections 6448 to 6448.5, are inconsistent with DPR's mandatory statutory  
7 duties to only allow use of 1,3-D that will not expose the public to adverse health effects or  
8 injury under Sections 14006 and 14024 of the FAC.

9 86. By using a 1,3-D regulatory air concentration level in its occupational bystander  
10 regulation that is different than the regulatory air concentration level in the existing non-  
11 occupational bystander regulation, DPR has adopted a regulation that is inconsistent with the  
12 mandates of existing provisions of law.

13 87. In particular, DPR set the 0.21 ppb target working lifetime air concentration level  
14 in the occupational bystander rule based on OEHHA's 0.04 ppb recommendation, but DPR used  
15 a significantly higher regulatory target level, 0.56 ppb, in the non-occupational bystander rule.

16 88. Further, sections 6448 to 6448.5 are also internally inconsistent. Specifically,  
17 section 6448.5, adopted as part of the occupational bystander regulation, is inconsistent with  
18 section 6448.4, adopted as part of the non-occupational bystander regulation.

19 89. Section 6448.4(b)(2) requires DPR to evaluate where monitored air  
20 concentrations of 1,3-D exceed the trigger for additional evaluation of 0.27 ppb over a one-year  
21 average, or 55 ppb over a 24-hour period in the previous calendar year, as well as evaluate  
22 estimated 1,3-D concentrations for 10 townships with the highest 1,3-D use. Additionally, if high  
23 levels of monitored and estimated 1,3-D air concentrations are "higher than expected in  
24 comparison to previous data," DPR must include a description of the actions it will take to  
25 address the high levels of 1,3-D in an annual report.

26 90. In contrast, section 6448.5(c) requires DPR to develop interim mitigation  
27 measures, in consultation with OEHHA, to ensure that 1,3-D air concentrations in townships are  
28 no more than 0.21 ppb (as an eight hour time weighted average), where estimated air

1 concentrations exceed 0.21 ppb over a three- to five-year average, and provided that DPR  
2 determines that factors causing the exceedance are “likely to continue” in a township or  
3 townships. DPR must include a description of the interim mitigation measures and relevant  
4 townships in an annual 1,3-D report.

5 91. Section 6448.5(d) also requires DPR to publish final interim mitigation measures  
6 as recommended conditions for restricted material permits.

7 92. Additional internal inconsistencies between the adopted regulations at FAC  
8 sections 6448 through 6448.5 include, but are not limited, to:

9 a. DPR’s method of calculating 1,3-D air concentration exceedances based  
10 on average data over the previous three- to five-year period in section 6448.5, compared to  
11 calculating exceedances based on average data over a one-year period in section 6448.4.

12 b. DPR’s criterion in section 6448.5 for developing interim mitigation  
13 measures to lower 1,3-D air concentrations if it determines, in consultation with OEHHHA, that  
14 factors causing the exceedances are “likely to continue,” as opposed to its criterion in section  
15 6448.4 for taking action to address air concentrations if concentrations are “higher than expected  
16 in comparison to previous data.”

17 c. Additionally, DPR’s commitment to publish final interim mitigation  
18 measures as “recommended conditions” for restricted material permits to address 1,3-D  
19 exceedances under the occupational bystander regulation is inconsistent with its commitment to  
20 include in an annual report actions and a timeline for taking actions to address high levels of 1,3-  
21 D under the non-occupational bystander regulation.

22 d. DPR set the 0.21 ppb target working lifetime air concentration level in the  
23 occupational bystander rule based on OEHHHA’s recommendation of 0.04 ppb, but DPR failed to  
24 calculate the 55 ppb single day exposure limit or the 0.27 ppb trigger for additional evaluation in  
25 the non-occupational bystander rule from the same baseline air concentration.

26 93. PETITIONERS have no plain, speedy or adequate remedy in the ordinary course  
27 of law and will be irreparably harmed, unless the Court grants the requested writ of mandate and  
28 declaratory relief requiring DPR to modify the regulations to comply with the APA’s consistency

standard.

**THIRD CAUSE OF ACTION**  
**VIOLATIONS OF THE ADMINISTRATIVE PROCEDURE ACT:**  
**LACK OF CLARITY**

[Gov. Code, §§ 11340 et seq.; Code Civ. Proc., § 1085]

94. PETITIONERS reallege and herein incorporate by reference each preceding paragraph of the Petition herein.

95. DPR was, at all times relevant to this Petition, under a clear and present duty to comply with all the requirements of the APA, specifically the Government Code’s requirement that all regulations meet the standards for necessity, authority, clarity, consistency, reference, and non-duplication. (Cal. Gov. Code, §11349.1(a)(1)-(6).)

96. DPR abused its discretion, acted in excess of its statutory power and authority, and failed to proceed in the manner required by law by adopting 1,3-D regulations that do not meet the APA standards for clarity. (Cal. Gov. Code, §11349.1(a)(3).) “Clarity” is defined as “written or displayed so that the meaning of regulations will be easily understood by those persons directly affected by them.” (Cal. Gov. Code, §11349(c).)

97. The clarity standard considers agricultural workers and other members of the general public as those “directly affected” by the application of pesticides. (1 Cal. Code Reg., §16.)

98. Sections 6448 through 6448.5, as well as the FFR, fail the clarity requirements of the APA because they are not facially written in a manner that makes it easily understood by the occupational bystanders, i.e. agricultural workers, who are directly affected by the regulations and whom it is intended to protect. 1,3-D is routinely applied by specialized applicators, and agricultural workers are not present during the application. However, DPR’s regulations fail to provide any information that would allow agricultural workers to know if and when buffer zones are in effect in order to avoid being exposed to high levels of 1,3-D within the buffer zones.

99. Specifically, the regulations fail to provide information that would reliably allow agricultural workers to know when and where 1,3-D is applied, the method of 1,3-D application, and if the method of application requires a buffer zone.

1           100. If a buffer zone is required, the regulations do not require the farm operator using  
2 the 1,3-D to provide any information to agricultural workers that would allow them to know  
3 where the buffer zone is located, including the physical boundaries of the buffer zone, as well as  
4 the dates and duration of the buffer zone.

5           101. Additionally, if a buffer zone is in effect in a parcel owned and operated by one  
6 person or entity, but is located within 100 feet from another parcel owned and operated by  
7 another entity, the regulations do not require anyone to provide information directly to  
8 agricultural workers that would allow workers to know the location, dates, and duration of the  
9 buffer zone.

10           102. DPR's "1,3-D Field Fumigation Requirements, Revised January 1, 2026" (FFR)  
11 contains undefined terms that do not have meanings generally familiar to agricultural employees,  
12 nearby residents, and others directly affected by the regulation. For example, the terms Totally  
13 Impermeable Film ("TIF") and non-TIF tarp are not defined in the regulations. Nor are any of  
14 those terms generally familiar to people directly affected by the regulations. All of these terms  
15 are vital to the determination as to whether or not the regulations require a buffer zone following  
16 a 1,3-D application.

17           103. Additionally, all information provided by DPR in the regulation about buffer  
18 zones is presented in a format that is not readily accessible or understandable to people directly  
19 affected by the regulation. The regulation contains no clear mechanism for agricultural  
20 employees or others directly affected by the regulation to determine if a 1,3-D application to a  
21 field near their workplace requires a buffer zone. Instead, the regulation requires such people to  
22 1) locate the FFR on DPR's website in the absence of any link to the FFR being provided in the  
23 regulation; 2) review Table 10, "Buffer Zone Distances and Duration Periods by Field  
24 Fumigation Method Code" on page 54 of the FFR; 3) become aware of the "Totally  
25 Impermeable Film (TIF) tarpaulin methods with minimum restrictions" section on page 34 of the  
26 FFR to learn of the existence of DPR's "List of Approved Totally Impermeable Film (TIF)  
27 Tarpaulins" that is available on DPR's website, though no link to the website is provided; 5)  
28 navigate to another unknown page on the DPR website to review the list of approved TIF tarps;

1 and 6) determine a) whether or not the tarp in the field near where they work or live is an  
2 approved TIF tarp; and b) what crop will be planted at that field. Section 6448.5(c) lacks clarity  
3 because DPR fails to define “interim mitigation measures.” OEHHA recommends that DPR  
4 develop mitigation measures, not interim mitigation measures. Further, such measures will only  
5 be developed if DPR determines the exceedances are “likely to continue,” a phrase that is also  
6 undefined in the regulation.

7 104. Sections 6448.5(c) and (d) also lack clarity because DPR fails to define a  
8 timeframe for the implementation of “interim mitigation measures” or “final interim mitigation  
9 measures.”

10 105. The regulation also fails to describe how it would ensure interim or final interim  
11 mitigation measures reduce exposure to 1,3-D below 0.21 ppb.

12 106. A writ of mandate should be issued to compel DPR to revise 3 Cal. Code of  
13 Regulations section 6448.5 to comply with Government Code section 11349.1(a)(3).

14 107. PETITIONERS have no plain, speedy or adequate remedy in the ordinary course  
15 of law and will be irreparably harmed, unless the Court grants the requested writ of mandate and  
16 declaratory relief requiring DPR to modify the regulations to comply with the APA’s clarity  
17 standard.

18 **FOURTH CAUSE OF ACTION**  
19 **DECLARATORY RELIEF**

20 [Code Civ. Proc., § 1060; Gov. Code, § 11350]

21 108. PETITIONERS reallege and herein incorporate by reference each preceding  
22 paragraph of the Petition herein.

23 109. Regulations adopted contrary to the requirements of the APA may be declared  
24 invalid. (Gov. Code § 11350.)

25 110. There is an actual controversy between PETITIONERS, on the one hand, and  
26 DPR on the other, in that PETITIONERS assert that:

27 a. DPR failed to comply with Food and Agricultural Code sections 14006  
28 and 14024 as set forth above;

1                   b.       DPR failed to adopt regulations that meet the consistency and clarity  
2 requirements of Government Code section 11349.1 as set forth above;

3                   c.       DPR failed to support its assumptions and conclusions in Regulation No.  
4 24-001, including the assumption that farm workers work from 8:00 a.m. to 4:00 p.m., based on  
5 substantial evidence.

6           111.   A judicial declaration is necessary and appropriate at this time to clarify whether  
7 DPR's development and adoption of the regulations fully and completely satisfies the legal  
8 requirements of the California Code of Regulations, the Food and Agricultural Code, and the  
9 Government Code, so that the parties and the public can be informed as to the lawful  
10 promulgation of the regulations.

11 **WHEREFORE, PETITIONERS pray:**

12           1.       For declaratory judgment, stating that:

13                   a.       Sections 6448 through 6448.5 as adopted by DPR fail to comply with  
14 Sections 14006 and 14024 of the FAC;

15                   b.       The regulations adopted by DPR are invalid for failing to satisfy the  
16 consistency requirements of the APA;

17                   c.       The regulations adopted by DPR are invalid for failing to satisfy the  
18 clarity requirements of the APA; and,

19                   d.       The regulations adopted by DPR are invalid for failing to promulgate a  
20 decision that is supported by the findings.

21           2.       That the court issue an alternative and/or peremptory writ of mandate  
22 commanding DPR to:

23                   a.       Develop a single regulation to mitigate health risks of 1,3-D for  
24 occupational and non-occupational bystanders by setting the air concentration regulatory level at  
25 0.04 ppb as determined by OEHHA and in concert with OEHHA so as to satisfy their joint and  
26 mutual responsibility to protect public health;

27                   b.       Require agricultural owners and operators to provide notices and  
28 warnings, including signs posted in fields regarding buffer zones, which include location and

1 physical boundaries, dates and duration of buffer zones, as well as method(s) of application; and  
2 c. Ensure that the regulation complies with the FAC, the APA's consistency  
3 and clarity standards, and other relevant statutory provisions;

4 3. That PETITIONERS be awarded costs of this proceeding;

5 4. That PETITIONERS be awarded reasonable attorneys' fees for this action  
6 pursuant to Code of Civil Procedure Section 1021.5 for ROCIO ORTIZ, ANA BARRERA, CPR,  
7 and PAN; and,

8 5. That PETITIONERS be awarded such other and further relief as the Court deems  
9 just and proper.

10 DATED: January 30, 2026

Respectfully submitted,

CALIFORNIA RURAL LEGAL ASSISTANCE, INC.

12  
13 By  \_\_\_\_\_

Chelsea H. Tu

Attorney for PETITIONERS

ROCIO ORTIZ

CALIFORNIANS FOR PESTICIDE REFORM

16 Dated: January 30, 2026

Respectfully submitted,

MICHAEL FREUND & ASSOCIATES

19 By /s/ (next page) \_\_\_\_\_

Michael Freund

Attorney for PETITIONERS

ANA BARRERA

PESTICIDE ACTION & AGROECOLGY

NETWORK




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Dated: January 30, 2026

Respectfully submitted,

MICHAEL FREUND & ASSOCIATES

By   
Michael Freund  
Attorney for PETITIONERS/PLAINTIFFS  
ANA BARRERA  
PESTICIDE ACTION & AGROECOLGY  
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## VERIFICATION

I, Margaret Reeves, declare:

1. I am Senior Scientist with Pesticide Action and Agroecology Network, a Petitioner here.

I make this verification of my own knowledge. I hereby verify that the factual matters stated in VERIFIED PETITION FOR WRIT OF MANDATE are known to me personally and that they are true or that I believe them to be true.

2. I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct and that this verification was executed this 30th day of January, 2026, in Oakland, California.

By:



Margaret Reeves