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

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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.

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 16. 1,3-Dichloropropene (“1,3-D”), also known as “Telone,” is an extremely toxic
17 liquid fumigant with a penetrating odor. The fumigant kills most if not all living organisms in the
18 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
18 rapidly converts into gas to kill organisms in the soil. As 1,3-D converts from a liquid to gaseous
19 form, it can escape from the soil into the ambient air. As a gas, it can drift from application sites
20 into nearby fields and residential neighborhoods, increasing the likelihood that other nearby
21 living organisms, including humans, will inhale and be harmed by the fumigant.

24 18. In humans, 1,3-D can have both acute and serious chronic effects. Acute exposure
25 can cause upper respiratory tract irritation, chest tightness, watery eyes, or dizziness. Common
26 effects of long-term exposure include damage to the lining of the urinary bladder and the lining
27 of the nasal mucosa. Even at low levels, long-term 1,3-D exposures can cause various types of
28 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

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

2 **1,3-D Cancer Risk Thresholds**

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

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

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

18 27. Drawing from the RCD analysis, on October 6, 2016, DPR issued its Risk
19 Management Directive and Mitigation Guidance for Cancer Risk from 1,3-Dichloropropene
20 (“2016 RMD”) which set forth DPR’s decision on how it would “address cancer risks of
21 bystanders.” (2016 RMD, p. 1.) By using the “portal of entry” scenario, DPR raised the
22 regulatory target air concentration from 0.14 ppb to 0.56 ppb, allowing for more exposure to 1,3-
23 D. The 2016 RMD established a regulatory target level of 0.56 ppb for non-occupational
24 bystanders.

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

27 29. In both the 2016 and 2024 1,3-D Risk Management Directives, DPR states that its
28 objective is to reduce cancer risks to or below 1×10^{-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.

The Township Cap Program

35. 1,3-D was first registered for use as a soil fumigant in California in 1970.
4
5 However, in 1990, concerningly 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. Alarmingly, 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 Agrosciences 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

1 lifetime cancer risks of non-occupational bystanders in November of 2022. On November 19,
2 2022, DPR filed a Return to Writ to this Court alleging that its submission of a proposed non-
3 occupational bystander regulation satisfied its obligations under the Writ issued on May 14,
4 2018.

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

The Non-occupational Bystander Regulation

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

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

28 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.

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.

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

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

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

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

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

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

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

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

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

24 68. DPR's 1,3-D regulations fail to comply with the requirements of FAC section
25 14006 because the level of usage allowed is not limited to situations in which it is reasonably
26 certain that no injury will result.

27 69. The regulations fail to comply with legal mandates placed on DPR by sections
28 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 1×10^{-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 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**

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 OEHHA, 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 OEHHA’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

1 standard.

2

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

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

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

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

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

16 97. The clarity standard considers agricultural workers and other members of the
17 general public as those "directly affected" by the application of pesticides. (1 Cal. Code Reg.,
18 §16.)

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

26 99. Specifically, the regulations fail to provide information that would reliably allow
27 agricultural workers to know when and where 1,3-D is applied, the method of 1,3-D application,
28 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**
DECLARATORY RELIEF

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

20
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;

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

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

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

WHEREFORE, PETITIONERS pray:

1. For declaratory judgment, stating that:

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

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

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

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

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

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

b. Require agricultural owners and operators to provide notices and 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 By 

13 Chelsea H. Tu

14 Attorney for PETITIONERS

15 ROCIO ORTIZ

16 CALIFORNIANS FOR PESTICIDE REFORM

17 Dated: January 30, 2026

Respectfully submitted,

18 MICHAEL FREUND & ASSOCIATES

19 By /s/ (next page)

20 Michael Freund

21 Attorney for PETITIONERS

22 ANA BARRERA

23 PESTICIDE ACTION & AGROECOLGY

24 NETWORK

1 Dated: January 30, 2026

2
3 Respectfully submitted,

4 MICHAEL FREUND & ASSOCIATES

5 By _____

6 Michael Freund

7 Attorney for PETITIONERS/PLAINTIFFS

8 ANA BARRERA

9 PESTICIDE ACTION & AGROECOLGY

10 NETWORK



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

Margaret Reeves