STANISLAUS COUNTY FARM BUREAU

For the good of your food.

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January 18, 2023

Julie Henderson, Director
Department of Pesticide Regulation
1001 I Street
Sacramento, CA 95814

Re: 1,3-Dichloropropene (1,3-D) Proposed Rulemaking

Dear Director Henderson:

Thank you for the opportunity to provide comment on the proposed regulatory action (DPR 22-005) regarding the use of 1,3-Dichloropropene (1,3-D) in California. Stanislaus County Farm Bureau represents around 1600 farmers and industry professionals within Stanislaus County who service farm operations and grow fruits, nuts, vegetables, and other crops that are critical to the state's agricultural economy and communities. In Stanislaus County, our biggest commodities are fruit and nut trees. Our growers depend on 1,3-D to fumigate their fields before replanting an orchard. Buffer zones and township caps already limit its use, however it is a critical tool that enables our growers to produce higher yields more efficiently. California farmers and ranchers have been so innovative and work tirelessly to produce food with less water and tools, but desperately need to retain this irreplaceable product.

Soil fumigation is an integral part of farming operations throughout California and a fundamental practice used to protect farm fields from soil borne pests and diseases, such as nematodes, fungi, and others that damage plant root structures. 1,3-D has been confirmed to improve crop yields, allow for more efficient use of farm inputs (like water and fertilizers) and reduce reliance on other pesticidal products. The distribution, sale and use of products containing 1,3-D are highly regulated at the federal, state, and local level and may only be utilized by certified applicators, permitted under County Agricultural Commissioner oversight and approval, after considering field-level conditions.

Therefore, we appreciate the effort the Department of Pesticide Regulation (Department) has taken to generate additional field data from the series of pilot projects initiated in 2022. The utilization of empirical data grounds policy proposals in practicality and considers important measures such as how product efficacy is impacted by proposed mitigation measures. While the current regulatory proposal makes significant progress from previous iterations, we respectfully offer comments on the following items: scientific basis of the mitigation measures, the new soil moisture requirements, seasonal restrictions, and setbacks.

Science Based Considerations
As leading organizations representing California agriculture, we have a strong interest in ensuring that the proposed regulations are developed through a consistent, comprehensive, and robust analysis of all available science.

To that end, we are concerned that the concentration limits for non-occupational bystanders cited as the basis for the Department's proposed mitigation measures – 0.56 ppb (70-year average) for cancer risk and 55 ppb (72-hour average) for acute effects –- are predicated on an outdated risk assessment that does not consider more recent scientific evidence and data. The U.S. Environmental Protection Agency is conducting a pesticide registration review for 1,3-D using a weight of evidence (WOE) analysis peer reviewed by a panel of subject matter experts. This analysis concludes that the currently manufactured form of 1,3-D is not mutagenic or carcinogenic below certain doses.[1] This finding challenges the validity of previous risk assessments used to establish health protective exposure levels, including the Department's risk assessment last updated in 2016 of which is the basis for this proposed regulation. We request that the Department update its 1,3-D risk assessment using a current WOE analysis before completing this rulemaking. This will ensure that the proposed mitigation measures, while still conservative in the context of toxicological endpoints, would deliver public health benefits commensurate with the economic harm they would impose on the agricultural sector. It would also allow for conformity in regulatory outcomes that don't put California farmers at a competitive disadvantage and thereby impact food supply and consumer prices.

Stanislaus County have had three incidents during a 1,3-D application during the last five years. Two incidents were considered moderate (Class B) and one minor (Class C). NO Level A violations. In all three incidents, the violations were found concerning worker health and safety requirements and not bystanders.

For some context, the most recent incident was due to the sealer being an employee of the grower not wearing required PPE and not having been trained, for an application under supervision by a PCB. Stanislaus County Ag Commissioner's Office performed compliance interviews, the Pest Control Business understood they were supervising the application and therefore responsible for all compliance elements and going forward would provide their own sealers. All of these were resolved via a Decision Report to DPR.

Seasonal Restrictions and Soil Moisture Requirements
In the regulations, the Department proposes to increase soil moisture requirements from 25% to 50% of field capacity and offer three options to comply: (1) irrigate with three inches of water 48 to 72 hours prior to fumigation, (2) determine the soil moisture content using the feel and appearance method, or (3) determine the soil moisture using a soil moisture sensor.

We would like to offer our concern that this increased saturation requirement will result in an inefficient use of scarce water supplies. Confronting the impacts of the current extreme drought conditions and implementation of the Sustainable Groundwater Management Act (SGMA), the proposed regulation would further constrain farmers' decision making and may, require them to choose between proper and appropriate pest management or irrigation. Should they choose not to reallocate water supplies for this requirement and wait for natural precipitation events, they may be ineligible for application, disrupt

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[1] Hayes, Nelson and Kirman, Peer review of a cancer weight of evidence assessment based on updated toxicokinetics, genotoxicity, and carcinogenicity data for 1,3-dichloropropene using a blinded, virtual panel of experts. Critical Reviews in Toxicology, February 2021.

fertigation timelines, or be significantly constrained by the other mitigation measures obligated by this rulemaking.

This soil moisture requirement is more challenging to achieve when compounded by the expanded seasonal restrictions. Extending the seasonal restriction from December to November through February means infrequent natural precipitation events are not likely able to be utilized to meet the soil moisture requirement. Even more importantly, it may not allow for responsiveness to pest issues (anticipated or actual), complicates application management with lower application blocks and lead to applications at inopportune times when conditions are not ideal agronomically. Some crops, such as tree nuts, are best planted in late fall (November) with relatively mild weather, after typically late October rain events have subsided and soil is appropriately drained. Therefore, as an alternative, the Department could expand their seasonal allowances, allowing soil moisture requirements to be better met by natural precipitation times, and allow growers to work with irrigation specialists to determine the appropriate soil moisture content within a more practical moisture range.

Soil moisture requirements have been an area of concern for Stanislaus County growers. Calls placed to local University of California, Cooperative Extension Farm Advisors have given no indication of efficacy of product with the proposed soil moisture requirements. Without solid data suggesting that 1,3-D is still effective at both the proposed depth and moisture requirements, what will growers use to mitigate nematodes? There is no viable alternative product.

Setback Distances

We would like to offer our appreciation to the Department for clarifying that "non-residential agricultural buildings, including barns, livestock facilities, sheds and outhouses," are not by default considered an occupied structure and therefore subject to the specified setback requirements. As you are aware, these types of agricultural structures are rarely occupied and if so, for very short time periods.

However, we would like to respectfully offer concern regarding the setback distances, which as proposed, will prove very impactful to farm operations. As is the case with setbacks or buffer zone requirements, depending upon the severity of the required distance, implementing them will lead to untreated rows resulting in production loss or crop quality issues. It may also allow soil borne pests to move freely in expanded setbacks and migrate to new areas or parcels requiring greater applications than otherwise anticipated. At a time when many California farms are at a watershed financial moment (managing input costs, lack of availability, resource scarcity, and supply chain challenges), these restrictive conditions will contribute more pressure, pushing some to the brink. This is especially true for small or mid-sized farms, those urban adjacent, or for cropping systems and crop types particular sensitive to pest pressures for which there are no alternatives to 1,3-D.

Moreover, we would like to provide comment on multiple application circumstances. The current methodology used to establish setback distances from single application blocks appears grounded in risk-based principles and applies available localized data to models capable of accounting for important variables that can influence emission rates (e.g., chemical properties, soil characteristics and application methods) and dispersion of emissions to predict airborne concentrations of 1,3-D at adjacent occupied structures. We generally support this science-based approach and agree that it yields defensible results for single application blocks.

However, we do not support the Department's proposed regulations which forego this approach in instances where two or more applications would occur at different locations within 36 hours and the buffer zones for individual application blocks overlap or touch. In these instances, the Department is

applying excessively conservative or worst-case assumptions[2] for the data driven inputs and modeling used to establish the setback distances for single application blocks. In most cases, applying these assumptions to the setback tables in the proposed regulation will either result in the maximum setback distance (500 feet) or impose de facto use prohibitions for all affected application blocks. We share in the Department's desire to be health protective, but actions must be based on scientifically valid standards, especially when it has data and modeling tools that are capable of predicting the impact of contemporaneous applications at off-site receptor locations. Therefore, we request the Department apply the same methodology it proposes for determining setbacks from single application blocks to determine setbacks from overlapping application blocks.

We appreciate the opportunity to provide our comments on the proposed 1,3-D regulation. We look forward to continued discussion on this proposed regulatory package and a practical evaluation of its components. We would be happy to host a roundtable here at Stanislaus County Farm Bureau, bringing together growers, applicators, and regulatory agents.

Sincerely,

Eric Heinrich
President,
Stanislaus County Farm Bureau

[2] Such as using the combined acreage of all overlapping application blocks and the highest application rate.