



August 24, 2020

Karen Morrison, Ph.D.
Assistant Director
Pesticide Programs Division
Department of Pesticide Regulation
1001 I Street
Sacramento, CA 95814

Dear Karen,

Thank you to you and your team for taking the time to talk to almond growers and the Almond Alliance about the mitigation practices proposed for assessment as a part of the pilot program for 1,3 -D. The purpose of this letter/email is to summarize the almond industry points from our discussion with you on Friday, June 12th, 2020.

1. It was useful to understand that DPR is aiming for achieve at least 60% of the emissions reduction that TIF tarps provide. However, it is not clear that there is a risk basis for that mitigation goal.
2. Limiting the applications to small acreages (15, 20 acres) counters the purposes of adding additional mitigation measures for off-gassing. It is not possible to ensure that soil moisture levels are maintained over days if not weeks to complete sequential smaller acreage applications. It also unduly increases the expense to have the specialized equipment and specially trained applicators come out multiple times to complete a treatment. This is a costly endeavor for our growers.
3. We were very concerned about the use of property lines for determining buffer zones rather than setbacks to occupied structures which has been the focus to date. Buffer zones to property lines hurts smaller acreage growers (74% of the almond growers in California farm 100 acres or less). We understand now that DPR is returning to the current label language of using setbacks to occupied structures; this provides the flexibility needed for the diversity of operation sizes and of locations almonds are grown in and is protective of bystanders.

We appreciate that DPR and your team is seeking out different approaches to reduce emissions, as well as the current goal to provide a menu of mitigation options a grower could choose from depending on the specifics of the fumigation treatment site. We also appreciate DPR taking the time to assess the efficacy through field testing.

Of the practices proposed for testing we have the following comments:

1. Moving the injection level to 24 inches from the current 18 inches was considered the most viable of the mitigation options.



2. We support the request from the walnut industry to also test the Buser shank that splits the application between both a higher (18 inch) and deeper (30 inch) injection level. In terms of efficacy, this is excellent for tree crops to reach a greater volume of the soil and would be using a lower rate at the shallower depth compared to now.
3. The use of water seals to 70% FC with an 18 inch injection depth is a maybe. From the current description it is not clear if it is viable. The main issue is that if soil is too wet then the fumigant does not move in the soil, thus obviating the purpose and expense of the fumigation. Where a more wet soil can be maintained in the upper 6 inches as a seal, but the soil is drier lower down, it may be a viable mitigation measure. We understand that DPR received similar feedback from others, which indicated that a range of 50 to 70% with a target of closer to 50% being more viable.
4. The application of 2.5 inches water seal is not viable. We understand that DPR has received similar feedback from others and is removing this option.
5. TIF tarps double the already expensive cost of an application, and increase plastic waste to dump sites, which is something the State is trying to move away from.
 - a. Strip tarping may reduce some of the costs but there are fixed costs associated with bringing the appropriate equipment and personnel out. It does eliminate the need for gluing.

DPR should consider the timing of requiring new mitigation options. The fumigations are applied both by specialized equipment and specially trained applicators. It takes time to have enough rigs with deeper injection systems in place.

As mentioned earlier, per the last USDA-NASS Agricultural Census, 74% of almond growers farm 100 acres or less. Re/planting an orchard is a major long-term investment with no return from that ground for 3-4 years, and it takes 7-15 years to fully recoup the investment costs. Everything that increases the planting costs, including efforts to achieve successful soil pest management prior to planting, means the grower needs that much more capital to put in and it will take that much longer to amortize the costs. That is harder for smaller growers to do. Yet, good soil pest management is critical for the long-term productivity and health of an almond orchard.

Again, we appreciate the time DPR is taking to research the options and obtain feedback from affected users. We invite DPR staff to come to out to visit almond orchards to provide a better understanding of the geographies for possible mitigation measures. Soil fumigations with 1,3-D or 1,3-D and Chloropicrin blend (C35) remain critical for the almond industry.

Sincerely,

A handwritten signature in black ink, appearing to read "Elaine Trevino".

Elaine Trevino
President
Almond Alliance