FINAL STATEMENT OF REASONS AND PUBLIC REPORT
DEPARTMENT OF PESTICIDE REGULATION

Title 3. California Code of Regulations
Amend Sections 6452 and 6452.2
Amend Section 6452.4 and Renumber to 6881
Renumber section 6890 to 6864
Adopt Sections 6558, 6577, 6880, 6883, 6884, and 6886
Pertaining to Volatile Organic Compounds in the
San Joaquin Valley Ozone Nonattainment Area

UPDATE OF THE INITIAL STATEMENT OF REASONS

The originally proposed regulatory action was noticed in the *California Regulatory Notice Register* on April 20, 2012.

During the 45-day public comment period, DPR received comments on the proposed text. The comments are discussed under the heading "Summary and Response to Comments Received" of this Final Statement of Reasons. Based upon the comments received from the public and for reasons below, DPR modified the text from that originally proposed. Additional documents were relied upon and added to the rulemaking file.

DPR received comments addressing the modified text during the 15-day public comment period. These comments are discussed under the subheading "Comments Received During the 15-Day Public Comment Period."

Additional changes to the text were made after the 15-day public comment period. A second 15-day comment period was provided. Responses to the comments received are discussed under the subheading "Comments Received During the Second 15-Day Public Comment Period."

Changes to the Text of Proposed Regulations

First Modified Text:

- Amend section 6452(b)(1)(A) to reflect the correct section reference based on the proposed changes.

- Revise proposed section 6558 to require a licensed pest control adviser to identify the exception under section 6884(b) if the use of a high-volatile organic compound (VOC) nonfumigant product is recommended. This will assist in determining compliance during an enforcement audit.

- Revise proposed section 6577(b) to clarify that a licensed pest control dealer must indicate on the invoice that the information required in subsection (a) was provided to the operator of the property.

- Revise proposed section 6880(a) to clarify that designating a product as a high- or low-VOC compound only pertains to a product that contains abamectin, chlorpyrifos, gibberellins, or oxyfluorfen as the primary active ingredient. Also, "by weight" has been added to clarify that the product VOC emission potential is percent by weight as opposed to percent by volume.

- Revise the title of proposed section 6883 to remove "Pest Control Adviser." This title is misleading as this proposed section addresses the responsibility of the operator of the property in obtaining a recommendation, and not the requirements of a pest control adviser.

- Revise section 6884(b)(2) to increase the application rate of gibberellins from 8 to 16 grams of active ingredient per acre or less. All high-VOC products are liquids and all low-VOC products are dusts and powders. The application rate of 8 grams of low-VOC dust and powder formulations is difficult to measure in the field resulting in possible adverse effects. Too low of an application rate can cause ineffective thinning of grapes, and too high an application rate can cause fruit abortion. The University of California's *"Proposed Exemptions to San Joaquin Valley Ozone Nonattainment Area Use Restrictions,"* a document relied upon, concurred that 16 grams or less of dust/powder formulations could be difficult to measure in the field. The rate was increased from 8 to 16 grams based on public comments. Because some grape varieties require an application rate of 16 grams for thinning, the application rate was increased to include the use of liquid formulations. The liquid formulations can be more accurately measured at this low rate.

- Propose to add subsection 6884(b)(3) to allow an exception for use of high-oxyfluorfen products when using a low application rate. A recent University of California study, "Evaluation of Low VOC Oxyfluorfen Plus 'Kicker' Treatments for Postemergence Preharvest Weed Control in Nut Orchards" suggests that overall, low- and high-VOC formulations of oxyfluorfen can be similarly effective with respect to post-emergence weeds. However, this one study may not be conclusive, and some low-VOC products may prove to be less effective in some weed genera in orchards and vineyards. If this is the case, limiting use to low-VOC products may result in herbicide resistance in some weed genera. If additional studies confirm that low-VOC products are equally effective, this exception can be removed. This study has been added to the rulemaking file as a "Document Relied Upon."

- Propose to add subsections 6884(d) and (e) to allow the Director to propose removal of an active ingredient or crop through the rulemaking process while not affecting the ability to meet the pesticide VOC benchmark of 18.1 tons per day (tpd) in San Joaquin Valley ozone nonattainment area (NAA). Cropping and use patterns which make these four active ingredients and seven crops a priority for restriction may change over time and, consequently, DPR may be regulating products and crops that are not major contributors to VOC emissions in the San Joaquin Valley. DPR is required to ensure that the control measures to obtain VOC emission reductions are stringent enough to meet the 18.1 tpd benchmark in order to comply with the anti-backsliding provision of the Clean Air Act section 172(e), or 42 U.S. Code section 7502(e). Examples of changes to use and emissions that may cause the Director to propose removal include: the active ingredient is being regulated due to other potential impacts, a new active ingredient is being used, a different or

new crop is replacing other crops, or use has decreased due to pest resistance. Examples of temporary changes to use patterns that are unlikely to cause the Director to propose removal include: low pesticide product supply, low water supply, or crop loss.

- In proposed section 6884, add subsection (f) to allow the Director to make a determination to add an exception while not affecting the ability to meet the pesticide VOC benchmark of 18.1 tpd in the San Joaquin Valley ozone NAA if an acceptable study shows a greater amount of an active ingredient of a low-VOC product must be applied to achieve the same efficacy as a high-VOC product. There may be situations where low-VOC products or future active ingredients have uncertain efficacy or other problems, particularly for specialty crops. The inability to add an exception may lead to greater amount of product used, offsetting any VOC emission reductions from the lower emission potentials. More importantly, the amount of active ingredient applied would likely increase. The health and environmental risk of a greater amount of active ingredient could easily outweigh the benefits of any VOC reductions that might be achieved. Therefore, this section allows the Director to publish his decision to add an interim exception for use of a high-VOC product in the draft emissions report which is subject to a 45-day public comment period prior to implementation. This process expedites the allowance of a high-VOC product that would result in the application of less active ingredient. The interim addition would have to be finalized by the rulemaking process or would expire. As previously stated, DPR is required to ensure that the controls to obtain VOC emission reductions are stringent enough to meet the 18.1 tpd benchmark, complying with the anti-backsliding provision of the Clean Air Act section 172(e), or 42 U.S. Code section 7502(e).

Second Modified Text:

- Amend section 6452.2(a) to reflect the correct section reference based on the proposed changes.

- Revise subsection 6884(d) to allow the Director to propose interim removal of an active ingredient or crop provided the removal will not affect the ability to maintain the pesticide VOC emissions under 17.2 tpd (95 percent of 18.1 tpd) in San Joaquin Valley ozone nonattainment area. Exceeding the 17.2 tpd would trigger the prohibitions and restrictions of section 6884. Using the Annual VOC Emission Inventory Report process proposed in subsection (e), the Director would publish his decision for the interim removal of an active ingredient or crop in the draft emissions report which is subject to a 45-day public comment period prior to implementation. This allows the interim removal to go into effect and be evaluated before the removal becomes permanent through state and federal rulemaking. Proposed subsection (d)(1) and (2) provides criteria for the Director to base his decision for removal of an active ingredient or a crop. Proposed subsection (d)(3) requires that the Director base his decision to add an interim exception on a determination that adding the exception will not affect the ability to maintain the pesticide VOC emissions under 17.2 tpd rather than the 18.1 tpd benchmark.

- Reorder proposed subsection (f) to (e) and revise to allow for the interim removal of an active ingredient or crop, or addition of an exception to remain in effect up to three years unless implemented through California and federal regulations. The removal or addition must be evaluated each year in the Annual VOC Emissions Inventory Report. This will provide the Director with flexibility to withdraw the interim removal or addition should there be a change in use and emissions. Also, require the report to include calculations used to determine that the VOC emission level of 17.2 tpd would not be exceeded with the removal or addition, as well as description of factors that have caused a decrease in use and emissions, and are likely to persist.

Revision page 6 of the Initial Statement of Reasons, last paragraph:

Use of low-VOC abamectin, chlorpyrifos, gibberellins, and oxyfluorfen products likely ensures that the San Joaquin Valley SIP goal is consistently achieved. Pesticide VOC emissions for the San Joaquin Valley in 2006 were 21.3 tpd, exceeding the SIP goal by 3.2 tpd. These were the highest pesticide VOC emissions since at least 2004 when DPR revised its emission inventory methods. Additionally, 2006 was the highest or second highest year for VOC emissions from products with three of the four pesticides included in these regulations. If the 2008 fumigant regulations had been in effect for 2006, DPR estimates that the fumigant emissions would have been reduced by 2.5 tpd (31 percent reduction from low-emission fumigant application methods, 6 percent reduction from shifts outside May 1 through October 31), resulting in total pesticide VOC emissions of 19.1 tpd for 2006. If all abamectin, chlorpyrifos, gibberellins, and oxyfluorfen applications in 2006 used low-VOC products, DPR estimates that total pesticide VOC emissions would have been 15.6 tpd. The fumigant restrictions and nonfumigant restrictions combined would ensure that the SIP goal of 18.1 tpd would be met each year, and the 17.2 tpd trigger for a fumigant allowance program would not be exceeded, assuming that 2006 had the worst-case emissions.

PUBLIC HEARING

DPR scheduled and held a public hearing on June 6, 2012 in Tulare, California. A transcript of the hearing is contained in the rulemaking file.

SUMMARY AND RESPONSE TO COMMENTS RECEIVED DURING 45-DAY COMMENT PERIOD

See Attachment A

COMMENTS RECEIVED DURING THE 15-DAY COMMENT PERIOD

- Christopher Valadez, California Grape and Tree Fruit League

Comment: While the proposed increase from 8 grams of active ingredient per acre to 16 grams of active ingredient per acre more closely reflects stretch and thinning needs, limiting liquid formulation to 16 grams of active ingredient per acre underestimates table grape needs for proper sizing development.

Response: A report by the University of California (UC) Extension, *"Proposed Exemptions to San Joaquin Valley Ozone Nonattainment Area Use Restrictions"* by Robert Van Steenwyk and Karen Klonsky indicate that the range of application rate recommended is from 4 to 16 grams of active ingredient per acre for different varieties of grapes. The increase to 16 grams will not affect the total emissions significantly. A newly registered low-VOC liquid product of gibberellin should remove the need for the use of the high-VOC liquid and the exemption. If use indicates that the exemption is not needed, it can be removed in the future. This report was added to the rulemaking file as a "document relied upon."

Comment: Support the proposed change to allow the Director to propose removal of an active ingredient or crop, and the addition to allow for an exemption for use of a high-VOC formulation, provided data reveals that a greater amount of an active ingredient of a low-VOC product must be applied to achieve the same efficacy which could have the effect of offsetting VOC emission reductions.

Response: No response necessary.

- Anne Katten, California Rural Legal Assistance Foundation; Caroline Cox, Center for Environmental Health; Tracey Brieger, Californians for Pesticide Reform

Comment: The added exception for low rate oxyfluorfen applications is completely unjustified given DPR's admission that the reference added does not support need for this exception.

Response: A report by UC Extension, *"Evaluation of Low VOC Oxyfluorfen Plus 'Kicker' Treatments for Postemergence Preharvest Weed Control in Nut Orchards"* by M. Moretti, A. Johnson, S. Watkins, and B. Hanson states that the low-emission formulation is not as effective as a post-emergence herbicide for some weeds and may increase the occurrence of herbicide resistant weeds. The inclusion of the exemption does not have a large effect on the emission total. If use indicates that the exemption is not needed, it can be removed in the future. This report was added to the rulemaking file as a "document relied upon."

Comment: The proposed change doubles the allowable rate of application of high-VOC gibberellin formulations both because this will increase VOC emissions and no explanation for the change has been provided.

Response: A report by UC Extension, *"Proposed Exemptions to San Joaquin Valley Ozone Nonattainment Area Use Restrictions"* by Robert Van Steenwyk and Karen Klonsky indicates there is concern regarding the difficulty of measuring small amounts of the low-VOC powder products in the field. The inclusion of the exemption does not have a large effect on the emission total. A newly registered low-VOC liquid product of gibberellin should remove the need for the use of the high-VOC liquid and the exemption in the future. This report was added to the rulemaking file as a "document relied upon."

Comment: Object to addition of unilateral language stating that the Director is authorized to remove active ingredients or crops or create other interim exceptions based on determination that the change will not affect ability to meet the VOC benchmark. We are concerned because the language does not apply to adding new active ingredients or crops or ending exceptions even though the Department acknowledges that growers could transition to use of a high-VOC formulation of a different active ingredient, that cropping patterns could change over time, or that exceptions could be abused and that all these changes could affect ability to meet the VOC benchmark. The proposed revision inappropriately places a higher priority on convenience to agricultural producers than on assuring that VOC emission reductions are maintained. We are also puzzled because the Director currently already has this authority so this proposed language seems unnecessary and duplicative of existing regulation.

Response: Language to add new active ingredients is not necessary since DPR always has the ability to add it through rulemaking. The language to remove an active ingredient is needed to assure that the Department complies with the "anti-backsliding provision" of the Clean Act section 172(e) or 42 U.S. Code section 7502(e) from the regulations which did not previously include the ability to do so.

- Brian L. Bret, Dow AgroSciences

Comment: Supports the modification that provides an exception for use of high-VOC formulations of oxyfluorfen. However, limiting the exemption to only 0.125 pounds of active ingredient per acre would deprive growers of needed post-emergent and residual weed control. Raising the exclusion to 0.25 pounds of active ingredient per acre (one pint per acre) in grapes and tree nuts would provide improved efficacy, especially of hard to control weeds.

Response: Consultation with UC and growers indicated that 0.125 pounds of active ingredient per acre of the high-VOC product was sufficient to control weeds.

- Debra S. Stubbs, Syngenta Crop Protection

Comment: Supports proposal to modify the proposed regulation to include granting the Director authority to propose removal of an active ingredient or crop from the restrictions imposed by the rule.

Response: No response necessary.

Comment: Because of the rigidity of the proposed regulation, DPR will be prevented from adding active ingredients to the regulatory scheme. With the responsibility for reductions in VOC emissions falling exclusively upon producers of products containing the four regulated active ingredients, registrants for other products will have no incentive to reformulate their high-VOC emitting products to lower VOC emitting alternatives.

Response: Language to add new active ingredients is not necessary since the Department always has the ability to add it through rulemaking.

Comment: Modify the regulation further to require DPR to make an announcement by a fixed date each year whether and when the use restrictions and prohibitions imposed will take effect. Producers/registrants require sufficient lead time to coordinate production campaigns to meet forecasted needs for regulated products. It is imperative that all registrants, dealers, pest control advisers, and growers have adequate time to prepare for these regulations to take effect.

Response: Unforseen circumstances can make it impossible to fix a time when the data is available every year. The requirements for dealers and pest control advisers are in place whether the prohibitions are in place or not.

- Richard Matoian, American Pistachio Growers

Comment: No suitable substitute for high-VOC oxyfluorfen. It will be necessary to supplement with additional herbicides resulting in an economic hardship for pistachio growers.

Response: Not relevant to the modified text - no response necessary.

Comment: If less effective material is used, the repeat applications would have to be factored for estimating the added VOC. Tractor emissions are one of the major sources of VOCs.

Response: Not relevant to the modified text - no response necessary.

Comment: It is essential for DPR to improve the reporting system in order for the pistachio growers to not be denied the use of oxyfluorfen when the VOC usage is below the previous year's 95 percent level.

Response: Not relevant to the modified text - no response necessary.

Comment: Director should consider adopting regulation language that would permit the exemption of a nonfumigant, should it be demonstrated the assumed high emission, nonfumigant VOC is no longer a high emission VOC.

Response: The proposed regulations included language to allow the Director to allow the addition of an exception if its addition would not affect the total VOC emission.

<u>COMMENTS RECEIVED DURING THE SECOND 15-DAY COMMENT PERIOD</u>

- Bob Blakely, California Citrus Mutual

Comment: Supports language modification of increasing gibberellins application rate to 16 grams of active ingredient per acre or less; does not support the use of hypothetical emissions and assumed mixtures of high and low-VOC formulations.

Response: Comments not relevant to the second modified text. No response necessary.

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

DPR has determined that the proposed regulatory action does not impose a mandate on local agencies or school districts requiring reimbursement by the State pursuant to Part 7 (commencing with section 17500) of Division 4 of the Government Code because the regulatory action does not constitute a "new program or higher level of service of an existing program" within the meaning of section 6 of Article XIII B of the California Constitution. DPR has also determined that no nondiscretionary costs or savings to local agencies or school districts will result from this regulatory action.

ALTERNATIVES DETERMINATION

The Director has determined that no alternative considered by DPR would be more effective in carrying out the purpose for which this regulation is proposed, or would be as effective and less burdensome to affected private persons or businesses than the proposed regulatory change.

POSTING REQUIREMENT

Title 3, California Code of Regulations, section 6110, states in part that, "The public report shall be posted on the official bulletin boards of the Department, and of each commissioner's office, and in each District office of the DPR [Division of Pest Management, Environmental Protection and Worker Safety] for 45 days." DPR has posted its Initial Statement of Reasons and Public Report on its official bulletin board, which consists of the Department's Internet Home Page <http://www.cdpr.ca.gov>. In addition, copies were provided to the offices listed above for posting.