SUMMARY AND RESPONSE TO COMMENTS RECEIVED

Comments Received During the 45-Day Public Comment Period

No.	Comment and Response	Commentor
1	Low-VOC formulations, oxyfluorfen and chlorpyrifos, are not adequate alternatives. For low-VOC oxyfluorfen to get similar performance, a grower must add tank mixtures like Rely or Treevix. This adds $18-$40/acre. For low-VOC chlorpyrifos, higher rates of the formulation must be used, resulting in additional costs, and increased pesticide use. ***A recent report, "Evaluation of Low VOC Oxyfluorfen Plus "Kicker" Treatments for Postemergence Preharvest Weed Control in Nut Orchards" by UC Extension on the efficacy of both low- and high-VOC formulations of oxyfluorfen found no significant difference in weed control. However, this one study may not be conclusive and some low-VOC products may prove to be less effective in some weed genera in some orchards and vineyards. If this is the case, limiting use to low-VOC products may result in herbicide resistance in some weed genera. Therefore, DPR modified the regulation to add an exception for the use of high-VOC products at low application rates to address the concern. This report was added to the rulemaking file as a "document relied upon."*** ***An earlier analysis by UC Extension noted general consensus that the low-VOC formulations of chlorpyrifos are as efficacious as the high-VOC formulation for most pests. The regulations include an exception for aphids on cotton which were identified as harder to control in the analysis.***	1
2	These regulations place an administrative burden upon businesses by requiring them to provide written information on the VOC regulations, tracking the intended use period, providing written recommendations and maintaining records for two years. ***The information required can be a simple form or addition to an invoice. The dealer is not required to follow the use period but only needs to supply information to purchaser. The two- year requirement for maintaining records is the same procedure that growers and pest control advisers do currently for other records.***	1, 2, 3, 4, 5, 6, 7, 8, 11, 12
3	Goal 2XL is needed in summer post emergent weed programs for effective in-season control. GoalTender and other low-VOC oxyfluorfen formulations are not viable substitutes for Goal 2XL and other EC oxyfluorfen products. Eliminating these formulations will result in cost increase and weed or pest control decreases. The decreased control could result in additional trips across the field and increased pesticide use. ***A recent report, "Evaluation of Low VOC Oxyfluorfen Plus "Kicker" Treatments for Postemergence Preharvest Weed Control in Nut Orchards" by***	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 28

	UC Extension on the efficacy of both low- and high-VOC formulations of oxyfluorfen found no significant difference in weed control. However, this one study may not be conclusive and some low-VOC products may prove to be less effective in some weed genera in some orchards and vineyards. If this is the case, limiting use to low-VOC products may result in herbicide resistance in some weed genera. Therefore, DPR modified the regulation to add an exception for the use of high-VOC products at low application rates to address the concern. This report was added to the rulemaking file as a "document relied upon."	
4	Reliable data doesn't exist that support "kickers" as the answer to using GoalTender in place of Goal 2XL. Glyphosate is already in the foundation of the spray mix. Paraquat is a restricted use pesticide due to acute toxicity. Human toxicity and worker exposure make Paraquat a poor choice. Rely costs $46/acre and was in short supply. Treevix costs $16/acre and recommends an "adjuvant system" adding additional costs. ***See response to comment no. 3***	2, 5, 7, 8, 11, 12
5	Who and how will applications of oxyfluorfen be monitored to be certain that only non-VOC formulations will be applied during the time periods should that be determined necessary? This will put additional financial burden on monitoring agencies to be certain everyone is in compliance. ***Enforcement of the regulations will fall within the normal procedures that are currently administered.***	8
6	Add an exemption to section 6884(b) to include low rates of high-VOC formulations of oxyfluorfen for spring and summer orchard floor weed control prior to harvest. The use pattern could be consistent with the supplemental label for GOAL 2XL in almond that allows up to 0.125 lb active ingredient per acre as a tank mix partner in orchard middles and tree rows. ***DPR modified the regulations to include an exception for oxyfluorfen at low applications rates (0.125 pounds of active ingredient per acre) of the high-VOC product.***	9, 13, 14, 15, 16, 17, 28
7	The regulations add additional paperwork. A better idea is to include your requirement on the county restricted materials permit. Recommendations are available through our counties, and should be retrievable by DPR. ***Including the products in the restricted materials permit would over-burden county personnel. The regulations require pest control advisers (PCAs) to retain recommendations which would be retrievable for enforcement purposes.***	9
8	DPR must question the validity of the annual VOC emissions report, from the formulas used in calculating the VOC levels to the way growers were allocated to difference ozone nonattainment areas. This matter is too costly for agriculture to implement without the base assurance the people deciphering the data actually	11

	knew what they were doing. DPR should hire a disinterested, third party accounting firm to audit the numbers, formulas, and processes DPR used in its original interpretation of pesticide use report data to assure the entire integrity of the VOC numbers in the report. ***The emissions report goes through a 45-day public comment period process. The use data and emission potential of products is available for anyone who is interested in checking the calculations conducted by DPR.***	
9	Several alternatives to high-VOC formulations of oxyfluorfen have been proposed. Documentation relied upon during development of the regulations are incomplete or were not intended to address post weed control use pattern. The report "Emulsifiable Concentrate Alternatives Analysis" by UC researchers focused on PRE applications of oxyfluorfen (prior to Feb 15th). Low-VOC formulations could replace high -VOC formulations this time of the year but the report did not address the POST use pattern that would be impacted by the regulations and is irrelevant in this case. ***See response to comment no. 3***	14, 28
10	The report "Proposed Exemptions to San Joaquin Valley Ozone Nonattainment Area Use Restriction" by UC focused on the economics of adding low doses of other POST herbicides to the low-VOC formulation oxyfluorfen during the ozone season. There are no data available that these alternatives are equally efficacious for this use pattern. There is not sufficient efficacy data to state that these are viable alternatives for all tree and vine use patterns currently relying on high-VOC formulations of oxyfluorfen. It is not reasonable to base a regulation on our discussion of possible alternatives rather than sound scientific data. ***UC submitted their recent findings, "Evaluation of Low VOC Oxyfluorfen Plus "Kicker" Treatments for Postemergence Preharvest Weed Control in Nut Orchards" on the efficacy of both low- and high-VOC formulations of oxyfluorfen which found no significant difference in weed control. This document was added to the rulemaking file as a "document relied upon."***	14, 28
11	Research is needed on the low rate tank mix partners proposed in the economic analysis document. Several trials were implemented Spring 2012; time is needed to develop a robust and scientifically valid data set. Multiple locations in tree nut production areas and evaluation of multiple weed species under field conditions for two to three years is the scientific standard. ***See response to comment no. 3***	14, 22
12	Regulations should be based on sound science to minimize short-term harm to several important tree and vine cropping systems of the regions. A measured approach to regulating oxyfluorfen, a key herbicide active ingredient, is even more warranted when one considers that the proposed *"…restrictions on nonfumigant products will provide minimal overall reduction in VOC emission and resulting ozone air concentrations*" (Initial Statement of Reason and Public Report, page 4) yet could present a significant challenge to summer weed	14

	management programs in San Joaquin Valley orchard cropping systems. ***See response to comment no. 12***	
13	Based on the correction to the 2010 emissions inventory report, it appears DPR can take additional time to refine the regulations with a goal to implement restrictions by May 1, 2014. ***DPR has revised the regulations to implement the dealer requirements in 2013 and the PCA and grower requirements in 2014.***	17, 18, 22, 23, 27
14	The restriction of liquid formulations of gibberellins to 8 grams or less active ingredient per acre will adversely affect variety specific cultural practices for table grapes. An additional exemption is needed for use of liquid gibberellins at higher rates. ***DPR modified the regulations to allow for liquid high-VOC gibberellins at an application rate up to 16 grams of active ingredient per acre or less.***	17, 18, 19, T-1, T-2
15	There should be a process to remove an active ingredient and change the list of crops when they are no longer significant contributors and re-focus on active ingredients and crops that may have become more significant. ***In the second modification, DPR made changes to the regulations to allow the Director to propose interim removal of an active ingredient or crop for up to three years unless implemented through California and federal rulemaking while not affecting the ability to meet the emission level of 17.2 tons per day (tpd).***	17, 18, 20, 22, 23, T-1, T-2
16	The written provision requirements of the regulations for licensed pest control advisers and notification by pest control dealers have costs involved and should only apply to products and crops when necessary to meet VOC emission benchmarks, not on a permanent basis. ***DPR felt that the current plan for dealers to always supply information to persons purchasing high-VOC products and requiring recommendations for high-VOC products by PCAs would result in the least confusion between restricted years and non-restricted years and would have the least adverse effect to the dealers and PCAs. Moreover, the PCA requirements encourage the voluntary use of low-VOC products.***	17
17	Written recommendations for high-VOC products will immediately increase the cost of pest control for San Joaquin Valley growers. In years, the trigger is exceeded additional costs will accrue for a minimum of two years. This is in addition to the increased costs associated with the fumigant method restrictions already in place. ***DPR was told that growers usually get recommendations for the active ingredients listed even though they are not restricted materials, so the increase should be minimal. DPR does acknowledge that the regulations may result in increased costs for growers.***	17

18	Imposing restrictions and prohibitions at any level below the benchmark goal lowers the benchmark below the emission level goal established in the SIP, and penalizes growers, when in fact an exceedance of VOC emissions has not occurred. Restrictions and prohibitions should be imposed when an actual exceedance of the benchmark occurs. All language referencing a trigger of five percent or less of the benchmark should be removed from the amendment. ***The only restrictions that would occur in years with emissions lower than the benchmark are for the dealer to provide information and a recommendation for use of a high-VOC product from May-October in the SJV. An exceedance of the benchmark would indicate that the Department was out of compliance with the Federal Clean Air act and could face penalties.***	19, T-1
19	The amendment is flawed in how the prohibitions in Section 6884 are applied. Emissions from the citrus industry decreased from 2009 to 2010. Had the 2010 increase in emissions triggered the prohibitions in Section 6884, the citrus industry would have been subject to prohibitions, even though the industry contributed positively to reducing emissions. DPR should use detailed information from the current use reporting system on the material used and crops used on data to determine which commodities are actually contributed to the increase in emissions and target the prohibitions in section 6884 to those commodities. To do otherwise imposes additional regulatory burdens and costs on those commodities and individuals who are having a positive impact. ***DPR is required to put restrictions in place to assure emissions are below the benchmark. Although the emissions decreased for citrus, it was still the 7th highest contributor to total emissions in 2010. Growers who have moved to low-VOC products already would not be affected by the restrictions. Regulating different commodities during different years would add unnecessary confusion and complexity, making compliance and enforcement more difficult. If emissions from citrus continue to decrease, DPR made changes to the regulations to allow the Director to propose interim removal of a crop while not affecting the ability to meet the emission level of 17.2 tpd.***	19, T-1
20	We object to the complete prohibition in section 6884 of nonfumigant products designated as high-VOC. This singles out and discriminates against a few commodities, exempting all others. It dictates how a grower must farm, potentially to the determent of his farms economic viability. In some cases growers can use low-VOC material, in other cases such as gibberellins the high-VOC formulation may be the only alternative for necessary efficacy and beneficial result. ***The regulations are directed towards the crops which contribute the most to the total emissions from May-October. The active ingredients selected also had alternative product that were lower in VOC emission and efficacious and would have the least adverse impact economically.***	19

21	Gibberellin should be exempted from the requirements under sections 6577 and 6883. ***Gibberellins account for a large amount of the total VOC emissions. Since there are lower VOC products available for use, and exception for applications that would allow the use of high-VOC product at a low application rate, there is no reason to exempt gibberellins from the regulation.***	19
22	We are concerned as to whether the manner DPR is collecting and reporting the use data accurately differentiates between pounds of active ingredient applied in the form of high-VOC formulations and the pounds of active ingredient applied in the form of low-VOC formulations. DPR should implement reporting procedures that accurately differentiate and track high-VOC and low-VOC usage where the active ingredient is the same. ***Pesticide use reports include information on the product applied. Each product registered in California has a designated emission potential, so the emissions calculated in the emissions inventory report are determined for each individual application reported.***	19, T-1
23	We object to the use of the words and phrases "hypothetical VOC emissions" and "calculated by assuming the relative mixture of high and low-VOC products" contained in section 6884(6)(c). Regulations should not be based on hypotheticals or assumptions. ***The calculations would give DPR the ability to estimate emissions if the prohibitions were lifted. Unless hypothetical emissions are calculated, DPR has no assurance that the State Implementation Plan (SIP) goal would be met if the prohibitions are lifted. Therefore, if prohibitions were triggered they would always remain in effect.***	19
24	We object to the criteria that an exceedance in one year results in the prohibitions being implemented for two years. This exceedance usually is the result of pest pressure in a particular year and not an indication of a trend of growers intentionally over using high-VOC materials. DPR should use a three to five year rolling average and impose prohibitions when the average exceeds the benchmark. DPR could also impose prohibitions when there is an exceedance for two consecutive years. ***The SIP requires DPR to maintain VOC emission levels below a standard set in the plan each year. A rolling average would not comply with the SIP. Frequent changes to the restrictions would add confusion and complexity, making compliance and enforcement more difficult. Requiring prohibitions for at least two years will allow DPR to better evaluate trends.***	19

25	While the regulation may result in immediate reductions from products containing the four active ingredients, it is likely to result in a simultaneous increase in emissions from products that remain unregulated. The net reduction is therefore questionable, even in the short term, and the long-term results are even less clear. ***See response to comment no. 15. Additional active ingredients can be added through rulemaking.***	20
26	With the correction in DPR's annual emissions report, DPR has the latitude to withdraw the proposed regulations as it is not necessary to achieve compliance with the State Implementation Plan. ***DPR is required by the SIP to implement restrictions to reduce VOC emissions from nonfumigant products by 2014.***	20, 21
27	Data from studies conducted using the Thermogravimetric Analysis (TGA) method do not support the proposed rules in the field. ***The TGA method is part of the SIP. The method can only be changed with a SIP amendment and is beyond the scope of this regulation.***	20, 21, 22
28	The emissions figures that DPR proposes to use to determine if VOC triggers have been reached are not timely. It is not good policy to base ongoing regulatory decisions regarding prohibitions on the use of these products, which are vital to agriculture, on data that are four to five years old. If this regulation is to be adopted, it should be amended so decisions are based on more recent use and emissions data. ***Restrictions would go into place based on use data from two years prior to prohibitions. Based on the timing of submission of use data, this is the closest period to actual prohibition as possible.***	20, 21, 24, T-2
29	DPR's approach in selecting products for regulation on the basis of their active ingredients, rather than their VOC emissions, is inappropriate. Instead of regulating the most widely used, and therefore, the most needed active ingredients, DPR should consider identifying products by their VOC content or emission potential alone or set clear and uniform standards for VOC emissions. ***DPR is not regulating active ingredients, rather it is regulating certain products containing the active ingredients. Regulating active ingredients in products with high-VOC content, but low use would be ineffective in achieving the SIP goal. Most pesticide VOC emissions come from products with both high-VOC content and high use. DPR had several criteria for selecting the four active ingredients. First, many products containing the selected active ingredients have high use and high-VOC content, and are consistently among the highest pesticide VOC contributors in San Joaquin Valley. Second, low-VOC alternatives for these active ingredients are available and being used, demonstrating their feasibility. Moreover, UC has evaluated and confirmed the efficacy and feasibility of the low-VOC alternatives for these four active***	**20**

	ingredients. Other active ingredients with low-VOC alternatives have not been evaluated for efficacy and feasibility. Third, DPR estimates that switching to low-VOC products for these active ingredients will achieve the needed VOC reductions even for the highest use years. Other active ingredients may meet the first two criteria, but regulating them is not necessary because the additional VOC reductions are not needed to achieve the SIP goal.	
30	It is inappropriate to select products that contain only four active ingredients for restrictions. DPR, in the Initial Statement of Reasons, selected products containing these four active ingredients because they are used in volumes sufficient that a reduction would result in reduction in VOC emissions; yet are not so great as to be considered a significant source of VOC emissions in the San Joaquin Valley NAA, taking into account other sources. The high volume of usage reflects that these active ingredients are more important to agriculture. DPR data indicates that active ingredients DPR has chosen not to regulate have products with high-VOC emission potentials; some with alternative low-VOC formulations. The decision to target products containing the four active ingredients (to the exclusion of others) is not a rational basis to regulate. ***See response to comment 29. Regardless of the contribution from other sources, the SIP requires specific VOC reductions from pesticide products. Those reductions cannot be consistently achieved unless some of the products and uses containing these active ingredients are included in the regulations.***	20, 21
31	The regulation does not include a mechanism to address emergencies, or grant exemptions, such as critical uses. The regulation does allow for the use of products under Section 18 and 24(c) of FIFRA and we infer DPR intends to allow for exemptions where the use of a product is not registered under FIFRA Section 3, might be prohibited under the proposed regulation. These processes are not appropriate when the product is already registered under Section 3. An application under Section 18 or 24(c) would be burdensome. This section of the regulation should be redrafted to include a mechanism to address emergencies and exemptions that would include criteria that are appropriate to this rule. ***The regulation includes an exception for applications made under the direction of the U.S. Department of Agriculture, the California Department of Food and Agriculture, or a county agricultural commissioner (CAC) for suppression or eradication of pests. Section 18 or 24(c) are for use under emergency or special local needs use. These exceptions are sufficient to address emergencies and critical uses.***	20
32	Section 6884(b) could be amended by providing for additional exemptions for products in their uses on additional crops; exemptions for products that are applied under conditions as so to minimize VOC emissions; and allowing the Director to grant exemptions upon application by the companies that produce regulated products, agricultural producers, or university research and extension	20

	specialists, and in accordance with criteria set forth in the new section, or at the discretion of the Director. ***DPR modified the proposed regulations that would allow for the addition of an exception as long as the emission level of 17.2 tpd is not affected.***	
33	The regulations will cause users of products containing high-VOC formulations of the regulated active ingredients to switch to other products. Because the alternatives include high-VOC formulations with unregulated active ingredients, it is likely that customers will chose those products. There will be no significant reduction in total VOC emissions in the San Joaquin Valley NAA; rather the only change will be to the sources of those emissions. ***It is unlikely that growers will switch to products with higher VOCs containing other active ingredients. DPR is regulating these four active ingredients because in most cases the low-VOC products are as effective and cost the same or slightly higher than the high-VOC products. Since the efficacy and cost are usually the same, growers have little incentive to switch to other active ingredients. DPR will continue to track emissions and take additional actions in the unlikely event that growers switch to products containing other active ingredients with higher VOCs, resulting in exceedance of the 18.1 tons/day SIP goal.***	20, 26
34	In the absence of provisions to remove or add active ingredients that are being regulations, there will be no incentive to for registrants reformulate their high-VOC emitting products to lower VOC emitting alternatives. ***See response to comment no. 15***	20
35	The UC Extension Report errs in its analysis of alternatives for many crops, including application rates, use patterns, and other basic assumptions, as well as its identification of many products as substitutes for high-VOC products. ***DPR has not received any information that contradicts the analysis of alternatives conducted by UC Extension. Exceptions were added to the regulation for pest control scenarios noted as areas of concern until further analysis can be completed.***	20
36	The economic analysis was based in substantial part on the UC report. Many of the erroneous data and conclusions in the UC Report flow through to the economic analysis. The UC report should be revaluated and revised, and the economic analysis revised to reflect those changes. ***See response to comment no. 35***	20
37	DPR should consider a regulation that imposes restrictions and prohibitions on the use of products that contributed the most to the VOC emission load in the preceding year. This provision allows the addition of products whose	20, 21, 24

	contribution to VOC increases and removal of products whose contribution to VOC decreases. ***Changing restrictions on products from year-to-year would be extremely confusing and difficult to enforce. DPR modified the language to allow active ingredients to be removed when the emission inventory indicates that the use patterns have change significantly to maintain compliance with the SIP.***	
38	Expanding the list of active ingredients could enlarge the volume of the anticipated decrease in VOC emissions presenting DPR with greater flexibility in granting exemptions from the prohibitions, in order to meet changing needs of growers and the agricultural community. ***DPR decided that the limitation of the number of active ingredients and exceptions makes the regulations more understandable and enforceable. DPR has the option of adding more active ingredients to the regulations in the future if it is needed to comply with the SIP goal.***	20, 21
39	DPR should propose a regulation that imposes restrictions on products whose manufacturers did not submit TGA data. ***This comment is outside the scope of the proposed regulations. However, a regulation is not needed for TGA data. DPR has a registration requirement for all liquid agricultural and liquid commercial structural-use pesticides to submit TGA data. DPR has the authority to cancel a product if TGA data is not submitted.***	20
40	DPR should consider exemptions for high-VOC products whose emissions can be controlled or mitigated in their application. VOC emissions from many products whose use will be prohibited or restricted can be controlled by methods such as low-pressure ground application, incorporation in soil, application to water, and chemigation. ***DPR is not aware of any studies that would provide necessary data on the emission of VOC reduction due to application methods of the nonfumigant products. Additionally, this would require a change to the method for estimating pesticide VOC emissions, which can only be done with a SIP amendment.***	20
41	DPR could implement a two tier regulation of nonfumigant pesticide products. Tier I would take effect if the VOC inventory exceeded 90 percent of the SIP goal. At Tier I the top contributors based on most recent annual pesticide inventory report would be identified and treated as high-VOC products, with a requirement for a written recommendation from a PCA. Dealers would provide written information on the VOC emissions, and the recordkeeping provision of the proposed regulation would be in effect. Tier II would be triggered if the VOC inventory were to exceed 95 percent of the SIP goal. Then, use of the products	20, 22

	designated as high-VOC in Tier I would be prohibited during May-October. ***Changing restrictions on products from year-to-year would be extremely confusing and difficult to enforce.***	
42	With respect to abamectin, the proposed threshold of 35 percent VOC considered to be low is unfair, contrary to sound science and public policy, and unsupported by any evidence of environmental or economic necessity. ***Under the current regulatory environment, it is unnecessary to set the threshold at the level originally targeted by the nonfumigant reevaluation that was designed to achieve specific emission reductions through reformulation. The reevaluation of nonfumigants pesticides began before and continued after a concurrent effort by DPR to reduce VOC emissions through restrictions on fumigants. While all registrants subject to the nonfumigant reevaluation eventually met their obligation, the implementation of restrictions and resulting reduction in VOC emissions from the use of fumigant pesticides allows DPR to achieve the additional reductions necessary to meet its obligations from nonfumigants with the thresholds we have set. The threshold allows multiple products to qualify as low-VOC providing more product options to users when restrictions are in place and causes less market disruption for registrants. In setting the emission potential thresholds for abamectin products and the other products included in the regulation, DPR also considered the number of pesticide products (by active ingredient) included, the crops included, and the exceptions included. DPR must balance these four factors to achieve the needed VOC reductions.***	21
43	The prohibitions and exceptions of section 6884(c) are too rigid and lack needed discretion. As recently discovered by DPR, a "math error", in the future could lead to a conclusion that VOC emissions had exceeded the trigger level, requiring restrictions and prohibitions. If the math error was discovered in the first month of the two year period defined in section 6884(c), leading to a conclusion that the trigger had not been exceeded, DPR would have no discretion or obligation to lift the restrictions that should never have been imposed. DPR should have discretion or obligation to lift restrictions for any reason that the total pesticide VOC emissions in the San Joaquin Valley Ozone NAA were in fact within allowable SIP limits. ***The error occurred because an incorrect density was assigned to a product with high use and high-VOC content. The error has been corrected. DPR has the discretion to lift the high-VOC prohibitions if a math error causes DPR to trigger the prohibitions incorrectly.***	21
44	DPR's conclusions on economic impact are inconsistent. The Notice concludes that the actions do affect small businesses, then states that the regulations will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states. The proposed regulation will increase costs to business and increase costs to county agricultural commissioners and DPR.	22

	The Notice identifies small businesses as defined by Government Code section 11342.610 as a type of business that would be affected by the regulations. DPR made the initial determination of the cost impacts the regulation would have on businesses, CACs and DPR.	
45	Rather than single out individual active ingredients, DPR should establish in regulation performance-based criteria that would qualify contributors of concern. Identification or listing of AI's would be through executive order, so DPR has flexibility to list or delist products. Establishing analytical performance-criteria would allow DPR to focus on current high-use formulations without permanently having those formulations included in regulation. This may allow DPR flexibility to take into account exceptions needed by growers and research taking place. ***A complete response is not possible because the meaning of "performance-based criteria" in this context is unknown. However, limiting the regulations to a subset of products containing the four active ingredients would be ineffective in reducing VOC emissions. Growers and applicators would simply switch from a low-VOC product to a high-VOC product with the same active ingredient.***	22
46	What is the rationale for selecting only these four high-VOC types of pesticides and not including other nonfumigants in products that may be as high or higher in VOC emission potential (ex. bifenthrin, glyphosate, isopropylamine salt). ***See response to comment 29***	25
47	Why do the prohibitions apply to a subset of San Joaquin Valley's seven crops rather than all crops that currently use or could use potentially high -VOC emitting nonfumigant pesticides. ***Restriction of high- VOC products in the seven crops would give the necessary reduction. The efficacy and feasibility of using low-VOC products for other crops is unknown.***	25
48	In section 6884 "hypothetical emissions" calculation, it appears DPR assumes the pounds of VOC emitted per pound of active ingredient applied are constant from year to year. Please explain the bases for that assumption. ***This is incorrect. DPR assumes that the pounds of VOCs emitted per pound of active ingredient applied vary from year to year, particularly if high-VOC prohibitions are in effect or not.***	25
49	Please extend the retention time for licensed pest control office recommendations should be extended from two to five years. ***The two-year requirement for maintaining records is consistent with other recordkeeping requirements for growers and pest control advisers.***	25

50	For clarification, please include the word "primary" before "active ingredient" in the first sentence of section 6880. ***DPR has modified the language to include this change.***	25
51	Section 6452(b)(1)(A) should refer to section 6881, rather than 6452.4. ***DPR modified the regulation to cite the correct reference section.***	25
52	The total VOC Emissions Inventory Benchmark for the San Joaquin Valley should not be deleted from the table in section 6452.2(a) and needs to be increased to reflect a 20 percent emissions reduction requirement from 1990 levels. We support the concept of limiting nonfumigant pesticide VOC emissions but conclude that limits need to be in place to drive reduction of both fumigant and non-fumigant pesticide VOC emissions to help clear the valley's air. ***For the San Joaquin Valley, DPR's SIP commitment is to reduce pesticide VOC emissions to no more than 18.1 tpd, equivalent to a 12 percent reduction from the 1990 base year. DPR is not legally obligated to reduce pesticide VOC emissions by 20 percent.*** ***If the high-VOC prohibitions specified by the regulations are triggered, DPR estimates that San Joaquin Valley pesticide VOC emissions would be approximately 16 tpd for the highest emission year. Additional reductions from fumigant pesticides are not needed.***	26, T-3
53	Section 6577: Pesticide dealer businesses would be required to keep record of sales of selected high-VOC products for two years. Section 6883: Pest Control Advisors would be required to provide written recommendation for use of high-VOC products during the smog season. With diminishing resources how could the Department possibly do enough dealer or grower audits, let alone field inspection. ***Most audits are performed by CACs, not DPR. CACs already perform routine audits, and these regulations will not increase their workload. The documents audited will simply be checked for additional information.***	26, T-3
54	Pesticide products should be classified as "high-VOC" and "lower VOC" products containing designated active ingredients rather than "low-VOC" because it is a misnomer to classify products containing 15 to 35 percent as "low-VOC" and are only classifying products containing four active ingredients. ***Designating products as either "high-VOC or "lower-VOC" would add unnecessary confusion to the regulations. The regulations specify two product categories. The suggested change implies that there is a third non-existent category of "low-VOC" products. Moreover, it's unclear what VOC content the commenter would consider low-VOC.***	26
55	Products which contain one of the four designated active ingredients as a secondary active ingredient should not be exempted because this creates a loophole which could undermine reductions in nonfumigant VOC emissions.	26

	The only effective way to reduce nonfumigant VOC emissions is to remove a wide range of high-VOC products from the market by cancelling their registrations. ***The solvents used in pesticide formulations must dissolve the active ingredient in order function. Different active ingredients have different solubilities, and a solvent or solvent amount that works for one active ingredient may not work for a different active ingredient. Achieving the VOC content thresholds specified in the regulations may not be feasible for the regulated pesticides if they are present as secondary active ingredients. DPR will continue to track emissions and take additional actions if these regulations do not achieve the 18.1 tpd SIP goal, regardless if the reason for the increased emissions is due to new products formulations with secondary active ingredients, or increased use of other pesticide products not included in the regulations (e.g., diazinon products).***	
56	We also have concerns about the accuracy of the VOC content estimates for the pesticide emissions inventory. The Thermogravimetric Analysis (TGA) tests should be conducted with aqueous tank mixtures. ***This comment is beyond the scope of the regulations. The TGA method is part of the SIP. The method can only be changed with a SIP amendment. That said, the TGA test is conducted at 115° C, well above the boiling point of water. Adding water to the test procedure will have no effect on the results.***	26
57	If the four active ingredients were also designated as restricted materials the recommendations for use would be submitted to the county agricultural commissioner so that use under exceptions would be reviewed during the Notice of Intent process and would become part of the state's electronic pesticide data base. ***DPR considered designating these pesticides as restricted materials, but determined that the disadvantages outweighed the advantages. A key disadvantage is the need for some growers to obtain a restricted materials permit and become certified applicators for the first time. Certified applicators are unnecessary for VOC purposes because special equipment, procedures, or precautions are not needed. Workload would increase for CACs because an evaluation of local conditions is required for all restricted materials. The additional work would have little value because an evaluation of local conditions would not be needed for VOC purposes.***	26
58	Use of most proposed exceptions and substitutions of other pesticide products with high-VOC content will undermine VOC emission reduction. Prohibiting use of high-VOC products containing a broad range of active ingredients is the only effective way to reduce nonfumigant VOC emissions. ***The amount of VOC reductions achieved from nonfumigant restrictions depend on four factors: the pesticide products (by active ingredient) included, the VOC content thresholds selected, the crops included, and the exceptions included.***	26

	DPR must balance these four factors to achieve the needed VOC reductions. If the high-VOC prohibitions specified by the regulations are triggered, DPR estimates that San Joaquin Valley pesticide VOC emissions would be approximately 16 tons per day for the highest emission year. The pesticide products, VOC content thresholds, crops, and exceptions specified in the regulations are sufficient to achieve the SIP goal, with a margin of safety. More stringent requirements are not needed. DPR will continue to track pesticide VOC emissions and take additional actions if emissions from other products increase to unprecedented levels resulting in exceedance of the SIP goal.	
59	All pesticide products containing chlorpyrifos should be cancelled to reduce both VOC emissions and toxic air contamination. ***This comment is not relevant to the regulation -no response necessary.***	26, T-3
60	We recently identified possible efficacy issues with low-emission oxyfluorfen products recommended in the UCCE report. Field trials of low-emission oxyfluorfen products are being conducted. It would be practical to postpone the oxyfluorfen rules until results from the experiments can help address efficacy questions. ***DPR modified the regulations to include an exception for oxyfluorfen at low applications rates (0.125 pounds of active ingredient per acre) of the high-VOC product.***	27
61	The economic impact report says the costs are not significant. It does not address the issue of how much food is produced. If the amount of pesticide used is decreased it will decrease the crop yield. ***Since the low-VOC products have been found to be as efficacious as the high-VOC products, crop yield should not decrease. In case where they are suspected of being less efficacious, DPR has included exceptions in the regulations.***	T-4