

**Notice of Proposed and Final Decisions
and Public Reports**

**Volume 2020-30
July 24, 2020**

**Department of Pesticide Regulation
Pesticide Registration Branch**

COMMENT PERIOD ENDS AUGUST 23, 2020

NOTICE OF FINAL DECISIONS TO REGISTER PESTICIDE PRODUCTS AND WRITTEN EVALUATION

Pursuant to Title 3, California Code of Regulations section 6255, the Director of the Department of Pesticide Regulation (DPR), files this Notice of Final Decisions to Register Pesticide Products with the Secretary of the Resources Agency for posting. This notice must remain posted for a period of 30 days for public inspection. Between the time DPR posts a proposed registration decision for public comment and DPR makes a final decision regarding the product, non-significant changes may be made to the product label (e.g., revising the product name, changing a master label to an end-use marketing label, correcting typographical errors). If the changes are not significant, DPR will not re-notice the product for public review and comment. However, if significant changes are made to the product label that substantially affect DPR's analysis on direct or indirect significant adverse environmental or human health impacts that can reasonably be expected to occur from the proposed decision, DPR will re-notice the product label for public review and comment.

In addition, for any product that is posted proposed to register as a conditional registration, the registrant may address the conditions of registration by providing the appropriate data or modifying the product label (e.g., remove use site, add "not for use in California" to a use site) during the posting period. If the registrant adequately addresses the conditions of registration during the posting period and the resulting change to the product label is not significant such that DPR must re-post the product label for review and public comment, DPR will post the product below, but will no longer have a "conditional" designation by the registration type.

For information about submitting a request for any documents related to this notice, please visit https://www.cdpr.ca.gov/public_r.htm.

To view the public report that was issued when the product was proposed for registration, click on the hyperlinked Tracking Number for the product.

*Tracking Number with hyperlink to public report – (EPA Registration Number)
Applicant / Brand Name*

[294724](#) - (62719 - 727)

SISKIYOU COUNTY DEPARTMENT OF AGRICULTURE
TRANSFORM CA

USE: INSECTICIDE – FOR THE CONTROL OF BLUE ALFALFA APHID ON ALFALFA

TYPE: SECTION 24(C) SLN 3RD PARTY - FOR THE CONTROL OF BLUE ALFALFA
APHID ON ALFALFA

ACTIVE INGREDIENT(S):

SULFOXAFLOX

CAS NUMBER(S): 946578-00-3

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Written Evaluation

On May 22, 2020, the Department of Pesticide Regulation (DPR) proposed to register a Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 24(c) special local need (SLN) registration requested by the Siskiyou County Agricultural Commissioner on behalf of Lassen, Modoc, Shasta and Siskiyou counties for a pesticide product containing the active ingredient sulfoxaflor, Transform CA (EPA Reg. No. 62419-727), for control of blue alfalfa aphid on pre-bloom alfalfa in the four listed counties. (Notice of Proposed and Final Decisions, Vol. 2020-21) The proposed SLN registration would expire one year from the date of issuance. DPR's proposed decision was accompanied by a public report outlining the proposed action, a statement of any significant adverse environmental effect that can reasonably be expected to occur from the registration, and the conclusions of DPR's scientific evaluation. At the time of the proposed decision, the public report noted that although the proposed label for the Section 3 registration of Transform CA was not labeled for use on alfalfa, its California registration application was pending before DPR. On May 29, 2020, DPR registered Transform CA and Sequoia CA for use in California for several crops not including alfalfa.

On June 17, 2020, Earthjustice, on behalf of the Pollinator Stewardship Council and the American Beekeeping Federation (collectively the "Commenter"), submitted a comment letter on the proposed decision (*See* Attachment 1). DPR did not receive any other comments on the proposed SLN registration. After reviewing the comment letter, DPR determined that the proposed label should have included a more restrictive use direction specifying that, "Alfalfa must be harvested before bloom," since the scientific evaluation of the proposed decision and analysis in the public report were based on the assumption that all alfalfa would be harvested before bloom. (*See* Public Report at p. 7 "this SLN registration is limited to applications to alfalfa, which is harvested before bloom.") Consistent with DPR's scientific analyses, the proposed SLN label was modified to include this language and to clarify the use restriction. The modified and accepted SLN label (*See* Attachment 2) and accepted label for Transform CA (*See* Attachment 3) are attached to the Notice of Final Decision.

The Commenter's letter also enclosed and incorporated by reference previous comments submitted to DPR in response to DPR's Section 3 registration decisions for Sequoia CA (EPA Reg. No. 62719-623) and Transform CA (EPA Reg. No. 62419-727). (Notice of Proposed and Final Decisions, Vol. 2019-49 [Proposed] and Vol. 2020-22 [Final]). In response, DPR also incorporates by reference and attaches a copy of its previous responses to the identified comments (*See* Attachment 4 - also available at <https://www.cdpr.ca.gov/docs/registration/nod/2020-22.pdf>).

Pursuant to Title 3, California Code of Regulations section 6254, this notice includes a written evaluation of significant adverse environmental points raised in the comment submitted during the review and comment period required by Title 3, California Code of Regulations section 6253. A copy of the full comment letter can be viewed below (Attachment 1). A copy of DPR's individual response to the comment letter can be obtained through submission of a public records act request by emailing publicrecords@cdpr.ca.gov or calling 916-445-2047.

COMMENT #1:

The comment states, “In the few months since DPR proposed section 3 registration for sulfoxaflor, the scientific evidence documenting sulfoxaflor’s toxicity to pollinators has only increased. For example, Chakrabarti et al. 2020 (Attachment 2 hereto) found “[a] majority of the honey bees exposed to Transform died within the six hours after initiation of the experiment, which confirms severe toxicity of Transform to bees when exposed directly to field application rates recommended on the label.” Of particular concern, Chakrabarti et al. found “Transform exposed honey bees exhibited the highest oxidative stress (significantly higher than control) when compared with honey bees in other treatment groups.” The authors explained “[p]hysiological impacts of pesticides, for example oxidative stress and apoptosis, can render individual honey bees incapable of performing their tasks smoothly, thereby affecting the colony performance as well.”

RESPONSE #1:

DPR reviewed the Chakrabarti et al. 2020 study submitted by the commenter. The Chakrabarti study is a contact lab study in which bees were directly sprayed with the end-use product, Transform. However, the proposed California-specific, SLN label for Transform CA mandates that the product not be applied to blooming alfalfa or while bees are foraging, and also prohibits drift to blooming crops or weeds while bees are actively foraging. The label also restricts application timing to “before 7:00 a.m. or after 7:00 p.m. local time or when the temperature is below 50°F at the site of application,” since pollinators are not prone to actively foraging during those times or at colder temperatures. (See U.S. EPA’s January 2017 *Policy To Mitigate The Acute Risk To Bees From Pesticide Products*, available at <https://www.epa.gov/pollinator-protection/policy-mitigating-acute-risk-bees-pesticide-products>, p. 19.) These restrictions on the proposed SLN label prohibit directly spraying of the end use product on bees and mitigate the potential for direct contact exposure of the end use product to pollinators on the treated field or in neighboring fields. The label also mitigates potential exposure to residue in pollen and nectar by prohibiting applications to alfalfa grown for seed and requiring that treated alfalfa be harvested prior to bloom. The Chakrabarti contact study confirms the need for these restrictions to mitigate exposure to bees, but provides no relevant information to evaluate DPR’s proposed registration decision.

COMMENT #2:

The comment states, “DPR wrongly asserts that ‘applications to alfalfa under this [special local need registration] are unlikely to result in direct contact with bees,’ because the proposed label ‘prohibits applications to alfalfa grown for seed and blooming alfalfa.’ (Pub. Rpt. at 7.) DPR’s assertion fails to address or even acknowledge the systemic nature of sulfoxaflor, which like other neonicotinoids is absorbed by the plant and expressed into the pollen and nectar at toxic levels. (See Attachment 1 at 2, 15.) The risk to pollinators therefore cannot be mitigated by DPR’s proposed label advisory: ‘Do not apply this product to blooming alfalfa or when bees are foraging in the field.’ (Pub. Rpt. at 9.) Pre-bloom applications of sulfoxaflor will be absorbed by the perennial alfalfa tissue and may be expressed in the pollen and nectar of any alfalfa allowed to bloom—whether intentionally or not—after harvest.”

RESPONSE #2:

The Commenter expresses concern about the systemic nature of sulfoxaflor and the potential for oral exposure to pollinators from pre-bloom applications of sulfoxaflor being absorbed by the alfalfa tissue and expressed in the pollen and nectar of any alfalfa allowed to bloom after harvest. As discussed above, DPR's scientific evaluation and public report were based on the assumption that all treated alfalfa would be harvested before bloom. Thus, DPR modified the proposed SLN label to clarify the restriction that, "Alfalfa must be harvested before bloom." The proposed SLN label also addresses potential oral exposure to pollinators from expressed pollen and nectar by prohibiting applications to alfalfa grown for seed, as alfalfa grown for seed is required to go through the flowering/blooming stage. The proposed SLN label further mitigates direct contact exposure to pollinators by prohibiting application of the product to blooming alfalfa or while bees are foraging, and also does not allow drift to blooming crops or weeds while bees are actively foraging. Based on residual toxicity data on file with DPR, sulfoxaflor has a RT₂₅ (aging time required for foliar residues to cause 25% mortality to bees) of less than 3 hours. As a result, the Environmental Hazards section of the proposed label cautions, "This product may be toxic to bees exposed to treated foliage for up to 3 hours following application. Toxicity is reduced when spray droplets are dry." The label mitigation also restricts application timing to "before 7:00 a.m. or after 7:00 p.m. local time or when the temperature is below 50°F at the site of application," since pollinators are not prone to foraging during those times or at colder temperatures. (See U.S. EPA's January 2017 *Policy To Mitigate The Acute Risk To Bees From Pesticide Products*, available at <https://www.epa.gov/pollinator-protection/policy-mitigating-acute-risk-bees-pesticide-products>, p. 19.) As a result of the restrictions and mitigation incorporated into the modified SLN label, as well as any applicable use restrictions in regulation, DPR does not expect use of this product will have a significant adverse effect on pollinators.

COMMENT #3:

The comment states, "DPR's proposed label restriction will not prevent bees from being exposed to sulfoxaflor in the pollen and nectar of blooming weeds. Flowering weeds are commonplace in many alfalfa fields, as the picture below makes clear. The yellow flowers in the foreground are of blooming dandelions in an alfalfa field."

RESPONSE #3:

The Commenter expresses concern regarding the potential for oral exposure to pollinators, expressed in nectar and pollen, from non-target blooming weeds within the treated alfalfa field. First, as stated in Response #2, above, the proposed SLN label incorporates restrictions to mitigate contact exposure to pollinators in the treated field. For example, the proposed SLN label specifically requires "[t]his product must be applied before 7:00 a.m. or after 7:00 p.m. local time or when the temperature is below 50°F at the site of application," since pollinators are not prone to foraging at night or at colder temperatures. Next, the SLN label specifically prohibits drift to blooming weeds, stating, "Do not apply this product to blooming alfalfa or when bees are foraging in the field. Do not allow it to drift to blooming crops or weeds while bees or other pollinating insects are actively foraging the treatment area." As a result, the mitigation on the label to address potential exposure to pollinators on the treated field will carry over to other

blooming weeds within the treated field. Finally, in reviewing potential impacts to blooming weeds within or near a treated field, including those suggested by the Commenter, DPR found no data or other relevant scientific evidence to support a finding that an application of sulfoxaflor at the proposed SLN rate may be taken up by blooming weeds within a treated field and result in exposure levels that would cause a significant adverse impact on pollinators. Blooming weeds are not themselves a use site for the proposed SLN registration, so information and studies on impacts from use on blooming weeds are outside the scope of the proposed project. Further, as agronomic practices typically limit the amount of weeds within a crop field, DPR lacks information regarding how many blooming weeds, such as dandelions, are likely to be in a typical alfalfa field at the time of a sulfoxaflor application to control blue alfalfa aphids within the four counties requesting use. Moreover, although the commenter provides a picture it states displays blooming dandelions within an alfalfa field, DPR lacks information regarding what stage in the alfalfa growing season this picture was taken and whether this situation is “commonplace” in one of the California counties in which DPR proposes to allow use. In contrast, substantial evidence supports a finding that the proposed SLN label will prevent a significant adverse impact on pollinators from applications, as explained throughout these response to comments and in the public report itself. Therefore, DPR does not expect use of this product in accordance with its SLN-specific restrictions and label directions and any applicable use restrictions in regulation will have a significant adverse effect on pollinators.

COMMENT #4:

The Commenter expresses concern that pollinators and other beneficial insects will be exposed to sulfoxaflor that drifts from the treated fields to nearby crops or vegetation. The Commenter states that “according to the ecological risk assessment conducted by the United States Environmental Protection Agency for sulfoxaflor in 2019:

Bees may also become exposed to sulfoxaflor which has been deposited on (or translocated into) pollen and nectar of blooming plants adjacent to treated fields. To provide an estimate of the potential oral exposure of bees to sulfoxaflor when foraging on plants adjacent to treated fields, AgDRIFT (version 2.1.1) was run as described previously in **Table 11-9**. for the acute contact exposures. Based on this AgDRIFT modeling and default (high end) estimates of exposure for adult nectar foragers (the highest exposed type of honey bee), the acute risk LOC [i.e., level of concern] is exceeded from 16 to 361 feet beyond the edge of the treated field, depending on the application rate and application method. (Attachment 3 at 66.)”

The Commenter therefore argues that “DPR’s proposed 12-foot downwind spray buffer is wholly inadequate.”

RESPONSE #4:

The Commenter expresses concern for oral exposure to pollinators, expressed in pollen and nectar, from off-site movement of sulfoxaflor applications to neighboring blooming plants. As discussed in Responses #2 and #3, above, the proposed SLN label contains language that mitigates off-site exposure from sulfoxaflor applications. The Transform CA product label contains a “Spray Drift Management” section that includes restrictions on using the product in inappropriate wind and temperature inversion conditions, and only allows use of medium or coarser spray nozzles that produce larger droplets less prone to drift. The Transform CA label

also places additional restrictions on ground and aerial applications (the only types of applications allowed by the proposed SLN registration). For ground applications the Transform CA label states, “To prevent drift from groundboom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy. Shut off the sprayer when turning at row ends.” For aerial applications, the proposed label states, “Mount the spray boom on the aircraft so as to minimize drift caused by wing tip or rotor vortices. Use the minimum practical boom length and do not exceed 75% of the wing span or 80% of the rotor diameter. Flight speed and nozzle orientation must be considered in determining droplet size. Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.” This is consistent with DPR’s experience in understanding best practices related to drift. (*See also, e.g., U.S. EPA Pesticide Registration Notice 2001-X Draft: Spray and Dust Drift Label Statements for Pesticide Products*, available at <https://www.epa.gov/pesticide-registration/prn-2001-x-draft-spray-and-dust-drift-label-statements-pesticide-products>.) The proposed SLN label also requires a buffer zone if blooming vegetation is downwind of the treatment area, stating, “If blooming vegetation is present 12 feet out from the downwind edge of the field, a downwind 12-foot on-field buffer must be observed.”

The Commenter cites a specific excerpt from U.S. EPA’s 2019 ecological risk assessment for sulfoxaflor for the assertion that the proposed 12-foot downwind buffer is inadequate. U.S. EPA’s Tier I assessment, which is the basis for the excerpt cited by the Commenter, is a screening level assessment based on lab toxicity data, conducted on individual bees. Because the Tier I assessment screening of sulfoxaflor exceeded a level of concern, U.S. EPA continued to refine its analysis with higher tiered assessments. U.S. EPA’s more refined Tier II assessment, which the Commenter does not address, assumes both contact and oral exposure and concludes that applications between the rates of 0.02-0.04 lbs ai/A applied during bloom pose no long-term or colony level risk (*See U.S. EPA’s 2019 Sulfoxaflor Ecological Risk Assessment*, p. 84). The Commenter fails to acknowledge this Tier II assessment, which led U.S. EPA to a different conclusion than the Tier I assessment alone.

As a result of the restrictions and mitigation incorporated into the proposed SLN label, DPR does not expect use of this product in accordance with its proposed SLN label and any applicable use restrictions in regulation will have a significant adverse effect on the environment.

COMMENT #5:

The comment states, “In short, there is substantial scientific evidence that DPR’s proposed special local need registration for sulfoxaflor will have a significant adverse effect on the environment. DPR’s public report fails to address and cannot be reconciled with this science.”

RESPONSE #5:

DPR scientists reviewed the proposed SLN application, the data submitted, and the SLN product label for the project’s potential to cause a significant adverse impact on human health and the environment. Pages 6 and 7 of DPR’s proposed decision and analysis describe the Department’s scientific conclusion that the proposed SLN registration will not cause direct or indirect impacts on human health, flora, fauna, water, and air. Further, the proposed decision noted actual sulfoxaflor use on multiple agricultural use sites in California previously approved under the FIFRA section 24(c) special local need registrations and FIFRA section 18 emergency

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exemptions. To date, there have been no adverse effects reported associated with the use of either the section 18 emergency exemption or section 24(c) special local need registration in California. *See also*, Responses # 2-4, above, and Responses #7 and 9, below. *See also* DPR's Response to Comments regarding Sequoia CA and Transform CA, Section 3 Registrations, Response No. 7 (Attachment 4).

COMMENT #6:

The comment states that DPR's proposed registration decision does not comply with CEQA by failing to adequately evaluate alternatives to the proposed registration action identified above.

RESPONSE #6:

The Commenter expresses concern that DPR failed to adequately consider feasible alternatives by not considering non-chemical alternatives, such as planting resistant alfalfa varieties and biological controls. Despite evidence provided in the SLN application that growers and pest control advisors have tried different strategies, such as choosing resistant varieties and encouraging natural enemies, with inconsistent results, DPR did not consider these non-chemical alternatives in its proposed registration decision because they are outside the scope of the proposed project (SLN for use in four counties). Here, DPR did consider appropriate and feasible alternatives to the proposed project of registering this SLN for use in four counties. Under section 6254 of Title 3 of the California Code of Regulations, DPR's certified regulatory program requires that each notice of proposed decision to register a pesticide product contain a statement of reasonable alternatives to the proposed action to reduce any significant adverse environmental impact that could reasonably be expected to occur. First, DPR's scientific review determined that the registration of the California-specific SLN pesticide product label for Transform CA would not have any reasonably expected significant adverse impact on human health or the environment. Second, DPR's proposed decision to accept this proposed SLN registration considered the following two project alternatives: (1) accept the proposed special local need registration; and (2) no action (deny the proposed special local need registration). DPR's scientific evaluation of this product did not identify a significant adverse environmental or human health impact that is reasonably expected to occur from the proposed acceptance of the SLN registration. DPR further determined that the availability of this SLN registration, for a single application and expiring one year from the date of issuance, will address an existing or imminent pest situation determined to be a special local need within California for which there are no currently registered effective pesticide products available in California. DPR also considered the impact of not accepting the proposed decision, stating "The impact of taking no action on the proposed project would result in not allowing the specific pesticide use requested to address the existing or imminent pest situation." As a result, DPR selected Alternative #1 [accept the proposed special local need registration] as the preferred alternative stating, "DPR determined that accepting the SLN registration will not have any reasonably expected significant adverse impacts on human health or the environment. As part of its application, the applicant has shown there are no feasible, effective registered pesticides available to address the special local need other than broad-spectrum pesticides that may be effective in the short-term, but can impact beneficial insects resulting in secondary outbreaks of aphids and additional crop damage."

COMMENT #7

The comment letter states, “As detailed in the enclosed comments on DPR’s proposed section 3 registration of sulfoxaflor, scientists have documented sulfoxaflor’s particular toxicity and adverse impact on ladybird beetles and parasitic wasps—the very beneficial insects experts say are needed to manage the blue alfalfa aphids. (See Attachment 1 at 7 [citing He et al. 2019 and Nawaz et al. 2018].)”

RESPONSE #7:

As noted above, in its current comment on DPR’s proposed SLN registration, the Commenter incorporated by reference its previously submitted comments and studies regarding DPR’s proposed registrations of Transform CA and Sequoia CA, and their potential impacts to ladybird beetles and parasitic wasps. Accordingly, *see* DPR’s Response to Comments regarding Sequoia CA and Transform CA, Section 3 Registrations, Response No. 3 (Attachment 4). Based on DPR’s scientific evaluation and mitigation incorporated into the product label, substantial evidence continues to support the conclusion that the proposed decisions to register will not have significant adverse impacts on nontarget, beneficial organisms.

COMMENT #8:

The Commenter expresses concern that DPR failed to adequately analyze the environmental baseline in the proposed SLN registration identified above by failing to include pollinators in the environmental baseline.

RESPONSE #8:

Although DPR’s public report did not include general information about pollinator health, the public report adequately discussed the existing environmental conditions at the time of the proposed SLN decision. The proposed SLN registration decision outlined the approximate total number of pesticide products and active ingredients registered in California. The proposed SLN decision also provided information that sulfoxaflor is an active ingredient contained in two currently registered pesticide products in California; one registration for a manufacturing use-only product and one SLN registration for control or suppression of foxglove and lettuce aphid in Brassica (cole) leafy vegetables, leafy vegetables (except Brassica), and watercress expiring March 31, 2022. The proposed SLN decision also explained that at the time of posting, DPR had two FIFRA Section 3 end-use products pending registration: Sequoia CA and Transform CA – both only labeled for use on non-blooming crops (which became final on May 29, 2020); and that DPR had previously approved six FIFRA section 18 emergency exemptions for sulfoxaflor, all of which have expired. The proposed SLN decision also provided relevant information for the past three years of actual sulfoxaflor use in California reported as being applied on certain agricultural use sites under the current FIFRA section 24(c) special local need registration or previous FIFRA section 18 emergency exemptions.

COMMENT #9:

The comment states, “DPR’s public report does not disclose and adequately analyze significant adverse environmental effects that can reasonably be expected to occur, directly or indirectly, from its proposed special local need registration decision on sulfoxaflor.” The comment further states that DPR failed to disclose the actual scientific basis for its decision and that DPR’s impact

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analysis is flawed because it is reasonably foreseeable that DPR's registration action to accept the proposed SLN label will result in future use.

RESPONSE #9:

See Responses # 2-5, and 7, above. See also DPR's Response to Comments regarding Sequoia CA and Transform CA, Section 3 Registrations, Response No. 7 (Attachment 4).

Before DPR accepts a proposed SLN decision, DPR performs a comprehensive review of data submitted on the active ingredient and pesticide product and reviews the proposed SLN product label to determine how the product may affect human health or the environment. With regard to the proposed SLN registration of Transform CA for use on alfalfa, DPR scientists reviewed the relevant data submitted and the product label to evaluate whether the project had the potential to cause a significant adverse impact on human health, flora, fauna, water, and air, and described its scientific conclusions regarding potential direct or indirect environmental impacts in its proposed decision to register. DPR's proposed SLN decision summarized the scientific basis for its conclusions that it did not expect significant adverse environmental impacts from its proposed decision. The public report document did not include hard copies of DPR's scientific evaluation reports or studies listed on file with DPR regarding sulfoxaflor. However, every proposed decision contains a statement that any person can request documents related to the notice. In fact, in response to DPR's previous proposed decisions to register Sequoia CA and Transform CA, on December 17, 2019, the Commenter requested all documents, data, and evaluations underlying and relating to DPR's proposed decisions to register sulfoxaflor. Within 5 business days of the request, DPR provided the Commenter with responsive documents. The Commenter did not submit a similar request regarding this proposed SLN decision.

The Commenter goes on to state, "It is difficult to reconcile DPR's assertion that any future sulfoxaflor use is speculative with its conclusion that there is a documented 'special local need' for sulfoxaflor in the first instance." The Siskiyou County Agricultural Commissioner requested to have this tool available for use on a potential 45,000 acres of pre-bloom alfalfa in Lassen, Modoc, Shasta, and Siskiyou Counties to control blue alfalfa aphid. The proposed SLN registration requires users in the four listed counties to obtain permission from the Siskiyou County Agricultural Commissioner before using the product, to only apply the product to pre-bloom alfalfa that must be harvested before bloom, to comply with specific timing and buffer restrictions, and to apply the product as part of an integrated pest management program and in accordance with insecticide resistance management practices. The proposed SLN registration also limits users in the four listed counties to apply the product only once. These restrictions and limitations mean that the product would be applied on no more than 45,000 acres of pre-bloom alfalfa, which is the anticipated use that DPR considered in evaluating potential environmental impacts. However, it remains unknown at the time of registration exactly how much will be used in each application (e.g., a minimum rate of application versus a maximum rate of application), when it will be used, and whether it will be used at all.

This proposed decision to register this SLN label has a single use site on non-blooming alfalfa for a limited duration, specifically requires that the treated alfalfa be harvested before bloom, and contains a number of label mitigation and restrictions to address potential on-field and off-target exposure to pollinators. DPR has evaluated the proposed project and determined that this project is not reasonably expected to result in significant adverse effects to the environment.

COMMENT #10:

The Commenter expressed concern that DPR failed to discuss cumulative impacts from the proposed SLN registration action identified above.

RESPONSE #10:

DPR's certified regulatory program incorporates the consideration of cumulative impacts by requiring DPR to continuously evaluate pesticides registered for use in California and take necessary action if a potential concern is identified. (FAC § 12824.) DPR accomplishes its mandate to continuously evaluate pesticides by conducting a number of activities including, but not limited to: ongoing DPR registration reviews that involve conducting human health risk assessments on individual active ingredients to comply with its statutory obligations to protect human health (FAC §§ 14021-14025; FAC § 13129); investigating reports of adverse environmental or human health effects from pesticide use submitted by the applicant/registrant as required (3 CCR § 6210) or received from the public; investigating reports of pesticide illness; sampling for pesticide residue on produce; monitoring the environment (air/water); and evaluating information submitted by other entities, including state and federal agencies, or contained in studies conducted by public or private research entities according to established scientific standards. In addition, pesticide use reporting aids DPR in evaluating cumulative impacts from specific pesticide use. DPR must also investigate all reported episodes and information received that indicate a pesticide may have caused or is likely to cause a significant adverse impact. If the Director finds from the investigation that a significant adverse effect has occurred or is likely to occur, DPR must reevaluate the pesticide involved. (3 CCR §§ 6220-6226). As a result of DPR's continuous evaluation and investigation into ongoing pesticide use and identified potential impacts, DPR has placed numerous products and classes of pesticides into reevaluation where it may evaluate cumulative effects and determine appropriate mitigation measures. (See <https://www.cdpr.ca.gov/docs/registration/reevaluation/reevals.htm>.) In the event DPR determines additional mitigation is necessary, DPR will develop those additional required mitigation measures and may initiate further evaluation of the pesticide product or active ingredient to address the identified or potential concern.

In its proposed SLN registration decision, DPR acknowledged its other active SLN registration of sulfoxaflor for control or suppression of foxglove and lettuce aphid in Brassica (cole) leafy vegetables, leafy vegetables (except Brassica), and watercress expiring March 31, 2022; two pending section 3 registration decisions for non-blooming crops (which became final on May 29, 2020); and six previous FIFRA section 18 emergency exemption registrations, which have all expired. The proposed SLN decision also provided relevant information for the past three years of actual sulfoxaflor use in California reported as being applied on certain agricultural use sites under the current FIFRA section 24(c) special local need registration or previous FIFRA section 18 emergency exemptions. To date, there have been no adverse effects reported associated with the use of either the section 18 emergency exemption or section 24(c) special local need registration in California.

The Commenter also expressed concern that sulfoxaflor, like neonicotinoids, presents a significant cumulative risk to honey bees and other insect pollinators. DPR's proposed SLN decision set forth substantial evidence that its action was not reasonably expected to have an adverse impact, including any significant cumulative risks, on honey bees and other pollinators.

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(*See* Proposed Decision and Response to Comments 1-5, above.) Also, sulfoxaflor is distinct from neonicotinoids. (*See* DPR's Response to Comments regarding Sequoia CA and Transform CA, Section 3 Registrations, Response No. 1 (Attachment 4).) DPR's proposed decision to register the SLN also notes that DPR is not aware of a valid methodology to scientifically evaluate potential cumulative interactions between sulfoxaflor and other active ingredients, such as neonicotinoids, as part of a regulatory decision. Finally, although in its previous comments on the Section 3 registration, the Commenter cited the Worldwide Assessment on Systemic Insecticides (Pisa et al. 2015) for support that DPR failed to consider cumulative impacts of its proposed decision to register sulfoxaflor products, that report itself concedes significant knowledge gaps on the interactions between systemic insecticides and other stressors such as disease and food stress; that "quantifying the suite of co-occurring pesticides is largely an intractable problem"; and that "[g]iven these knowledge gaps, it is impossible to properly evaluate the full extent of risks..."

Notwithstanding the above, this proposed decision to register this SLN for a single crop, non-blooming alfalfa, for a limited duration, specifically requires that the treated alfalfa be harvested before bloom, and contains a number of label mitigation and restrictions to address potential on-field and off-target exposure to pollinators. As a result, the proposed SLN registration decision is not reasonably expected to result in significant adverse effects to pollinators at either an individual project level or cumulative level in combination with other pesticides. (*See* DPR's Response to Comments regarding Sequoia CA and Transform CA, Section 3 Registrations, Response No. 2 (Attachment 4).) Here, DPR's scientific evaluation of the proposed decision to register this SLN for one year for potential use in Lassen, Modoc, Shasta, and Siskiyou Counties has not identified direct or indirect significant adverse impacts on human health or the environment, including significant adverse impacts on pollinators, from use of these pesticide products in a manner consistent with their labels. (*See* Response to Comment Nos. 2-5, 7, 9, above; *see also*, DPR's Response to Comments regarding Sequoia CA and Transform CA, Section 3 Registrations, Response Nos. 2-4, 11-13 (Attachment 4).)

Tulio Macedo

Tulio Macedo, Chief
Pesticide Registration Branch

07/24/2020

Dated



June 17, 2020

Via Electronic & U.S. Overnight Mail

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P.O. Box 4015
Sacramento, CA 95812-4015
registration.comments@cdpr.ca.gov

**Re. Comments Regarding Notice of Proposed Special Local Need Registration
for Sulfoxaflor (Tracking Number 294724)**

Dear Mr. Macedo:

Please accept these comments on behalf of the Pollinator Stewardship Council and the American Beekeeping Federation regarding the proposed decision of the California Department of Pesticide Regulation (DPR) to approve a “special local need” registration to use a pesticide product containing sulfoxaflor called “Transform” on alfalfa in Lassen, Modoc, Shasta, and Siskiyou Counties. (See Notice of Proposed and Final Decisions and Pub. Rpt., Vol. 2020-21, available at <https://www.cdpr.ca.gov/docs/registration/nod/2020-21.pdf>.) According to DPR’s public report, special local need registration of sulfoxaflor is needed “[t]o manage substantial plant damage caused by blue alfalfa aphids.” (Pub. Rpt. at 1, available at https://www.cdpr.ca.gov/docs/registration/nod/public_reports/294724.pdf.)

As detailed in the extensive written comments Pollinator Stewardship Council and American Beekeeping Federation provided DPR in January 2020 regarding DPR’s proposed decision to grant section 3 registration to Transform and another sulfoxaflor containing product called “Sequoia,” there is substantial scientific evidence that agricultural use of sulfoxaflor will have a significant adverse environmental impact. DPR’s proposed special local need registration for sulfoxaflor’s use on alfalfa will compound those adverse environmental impacts. In addition, DPR has failed to analyze the environmental impacts of and feasible alternatives to its proposed decision as required by the California Environmental Quality Act (CEQA). Pollinator Stewardship Council and American Beekeeping Federation urge DPR to withdraw its proposed decision and decline to issue a special local need registration for the use of sulfoxaflor alfalfa.

I. There Is Substantial Scientific Evidence that DPR's Proposed Special Local Need Registration Will Have a Significant Adverse Impact on Pollinators and Other Beneficial Insects.

DPR's public report concludes "acceptance of this proposed [special local need] registration is not expected to have any significant adverse effect that can reasonably be expected to occur, directly or indirectly, to human health or the environment." (Pub. Rpt. at 8.) DPR's conclusion is contradicted by a large body of peer-reviewed scientific research finding that agricultural use of sulfoxaflor has a significant adverse impact on pollinators and other beneficial insects.

We are enclosing and incorporate by reference the comments Pollinator Stewardship Council and American Beekeeping Federation provided DPR in response to DPR's earlier proposed section 3 registration. (See Attachment 1 hereto.)¹ The scientific information discussed therein confirms DPR's proposal to register sulfoxaflor for use on alfalfa in four large counties that together encompass almost 20,000 square miles will have a significant adverse environmental effect—particularly on insect pollinators and other beneficial insects like lady bird beetles and parasitoid wasps.

In the few months since DPR proposed section 3 registration for sulfoxaflor, the scientific evidence documenting sulfoxaflor's toxicity to pollinators has only increased. For example, Chakrabarti et al. 2020 (Attachment 2 hereto) found "[a] majority of the honey bees exposed to Transform died within the six hours after initiation of the experiment, which confirms severe toxicity of Transform to bees when exposed directly to field application rates recommended on the label." Of particular concern, Chakrabarti et al. found "Transform exposed honey bees exhibited the highest oxidative stress (significantly higher than control) when compared with honey bees in other treatment groups." The authors explained "[p]hysiological impacts of pesticides, for example oxidative stress and apoptosis, can render individual honey bees incapable of performing their tasks smoothly, thereby affecting the colony performance as well."

DPR wrongly asserts that "applications to alfalfa under this [special local need registration] are unlikely to result in direct contact with bees," because the proposed label "prohibits applications to alfalfa grown for seed and blooming alfalfa." (Pub. Rpt. at 7.) DPR's assertion fails to address or even acknowledge the systemic nature of sulfoxaflor, which like other neonicotinoids is absorbed by the plant and expressed into the pollen and nectar at toxic levels. (See Attachment 1 at 2, 15.) The risk to pollinators therefore cannot be mitigated by DPR's proposed label advisory: "Do not apply this product to blooming alfalfa or when bees are foraging in the field." (Pub. Rpt. at 9.) Pre-bloom applications of sulfoxaflor will be absorbed

¹ An electronic copy of all attachments to this comment letter are provided in the enclosed DVD.

by the perennial alfalfa tissue and may be expressed in the pollen and nectar of any alfalfa allowed to bloom—whether intentionally or not—after harvest.

Moreover, DPR’s proposed label restriction will not prevent bees from being exposed to sulfoxaflor in the pollen and nectar of blooming weeds. Flowering weeds are commonplace in many alfalfa fields, as the picture below makes clear. The yellow flowers in the foreground of are blooming dandelions in an alfalfa field.



Finally, pollinators and other beneficial insects will be exposed to sulfoxaflor that drifts from the treated fields to nearby crops or vegetation. According to the ecological risk assessment conducted by the United States Environmental Protection Agency for sulfoxaflor in 2019:

Bees may also become exposed to sulfoxaflor which has been deposited on (or translocated into) pollen and nectar of blooming plants adjacent to treated fields. To provide an estimate of the potential oral exposure of bees to sulfoxaflor when foraging on plants adjacent to treated fields, AgDRIFT (version 2.1.1) was run as described previously in **Table 11-9**, for the acute contact exposures. Based on this AgDRIFT modeling and default (high end) estimates of exposure for adult nectar foragers (the highest exposed type of honey bee), the acute risk LOC [i.e., level of concern] is exceeded from 16 to 361 feet beyond the edge of the treated field, depending on the application rate and application method.

(Attachment 3 at 66.) This analysis from EPA confirms that DPR's proposed 12-foot downwind spray buffer is wholly inadequate.

In short, there is substantial scientific evidence that DPR's proposed special local need registration for sulfoxaflor will have a significant adverse effect on the environment. DPR's public report fails to address and cannot be reconciled with this science.

II. DPR Has Failed to Comply With CEQA.

The public report posted by DPR in connection with its proposed registration decision does not comply with CEQA. As set forth below, DPR's discussion of alternatives is legally inadequate, as is DPR's discussion of the environmental baseline and the direct, indirect, and cumulative environmental impacts of its proposed decision.

A. DPR's Discussion of Alternatives Is Inadequate.

As detailed in the enclosed comments on DPR's proposed section 3 registration for sulfoxaflor, a public report "must include some consideration of feasible alternatives even if the project's significant environmental impacts will be avoided through mitigation measures." (*Pesticide Action Network N. America v. Cal. Dept. of Pesticide Regulation* (2017) 16 Cal.App.5th 224, 245 [quoting *Friends of the Old Trees v. Dept. of Forestry & Fire Protection* (1997) 52 Cal.App.4th 1383, 1395].) Here, the public report DPR prepared for sulfoxaflor's special local need registration identifies just two alternatives:

- Alternative # 1: Accept the proposed special local need registration.
- Alternative # 2: No action (Decision to deny proposed special local need registration).

(Pub. Rpt. at 3-4.) DPR's cursory treatment of alternatives does not satisfy CEQA.

First, DPR's description of the "no action" alternative is inadequate. In violation of CEQA, DPR's discussion of the "no action" alternative provides no information about that alternative's potential *impact* on the environment. DPR's failure to undertake any analysis of the environmental impacts associated with the no action alternative precludes the public and DPR decisionmakers from comparing the potential pros and cons of the no action alternative to that of DPR's preferred alternative, in violation of CEQA.

Relatedly, DPR fails to consider the availability and environmental consequences of a number of feasible non-chemical alternatives for controlling blue alfalfa aphids. As one entomologist explained:

There are options to consider before using insecticides. Biological control, the use of resistant cultivars, and harvesting will often minimize aphids to tolerable levels in most cases. Fortunately, there are many different natural enemies to aphids. For those fields with consistent aphids, consider cultivars with at least moderate resistance to pea aphid.

(See Attachment 4 at 5.)

Experts at the University of California have confirmed "[p]lanting alfalfa varieties resistant to blue alfalfa aphid has been the most effective means of controlling aphids in alfalfa." (See Attachment 5 at 2. See also Attachment 6 at 2 ["The most effective means of controlling pea and BAA [i.e., blue alfalfa aphid] is planting resistant varieties"].)

Before resorting to insecticides, experts also recommend the alternative of taking steps to encourage beneficial insects like lady bird beetles and parasitoid wasps that feed on aphids. U.C. entomologists explain:

Several species of aphid natural enemies are found in alfalfa including several species of lady bird beetles, green lacewings, western big eyed bugs, damsel bugs, and syrphid fly larvae that also play a role and should be conserved. Several species of parasitic wasps are found in alfalfa. Parasitic wasps that attack aphids in alfalfa include *Aphidius* spp., *Diaeretiella* spp., and *Lysiphlebus* spp.

(Attachment 6 at 3.) Indeed, experts warn that using insecticides can exacerbate aphid infestations by killing beneficial insects. (See, e.g., Attachment 5 at 3 ["Insecticides often destroy beneficial insects, leading to severe secondary pest outbreaks."].) DPR's own public report likewise concedes "broad-spectrum pesticides . . . may be effective in the short-term, but can impact beneficial insects resulting in secondary outbreaks of aphids and additional crop damage." (Pub. Rpt. at 4.)

Ultimately, DPR's proposed special local need registration for sulfoxaflor is likely to exacerbate the very problem it seeks to address. Sulfoxaflor—like other neonicotinoid insecticides—is by any measure a “broad-spectrum pesticide,” approved by U.S. EPA and now DPR to control an extremely wide range of insect pests, including mealybugs, scales, whiteflies, psylla, thrips, leafhoppers, and more. Moreover, as detailed in the enclosed comments on DPR's proposed section 3 registration of sulfoxaflor, scientists have documented sulfoxaflor's particular toxicity and adverse impact on ladybird beetles and parasitoid wasps—the very beneficial insects experts say are needed to manage blue alfalfa aphids. (See Attachment 1 at 7 [citing He et al. 2019 and Nawaz et al. 2018].)

DPR's failure to consider feasible alternatives to registering yet another highly toxic, broad-spectrum insecticide to control blue alfalfa aphids is not only ill-advised, it also violates CEQA. Pollinator Stewardship Council and American Beekeeping Federation urge DPR to consider the feasibility and environmental effect of alternatives to granting special local need registration for sulfoxaflor.

B. DPR's Analysis of the Environmental Baseline Does Not Satisfy CEQA.

“To decide whether a given project's environmental effects are likely to be significant, the agency must use some measure of the environment's state absent the project, a measure sometimes referred to as the ‘baseline’ for environmental analysis.” (*Communities for a Better Env't v. S. Coast Air Quality Mgm't Dist.* (2010) 48 Cal.4th 310, 315.) DPR's public report does not adequately describe the baseline environmental setting.

As detailed in the attached comments on DPR's proposed section 3 registration for sulfoxaflor, we are in the midst of an unprecedented and worsening pollinator die-off. (See Attachment 1 at 11 and Attachments 7, 8, and 9 [documenting the global insect die-off].) In violation of CEQA, DPR's public report makes no mention of this crisis. Nor does DPR's public report disclose the critical importance of honey bees and other insect pollinators to California agriculture.

Like the public reports that accompanied DPR's proposed section 3 registration for sulfoxaflor, the public report that accompanies DPR's proposed special local need registration also fails to describe the baseline with respect to registered use of other neonicotinoids. (See Attachment 1 at 12.)

In these and other respects, DPR's discussion of the existing environmental baseline is inadequate under CEQA.

C. DPR's Discussion of Environmental Impacts Is Inadequate.

DPR's public reports must also include "a statement of any significant adverse environmental effect that can reasonably be expected to occur, directly or indirectly, from implementing the proposal." (Cal. Code Regs., tit. 3, § 6254.) As the First District Court of Appeal recently explained:

[DPR]'s regulations which require review when a significant adverse effect "can reasonably be expected to occur" is not meaningfully different from CEQA regulations imposing a fair argument review when an activity "may have a significant environmental effect." The Supreme Court has noted that under the CEQA Guidelines, "[I]t is appropriate for agencies to apply the fair argument standard in determining whether there is a reasonable possibility [of] a significant effect on the environment."

(*Pesticide Action Network N. America, supra*, 16 Cal.App.5th at 246-47 [citing *Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1115].)

DPR's statement of the direct, indirect, and cumulative impacts that may result from its proposed special local need registration for sulfoxaflor is also inadequate under CEQA.

1. DPR's Analysis of Direct and Indirect Impacts Is Inadequate.

DPR's public report does not disclose and adequately analyze significant adverse environmental effects that can reasonably be expected to occur, directly and indirectly, from its proposed special local need registration decision for sulfoxaflor.

First, DPR's public report fails to disclose the actual scientific basis for DPR's assertion that registering sulfoxaflor will have no significant environmental impact. DPR claims to have "evaluated the project (proposed SLN registration) and scientific data supporting this registration action." (Pub. Rpt. at 8.) DPR fails, however, to disclose what specific "scientific data" it received and evaluated, nor does it disclose what the agency's "evaluation" actually entailed. DPR's failure to "show its work" frustrates the public's ability to review and comment meaningfully on DPR's proposed registration decision, in violation of CEQA. As the First District Court of Appeal recently made clear, DPR's CEQA certified regulatory program "does not excuse the Department from CEQA's substantive requirements or explaining its analysis." (*Pesticide Action Network N. America, supra*, 16 Cal.App.5th at 247.) As a result, "even if [DPR's] finding of no significant impacts was meaningfully derived, it does not excuse [DPR] from showing how it reached its conclusion." (*Ibid.*) An earlier opinion described this requirement of disclosure under CEQA as follows:

A certified program's statement of no significant impact must be supported by documentation showing the potential environmental impacts that the agency examined in reaching its conclusions, and this documentation would be similar to an initial study.

(*City of Arcadia v. State Water Res. Ctrl. Bd.* (2006) 135 Cal.App.4th 1392, 1424, n.11.) Here, DPR's public report is legally inadequate because it does not "allow meaningful public comment directed at the rationale for [DPR's] decision." (*Pesticide Action Network N. America, supra*, 16 Cal.App.5th at 247.)

Second, DPR's effort to dismiss the significant environmental impact of its proposed decision as somehow unknowable is both factually incorrect and contrary to CEQA. DPR claims that "registration does not translate to additive use," and DPR deems it "too speculative to determine whether the availability of this pesticide product, as proposed in this registration decision, will increase the overall future use of this active ingredient." (Pub. Rpt. at 5-6.) It is extremely difficult to reconcile DPR's assertion that any future sulfoxaflor use is speculative with its conclusion that there is a documented "special local need" for sulfoxaflor in the first instance. Moreover, by DPR's flawed logic, almost any governmental permit or approval could be excused from CEQA, on the grounds that approval does not guarantee execution. But "[t]he fact that precision may not be possible . . . does not mean that no analysis is required." (*Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 938.) To comply with CEQA, "an agency must necessarily engage in some forecasting. (Cal. Code Regs., tit. 14, § 15144.) "While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can." (*Ibid.*) Here, it is completely foreseeable and reasonable to conclude that DPR's special local need registration of sulfoxaflor will result in its use.

Third, DPR's assessment of sulfoxaflor's direct and indirect impacts fails to disclose and analyze the substantial scientific evidence indicating use of sulfoxaflor presents a significant risk to insect pollinators and other beneficial organisms.

In short, DPR's discussion of the direct and indirect environmental impacts of its proposed special local needs registration violates CEQA.

2. DPR's Discussion of Cumulative Impacts Does Not Satisfy CEQA.

When evaluating a pesticide proposed for registration, DPR must conduct "at least a preliminary search for potential cumulative environmental effects, and if any such effect were perceived, at least a preliminary assessment of its significance." (*Pesticide Action Network N.*

America, supra, 16 Cal.App.5th at 249 [quoting *Laupheimer v. State of Cal.* (1988) 200 Cal.App.3d 440, 462-63].) “While technical perfection in a cumulative impact analysis is not required, courts have looked for adequacy, completeness, and a good faith effort at full disclosure.” (*Id.* at 250 [quoting *Joy Road Area Forest & Watershed Assn. v. Cal. Dept. of Forestry & Fire Protection* (2006) 142 Cal.App.4th 656, 676].)

Here, there is substantial scientific evidence that DPR’s proposed special local need registration for sulfoxaflor will have a significant adverse impact on pollinators and other beneficial insects. DPR’s public report does not disclose or evaluate this evidence of environmental impacts. Instead, DPR incorrectly claims “it is not reasonably foreseeable to predict or analyze cumulative impacts from this proposed registration decision.” (Pub. Rpt. at 6.)

DPR’s cumulative impact “analysis” for sulfoxaflor does not reflect the requisite “good faith effort at full disclosure.” (*Pesticide Action Network N. America, supra*, 16 Cal.App.5th at 250.) First, DPR fails to consider the cumulative impact of the proposed special local need registration in conjunction with its entirely foreseeable May 29, 2020 decision to register sulfoxaflor for use on a variety of different crops, its earlier special local need registration for control or suppression of foxglove and lettuce aphid in Brassica (cole) leafy vegetables, leafy vegetables (except Brassica), and watercress expiring March 31, 2022, and its past Section 18 emergency use of sulfoxaflor.

Moreover, DPR fails to disclose and address the facts and evidence set forth in the attached comments on DPR’s proposed section 3 registration for sulfoxaflor showing: (1) that sulfoxaflor has similar toxicological properties and the same mode of action as other neonicotinoids in IRAC group 4; (2) that DPR has already registered over 400 pesticide products containing IRAC group 4 active ingredients for use on a specific crops; (3) that DPR has determined existing agricultural use of IRAC group 4 pesticides may be having a significant adverse impact on the environment; and (4) that DPR’s registration decisions with regard to sulfoxaflor—including the proposed special local need registration—may have a significant cumulative impact on pollinators and other environmental resources when considered together with DPR’s prior registration decisions involving IRAC Group 4 pesticides.

In an effort to excuse its failure to analyze cumulative impacts, DPR claims its certified regulatory program “incorporates the consideration of cumulative impacts by requiring DPR to continuously evaluate pesticides registered for use in California and take necessary action if a potential concern is identified.” (Pub. Rpt. at 5.) This “promise of more analysis to come following the conclusory explanation here simply does not measure up to CEQA’s mandate that relevant information on the effects of a project be made available as soon as possible and presented in a way that is useful to decisionmakers and the public.” (*Pesticide Action Network N. America, supra*, 16 Cal.App.5th at 250.)

DPR also claims it is “not aware of a scientifically valid methodology to evaluate potential cumulative interactions between the new active ingredient contained in this product with other active ingredients to support a proposed regulatory decision.” (Pub. Rpt. at 6.) As explained in the attached comments on DPR’s proposed section 3 registration for sulfoxaflor, both USEPA and the National Academy of Sciences have proposed methodologies for conducting pesticide cumulative impact assessments. (Attachment 1 at 16.)

In sum, DPR’s treatment of cumulative impacts falls well short of what CEQA requires.

Conclusion

Pollinator Stewardship Council and American Beekeeping Federation urge DPR to withdraw its proposed decision and decline to issue a special local need registration for alfalfa.

Sincerely,

A handwritten signature in black ink, appearing to read 'Greg Loarie', with a long horizontal flourish extending to the right.

Gregory C. Loarie
Earthjustice

*Counsel for Pollinator Stewardship Council
and American Beekeeping Federation*

List of Attachments
(Electronic copies provided on enclosed DVD)

- Attachment 1: PSC/ABF Comments on Proposed Section 3 Registration for Sulfoxaflor.
- Attachment 2: Chakrabarti et al. 2020, Field rates of Sivanto (flupyradifurone) and Transform (sulfoxaflor) increase oxidative stress and induce apoptosis in honey bees (*Apis mellifera* L.), PLoS ONE 15(5).
- Attachment 3: U.S. EPA 2019, Sulfoxaflor: Ecological Risk Assessment for Section 3 Registration for Various Proposed New Uses.
- Attachment 4: Hodgson, E. 2009, Getting to Know the Aphids in Alfalfa, available at <https://crops.extension.iastate.edu/cropnews/2009/07/getting-know-aphids-alfalfa>.
- Attachment 5: UC Pest Management Guidelines, Alfalfa, Blue Alfalfa Aphid, available at <http://ipm.ucanr.edu/PMG/r1302311.html>.
- Attachment 6: Barlow et al. 2014, Blue Alfalfa Aphid Management Strategies.
- Attachment 7: van Lexmond, M. et al. 2015, Global collapse of the entomofauna: exploring the role of systemic insecticides, *Environ. Sci. Pollut. Res.* 22:1-4, available at <https://link.springer.com/article/10.1007/s11356-014-3220-1>.
- Attachment 8: Sánchez-Bayo, F., Wyckhuys, K. 2019; Worldwide decline of the entomofauna: A review of its drivers. *Biological Conservation*; 232, available at <https://www.sciencedirect.com/science/article/pii/S0006320718313636>.
- Attachment 9: Simon-Delso, N. et al. 2015, Systemic insecticides (neonicotinoids and fipronil): trends, uses, mode of action and metabolites, *Environ. Sci. Pollut. Res.* 22:5-34.



Department of Pesticide Regulation

Gavin Newsom
Governor

Val Dolcini
Director

Jared Blumenfeld
Secretary for
Environmental Protection

July 24, 2020

FIFRA 24(c) Special Local Need Label (SLN)
For distribution and use only in the state of California
For use on Alfalfa for control of the Blue Alfalfa Aphid.

Transform CA

EPA Reg. No.: 62719-727

SLN # CA-200006

Manufacturer: Dow AgroScience LLC
9330 Zionsville Road
Indianapolis, Indiana 46268

DANGER

This label expires and shall not be distributed or used in accordance with this SLN registration after **July 24, 2021**.

DIRECTIONS FOR USE

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This state-specific Section 24(c) labeling must be in the possession of the user at the time of application.
- Follow all applicable directions, restrictions, and precautions on the EPA registered label for Transform CA (EPA Reg. No. 62719-727) and this label.

Environmental Hazards

This product is highly toxic to bees exposed through contact during spraying and while spray droplets are still wet. Do not apply this product to blooming alfalfa or when bees are foraging in the field. Do not allow it to drift to blooming crops or weeds while bees or other pollinating insects are actively foraging the treatment area. This product may be toxic to bees exposed to treated foliage for up to 3 hours following application. Toxicity is reduced when spray droplets are dry.

This product must be applied before 7:00 a.m. or after 7:00 p.m. local time or when the temperature is below 50° F at the site of application.

This product is toxic to aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

If blooming vegetation is present 12 feet out from the downwind edge of the field, a downwind 12-foot on-field buffer must be observed.

Location: Counties of Lassen, Modoc, Shasta, and Siskiyou

Crop/Site/Commodity: Alfalfa

Target Pest/Problem: Blue Alfalfa Aphid

Dosage: Use 0.75 to 1.0 fluid ounces of product (0.023-0.031 lbs. ai/acre) per acre per calendar year.

Dilution Rate: For ground application, apply in 5 to 10 gallons of water per acre.
For air application, apply in a minimum of 3 gallons of water per acre.

Method of Application: Ground or Air

Frequency/Timing of Application: Only one application allowed.

Restricted Entry Interval (REI): 24 hours

Preharvest Interval (PHI): Do not apply within 7 days of grazing, or forage, or hay harvest.

Specific Use Restrictions:

1. Do not apply through any type of irrigation systems.
2. Do not apply to alfalfa grown for seed.
3. Alfalfa must be harvested prior to bloom.

Valid until withdrawn, suspended or cancelled by the United States Environmental Protection Agency (USEPA), the manufacturer, the 24(c) registrant, or the Department of Pesticide Regulation, or expires.

The County Agricultural Commissioner's (or designee's) signature must be obtained prior to this use. This does not constitute a recommendation of the Department of Pesticide Regulation and will not prevent quarantine action if illegal residues are found on or in the crop.

To the extent consistent with applicable law, neither the Department nor the county agricultural commissioner, makes any warranty of merchantability, fitness of purpose, or otherwise, expressed or implied, concerning the use of a pesticide in accordance with these provisions. The user and/or grower acknowledge the preceding disclaimer.

Do not use in mixture with other pesticides unless provided for in the labeling. Trial on a small area to check out unanticipated problems is suggested.

24(c) Registrant: Siskiyou County Agricultural Commissioner
525 S. Foothill Drive
Yreka, California 96097
(530) 841-4025

USEPA SLN No. CA-200006



John Inouye
Senior Environmental Scientist
Pesticide Registration Branch
916-324-3538
E-mail:John.Inouye@cdpr.ca.gov

COUNTY AGRICULTURAL COMMISSIONER'S SIGNATURE

Date: _____

USER'S SIGNATURE _____



Transform[®] CA
with Isoclast[™] active

INSECTICIDE

For control or suppression of aphids, plant bugs, stink bugs, whiteflies and certain psyllids, scales, and thrips on: canola (rapeseed) (subgroup 20A), potatoes (crop groups 1C and 1D), succulent, edible podded, and dry beans, triticale, and wheat.

SULFOXAFLOR	GROUP	4C	INSECTICIDE
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Active Ingredient:
sulfoxaflor 50%
Other Ingredients..... 50%
Total 100%

Contains 50% active ingredient on a weight basis.

**Keep Out of Reach
of Children**

**DANGER
PELIGRO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact



First Aid (Cont.)

lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to inside of label booklet for additional precautionary information including Directions for Use.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-727

EPA Est. 67545-AZ-001
97050286 2004

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Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

NET WEIGHT 8 LB

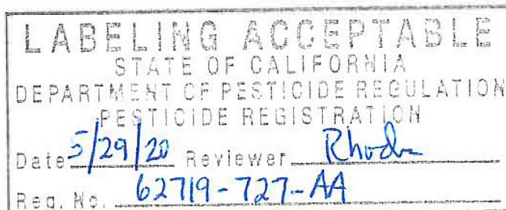


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Precautionary Statements

Hazard to Humans and Domestic Animals

DANGER

Corrosive. Causes Irreversible Eye Damage • Harmful If Swallowed

Do not get in eyes or on clothing.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This product is highly toxic to bees exposed through contact during spraying and while spray droplets are still wet. Do not apply this product or allow it to drift to blooming crops or weeds while bees or other pollinating insects are actively foraging the treatment area. This product may be toxic to bees exposed to treated foliage for up to 3 hours following application. Toxicity is reduced when spray droplets are dry.

Risk to managed bees and native pollinators from contact with pesticide spray or residues can be minimized when applications are made before 7:00 am or after 7:00 pm local time or when the temperature is below 50° F at the site of application.

Refer to the Directions for Use for crop specific restrictions and additional advisory statements to protect pollinators.

This product is toxic to aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation. Read all Directions for Use carefully before applying.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Shoes plus socks

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in original container only.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling: Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment

Storage and Disposal (Cont.)

or a mix tank. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Product Information

Carefully read, understand and follow label use rates and restrictions. Apply the amount specified in the following tables with properly calibrated aerial or ground spray equipment. Prepare only the amount of spray solution required to treat the measured acreage. The low rates may be used for light infestations of the target pests and the higher rates for moderate to heavy infestations. Transform® CA insecticide may be applied in either dilute or concentrate sprays so long as the application equipment is calibrated and adjusted to deliver thorough, uniform coverage. Use the specified amount of Transform CA per acre regardless of the spray volume used.

Use Precautions

Integrated Pest Management (IPM) Programs

Transform CA is recommended for IPM programs in labeled crops. Apply Transform CA when field scouting indicates target pest densities have reached the economic threshold, i.e., the point at which the insect population must be reduced to avoid economic losses beyond the cost of control.

Insecticide Resistance Management (IRM)

For resistance management, Transform CA contains a Group 4C insecticide. Any insect population may contain individuals naturally resistant to Transform CA and other Group 4C insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay development of insecticide resistance, the following practices are recommended:

- Rotate the use of Transform CA or other Group 4C insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendation provided by the Insecticide Resistance Action Committee (IRAC):
 - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
 - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
 - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
 - Mixtures become less effective if resistance is already developing to one of both active ingredients, but they may still provide pest management benefits.
 - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.

- Do not treat seedling plants grown for transplant in greenhouses, shade houses, or field plots.
- Contact your local extension specialist, certified crop advisor, and/or manufacturer for insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems.
- For further information or to report suspected resistance, you may contact Dow AgroSciences by calling 800-258-3033.

Mixing Directions

Application Rate Reference Table

Application Rate of Transform CA (oz/acre)	Active Ingredient Equivalent (lb ai/acre)
0.75	0.023
1	0.031
1.5	0.047
1.75	0.055
2.25	0.071
2.75	0.086

Transform CA – Alone

Fill the spray tank with water to about 1/2 of the required spray volume. Start agitation and add the required amount of Transform CA. Continue agitation while mixing and filling the spray tank to the required spray volume. Maintain sufficient agitation during application to ensure uniformity of the spray mix. Do not allow water or spray mixture to back-siphon into the water source.

Transform CA – Tank Mix

When tank mixing Transform CA with other materials, conduct compatibility test (jar test) using relative proportions of the tank mix ingredients prior to mixing ingredients in the spray tank. If foliar fertilizers are used, the jar test should be repeated with each batch of fertilizer utilizing the mixing water source. Vigorous, continuous agitation during mixing, filling and throughout application is required for all tank mixes. Sparger pipe agitators generally

provide the most effective agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing air into the spray mixture.

Tank Mixing Restrictions:

DO NOT TANK MIX ANY PESTICIDE PRODUCT WITH TRANSFORM CA without first referring to the following website: isoclasttankmix.com

- This website contains a list of active ingredients that are currently prohibited from use in tank mixture with this product. Only use products in tank mixture with this product that: 1) are registered for the intended use site, application method and timing; 2) are not prohibited for tank mixing by the label of the tank mix product; and 3) do not contain one of the prohibited active ingredients listed on isoclasttankmix.com website.
- Applicators and other handlers (mixers) must access the website within one week prior to application in order to comply with the most up-to-date information on tank mix partners.
- Do not exceed specified application rates for respective products or maximum allowable application rates for any active ingredient in the tank mix.
- It is the pesticide user's responsibility to ensure that all products in the mixtures are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Mixing Order for Tank Mixes: Fill the spray tank with water to 1/4 to 1/3 of the required spray volume. Start agitation. Add different formulation types in the order indicated below, allowing time for complete dispersion and mixing after addition of each product. Allow extra dispersion and mixing time for dry flowable products.

Add different formulation types in the following order:

1. Transform CA and other water dispersible granules
2. Wettable powders
3. Suspension concentrates and other liquids

Maintain agitation and fill spray tank to 3/4 of total spray volume. Then add:

4. Emulsifiable concentrates and water-based solutions
5. Spray adjuvants, surfactants and oils
6. Foliar fertilizers

Finish filling the spray tank. Maintain continuous agitation during mixing, final filling and throughout application. If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger agitator is particularly useful for this purpose.

Premixing: Dry and flowable formulations may be premixed with water (stirred) and added to the spray tank through a 20 to 35 mesh screen. This procedure assures good initial dispersion of these formulation types.

**Application Directions
Not for Residential Use**

Do not apply Transform CA in greenhouses or other enclosed structures used for growing crops.

Proper application techniques help ensure thorough spray coverage and correct dosage for optimum insect control. Apply Transform CA as a foliar spray at the rate indicated for target pest. The following directions are provided for ground and aerial application of Transform CA. Attention should be given to sprayer speed and calibration, wind speed, and foliar canopy to ensure adequate spray coverage.

Spray Drift Management

Wind: To reduce off-target drift and achieve maximum performance, apply when wind velocity favors on-target product deposition (approximately 3-10 mph). Do not apply when wind speed exceeds 10 mph as uneven spray coverage and drift may result.

Temperature Inversions: Do not make ground or aerial applications during a temperature inversion. Temperature inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

Droplet Size: Use only medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASABE (S-572.1) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size except where indicated for specific crops.

Ground Application

To prevent drift from groundboom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy. Shut off the sprayer when turning at row ends. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind directions are toward the aquatic area.

Row Crop Application

Use calibrated power-operated ground spray equipment capable of providing uniform coverage of the target crop. Orient the boom and nozzles to obtain uniform crop coverage. Use a minimum of 5 to 10 gallons per acre, increasing volume with crop size and/or pest pressure. Use hollow cone, twin jet flat fan nozzles or other atomizer suitable for insecticide spraying to provide a fine to coarse spray quality (per ASABE S-572.1, see nozzle catalogs). Under certain conditions, drop nozzles may be required to obtain complete coverage of plant surfaces. Follow manufacturer's specifications for ideal nozzle spacing and spray pressure. Minimize boom height to optimize uniformity of coverage and maximize deposition (optimize on-target deposition) to reduce drift.

Orchard/Grove Spraying Application

Dilute Spray Application: This application method is based upon the premise that all plant parts are thoroughly wetted, to the point of runoff, with spray solution. To determine the number of gallons of dilute spray required per acre, contact your state agricultural experiment station, certified pest control advisor, or extension specialist for assistance.

Concentrate Spray Application: This application method is based upon the premise that all the plant parts are uniformly covered with spray solution but not to the point of runoff as with a dilute spray. Instead, a lower spray volume is used to deliver the same application rate per acre as used for the dilute spray.

Aerial Application

Apply in a minimum spray volume of 3 gallons per acre. Mount the spray boom on the aircraft so as to minimize drift caused by wing tip or rotor vortices. Use the minimum practical boom length and do not exceed 75% of the wing span or 80% of the rotor diameter. Flight speed and nozzle orientation must be considered in determining droplet size. Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy

unless a greater height is required for aircraft safety. When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind. Do not apply when wind speed exceeds 10 mph.

Spray Adjuvants

The addition of agricultural adjuvants to sprays of Transform CA may improve initial spray deposits, redistribution and weatherability. Select adjuvants that are recommended and registered for your specific use pattern and follow their use directions. When an adjuvant is to be used with this product, Dow AgroSciences recommends the use of a Chemical Producers and Distributors Association certified adjuvant. Always add adjuvants last in the mixing process.

Chemigation Application

Transform CA may be applied through properly equipped chemigation systems for insect control in potatoes. Do not apply Transform CA by chemigation to other crops unless otherwise specified by a state-specific 24(c) label.

Use Directions for Chemigation: Transform CA may be applied through overhead sprinkler irrigation systems that will apply water uniformly, including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set, micro sprinkler, or hand move. Do not apply this product through any other type of irrigation system. Sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units are not recommended.

For continuously moving systems, the mixture containing Transform CA must be injected continuously and uniformly into the irrigation water line as the sprinkler is moving. If continuously moving irrigation equipment is used, apply in no more than 0.25 inch of water. For irrigation systems that do not move during operation, apply in no more than 0.25 inch of irrigation immediately before the end of the irrigation cycle.

Chemigation Preparation: The following use directions are to be followed when this product is applied through irrigation systems. Thoroughly clean the chemigation system and tank of any fertilizer or chemical residues, and dispose of the residues according to state and federal laws. Flush the injection system with soap or a cleaning agent and water. Determine the amount of Transform CA needed to cover the desired acreage. Mix according

to Instructions in the Mixing Directions section above. Continually agitate the mixture during mixing and application.

Chemigation Equipment Calibration: In order to calibrate the irrigation system and injector to apply the mixture containing Transform CA, determine the following: 1) Calculate the number of acres irrigated by the system; 2) Calculate the amount of product required and premix; 3) Determine the irrigation rate and determine the number of minutes for the system to cover the intended treatment area; 4) Calculate the total gallons of insecticide mixture needed to cover the desired acreage. Divide the total gallons of insecticide mixture needed by the number of minutes (minus time to flush out) to cover the treatment area. This value equals the gallons per minute output that the injector or eductor must deliver. Convert the gallons per minute to milliliters or ounces per minute if needed. Calibrate the injector system with the system in operation at the desired irrigation rate. It is suggested that the injection pump/system be calibrated at least twice before operation, and the system should be monitored during operation.

Chemigation Operation: Start the water pump and irrigation system, and let the system achieve the desired pressure and speed before starting the injector. Check for leaks and uniformity and make repairs before any chemigation takes place. Start the injection system and calibrate according to manufacturer's specifications. This procedure is necessary to deliver the desired rate per acre in a uniform manner. When the application is finished, allow the entire irrigation and injection system to be thoroughly flushed clean before stopping the system.

Chemigation Restrictions:

- Lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, contact state extension service specialists, equipment manufacturers or other experts.
- Do not connect an irrigation system used for pesticide application (including greenhouse systems) to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place with current certification. Specific local regulations may apply and must be followed.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall operate the system and make

necessary adjustments should the need arise and continuously monitor the injection.

- Do not apply when wind speed favors drift beyond the area intended for treatment. End guns must be turned off during the application if they irrigate nontarget areas.
- Do not allow irrigation water to collect or run off and pose a hazard to livestock, wells, or adjoining crops.
- Do not enter treated area during the reentry interval specified in the Agricultural Use Requirements section of this label unless required PPE is worn.
- Do not apply through sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units.

Chemigation Specific Equipment Requirements:

- The system must contain an air gap or approved backflow prevention device, or approved functional check valve, vacuum relief valve (including inspection port), and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. Refer to the American Society of Agricultural Engineer's Engineering Practice 409 for more information or state specific regulations.
- The pesticide injection line must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection chemical supply.
- A pesticide injection pump must also contain a functional interlock, e.g., mechanical or electrical to shut off chemical supply when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection when the water pressure drops too low or water flow stops.
- Use of public water supply requires approval of a backflow prevention device or air gap (preferred) by both state and local authorities.
- Systems must use a metering device, such as a positive displacement injection pump (or flow meter on eductor) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. An electric powered pump must meet Section 675 for "Electrically Driven or Controlled Irrigation Machines" NEC 70.
- To insure uniform mixing of the insecticide in the water line, inject the mixture in the center of the pipe diameter or just ahead of an elbow or tee in

- the irrigation line so that the turbulence created at those points will assist in mixing. The injection point must be located after all backflow prevention devices on the water line.
- The tank holding the insecticide mixture should be free of rust, fertilizer, sediment, and foreign material, and equipped with an in-line strainer situated between the tank and the injection point.

Rotational Crop Restrictions

The following rotational crops may be planted at intervals defined below following the final application of Transform CA at specified rates for a registered use.

Crop	Re-Planting Interval
Barley, triticale, wheat, canola (rapeseed) (subgroup 20A), potatoes (crop group 1C and 1D), succulent, edible podded and dry beans.	no restrictions
all other crops grown for food or feed	30 days

Use Directions

Barley, Triticale and Wheat

Pests and Application Rates:

Pests	Transform CA (oz/acre)
Aphids, including Russian wheat aphid and greenbug	0.75 – 1.5 (0.023 – 0.047 lb a.i./acre)

Application Timing: Treat in accordance with local economic thresholds. Consult your Dow AgroSciences representative, cooperative extension service, certified crop advisor or state agricultural experiment station for any additional local use recommendations for your area.

Application Rate: Use a higher rate in the rate range for heavy pest populations.

Restrictions:

- Preharvest Interval:** Do not apply within 14 days of grain or straw harvest or within 7 days of grazing, or forage, fodder, or hay harvest.

- Minimum Treatment Interval:** Do not make applications less than 14 days apart.
- Do not make more than two applications per crop.
- Do not apply more than a total of 2.8 oz of Transform CA (0.09 lb a.i. of sulfoxafior) per acre per year.
- If blooming vegetation is present 12 feet out from the downwind edge of the field, a downwind 12-foot on-field buffer must be observed.

Canola (Rapeseed) (Subgroup 20A)¹

¹Canola (rapeseed) (subgroup 20A) including borage, canola, crambe, cuphea, echium, flax seed, gold of pleasure, hare's ear mustard, lesquerella, lunaria, meadowfoam, milkweed, mustard seed, oil radish, poppy seed, rapeseed, sesame, sweet rocket, and cultivars, varieties and/or hybrids of these

Pests and Application Rates:

Pests	Transform CA (oz/acre)
Aphids	0.75 (0.023 lb a.i./acre)

Application Timing: Treat in accordance with local economic thresholds. Consult your Dow AgroSciences representative, cooperative extension service, certified crop advisor or state agricultural experiment station for any additional local use recommendations for your area.

Application Rate: Use a higher rate in the rate range for heavy pest populations.

Restrictions:

- Preharvest Interval:** Do not apply within 14 days of grain, straw, forage, fodder, or hay harvest.
- Minimum Treatment Interval:** Do not make applications less than 14 days apart.
- Do not make more than two applications per year.
- Do not apply more than a total of 1.5 oz of Transform CA (0.046 lb a.i. of sulfoxafior) per acre per year.
- Do not apply this product until after petal fall.
- If blooming vegetation is present 12 feet out from the downwind edge of the field, a downwind 12-foot on-field buffer must be observed.

Potatoes (Crop Groups 1C and 1D)¹

¹Root and tuber vegetables (crop group 1) including arracacha, arrowroot, bitter black salsify, bitter cassava, chayote (root), Chinese artichoke, chufa, daikon, dasheen, edible canna, ginger, Jerusalem artichoke, leren, lobok, lo pak, potato, radish, sweet cassava, sweet potato, tariner, true yam, turmeric, yam, yam bean, and other cultivars or hybrids of these

Pests and Application Rates:

Pests	Transform CA (oz/acre)
aphids	0.75 – 1.5 (0.023 – 0.047 lb ai/acre)
Leafhoppers	1.5 – 2.25 (0.047 – 0.071 lb ai/acre)
Potato psyllid silverleaf whitefly sweetpotato whitefly	2.0 – 2.25 (0.063 – 0.071 lb ai/acre)

Application Timing: Treat in accordance with local economic thresholds. Consult your Dow AgroSciences representative, cooperative extension service, certified crop advisor or state agricultural experiment station for any additional local use recommendations for your area. Two applications may be required for optimum control of whiteflies.

Application Rate: Use a higher rate in the rate range for heavy pest populations.

Restrictions:

- **Preharvest Interval:** Do not apply within 7 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 14 days apart.
- Do not make more than four applications per crop.
- Do not make more than two consecutive applications per crop.
- Do not apply more than a total of 8.5 oz of Transform CA (0.266 lb ai of sulfoxafior) per acre per year.
- Do not apply this product until after petal fall.
- If blooming vegetation is present 12 feet out from the downwind edge of the field, a downwind 12-foot on-field buffer must be observed.

Succulent, Edible Podded and Dry Beans¹

¹Succulent, edible podded, and dry beans including adzuki bean, asparagus bean, bean, blackeyed pea, broad bean, chickpea, Chinese longbean, cowpea, fava bean, field bean, garbanzo bean, grain lupine, green lima bean, jackbean, kidney bean, lablab bean, lima bean, moth bean, mung bean, navy bean, pinto bean, rice bean, runner bean, snap bean, sweet lupine, sword bean, tepary bean, wax bean, white lupine, white sweet lupine, yardlong bean

Pests and Application Rates:

Pests	Transform CA (oz/acre)
aphids	0.75 – 1.0 (0.023 – 0.031 lb ai/acre)
plant bugs	1.5 – 2.25 (0.047 – 0.071 lb ai/acre)
Suppression only: brown stink bug southern green stink bug	2.0 – 2.25 (0.063 – 0.071 lb ai/acre)
thrips (suppression only)	2.25 (0.071 lb ai/acre)

Application Timing: Treat in accordance with local economic thresholds. Consult your Dow AgroSciences representative, cooperative extension service, certified crop advisor or state agricultural experiment station for any additional local use recommendations for your area.

Application Rate: Use a higher rate in the rate range for heavy pest populations.

Restrictions:

- **Preharvest Interval:** Do not apply within 7 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 14 days apart.
- Do not make more than four applications per crop.
- Do not make more than two consecutive applications per crop.
- Do not apply more than a total of 8.5 oz of Transform CA (0.266 lb ai of sulfoxafior) per acre per year.
- Do not apply this product until after petal fall.

- If blooming vegetation is present 12 feet out from the downwind edge of the field, a downwind 12-foot on-field buffer must be observed.
- Do not use on soybeans.

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials,

the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. To the extent consistent with applicable law all such risks shall be assumed by buyer.

Limitation of Remedies

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

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EPA accepted 03/22/18

NOTES



Transform[®] CA

with Isoclast[®] active

INSECTICIDE

For control or suppression of aphids, plant bugs, stink bugs, whiteflies and certain psyllids, scales, and thrips on: canola (rapeseed) (subgroup 20A), potatoes (crop groups 1C and 1D), succulent, edible potted, and dry beans, triticale, and wheat.

SULFOXAFLO [®]	GROUP	4C	INSECTICIDE
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Active ingredient:	50%
sulfoxaflo [®]	50%
Other ingredients	50%
Total	100%

Contains 50% active ingredient on a weight basis.

Keep Out of Reach
of Children

DANGER
PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

First Aid

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center.

First Aid (Cont.)

or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to inside of label booklet for additional precautionary information including Directions for Use.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-727 EPA Est. 67545-AZ-001
97050286 2004

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Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

NET WEIGHT 8 LB



Attachment 4 – DPR’s Response to Comments Regarding Sequoia CA and Transform CA, Section 3 Registrations

Written Evaluation

On December 6, 2019, the Department of Pesticide Regulation (DPR) proposed to register the following two pesticide products containing the new active ingredient sulfoxaflor: Sequoia CA (EPA Reg. No. 62719-623) and Transform CA (EPA Reg. No. 62419-727) (Notice of Proposed and Final Decisions, Vol. 2019-49). Each proposed decision to register was accompanied with a public report outlining the proposed action, a statement of any significant adverse environmental effect that can reasonably be expected to occur from the registration, and the conclusions of DPR’s scientific evaluation. DPR received nine (9) unique comments in support of the proposed decisions, nine (9) unique comments opposing the proposed decisions, and approximately 4,390 identical comments received by e-mail opposing the proposed decisions.

Pursuant to Title 3, California Code of Regulations section 6254, this notice includes a written evaluation of significant adverse environmental points raised in comments submitted during the review and comment period required by Title 3, California Code of Regulations section 6253. DPR also provides responses to each unique commenter raising a significant adverse environmental point. Below, DPR provides written responses to all substantive comments, including the concern for honey bees and other pollinators addressed in the form letters.

Summary of Comments Raising a Significant Adverse Environmental Point

	Commenter	Comment	DPR Response
1.	Gregory C. Loarie, Staff Attorney Earthjustice on behalf of Pollinator Stewardship Council American Beekeeping Federation	*Sulfoxaflor mode of action is similar to neonicotinoids and therefore should be evaluated the same.	Responses #1-4, 8, 11-13
		*Sulfoxaflor presents a significant risk to honey bees and other insect pollinators	Response #2
		*Sulfoxaflor presents a significant risk to beneficial insects and other important agricultural organisms	Response #3
		*Sulfoxaflor presents a significant risk to water quality and aquatic ecosystems	Response #4
		*DPR’s proposed decision failed to adequately discuss alternatives	Response #5
		DPR’s analysis of the environmental baseline does not satisfy CEQA	Response #6
		DPR’s analysis of direct and indirect impacts does not satisfy CEQA. DPR’s public reports fail to disclose the actual scientific basis for its conclusion of no significant impacts.	Responses #2-4, 7, 9-13
		DPR’s discussion of cumulative impacts does not satisfy CEQA	Responses #1-4, 8, 11-13

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2.	Dr. Susan Kegley, Principal & CEO Pesticide Research Institute	*Sulfoxaflor mode of action sufficiently similar to neonicotinoids to require cumulative impact assessment.	Responses #1-4, 8, 11-13
		*USEPA's risk assessment and peer review information are not sufficient to support registration. Both suggest that adverse effects on pollinators and aquatic insects are highly probably and likely cumulative with similar effects caused by neonicotinoids.	Responses #2, 4, 8
		*The proposed registration of sulfoxaflor threatens commercial beekeeping operations, native pollinators, and growers depending on pollinators.	Response #2
		*Data gaps exist for sublethal effects of sulfoxaflor on beneficial insects	Response #3
		*DPR's proposed decision failed to adequately explore alternatives	Response #5
		*DPR's proposed decision does not provide sufficient information on the data DPR evaluated to reach the decision to approve the registration.	Responses #2-4, 7
		DPR failed to assess beneficial insect exposure through surface water and guttation water.	Responses #1, 4, 9
3.	Susan Bartow Pasadena, CA	*Concern about negative impact on pollinators	Response #2
		*Concern about negative impact on parasitic wasps and ladybugs	Response #3
		Concern for small mammals	Response #12
		Concern that sulfoxaflor has "suggested evidence for carcinogenic potential"	Response #11
		*Concern that sulfoxaflor will end up and build up in California waterways	Response #4
4.	Sally Bartow Los Angeles, CA	*Concern for negative impact on insect pollinators necessary to food supply	Response #2
		*Concern for impacts on safe drinking water	Responses #4, 11
5.	Kathryn Wild San Diego, CA	*Concern for negative impacts on bees	Response #2
6.	Eric Dynamic Berkeley, CA	*Relates sulfoxaflor to neonicotinoids	Response #1
		*Concern for negative impact on bees	Response #2
7.	Mary Schmidt San Francisco, CA	*Concern for negative impacts on bees and other pollinators	Response #2
		*Relates impacts of sulfoxaflor to neonicotinoids.	Response #1

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8.	Chuck Leavell Anaheim, CA	*Concern for negative impact on pollinators	Response #2
		*Concern for negative impacts on human health, including children and in utero	Response #11
		*Concern for negative impacts on water supply and groundwater	Response #4
		Concern for negative impacts on air one is breathing	Response #13
9.	Leslie Colyer San Rafael, CA	*Relates impacts of sulfoxaflor to neonicotinoids.	Response #1
		*Concern for negative impacts on pollinators	Response #2

*Delineates that comment received from more than one commenter.

A copy of the full comment letters can be viewed below. A copy of DPR's individual responses can be obtained through submission of a public records act request by emailing Amy.Duran@cdpr.ca.gov or calling 916-445-2047.

COMMENT #1:

The commenters express concern that sulfoxaflor's mode of action is sufficiently similar to neonicotinoids and therefore should be evaluated the same.

RESPONSE #1:

DPR uses chemical specific data to evaluate pesticides considered for registration. Thus, DPR's scientific evaluations focused on data specific to the active ingredient sulfoxaflor.

Sulfoxaflor is not a neonicotinoid; rather, it is part of a distinct class of insecticides called sulfoximines. The Insecticide Resistance Action Committee (IRAC) is an international authority that has classified sulfoxaflor as a "sulfoximine" and has placed it as a subgroup to the IRAC Group 4: "nicotinic acetylcholine receptor agonists." Group 4 is divided into five subgroups: Group 4A: neonicotinoids; Group 4B: nicotine; Group 4C: sulfoximines; Group 4D: Butenolides; and Group 4E: Mesoinoics. The chemicals in these subgroups target the nicotinic acetylcholine receptor in insects, but the subgroups have different modes of action. One of the most important differences between sulfoxaflor and neonicotinoids, when considering environmental impact, is their relative persistence in the terrestrial environment. When applied to a terrestrial environment, sulfoxaflor is expected to degrade rapidly (aerobic soil metabolism half-life = 0.13-0.86 days; CA field dissipation half-life = 1.6-6 days), whereas neonicotinoids are expected to persist for much longer (aerobic soil metabolism and terrestrial field dissipation half-lives for neonicotinoids can range anywhere from approximately 100-1300 days). U.S. EPA's decision document also notes that sulfoxaflor is an effective tool for growers and has a lower environmental impact because it disappears from the environment faster than widely-used alternatives like neonicotinoids. (USEPA, Decision Memorandum Supporting the Registration Decision for New Uses of the Active Ingredient Sulfoxaflor, July 12, 2019, p.11.)

COMMENT #2:

The commenters expressed concern that approving the sulfoxaflor product labels will have significant adverse effects on honey bees and other insect pollinators.

RESPONSE #2:

DPR evaluated the proposed product labels and associated data for sulfoxaflor for potential impacts to pollinators. During its evaluation, DPR scientists found that the original proposed labels for Sequoia CA and Transform CA did not adequately mitigate exposure because they included Directions for Use that allowed applications during bloom to the bee attractive crop group, Root and Tuber Vegetables. DPR informed the registrant of its concerns and as a result, Dow AgroSciences voluntarily agreed to remove the entire Root and Tuber Vegetables crop group from the Sequoia CA label, and specifically prohibit applications during bloom for that crop group on the Transform CA label, and submit the revised label to U.S. EPA and DPR for consideration. The proposed labels now prohibit all applications during bloom (when pollinators would be in contact with plant pollen and nectar that could potentially contain pesticide residue), thereby eliminating exposure to pollinators.

The proposed label for Transform CA is specifically for control or suppression of aphids, plant bugs, leafhoppers, whiteflies, stink bugs, potato psyllid, and thrips on crops such as barley; triticale; wheat; canola (rapeseed) (subgroup 20A); potatoes (crop group 1C, 1D, and root and tuber vegetables); and succulent, edible podded, and dry beans. DPR found that the Transform CA label mitigates pollinator exposure by including only use sites that either: (1) do not require bee pollination and are not attractive to pollinators according to the United States Department of Agriculture's 2017 Attractiveness of Agricultural Crops to Pollinating Bees for the Collection of Nectar and/or Pollen report (i.e., barley, triticale, and wheat), or; (2) are limited to applications made after petal fall (i.e., not during bloom). Specifically, no applications can be made to the canola subgroup; potatoes crop groups (including root and tuber vegetables); and succulent, edible podded, and dry beans until after petal fall. Crops harvested before the bloom period or after petal fall should not have flowers to attract pollinators. There is substantial evidence to conclude that when used according to its label, pollinators would not be exposed to Transform CA. As a result, the proposed decision to register Transform CA is not reasonably expected to result in significant adverse impacts to pollinators.

The proposed label for Sequoia CA is specifically for control or suppression of insects such as aphids, plant bugs, leafhoppers, whiteflies, pear psylla, San Jose scale, thrips, and mealybugs on Brassica (cole) leafy vegetables (crop group 5), fruiting vegetables (crop group 8) and okra, leafy vegetables (except Brassica) (crop group 4) and watercress, pome fruits (crop group 11), small fruit vine climbing (except fuzzy kiwifruit) (subgroup 13-07F), low growing berry (except strawberry) (subgroup 13-07G), stone fruits (crop group 12), tree nuts (crop group 14), and pistachio. DPR found that the Sequoia CA label mitigates potential pollinator exposure by including only use sites that are either: (1) harvested prior to bloom, or; (2) limited to applications made after petal fall (i.e., not during bloom). Specifically, no applications can be made to fruiting vegetables, okra, pome fruits, small fruit vine climbing, low growing berry, stone fruits, pistachio, and tree nuts until after petal fall. In addition, for applications to Brassica leafy vegetables, leafy vegetables, and watercress, which are harvested prior to bloom, the label prohibits application to crops grown for seed. Although crops grown for seed do not necessarily

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pose a risk to pollinators, they do create a potential exposure pathway because they are allowed to go through a blooming period, which could attract and expose pollinators. In contrast, crops harvested before the bloom period or after petal fall should not have flowers to attract pollinators. There is substantial evidence to conclude that when used according to its label, pollinators would not be exposed to Sequoia CA. As a result, the proposed decision to register Sequoia CA is not reasonably expected to result in significant adverse impacts to pollinators.

The commenter cites studies to support the assertion that acute and chronic exposure to sulfoxaflor present a significant risk to bees. As a threshold issue and as explained in the proposed decisions to register, substantial evidence supports DPR's conclusion that the products are not reasonably expected to result in exposures to pollinators. Therefore, the submitted studies discussing exposure from treated fields are of limited scientific relevance for these proposed decisions and do not support the commenter's assertion that the proposed decisions to register will present significant risk to bees. However, DPR would evaluate pollinator exposure studies in connection with any future application to register a sulfoxaflor product that contains use sites or use patterns that may result in pollinator exposure.

As described above and below, the labels for Transform CA and Sequoia CA contain multiple provisions to mitigate potential acute exposure and any resulting adverse impacts to pollinators. Although both product labels state that they are highly toxic to bees exposed through contact during spraying and while spray droplets are still wet, and may be toxic to bees exposed to treated foliage for up to 3 hours following application, the labels mitigate potential pollinator exposure by only including use sites that either do not require bee pollination and are not attractive to pollinators according to the USDA's 2017 Attractiveness of Agricultural Crops to Pollinating Bees for the Collection of Nectar and/or Pollen report, harvested before bloom, or are limited to applications made after petal fall (i.e., not during bloom).

In addition, the labels also include provisions to mitigate potential pollinator exposure from off-site movement. Specifically, the Spray Drift Management section of the label prohibits application when wind speed exceed 10 mph and requires the use of medium or coast spray nozzles. The labels also state, "Do not apply this product or allow drift to blooming crops or weeds while bees or other pollinators are actively foraging this treatment area." In addition, to minimize incidental contact with managed bees and native pollinators, the labels advise applications to occur before 7 a.m. or after 7 p.m., or anytime when the temperature is below 50° F, since pollinators are not prone to foraging at night or at colder temperatures. To protect native pollinators, each crop group also contains the following use restriction "If blooming vegetation is present 12 feet out from the downwind edge of the field, a downwind 12-foot on-field buffer must be observed." The 12-foot spray drift buffer for blooming vegetation on the label was determined using drift modeling in U.S. EPA's ecological risk assessment. As a result of the limited use sites and label restrictions and mitigation incorporated into the labels, DPR does not expect use of these products in accordance with their label directions and any applicable use restrictions in regulation will have a significant adverse effect on pollinators or other nontarget fauna.

In addition, the proposed decisions to register noted actual sulfoxaflor use on multiple agricultural use sites in California under previously approved under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) section 24(c) special local need registrations and FIFRA

section 18 emergency exemptions. To date, there have been no adverse effects reported associated with the use of either the section 18 emergency exemption or section 24(c) special local need registration in California.

Based on its scientific evaluation, limited use sites on the label, prohibitions of applying during bloom, and additional label mitigation, there is substantial evidence to support DPR's conclusion that the proposed decisions to register are not reasonably expected to result in significant adverse impacts on bees or other pollinators. DPR will consider pollinator exposure studies in connection with any potential future registration decision involving sulfoxaflor products that contain use sites or use patterns that may result in pollinator exposure.

COMMENT #3:

The commenter expressed concern regarding potential adverse impacts to beneficial organisms, such as earthworms, parasitic wasps, and ladybird beetles.

RESPONSE #3:

In order to obtain registration of a new pesticide with U.S. EPA, a registrant must submit a number of required ecotoxicology studies for indicator species for evaluation. DPR follows U.S. EPA's Office of Chemical Safety and Pollution Prevention (OCSPP) guidelines for evaluating pesticide studies for the purpose of making regulatory decisions. The OCSPP's guidelines are issued for use in testing pesticides to develop data for submission to U.S. EPA under FIFRA. Studies conducted according to these test guidelines may be used to satisfy FIFRA data requirements. (See https://www.epa.gov/sites/production/files/2019-10/documents/ocspp-testguidelines_masterlist-2019-09-24.pdf.) DPR regulations require the registrant to also submit those studies to DPR during the initial registration process. (Cal. Code of Regs., tit. 3, § 6170.) The test indicator species selected for the ecotoxicology evaluation are intended to broadly represent a range of nontarget birds, mammals, pollinators, fish, aquatic invertebrates, and plants. These indicator species provide an information base for assessing potential risks to nontarget fauna, as it is impossible to test every possible species with each new pesticide (such as the specific beneficial organisms identified by the commenters). Neither U.S. EPA nor DPR require an evaluation of the specific beneficial organisms identified by the commenters—earthworms, parasitic wasps, or ladybird beetles.

Notwithstanding the above, DPR's Ecotoxicology Evaluation Station reviewed the two earthworm studies on file with DPR¹ (DPR Study IDs 269822 and 269823), as well as the earthworm literature study (Fang et al, 2018) cited by a public comment, to determine if the proposed uses of sulfoxaflor pose unmitigated risk to earthworms. All three studies were conducted according to standard methodologies for testing toxicity to earthworms and were determined to be scientifically valid. Two of the three studies were conducted with the active ingredient, sulfoxaflor. The toxicity endpoints determined from these two studies are acute Lethal Concentration 50 values (LC₅₀) of 0.54 and 0.885 mg ai/kg sediment, and a No Observed Effect Concentration (NOEC) of 0.313 mg ai/kg sediment. One of the three studies was conducted with a metabolite of sulfoxaflor and established an LC₅₀ of greater than 1000 mg ai/kg sediment. DPR calculated the expected environmental concentration in soil immediately

¹ These studies were not required as part of registration with U.S. EPA or DPR. Sometimes registrants include non-required studies in the general registration package, which were required by another international agency.

following a single sulfoxaflor application at maximum rate assuming that all of the applied active ingredient is evenly distributed in the top 5 cm of soil in typical dry soil bulk density (1.5 g/cm³). The use of maximum application rate and presuming that all of the application bypasses the plant and goes directly to the soil are both conservative assumptions and generate a worst-case estimate of soil concentration. DPR's calculated concentration in soil was lower than all of the toxicity endpoints determined in the earthworm toxicity studies mentioned above. This comparison indicates that DPR lacks substantial evidence to show that the proposed uses of sulfoxaflor pose significant risks to earthworms.

Sulfoxaflor is an insecticide and therefore toxic to insects, including parasitic wasps and possibly ladybird beetles. There are currently no specific federal guidelines describing methods for testing conventional pesticides on ladybird beetles or parasitic wasps, so it is unclear how the exposure methods in the studies submitted by the commenter (He et al. 2019; Nawaz et al. 2018; Jiang et al. 2019) compare to field realistic conditions and applications. DPR reviewed the studies submitted by the commenter to further evaluate potential environmental risks to parasitic wasps and ladybird beetles. The commenter submitted He et al. 2019 for the assertion that sulfoxaflor may significantly impair ladybird beetle population parameters and reduce its potential biological control activity. A review of this study revealed that it tested both the acute and life cycle toxicity of technical grade sulfoxaflor sprayed directly on larval ladybird beetles. The study may not realistically capture contact exposure of larval ladybird beetles in the field, as applications under the proposed label use a diluted concentration of sulfoxaflor. The study also does not provide the raw data for each replicate, which prevents an independent analysis of the results.² DPR typically conducts an independent analysis of the raw data to ensure that the calculated results are consistent across studies. As this study was performed on the larval stage of ladybird beetles, it is further unclear if similar effects would be observed in adult lady bird beetles that are exposed to a direct spray, or if these effects would translate to population-level effects. The commenter also submitted Nawaz et al. 2018 for the assertion that sublethal exposure to sulfoxaflor damages the ladybug genome. A review of the Nawaz et al. 2018 study revealed that it tested gene expression in larval ladybird beetles exposed to a 1 µL drop of technical grade sulfoxaflor at a concentration of 0.02129 µg ai/larvae, rather than direct damage to the genome. The authors do not mention damage anywhere in the study. Although it is possible for genome damage to affect the expression of genes, the authors do not investigate the causes. Changes in gene expression may result from a variety of factors, and DPR's review of the studies required for genotoxicity by U.S. EPA were negative for genotoxicity. The endpoint defined in the study (changes in gene expression) cannot be used to determine risk because it is unclear how the change affects biological parameters. Although the study describes the up- and down- regulation of various genes in the larval ladybird beetle genome and gene expression, it is unclear if or how these changes ultimately affect biological parameters, such as reproduction and survival. Additionally, it is difficult to extrapolate the effects on the genomic level of an individual to an overall population effect in the field. Finally, the commenter submitted Jiang et al. 2019 which documented effects of technical grade sulfoxaflor on three species of parasitic

² Raw data is important for running an independent analysis of the data (e.g., running statistics or identifying performance of independent replicates). In the cited articles, results were reported as means for the entire treatment group. This prevents DPR from determining if the means for the treatment group accurately reflect what occurred in all replicates, or if the mean was skewed from one replicate performing very differently than the rest of the replicates in that treatment group.

wasps. DPR reviewed the study and found that it lacked the level of reporting typically seen in studies DPR evaluates for pesticide registration (*see* federal guidelines OCSPP 850.3000 and OCSPP 850.2000 (general terrestrial guidelines)). Further, the article did not provide raw data or data for individual replicates in order to conduct an independent analysis of the results. It is unclear how the methods of exposure evaluated in this lab-based study (i.e. adult wasps confined to glass tubes and host eggs submerged in solution) relate to exposure in the field. In the field, adult wasps would be able to move freely in and out of the treatment area and host eggs are unlikely to be fully immersed in spray solution.

Overall, the three cited articles lack detail in reporting that do not allow independent analysis of the results. Further, it is difficult or impossible to compare the level of exposure tested to the level of exposure that may result in the field from applications of the proposed sulfoxaflor products. As an insecticide, sulfoxaflor is likely toxic to parasitic wasps and may be toxic to ladybird beetles; however, the mitigation incorporated into the product labels are intended to minimize off-target movement of the pesticide and thus provide additional protection to pollinators and other nontarget insects, including parasitic wasps and ladybird beetles. Examples of label mitigation that minimizes off-target movement of the pesticide include: “Do not apply this product or allow it to drift to blooming crops or weeds while bees or other pollinating insects are actively foraging the treatment area.” and “If blooming vegetation is present 12 feet out from the downwind edge of the field, a downwind 12-foot-on-field buffer must be observed.” See also, Response #2, above. Further, both the Transform CA and Sequoia CA labels recommend the product for use in Integrated Pest Management Programs (IPM) in labeled crops, and encourage use only “when field scouting indicates target pest densities have reached the economic threshold.” Based on DPR’s scientific evaluation and mitigation incorporated into the product labels, substantial evidence continues to support the conclusion that the proposed decisions to register will not have significant adverse impacts on nontarget, beneficial organisms.

COMMENT #4:

The commenters expressed concern that approving the sulfoxaflor product labels will have a negative effects on a range of non-target invertebrates in terrestrial and aquatic habitats and significant adverse environmental impact on aquatic ecosystems and water quality.

RESPONSE #4:

The commenter cited the Worldwide Assessment on Systemic Insecticides, Pisa et al 2015 for the assertion that neonicotinoids have negative effects on a range of non-target invertebrates in terrestrial and aquatic habitats. First, as stated in Response Number 1, above, DPR’s evaluation focused on chemical specific data for sulfoxaflor, not neonicotinoids. Further, DPR’s scientific evaluation determined that when applied to a terrestrial environment, sulfoxaflor is expected to degrade more rapidly and is less persistent than neonicotinoids. *See also*, Response Number 3 (non-target beneficial invertebrates). Moreover, DPR’s evaluation determined that on an acute basis, sulfoxaflor is practically non-toxic to slightly toxic to aquatic invertebrates (water flea) and oysters.

The commenter also referenced three studies for the assertion that aquatic systems are threatened by the high toxicity and persistence of neonicotinoid insecticides (Yamauro et al. 2019), and that the presence of neonicotinoids in surface water and ground water throughout the United States is well-documented (Hladik et al. 2015; Klarich et al. 2017). Again, the cited studies focus on

neonicotinoids, which are distinct from sulfoxaflor and have greater persistence. (*See* Response Number 1, above.). All the same, DPR's scientific evaluations focus on chemical specific data and seek to prevent adverse environmental impacts on aquatic ecosystems and water quality from use of sulfoxaflor by reviewing sulfoxaflor specific data.

DPR's scientific review evaluated the products for potential environmental impacts, including aquatic ecosystems, in surface water and groundwater. DPR does not expect use of the proposed products in accordance with their label directions and any applicable use restrictions in regulation will have a significant adverse effect on surface water or groundwater. DPR scientists reviewed phytotoxicity, terrestrial field dissipation (TFD), and ecotoxicology data submitted to support the registration of these products. The phytotoxicity data indicated that use of the products was unlikely to result in damage to the listed crops or to aquatic and terrestrial non-target plants. DPR also evaluated the groundwater contamination potential of sulfoxaflor and its metabolites through a review of submitted TFD studies and numerical modeling. Sulfoxaflor was found to have low persistence in the TFD studies and subsequent modeling also predicted no significant potential for sulfoxaflor or its metabolites to contaminate groundwater when applied in accordance with the label directions. There is substantial evidence to support DPR's conclusion that the proposed decisions to register are not reasonably expected to result in significant adverse impacts on groundwater.

DPR also evaluated ecotoxicology data to determine the potential for surface water contamination by sulfoxaflor and its metabolites. DPR scientists acknowledged that the physical-chemical properties of sulfoxaflor indicate the potential for off-site movement of the products into surface water. Although DPR scientists determined that the products are toxic to aquatic invertebrates, DPR determined that the mitigation on the product labels, including use instructions, environmental hazards statements, and spray drift management section, mitigate risk to aquatic organisms. Specifically, the product labels prohibit applications made directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. In addition, to avoid off-site movement, only applications with medium or coarser spray nozzles—which output spray droplets less prone to drift—are allowed. The labels also prohibit applications when wind speed exceeds 10 mph. DPR scientists also found that due to sulfoxaflor's rapid soil degradation, moderately low toxicity to organisms such as fish and various aquatic invertebrates, and low potential to bioaccumulate, it is unlikely that sulfoxaflor will reach concentrations in surface waters that will result in adverse effects to various aquatic organisms. As a result, there is substantial evidence to support DPR's conclusion that the proposed decisions to register are not reasonably expected to result in significant adverse impacts to aquatic organisms or surface water. However, DPR will add sulfoxaflor to its surface water monitoring program as part of continuous evaluation and take further action if additional mitigation is determined to be necessary.

COMMENT #5:

The commenters expressed concern that DPR failed to adequately evaluate alternatives to the proposed registration actions identified above.

RESPONSE #5:

Under section 6254 of Title 3 of the California Code of Regulations, DPR's certified regulatory program requires each notice of proposed decision to register a pesticide product contain a statement of reasonable alternatives to the proposed action to reduce any significant adverse environmental impact that could reasonably be expected to occur. First, DPR's scientific review determined that the projects of registering the pesticide product labels would not have any reasonably expected significant adverse impact on human health or the environment. Next, both of DPR's proposed decisions to register considered four project alternatives: (1) accept the proposed pesticide product containing a new active ingredient; (2) require revision of the proposed pesticide product label; (3) adopt a regulation; and (4) no action (deny the proposed pesticide product containing the new active ingredient sulfoxaflor). During its evaluation of the projects, DPR identified potential environmental concerns associated with certain use sites that were not adequately mitigated by the original pesticide product labels submitted for review. Specifically, DPR scientists found that the original proposed labels for Sequoia CA and Transform CA did not adequately mitigate exposure to honey bees because they included Directions for Use that allowed applications during bloom to the bee attractive crop group, Root and Tuber Vegetables. As a result, Dow AgroSciences voluntarily agreed to revise the label to remove the entire crop group from the Sequoia CA label and prohibit applications during bloom for the crop group on the Transform CA label. Although federal preemption prohibits DPR from requiring the registrant to revise the proposed labels, the registrant chose to voluntarily amend the labels to address the identified concerns and submit the updated labels to U.S. EPA and DPR for consideration. Based on its scientific review, DPR determined that accepting the newly submitted proposed pesticide product labels would not have any reasonably expected significant adverse impacts on human health or the environment. As a result, DPR selected Alternative #1 [accept the proposed pesticide product containing a new active ingredient] as the preferred alternative.

COMMENT #6:

The commenter expressed concern that DPR failed to adequately analyze the environmental baseline in the proposed registration actions identified above.

RESPONSE #6:

See Response Number 1, above. In addition, DPR's proposed registration decisions established the environmental baseline by outlining the approximate total number of pesticide products and active ingredients registered in California. The proposed decisions provided relevant information for the past three years of actual sulfoxaflor use in California reported as being applied on certain agricultural use sites under FIFRA section 24(c) special local need registrations and FIFRA section 18 emergency exemptions, as the appropriate baseline.

COMMENT #7:

The commenters expressed concern that DPR failed to adequately discuss potential direct and indirect environmental impacts, including impacts to pollinators, and provide scientific data it evaluated for the proposed registration actions identified above.

RESPONSE #7:

See Response Numbers #2-4, 9-13. Before a pesticide product containing a new active ingredient is registered in California, DPR performs a comprehensive review of data submitted on the active ingredient and pesticide product and reviews the proposed product label to determine how the product may affect human health or the environment. DPR scientists reviewed the proposed projects of registering Sequoia CA and Transform CA, relevant data submitted, and the product labels to evaluate whether the projects had the potential to cause a significant adverse impact on human health, flora, fauna, water, and air, and described its conclusions regarding potential direct or indirect environmental impacts in its proposed decisions to register.

The commenter expressed concern that DPR failed to disclose the specific scientific basis behind the proposed decisions to register products containing sulfoxaflor. Although DPR's proposed decisions summarized the scientific basis for its conclusions, it did not include hard copies of all 152 pages of DPR's scientific evaluation reports and 912 studies listed on file with DPR regarding sulfoxaflor. However, each proposed decision contains a statement that any person can request documents related to the notice, including the full scientific evaluation report. On December 17, 2019, Earthjustice did just this, requesting "all documents underlying and relating to DPR's December 6, 2019 proposed decision to register sulfoxaflor. Such records should include, but not be limited to, all data and evaluations possessed by DPR regarding sulfoxaflor, as well as any internal or external correspondence relating to DPR's proposed registration decision." Within 5 business days, DPR provided Earthjustice with 152 pages of DPR's scientific evaluation reports and 62 pages listing the 912 studies on file with DPR, on sulfoxaflor. DPR's evaluation reports and proposed decisions discussed and summarized relevant studies and data, identified potential impacts and mitigation, and concluded that DPR does not expect use of Sequoia CA or Transform CA in accordance with its label directions or any mitigation contained in existing regulations will have a significant adverse effect on human health or the environment.

COMMENT #8:

The commenter expressed concern that DPR failed to discuss cumulative impacts from the proposed registration actions identified above.

RESPONSE #8:

The commenter expressed concern that sulfoxaflor, like neonicotinoids, presents a significant cumulative risk to honey bees and other insect pollinators. Again, sulfoxaflor is distinct from neonicotinoids. (*See Response to Comment #1, above.*) DPR's proposed decisions to register note that DPR's registration of a particular pesticide product is only a general license to sell the product in California and does not identify anticipated future use of the products once registered. In addition, DPR is not aware of a valid methodology to scientifically evaluate potential cumulative interactions between sulfoxaflor and other active ingredients as part of a regulatory decision. Therefore, it is not reasonably foreseeable to predict or analyze cumulative impacts from this proposed registration decision. Finally, although the commenter cites to the Worldwide

Assessment on Systemic Insecticides (Pisa et al. 2015) for support that DPR failed to consider cumulative impacts of its proposed decision to register sulfoxaflor products, that report itself concedes significant knowledge gaps on the interactions between systemic insecticides and other stressors such as disease and food stress; that “quantifying the suite of co-occurring pesticides is largely an intractable problem”; and that “[g]iven these knowledge gaps, it is impossible to properly evaluate the full extent of risks...”

Notwithstanding the above, these proposed decisions to register have limited use sites, additional label mitigation, and prohibit applications during bloom (when pollinators would be in contact with plant pollen and nectar that could potentially contain pesticide residue) and are therefore not reasonably expected to result in exposures to pollinators. As a result, the proposed decisions to register are not reasonably expected to result in significant adverse effects to pollinators at either an individual project level or cumulative level in combination with other pesticides. (See Comment Number 2, above.) Here, DPR’s scientific evaluation of the proposed decisions to register Transform CA and Sequoia has not identified direct or indirect significant adverse impacts on human health or the environment, including significant adverse impacts on pollinators, from use of these pesticide products in a manner consistent with their labels. (*See also*, Response to Comments #2-4, 11-13)

DPR’s certified regulatory program incorporates the consideration of cumulative impacts by requiring DPR to continuously evaluate pesticides registered for use in California and take necessary action if a potential concern is identified. (FAC § 12824.) DPR accomplishes its mandate to continuously evaluate pesticides by conducting a number of activities including, but not limited to: ongoing DPR registration reviews that involve conducting human health risk assessments on individual active ingredients to comply with its statutory obligations to protect human health (FAC §§ 14021-14025; FAC § 13129); investigating reports of adverse environmental or human health effects from pesticide use submitted by the applicant/registrant as required (3 CCR § 6210) or received from the public; investigating reports of pesticide illness; sampling for pesticide residue on produce; monitoring the environment (air/water); and evaluating information submitted by other entities, including state and federal agencies, or contained in studies conducted by public or private research entities according to established scientific standards. In addition, pesticide use reporting aids DPR in evaluating cumulative impacts from specific pesticide use. DPR must also investigate all reported episodes and information received that indicate a pesticide may have caused or is likely to cause a significant adverse impact. If the Director finds from the investigation that a significant adverse effect has occurred or is likely to occur, DPR must reevaluate the pesticide involved. (3 CCR §§ 6220-6226). As a result of DPR’s continuous evaluation and investigation into ongoing pesticide use and identified potential impacts, DPR has placed numerous products and classes of pesticides into reevaluation where it may evaluate cumulative effects and determine appropriate mitigation measures. (*See* <https://www.cdpr.ca.gov/docs/registration/reevaluation/reevals.htm>.) In the event DPR determines additional mitigation is necessary, DPR will develop those additional required mitigation measures and may initiate further evaluation of the pesticide product or active ingredient to address the identified or potential concern.

COMMENT #9:

The commenter expressed concern for pollinator exposure through surface water and guttation water from treated areas.

RESPONSE #9:

The commenter asserts that exposure to pollinators through drinking water and guttation water was not assessed by U.S. EPA or DPR, but has the potential to be a major exposure pathway for pollinators and other beneficial insects. The commenter noted that neonicotinoids were reported to be found in 63% of 48 streams sampled waters across the United States, but acknowledged that there have been no comparable studies for sulfoxaflor. The studies cited by the commenter involve reports of neonicotinoids, not sulfoxaflor, in U.S. streams. As stated above, sulfoxaflor is not a neonicotinoid and DPR evaluates chemical specific data. (*See Response Number 1.*) As explained in its proposed decisions to register, DPR scientifically evaluated the surface water contamination potential of sulfoxaflor and its metabolites. (*See Response #4, above.*) Substantial evidence supports a conclusion that the use of the proposed products—in accordance with their label directions and any restrictions in regulations—will not have an adverse impact on surface. Nonetheless, DPR will add sulfoxaflor to its surface water monitoring program as part of continuous evaluation as an additional mitigation measure. In the event DPR determines additional mitigation is necessary, DPR will develop additional required mitigation measures and may initiate further evaluation of the pesticide product or active ingredient to address the identified or potential concern.

COMMENT #10:

The commenter expressed concern that approving the sulfoxaflor product labels will have significant adverse effect on drinking water.

RESPONSE #10:

See Response #4, above.

COMMENT #11:

The commenter expressed concern that approving the sulfoxaflor product labels will have significant adverse effect on human health.

RESPONSE #11:

DPR reviewed human health toxicology data and determined that the data was adequate for a complete acute toxicological evaluation. The labels prohibit applications that will contact workers or other person either directly or through drift. The labels also prohibit residential use. DPR's proposed decisions to register also referenced US EPA's July 2019 Decision Memorandum Supporting the Registration Decision for New Uses of the Active Ingredient Sulfoxaflor, which did not identify any risks of concern to human health for all population subgroups, including children, and occupational handlers. Based on the available data to support the registration of the proposed products, substantial evidence supports DPR's conclusion that the proposed decisions to register are not reasonably expected to have a significant adverse effect to human health when this product is used according to the label and any applicable use restrictions in regulation.

COMMENT #12:

The commenter expressed concern that approving the sulfoxaflor product labels will have a significant adverse impact on small mammals.

RESPONSE #12:

Based on data reviewed, DPR determined that the expected environmental concentrations for the proposed product are all less than one-half of the toxicity value for small mammals when modeled by DPR using US EPA's Terrestrial Residue Exposure model, Version 1.5.2. DPR's modeling indicates that the intended use of the proposed products are not reasonably expected to pose significant adverse impacts to small mammals. DPR also determined that the data on the metabolites of sulfoxaflor indicate the metabolites are generally less toxic than the parent compound. Substantial evidence supports DPR's conclusion that the use of these products in accordance with their label directions are not reasonably expected to have a significant adverse effect on small mammals.

COMMENT #13:

The commenter expressed concern that approving the sulfoxaflor product labels will have a significant adverse effect on air quality.

RESPONSE #13:

DPR evaluated sulfoxaflor's vapor pressure, water solubility, and Henry's Law Constant and determined that based on its physicochemical properties, sulfoxaflor is highly water soluble and has low volatility. In addition, sulfoxaflor is not federally listed as a hazardous air pollutant and DPR has not designated sulfoxaflor as a toxic air contaminant or regulated it as a potential source of volatile organic compound that may adversely impact the attainment of health-based air quality standards. Despite its low volatility, the proposed product labels provide additional mitigation to minimize potential drift by prohibiting applications when wind speeds exceed 10 mph. Additional prohibitions and instructions to avoid spray drift are also contained in the spray drift management section on the proposed labels. Further, as discussed in Response to Comment #11, above, there were no identified risks of concern to human health for all population subgroups, including children. Based on the available data and scientific evaluations of the projects to support the registration of the proposed products, DPR does not expect a significant adverse effect to human health or air quality when this product is used according to the label and any applicable use restrictions in regulation.

COMMENT PERIOD ENDS AUGUST 23, 2020

NOTICE OF FINAL DECISIONS TO DENY PESTICIDE PRODUCTS

Pursuant to Title 3, California Code of Regulations section 6255, the Director of the Department of Pesticide Regulation (DPR) files this Notice of Final Decisions to Deny Pesticide Products with the Secretary of the Resources Agency for posting. Unless specified, the reason for denial is that the required data was not submitted, was determined to be inadequate, or there was a likelihood of a significant adverse environmental effect anticipated from the use of these products in a manner consistent with its label. This action will not have a significant adverse impact on the environment. This notice must remain posted for a period of 30 days for public inspection. For information about submitting a request for any documents related to this notice, please visit https://www.cdpr.ca.gov/public_r.htm.

Tracking Number – (EPA Registration Number)

Applicant

Brand Name

285121* - (NO NUMBER ASSIGNED)

BASF CORPORATION

VEDIRA COCKROACH GEL BAIT

USE: INSECTICIDE - FOR THE CONTROL OF GERMAN COCKROACHES IN SITES
SUCH AS HOSPITALS, HOTELS, HOUSES, KENNELS, LABORATORIES, AND MOTELS

TYPE: SECTION 3 REGISTRATION -

ACTIVE INGREDIENT(S):

BROFLANILIDE

CAS NUMBER(S): 1207727-04-5

*Application for registration of tracking #285121 withdrawn at the request of the registrant

Tulio Macedo

Tulio Macedo, Chief
Pesticide Registration Branch

07/24/2020

Dated