

ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

February 13, 2014

#### Via Electronic Mail & Federal Express

Ann M. Prichard, Chief Pesticide Registration Branch Department of Pesticide Regulation 1001 I Street Sacramento, CA 95814 <u>Aprichard@cdpr.ca.gov</u>

## Re: Comments on Notices of Proposed Decisions to Register Pesticide Products and Public Reports (Vols. 2014-3, 2014-4 & 2014-6)

Dear Ms. Prichard:

We are writing on behalf of Pesticide Action Network, Center for Food Safety and Beyond Pesticides regarding the notices of proposed registration decisions referenced above. In the first two such Notices (Vols. 2014-3 & 2014-4), the California Department of Pesticide Regulation ("DPR") proposes to amend the labels for two neonicotinoid pesticide products to expand the list of approved uses. The specific products at issue are Valent U.S.A. Corporation's "Venom Insecticide" (59639-135) and Mitsui Chemicals Agro, Inc.'s "Dinotefuran 20SG" (86203-12). In the third Notice (Vol. 2014-6), DPR proposes to register a pesticide product that contains a new active ingredient called cyantraniliprole; specifically, E.I. Du Pont de Nemours and Co., Inc.'s "Dupont Verimark Insect Control."

We are concerned that the proposed decisions referenced above will have a profound and adverse impact on California's honey bees and other insect pollinators. We are aware that DPR placed all nitroguanidine neonicotinoid pesticides – including Venom Insecticide and Dinotefuran 20SG – into reevaluation on February 27, 2009, based on evidence that these pesticides may be having a significant adverse impact on pollinators. Notwithstanding the passage of *five full years*, and contrary to DPR's own regulations requiring the agency to act expeditiously when reevaluating pesticides, neonicotinoids remain under reevaluation today. DPR has yet to take any final action, although the agency has amassed ample scientific evidence demonstrating that neonicotinoids are having a devastating impact on pollinators, and that reasonable restrictions on their use are desperately needed.

In light of the scientific information already before DPR, it is both inappropriate and illegal for DPR to continue to expand the use of neonicotinoids while simultaneously rubber stamping new active ingredients – like cyantraniliprole – that are also known to be toxic to pollinators. As set forth below, we have identified at least *15 instances* over just the last two

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years (*i.e.*, 2012-2013) in which DPR summarily approved new neonicotinoid products or significant new uses for existing neonicotinoids. In every case, DPR concluded without any meaningful review that the new product or use would not have a significant adverse impact on the environment, employing the precisely the same boilerplate "analysis" every time.

We are concerned that DPR's conclusion that the proposed expansion of the list of uses for Venom Insecticide and Dinotefuran 20SG "will have no direct or indirect significant adverse environmental impact" is utterly unsupported by – indeed, contrary to – the scientific evidence before DPR. DPR's equivalent conclusion with respect to cyantraniliprole is likewise unfounded. We urge DPR to withdraw its proposed decisions with respect to Venom Insecticide, Dinotefuran 20SG, and DePont Verimark Insect Control, and to reject any future applications to register new neonicotinoid products, applications to expand the uses for existing neonicotinoid products, or applications to register new active ingredients that pose a risk to bees, pending the expeditious completion of DPR's reevaluation process.

# I. Factual Background

# A. The Pollinator Crisis

Across America, honey bees are dying at rates that are unprecedented and unsustainable. Prior to 2006, commercial beekeepers could anticipate losing about 10 percent of their bees each year, mostly over the course of the winter. Losses of that magnitude were sustainable, in that they could be recovered by dividing hives and pooling resources. Since 2006, however, annual overwinter losses have risen dramatically. Surveys conducted by the U.S. Department of Agriculture ("USDA") show that 28 to 33 percent of total U.S. honey bee colonies died each winter from 2007 to 2011. (USDA 2012.)<sup>1</sup> Total winter losses dipped to 22 percent in 2012, but preliminary results of the 2013 survey indicate that 31 percent of colonies died last winter. (See Winter Loss Survey 2012-2013: Preliminary Results, http://beeinformed.org/ 2013/05/winter-loss-survey-2012-2013/ (last visited Feb. 4, 2014).) Compounding these unsustainable overwinter losses is a marked increase in the incidence of significant *summer* mortality – a time when bee populations should be healthy due to warm weather, long days, and food abundance. All told, according to USDA: "Since 2006 an estimated 10 million bee hives at an approximate current value of \$200 each have been lost, and the total replacement costs of \$2 billion dollars has been borne by the beekeepers alone." (USDA 2012.)

The nationwide collapse of honey bee colonies is not only a crisis for commercial beekeepers; it is also a direct and dire threat to California's food supply. Scientists estimate that one-third of the food we eat – and an even greater proportion of our overall nutrition – comes from crops that will not make fruit or seed unless they are first pollinated by a bee. (Klein 2007.) As summarized by USDA:

<sup>&</sup>lt;sup>1</sup> A CDROM containing electronic copies of all references cited herein accompanies this letter.

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It is imperative that we increase honey bee survival both to make beekeeping profitable but more importantly to meet the demands of U.S. agriculture for pollination and thus ensure [our] food security. . . . Currently, the survivorship of honey bee colonies is too low for us to be confident in our ability to meet the pollination demands of U.S. agricultural crops.

(USDA 2012 at 5.) Unless current trends are reversed, a prominent USDA researcher has warned that "[w]e are one poor weather event or high winter bee loss away from a pollination disaster." (Ibid.) (emphasis added).

The honey bee crisis is of particular concern to California, because many of California's most important crops are dependent upon bees for pollination. California's almond industry, for example, is almost entirely dependent upon managed honey bees. A recent report explains:

Probably the most remarkable example of the relation between the intensification of agriculture and the dependence on the honey bee is the US almond industry in California's Central Valley. . . . [W]ith a total of over 275,000 hectares and more than 60 million trees, the area accounts for more than half of global almond production.

While the almond industry grew impressively throughout the past decades, the number of managed bee colonies in the US more than halved. . . . The further the number of available colonies and the number of required colonies converge, the greater the risk that future colony losses will have an economic impact on the almond industry.

(Rabobank 2011 at 3.)

## B. Neonicotinoids

The term "neonicotinoids" is used to describe a class of insecticides that interfere with the nicotinic receptor in the central nervous system of insects, causing tremors, paralysis and death at extremely low doses. Neonicotinoids are systemic insecticides, meaning that they are absorbed into the treated plant and distributed via the plant's vascular system. As a result, spraying a plant – or even a just a seed – with neonicotinoids not only kills insects that come into direct contact with spray droplets, but also renders the growing plant itself – including the leaves, stem, flowers, nectar and pollen – highly toxic to insects for weeks thereafter.

The "nitrogaunidine" subclass of neonciotinoids consists of four active ingredients: imidacloprid, clothianidin, thiamethoxam, and dinotefuran. Over the last 15 years, DPR has registered at least 264 individual pesticide products containing one or more of these four active ingredients registered for use in California. Today, nitrogaunidine neonicotinoids are some of the most frequently applied pesticides in California. Ms. Ann M. Prichard February 13, 2014 Page 4 of 11

There is now abundant scientific evidence that widespread use of nitroguanidine neonicotinoids is causing or at least contributing to the precipitous decline in insect pollinators. (See generally Van der Sluijs 2013; Goulson 2013; Hopwood 2012.) DPR is well aware of the myriad peer-reviewed studies linking neonicotinoids to pollinator declines and honey bee colony collapse disorder. To highlight only a few recent abstracts:

- Alaux et al. (2010) "demonstrated that the interaction between the microsporidia *Nosema* and a neonicotinoid (imidacloprid) significantly weakened honeybees;"
- Di Prisco et al. (2013) found that "exposure to clothianidin . . . reduces immune defenses and promotes the replication of the deformed wing virus in honey bees;"
- Henry et al. (2012) concluded that "non-lethal exposure of honey bees to thiamethoxam (neonicotinoid systemic pesticide) causes high mortality due to homing failure at levels that could put a colony at risk of collapse;"
- Krupke et al. (2012) demonstrated "that bees are exposed to these compounds and several other agricultural pesticides in several ways throughout the foraging period;"
- Lu et al. (2012) found "convincing evidence that exposure to sub-lethal levels of imidacloprid . . . causes honey bees to exhibit symptoms consistent to CCD;"
- Palmer et al. (2013) demonstrated "a neuronal mechanism that may account for the cognitive impairments caused by neonicotinoids, and predict[ed] that exposure to multiple pesticides . . . will cause enhanced toxicity to pollinators;"
- Whitehorn et al. (2012) found that neonicotinoids "may be having a considerable negative impact on wild bumble bee populations across the developed world."

In sum, while scientific research is by nature never "conclusive," there is ample data indicating that neonicotinoids are having a significant adverse impact on honey bees and other insect pollinators. Indeed, the existing body of scientific research was sufficient to prompt the European Union to place a moratorium on the use of neonicotinoids. (EU 2013.)

# C. Cyantraniliprole

Cyantraniliprole is a systemic insecticide belonging to the diamide class of pesticides. Because of its systemic nature, cyantraniliprole poses many similar dangers to the widely-used neonicotinoid pesticides. Cyantraniliprole works by binding with insect ryanodine receptors, which leads to unregulated activation of ryanodine receptor. Insects exposed to cyantraniliprole first exhibit lethargy, followed by muscle paralysis, and then death.

U.S. EPA's ecological risk assessment for cyantraniliprole demonstrates that, in acute toxicity testing, cyantraniliprole is classified as highly toxic for both oral and contact exposure to honeybees. (US EPA 2013.) Risk quotient analyses showed direct risks to individual honeybees. Larval toxicity was not assessed because experiments were only performed to evaluate adult honeybees.

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# II. Legal Background

# A. Pesticide Registration

Before a pesticide may be used in California, it must undergo a "thorough and timely evaluation" by DPR. (Food & Agr. Code § 12824.) During its evaluation, DPR must "give special attention" to a number of factors including:

- "Potential for environmental damage;"
- "Toxicity to aquatic biota or wildlife;" and
- "The availability of feasible alternatives."

(Cal. Code Regs., tit. 3, § 6158.) "If any of these factors are anticipated to result in significant adverse impacts which cannot be avoided or adequately mitigated, registration will not be granted unless [DPR] makes a written finding that the anticipated benefits of registration clearly outweigh the risks." (*Ibid.*)

DPR's pesticide registration process operates as a "certified regulatory program" for purposes of the California Environmental Quality Act ("CEQA"). (Cal. Code Regs., tit. 14, § 15251, subd. (i)(1).) The regulations that govern the pesticide certified regulatory program direct DPR to prepare and make available for public comment a "public report" for any proposed registration decision. (Cal. Code Regs., tit. 3, § 6253.) The report must include "a description of the proposed action, a statement of any significant adverse environmental effect that can reasonably be expected to occur, directly or indirectly, from implementing the proposal, and a statement of any reasonable mitigation measures that are available to minimize significant adverse environmental impact." (*Ibid.*, § 6254.) The report must "also contain a statement and discussion of reasonable alternatives which would reduce any significant environmental impact." (*Ibid.*, § 6254, subd. (a).)

# **B.** Pesticide Reevaluation

California law directs DPR to "endeavor to eliminate from use in the state any pesticide that endangers the agricultural or nonagricultural environment, is not beneficial for the purposes for which it is sold, or is misrepresented." (Food & Agr. Code § 12824.) "In carrying out this responsibility, [DPR] shall develop an orderly program for the continuous evaluation of all pesticides actually registered." (*Ibid.*)

To this end, regulations promulgated by DPR direct the agency to "investigate all reported episodes and information received by the [agency] that indicate a pesticide may have caused, or is likely to cause, a significant adverse impact, or that indicate there is an alternative that may significantly reduce an adverse environmental impact." (Cal. Code Regs., tit. 3, § 6220.) "If [DPR] finds from the investigation that a significant adverse impact has occurred or is likely to occur or that such an alternative is available, the pesticide involved shall be reevaluated." (*Ibid.*) In addition, a pesticide must reevaluated "when certain factors have been

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found," including "fish or wildlife hazard" and "discovery that data upon which a registration was issued is false, misleading, or incomplete." (*Ibid.*, § 6221.)

If DPR determines that reevaluation is warranted, the agency must notify the registrant of the basis for its decision. (*Ibid.*, § 6223.) DPR must then "require submission of all data required for registration of a new pesticide by the U.S. EPA and by [DPR] which is relevant to the focus of the reevaluation and has not previously been submitted to the department. (*Ibid.*, § 6222, subd. (a).) DPR may "allow a reasonable time for the development and submission of such data, not to exceed a period of two years." (*Ibid.*) However, "[n]otwithstanding the lack of such data the director shall act expeditiously to protect against risks to human health and the environment." (*Ibid.*) At the conclusion of its reevaluation, DPR must "determine if the pesticide should be classified as a restricted material . . . and if additional restrictions on use are necessary, or if action [to suspend and/or cancel registration] should be taken." (*Ibid.*, § 6224.)

## III. Procedural Background

On February 27, 2009, DPR placed pesticide products within the nitroguanidine insecticide class of neonicotinoids (*i.e.*, products containing the active ingredients imidacloprid, clothianidin, dinotefuran, and thiamethoxam) into reevaluation based on data indicating that imidacloprid residue levels in ornamentals exceeded levels of concern for honey bees. (DPR 2009.) On September 15, 2009, DPR notified the registrants of neonicotinoid pesticides of the following data requirements: (1) field-based residue analysis in pollen and nectar from specific agricultural orchard and row crops for each of the four active ingredients, and (2) an  $LC_{50}$  study on honey bees starting at the larval stage through emergence. (DPR 2009a.)

After five full years, DPR's reevaluation of neonicotinoids remains pending. DPR's most recent semi-annual report regarding pesticides currently under reevaluation indicates that – as of June 30, 2013 – DPR had received and was in the process of analyzing some of the requested data from registrants, but that the agency was still in the process of developing study protocols for the gathering of other data. (DPR 2013.) The report concludes:

DPR continues to work with U.S. EPA and PMRA on possible new data requirements and possible mitigation strategies including label changes. DPR is in the process of actively analyzing crop residue and toxicity data, and investigating possible honeybee chronic effects studies that would be scientifically meaningful to the reevaluation.

## (*Ibid.* at 12.)

On August 8, 2013, the organizations that we represent requested that DPR take immediate action with respect to neonicotinoids to protect pollinators from further collapse. (PAN 2013.) DPR's December 4, 2013 response indicated:

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[As part of the reevaluation] DPR required manufacturers to conduct monitoring studies on various row and orchard crops measuring neonicotinoid residues in pollen, nectar, and leaf samples. Thus far, the results of these studies have been inconclusive overall. DPR also required registrants to conduct acute toxicity studies on honey bee larvae; results from these studies are under review by DPR scientists. Last year DPR took the additional step of requiring registrants to conduct further two-year residue monitoring studies using a more refined testing protocol. If during the course of this reevaluation DPR finds that neonicotinoids are resulting in significant adverse effects on honeybees, the Department will take appropriate action at that time.

## (CalEPA 2013.)

Meanwhile, on January 10, 2014, DPR proposed to amend the label for a pesticide product that contains the neonicotinoid dinotefuran ("Dinotefuran 20SG" manufactured by Mitsui Chemicals Agro) to add new pest uses.<sup>2</sup> (DPR 2014.) The following week, DPR proposed to amend the label for a second product containing dinotefuran ("Venom Insecticide" manufactured by Valent USA Corp.) to add new crop uses and revise application rates. (DPR 2014b at 4.) Three weeks later, DPR proposed to register a product that contains a new active ingredient called cyantraniliprole (E.I. Du Pont de Nemours and Co., Inc.'s "Dupont Verimark Insect Control"). (DPR 2014c at 6.)

The "public report" that accompanies each of DPR's proposed registrations above contains the same boilerplate and reaches the same conclusion:

DPR evaluated the ["new labels" or "these proposed products and their new active ingredient"] for their potential to create adverse environmental effects to human health, water, air, and non-target species (checklist). ["After review of the new labels for the above-identified registered products, DPR" or [DPR's review of this project, the registration of certain pesticide products containing a new active ingredient"] has determined that use of ["each product in a manner consistent with its new label" or "these products in a manner consistent with its labeling"] will have no direct or indirect significant adverse environmental impact, and therefore no alternatives or mitigation measures are proposed to avoid or reduce any significant effects on the environment.

(DPR 2014a at 4; DPR 2014b at 2; DPR 2014c at 7.)

<sup>&</sup>lt;sup>2</sup> DPR re-posted the public report for Dinotefuran 20SG on January 24, 2014, because the original report "did not contain a complete description of the proposed amendments to the product's label." (DPR 2014b at 2.)

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#### IV. Legal Violations

# A. DPR's Proposed Decisions with Respect to Venom Insecticide, Dinotefuran 20SG and Cyantraniliprole Are Contrary to Law.

## 1. DPR Concluded Incorrectly that the Proposed Decisions Will Have No Significant Adverse Environmental Impacts.

The public reports that accompany DPR's proposed decisions with respect to Venom Insecticide, Dinotefuran 20SG, and cyantraniliprole indicate that DPR completed an environmental "checklist" in connection with the proposals. Both public reports employ the same boilerplate "analysis," and both conclude that the proposal "will have no direct or indirect significant adverse environmental impact. (See DPR 2014a; DPR 2014b, DPR 2014c.) DPR's public reports are therefore the "functional equivalent" of a negative declaration for purposes of CEQA. (See Cal. Code Reg., tit. 14, § 15252, subd. (b).)

Contrary to DPR's conclusion, the available science shows that DPR's proposed decisions with respect to Venom Insecticide, Dinotefuran 20SG and cyantraniliprole *will* have significant direct, indirect, and cumulative adverse impacts on honey bees and other insect pollinators. Accordingly, DPR's finding of no significant impact and the agency's decision to prepare only the functional equivalent of negative declarations was an abuse of discretion. (See, e.g., *City of Arcadia v. State Water Res. Ctrl. Bd.* (2006) 135 Cal. App. 4th 1392, 1426 [holding that the agency's reliance on the functional equivalent of a negative declaration was inappropriate where substantial evidence supported a "fair argument" that the proposal "may" have a significant impact]; *Friends of the Old Trees v. Department of Forestry & Fire Prot.* (1997) 52 Cal. App. 4th 1383, 1397 [same].)

Because CEQA's policies apply in a certified regulatory program, courts have consistently held that the environmental documentation in a certified regulatory program is subject to the same "substantive standards" as an EIR. For example, in the leading case of *Environmental Protection Information Ctr. v. Johnson* (1985) 170 Cal. App. 3d 604, the court of appeal held that the analysis of environmental impacts in a certified regulatory program extends to "cumulative impacts," as is required by the CEQA Guidelines. (*Ibid.*, at 625.) The court explained that by exempting certified regulatory programs only from specific provisions of CEQA, "the Legislature has manifested an intent to retain the applicability of the other provisions of CEQA and of the [CEQA] Guidelines, particularly the substantive criteria and the specific aspects of environmental effect that must be evaluated before a project may proceed." (*Ibid.*, at 618.)

Contrary to CEQA, DPR has failed entirely to analyze the *cumulative* impact of the proposed decisions with respect to Venom Insecticide, Dinotefuran 20SG and cyantraniliprole *together* with the numerous other neonicotinoid registration decisions that the agency has issued over the course of the last five years. Set forth in Exhibit A to this letter are 15 instances in

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which DPR has registered new neonicotinoid products or approved significant new uses for existing neonicotinoid products during the last two year (2012-2013).<sup>3</sup> To give one example: last fall DPR amended the label for Valent U.S.A. Corporation's "Belay" insecticide to allow foliar use on rice. As detailed in Pesticide Action Network's comments on the Belay label amendment, submitted herewith and incorporated herein by reference, DPR's decision with respect to Belay could result in neonicotinoids being applied to an additional *500,000 acres* of cropland in California each year. (PAN 2013a.) Similarly, as detailed in comments submitted by Beyond Pesticides and Center for Food Safety in response to U.S. EPA's ecological risk assessment for cyantraniliprole, submitted herewith and incorporated by reference, cyantraniliprole will have significant direct, indirect and cumulative impacts on pollinators. (CFS 2013; BP 2013.)

The public reports that accompany DPR's proposed decisions for Venom Insecticide, Dinotefuran 20SG, and cyantraniliprole completely fail to account for the significant cumulative impact that these decisions plus DPR's incremental expansion of neonicotinoid use during the pending reevaluation has had and will have on honey bees and other pollinators.

## 2. DPR Failed to Consider Alternatives to Its Proposed Decisions.

CEQA requires that the written documentation in a certified regulatory program include "a description of the proposed activity *with alternatives to the activity.*" (Pub. Res. Code § 21080.5, subd. (d)(3)(A).) Consistent with CEQA, the California Supreme Court has ruled that "the public agency bears the burden of affirmatively demonstrating that, *notwithstanding a project's impact on the environment*, the agency's approval of the proposed project followed meaningful consideration of alternatives." (*Mountain Lion Found. v. Fish & Game Comm'n* (1997) 16 Cal. 4th 105, 134, emphasis added.)

Moreover, DPR's own regulations direct the agency to give "special attention" to the "availability of feasible alternatives" during the registration process. (Cal. Code Regs., tit. 3, 6158.) DPR defines the term "feasible alternative" to mean "other chemical or non-chemical procedures which can reasonably accomplish the same pest control function with comparable effectiveness and reliability, taking into account economic, environmental, social, and technological factors and timeliness of control. (*Ibid.*, § 6000.)

Contrary to CEQA and DPR's own regulations, the public reports that accompany DPR's proposed decisions with respect to Venom Insecticide, Dinotefuran 20SG and cyantraniliprole do not identify and evaluate alternatives to the proposals. Instead, the public reports conclude that no alternatives analysis is necessary. We have explained in previous comments, which are submitted herewith and incorporated by reference herein, that DPR's boilerplate discussion of alternatives mischaracterizes the law and fails to comply with CEQA. (PAN 2013b.) DPR has

<sup>&</sup>lt;sup>3</sup> The documents comprising Exhibit A are contained on the CDROM that accompanies this letter.

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nevertheless persisted in failing to conduct a meaningful evaluation of alternatives when registering pesticides, in clear violation of CEQA and the agency's own regulations.

# B. DPR Has Not Proceeded in the Manner Required by Law in Reevaluating Neonicotinoids.

# 1. DPR Has Failed to Conduct Its Reevaluation in a Timely Manner.

As discussed above, once DPR places a pesticide into reevaluation, it may "allow a reasonable time" for the development and submission of data relevant to that reevaluation, "*not to exceed a period of two years.*" (Cal. Code Regs., tit. 3, § 6222, subd. (a), emphasis added.) Here, DPR placed neonicotinoids into reevaluation in February 2009 – five full years ago. However, neonicotinoids remain under reevaluation today, and DPR is still in the process of negotiating study protocols for some of the data it directed registrants to submit in 2009. DPR's failure to conduct its reevaluation in a timely manner is contrary to law.

# 2. DPR Has Failed to Act Expeditiously to Protect Pollinators.

While a pesticide is under reevaluation, notwithstanding the available data, DPR must "act expeditiously to protect against risks to human health and the environment." (Cal. Code Regs., tit. 3, § 6222.) There is overwhelming evidence – including but not limited to the evidence cited earlier in these comments – that neonicotinoids are having a substantial and imminent adverse impact on honey bees and other insect pollinators. DPR's failure to act expeditiously to address these impacts pending reevaluation is contrary to law.

# **B.** DPR Has Engaged in an Illegal Pattern and Practice With Respect to Its Registration and Reevaluation Pesticides.

As discussed above, DPR has engaged in an illegal pattern and practice of registering new pesticides without analyzing direct, indirect, and cumulative impacts, and without considering alternatives, as is required by CEQA and DPR's own implementing regulations. In lieu of the requisite analysis, DPR relies on inadequate boilerplate analysis that mischaracterizes the agency's duties under CEQA.

DPR has likewise engaged in an illegal pattern and practice of failing to conduct its reevaluations in a timely manner. DPR's most recent Semiannual Report Summarizing the Reevaluation Status of Pesticide Products indicates that numerous pesticides have been under reevaluation for many years, with DPR failing to act expeditiously to prevent well-documented risks to human health and the environment. (See DPR 2013.)

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## V. Conclusion

We urge DPR to withdraw its proposed decisions with respect to Venom Insecticide, Dinotefuran 20SG, and cyantraniliprole. In addition, we ask DPR to conclude its reevaluation of neonicotinoids as soon as practicable by taking immediate steps to protect honey bees and other insect pollinators. Should DPR finalize the proposed decisions for Venom Insecticide, Dinotefuran 20SG or cyantraniliprole without addressing the legal violations set forth herein, or should DPR fail to take immediate steps to conclude its reevaluation of neonicotinoids, we intend to seek relief by filing suit in California Superior Court.<sup>4</sup> California's honey bees cannot endure any further delay.

Please do not hesitate to contact us should you wish to discuss any of the foregoing.

Sincerely,

Gregory C. Loarie, Staff Attorney Adenike Adeyeye, Research & Policy Analyst Earthjustice

Encl. (CDROM containing Exhibit A and all references cited herein)

cc: (via e-mail)

Polly Frenkel, Chief Counsel Department of Pesticide Regulation

<sup>&</sup>lt;sup>4</sup> These comments should be construed as formal notice of legal violations and an offer of settlement. (See *Graham*, *v. DaimlerChrysler Corp.* (2004) 34 Cal. 4th 553, 577.)

#### REFERENCES

#### (Contained on the Accompanying CDROM)

- Alaux, C. et al. 2010. Interctions between *Nosema* microspores and a neonicotinoid weaken honeybees. Envt'l Microbiology (2010) 12(3), 774-782.
- BP 2013. Letter to EPA Office of Pesticide Programs re: Proposed Registration of New Active Ingredient Cyantraniliprole. July 12, 2013.
- CalEPA 2013. Letter to Mr. Paul Towers, Organizing & Media Director, Pesticide Action Network North America
- CFS 2013. Letter to Thomas Harris, EPA Office of Pesticide Programs re: Comments to EPA on Cyantraniliprole. July 13, 2013.

EU 2013. Commission Implementing Regulation (EU) No. 485/2013 of 24 May 2013. Official Journal of the European Union 25.5.2013. L 139/12.

- Di Prisco, G. et al. 2013. Neonicotinoid clothianidin adversely affects insect immunity and promotes replication of a viral pathogen in honey bees. Proc. of the Nat'l Academy of Sciences, www.pnas.org/cgi/doi/10.1073/pnas.1314923110
- DPR 2009. Notice of Decision to Initiate Reevaluation of Chemicals in the Nitroguanidine Insecticide Class of Neonicotinoids. Cal. Notice 2009-02, Feb. 27, 2009
- DPR 2009a. Data Requirements Regarding Reevaluation of Certain Neonicotinoid Products. Sept. 15, 2009
- DPR 2013. Semiannual Rpt. Summarizing the Reevaluation Status of Pesticide Products During the Period of January 1, 2013 through June 30, 2013. Cal. Notice 2013-14, Dec. 9, 2013
- DPR 2014. Notice of Proposed and Final Decisions and Public Reports. Vol. 2014-2, Jan. 10, 2014
- DPR 2014a. Notice of Proposed and Final Decisions and Public Reports. Vol. 2014-3, Jan. 17, 2014
- DPR 2014b. Notice of Proposed and Final Decisions and Public Reports. Vol. 2014-4, Jan. 24, 2014
- DPR 2014c. Notice of Proposed and Final Decisions and Public Reports. Vol. 2014-6, Feb. 7, 2014
- Goulson, D. 2013. An Overview of the Environmental Risks Posed by Neonicotinoid Insecticides. Journal of Applied Ecology 2013. doi: 10.1111/1365-2664.12111
- Henry, M., et al. 2012. A Common Pesticide Decreases Foraging Success and Survival in Honey Bees. 10.1126/science.1215039

- Hopwood, J. et al. 2012. Are neonicotinoids killing bees? The Xerces Soc'y for Invertebrate Conservation, 2012
- Krupke, C.H. et al. 2012. Multiple Routes of Pesticide Exposure for Honey Bees Living Near Agricultural Fields. PLoS ONE 7(1): e29268. doi: 10.1371/journal.pone.0029268.
- Klein, A. et al 2007. Importance of pollinators in changing landscapes for world crops. Proc. R. Soc. B (2007) 274, 303-311.
- Lu, C. et al. 2012. *In situ* replication of honey bee colony collapse disorder. Bulletin of Insectology. 65(1) Mar. 9, 2012.
- Palmer, M.J. et al. 2013. Cholinergic pesticides cause mushroom body neuronal inactivation in honey bees. Nature Communications. 4.1634 2013
- PAN 2013. Letter to Secretary Matt Rodriguez re: Action to Protect Bees. Aug. 8, 2013.
- PAN 2013a. Letter to Ann M. Prichard re: Notice of Proposed Decisions to Register Pesticide Products and Public Reports (Vol. 2013-9, Mar. 1, 2013). Mar. 28, 2013.
- PAN 2013b. Letter to Ann M. Prichard re: Notice of Proposed Decisions to Register Pesticide Products [Fol. 2013-4, Jan. 25, 2013]. Feb. 13, 2013.
- Rabobank 2011. The Plight of the Honey Bee. Rabobank Industry Note 252-2011
- USDA 2012. Report on the Nat'l Stakeholders Conference on Honey Bee Health. Sheraton Suites Old Town Alexandria Hotel, Alexandria, Virginia, Oct. 15-17, 2012
- USEPA 2013. Amendment EFED Environmental Risk Assessment of Proposed New Global Chemical Cyantraniliprole. Apr. 30, 2013.
- Van der Sluijs, J., et al. 2013. Neonicotinoids, bee disorders and the sustainability of pollinator services. Current Opinion in Envt'l Sustainability 2013, 5:293-305.
- Whitehorn, P.R. et al. 2012. Neonicotinoid Pesticide Reduces Bumble Bee Colony Growth and Queen Production. 10.1126/science.1215025.

# **Final Registration Decisions Involving Neonicotinoids in 2013**

1.

258087 - (10163 - 317) GOWAN COMPANY SCORPION 35 SL INSECTICIDE USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS MELON APHIDS, LEAFMINERS, AND LEAFHOPPERS ON VARIOUS CROPS SUCH AS ACORN SQUASH, CANTALOUPE, AND CUCUMBERS TYPE: SECTION 3 LABEL AMENDMENT - TO ADD USE ON VARIOUS CROPS SUCH AS ONIONS, PEACHES, AND WATERCRESS ACTIVE INGREDIENT(S): DINOTEFURAN CAS NUMBER(S): 165252-70-0

[Proposed Decision 9.13.13 (Vol. 2013-27); Final Decision 11.22.13 (Vol. 2013-47)]

2.

259725 - (72155 - 29) BAYER ADVANCED A BUSINESS UNIT BAYER ADVANCED COMPLETE INSECT KILLER FOR SOIL & TURF READY-TO-SPRAY USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS FLEAS, ANTS, AND MOLE CRICKETS ON AREAS SUCH AS LAWNS, GROUND COVERS, AND FLOWER BEDS TYPE: SECTION 3 LABEL AMENDMENT - TO ADD CONTROL OF STINK BUGS INCLUDING BROWN MARMORATED STINK BUGS AND KUDZA BUGS ACTIVE INGREDIENT(S): BETA-CYFLUTHRIN IMIDACLOPRID CAS NUMBER(S): 68359-37-5, 105827-78-9

[Proposed Decision 9.13.13 (Vol. 2013-37); Final Decision 10.25.13 (Vol. 2013-23)]

3.

248748 - (59639 - 150) VALENT U.S.A. CORPORATION BELAY INSECTICIDE USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS APHIDS, LEAFHOPPERS, AND STINKBUGS ON VARIOUS CROPS SUCH AS BROCCOLI, CABBAGE, AND BRUSSELS SPROUTS TYPE: SECTION 3 LABEL AMENDMENT - TO ADD USE ON RICE ACTIVE INGREDIENT(S): CLOTHIANIDIN CAS NUMBER(S): 205510-53-8

[Proposed Decision 3.1.13 (Vol. 2013-9); Final Decision 9.27.13 (Vol. 2013-39)]

4.

258055 - (59639 - 151) VALENT U.S.A. CORPORATION NIPSIT INSIDE INSECTICIDE USE: INSECTICIDE - FOR THE CONTROL OF INSECTS SUCH AS APHIDS AND LEAFMINERS ON LEAFY VEGETABLES SUCH AS LEAF, ROMAINE, AND HEAD LETTUCE TYPE: SECTION 3 LABEL AMENDMENT - TO ADD SUPPLEMENTAL LABELING FOR USE ON LEAFY GREENS ACTIVE INGREDIENT(S): CLOTHIANIDIN CAS NUMBER(S): 205510-53-8

[Proposed Decision 6.28.13 (Vol. 2013-26); Final Decision 8.2.13 (Vol. 2013-31)]

5. 254942 - (100 - 1437) SYNGENTA CROP PROTECTION, LLC TANDEM USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS ANTS, CRICKETS, EARWIGS, AND COCKROACHES IN AND AROUND BUILDINGS, LAWNS, AND PARKS TYPE: SECTION 3 REGISTRATION – ACTIVE INGREDIENT(S): LAMBDA-CYHALOTHRIN THIAMETHOXAM CAS NUMBER(S): 91465-08-6, 153719-23-4

[Proposed Decision 5.3.13 (Vol. 2013-18); Final Decision 6.14.13 (Vol. 2013-24)]

#### 6.

256950 - (72155 - 28) BAYER ADVANCED A BUSINESS UNIT OF BAYER CROPSCIENCE L.P. BAYER ADVANCED DUAL ACTION ROSE & FLOWER INSECT KILLER READY-TO-USE USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS APHIDS, LEAFMINERS, AND WHITEFLIES ON ROSES, FLOWERS, AND HOUSEPLANTS TYPE: SECTION 3 LABEL AMENDMENT - TO ADD CONTROL OF BROWN MARMORATED STINK BUGS ACTIVE INGREDIENT(S): BETA-CYFLUTHRIN IMIDACLOPRID CAS NUMBER(S): 68359-37-5, 105827-78-9

[Proposed Decision 4.12.13 (Vol. 2013-15); Final Decision 5.24.13 (Vol. 2013-21)]

7.

256109 - (100 - 1369) SYNGENTA CROP PROTECTION, LLC CRUISERMAXX RICE USE: FUNGICIDE, INSECTICIDE - FOR USE AS A SEED TREATMENT TO CONTROL VARIOUS INSECTS AND DISEASES SUCH AS WEEVILS, CHINCH BUGS, AND PYTHIUM ON RICE (DRY-SEEDED) TYPE: SECTION 3 REGISTRATION – ACTIVE INGREDIENT(S): AZOXYSTROBIN FLUDIOXONIL MEFENOXAM THIAMETHOXAM CAS NUMBER(S): 131860-33-8, 131341-86-1, 70630-17-0, 153719-23-4

[Proposed Decision 4.12.13 (Vol. 2013-15); Final Decision 5.24.13 (Vol. 2013-21)]

#### 8.

254000 - (74578 - 6) ARBORJET, INC. IMA-JET 10 USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS ADELGIDS, APHIDS, AND LACEBUGS ON TREES IN ORNAMENTAL LANDSCAPES, FOREST AND WOODLAND AREAS, AND INTERIOR LANDSCAPES TYPE: SECTION 3 REGISTRATION – ACTIVE INGREDIENT(S): IMIDACLOPRID CAS NUMBER(S): 105827-78-9

[Proposed Decision 3.8.13 (Vol. 2013-10); Final Decision 4.12.13 (Vol. 2013-15)]

#### 9.

256059 - (73049 - 467) VALENT BIOSCIENCES CORPORATION DARLEX INSECTICIDE USE: INSECTICIDE - FOR THE CONTROL OF BEETLES IN AND ALONG THE OUTSIDE OF POULTRY HOUSES TYPE: SECTION 3 REGISTRATION – ACTIVE INGREDIENT(S): CLOTHIANIDIN CAS NUMBER(S): 205510-53-8

[Proposed Decision 2.15.13 (Vol. 2013-7); Final Decision 3.29.13 (Vol. 2013-13)]

10. 254680 - (100 - 1415) SYNGENTA CROP PROTECTION, LLC CARAVAN G USE: FUNGICIDE, INSECTICIDE - FOR THE CONTROL OF VARIOUS DISEASES SUCH AS BROWN PATCH, LEAF RUST, AND POWDERY MILDEW ON SITES SUCH AS LAWNS, GOLF COURSES, AND ATHLETIC FIELDS TYPE: SECTION 3 REGISTRATION – ACTIVE INGREDIENT(S): AZOXYSTROBIN THIAMETHOXAM CAS NUMBER(S): 131860-33-8, 153719-23-4

[Proposed Decision 1.11.13 (Vol. 2013-2); Final Decision 3.1.13 (Vol. 2013-9)]

# **Final Registration Decisions Involving Neonicotinoids in 2012**

11. 251310 - (2217 - 937) PBI/GORDON CORPORATION ZYLAM LIQUID SYSTEMIC INSECTICIDE USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS APHIDS, LEAFMINERS, AND PSYLLIDS ON ORNAMENTAL TREES, SHRUBS, AND FLOWERS TYPE: SECTION 3 REGISTRATION – ACTIVE INGREDIENT(S): DINOTEFURAN CAS NUMBER(S): 165252-70-0

[Proposed Decision 9.14.12 (Vol. 2012-37); Final Decision 11.30.12 (Vol. 2012-48)]

## 12.

251882 - (59639 - 152) VALENT U.S.A. CORPORATION BELAY 50 WDG INSECTICIDE USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS APHIDS, FLEA BEETLES,AND LEAFHOPPERS ON POTATOES AND TOBACCO TYPE: SECTION 3 LABEL AMENDMENT - TO ADD USE ON FRUITING VEGETABLES AND LEAFY VEGETABLES, CONTROL OF PESTS SUCH AS CUCUMBER BEETLES, STINKBUGS, AND HARLEQUIN BUGS, REVISE THE PRECAUTIONARY LANGUAGE, WARRANTY STATEMENT, RESISTANCE MANAGEMENT SECTION, DIRECTIONS FOR USE,AND THE STORAGE AND DISPOSAL STATEMENT, AND TO DELETE USE ON POTATOES AND TOBACCO ACTIVE INGREDIENT(S): CLOTHIANIDIN CAS NUMBER(S): 205510-53-8

[Proposed Decision 7.13.12 (Vol. 2012-28); Final Decision 8.24.12 (Vol. 2012-34)]

13.

251103 - (70905 - 3) SULPHUR MILLS LIMITED HOTSHOT 70WG INSECTICIDE USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS APHIDS, WHITEFLIES, AND LEAFHOPPERS ON CROPS SUCH AS GLOBE ARTICHOKES, GRAPES, AND TREE NUTS TYPE: SECTION 3 REGISTRATION – ACTIVE INGREDIENT(S): IMIDACLOPRID CAS NUMBER(S): 105827-78-9

[Proposed Decision 7.13.12 (Vol. 2012-28); Final Decision 8.17.12 (Vol. 2012-33)]

#### 14.

249044 - (59639 - 135) VALENT U.S.A. CORPORATION VENOM INSECTICIDE USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS WHITEFLIES, APHIDS, AND THRIPS ON CROPS SUCH AS COTTON, CUCURBITS, AND FRUITING VEGETABLES TYPE: SECTION 3 LABEL AMENDMENT - TO ADD CONTROL OF PESTS SUCH AS MULTICOLORED ASIAN LADY BEETLES, PLANT BUGS, AND PSYLLIDS AND TO REVISE THE DIRECTIONS FOR USE, CONTAINER DISPOSAL SECTION, AND THE WARRANTY STATEMENT ACTIVE INGREDIENT(S): DINOTEFURAN CAS NUMBER(S): 165252-70-0

[Proposed Decision 5.11.12 (Vol. 2012-19); Final Decision 6.15.12 (Vol. 2012-24)]

## 15.

246290 - (59639 - 151) VALENT U.S.A. CORPORATION NIPSIT INSIDE INSECTICIDE USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS WIREWORMS, APHIDS, AND HESSIAN FLIES ON VARIOUS CROPS SUCH AS RYE, WHEAT, AND OATS TYPE: SECTION 3 REGISTRATION – ACTIVE INGREDIENT(S): CLOTHIANIDIN CAS NUMBER(S): 205510-53-8

[Proposed Decision 11.4.11 (Vol. 2011-44); Final Decision 1.6.12 (Vol. 2012-01)]