



October 12, 2022

Julie Henderson, Director  
California Department of Pesticide Regulation  
Via email: [ProjectNotify@cdpr.ca.gov](mailto:ProjectNotify@cdpr.ca.gov)

**Re: Providing field location information is central to creating a health-protective pesticide notification system**

Dear Director Henderson,

Thank you for your continuing efforts to create a state-of-the art, health-protective pesticide application notification system for all Californians.

We wanted to clarify why it's essential the statewide pesticide notification system identify the actual fields where applications will take place and not be limited to identifying 1 square mile (640 acre) "sections". We are concerned that without field location information, the notification system will be a failure.

**People are not motivated to use a system that does not provide the precise location information they need to take action to protect their families.** Participation in the pilot projects has not been as robust as DPR would have liked. One key reason for this, which we've heard repeatedly from community members, is that there appears to be little point in signing up when the actual field location isn't going to be identified. We heard this over and over from residents in Ventura, Santa Cruz and Stanislaus, from the same people who very much want to know about hazardous agricultural pesticides being used around them. None of the four pilot notification programs included specific location information, so the opportunity to test its impact has been lost.

**The lack of specific location information makes it almost impossible for community members to use the notification system to protect their health and the health of their families – a primary goal of the system.** Under the current proposal, for example, it is not possible for a resident to know whether the planned application is close to their home, near the bus stop 10 blocks away used by their children, or perhaps closest to a community park  $\frac{3}{4}$  of a mile away. It is also not possible to know if the application is close to roads a resident might use for commuting or other purposes. Not knowing the precise location prevents the resident from knowing exactly what areas to avoid or whether to wear protective equipment, like a respirator.

**Without field location information people can use to decide what precautions are worth adopting, broader notifications can be overwhelming and/or useless.** The pilot project being carried out in Santa Cruz has revealed how completely frustrating it is for residents to know about nearby pesticide applications but not know exactly where they're located. Kathryn Mizuno lives in the senior housing community at the center of the Santa Cruz pilot program. She and other residents

know only when toxic pesticides are used on fields within one mile of their homes. She described her family's frustration in an October 4 [Letter to the Editor](#):

“Since Aug. 31, we have received over 20 of these notifications, which don't even tell you which fields are being fumigated. . . . I share teacher Sarah Legion's frustration with being powerless to escape the toxic chemicals. My family has found little practical value in the notifications except that they make us more aware of the danger we are all in. We avoid taking walks in the neighborhood, wash all produce from our backyard garden and don't hang laundry out.”

Rather than being able to take discrete precautions that are protective when an application is taking place nearby, the Mizuno family has significantly altered their lifestyle in response to the overwhelming number of applications being permitted within 1 mile of their residence. Even while they take these actions, they lack confidence that these actions are meaningful and instead they may only be adding to their daily anxieties. Many other people are simply giving up and not doing anything additional to protect themselves, because they figure there's no point, with so many mystery applications that could be anywhere.

A similar concern was voiced about the pilot in Grayson:

“Simplemente nos dicen, ‘By the way, alguien va a aplicar este pesticida dentro de la próxima semana’. Pero como no nos dice dónde, si en mi jardín de atrás o en una milla de lejos, es un poquito difícil de identificar cuáles son las precauciones que uno tiene que tomar<sup>1</sup>.”

*“They simply tell us, ‘By the way, someone is going to apply this pesticide within the next week.’ But since it doesn't tell us where, whether it's in my backyard or a mile away, it's a little hard to pinpoint what precautions one needs to take.”*

An Oxnard resident commented about the pilot in Nyeland Acres:

“La verdad yo me registré, pero esto no funciona porque en realidad no te especifica el lugar de dónde tú no puedes protegerte. Para mí no está funcionando porque no te especifica exactamente del lugar, nada más te dicen alrededor de una milla. Mucha gente dice, ‘No me puedo registrar porque no me está dando la ubicación’. Este proyecto piloto no está funcionando<sup>2</sup>.”

*“The truth is that I registered, but it doesn't work because it doesn't really specify the place and so you can't protect yourself. In my opinion it is not working because it does not specify the exact place, they just tell you about a mile. A lot of people say, ‘I can't sign in because it's not giving me the location.’ This pilot project is not working.”*

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<sup>1</sup> Unpublished research interviews from “Say Before You Spray: Assessing the Health and Behavioral Impact of Pesticide Use Notification”, UC Davis, funded by National Institutes of Health, 2022

<sup>2</sup> Ibid.

**Specific location information is necessary for residents to be able to take the adequate steps that they need to protect their health and that of their loved ones. Here are just a few additional examples of why field location information is critical so people can take their own protective measures:**

- a jogger who wants to avoid running by treated fields can alter his normal route for a few days
- a parent of an asthmatic child who normally allows her child to walk to school, past fields, could drive her daughter on days when she knew applications would likely be taking place
- an elderly couple who are immunocompromised and whose home is 100 feet away from a field to be treated could close their windows and reduce potential exposure, something they'd be much less likely to do if all they knew is that somewhere, possibly as far away as 5,280 feet, a pesticide application would be taking place
- parents could decide to take their kids to a different public playground if the playground nearest them had a field nearby that was going to be making an application
- clinicians need to know exactly what and where exposures may have occurred as they see patients with acute symptoms that could be due to pesticide exposure
- city recreation and parks departments, as well as schools, need to know about upcoming applications on nearby fields so they can plan safe outdoor activities
- pest control advisors and field scouts focused on ecological pest management need to know if applications have taken place at or near the fields where they're working, both so they can decide whether to wear personal protective equipment when entering fields and also so they know how to interpret their monitoring observations and alter their recommendations/strategies for pest management
- some pregnant farmworkers might choose not to work for a few days when they know that a hazardous pesticide application will be taking place at a nearby field
- knowing the field locations of nearby applications would allow organic farmers, who are responsible for preventing contamination of their crops, to take additional actions to protect their fields
- independent scientists could bolster the state's knowledge about pesticide drift, or lack thereof, if they knew where to set up monitoring equipment, something impossible to do if they only have information about pesticide applications within a one mile area

**Recent scientific research confirms that within a mile the threat of exposure to many pesticides tends to increase the closer one lives to pesticide application sites.** For example, a

recent meta-review<sup>3</sup> that assessed six studies<sup>4</sup> noted: “All [six studies] found that the greater the distance, the lower the levels in pesticide concentrations in dust, outdoor and indoor air.”<sup>5</sup>

It is obvious that the closer a home is to a treated field, the greater the health impact from exposure. One Oxnard resident, reflecting on her son’s terrifying asthma attacks, noted that they have become far less frequent since the strawberry field across the street from her apartment was removed from production.

“La verdad, yo ahorita analizando todo esto, yo pienso que eso le afectaba mucho a mi hijo porque él antes se ahogaba muy frecuentemente, se me despertaba de noche y se me ahogaba, como que se le iba la respiración. Ahorita que este field de fresas ya no está aquí enfrente me he estado dando cuenta que ya ahorita él se me ahoga, pero ya viene siendo más o menos como seis meses o cada tres meses. Ya no es tan frecuentemente como antes. Yo no sé si todo eso le afectaba a mi hijo porque estamos muy pegaditos, nada más es cruzando la calle y ese field era grandísimo de fresas<sup>6</sup>.”

*“As I analyze all this right now, the truth is I think that this affected my son a lot because he used to get out of breath very frequently. He would wake me up at night and he would be choking, as if his breath were gone. Now that this strawberry field is no longer right across the street here, I have been realizing that right now he continues to get out of breath, but it has been more or less like [every] six months or every three months. It's not as often as it used to be. I don't know if all that affected my son because we are so close. It's right across the street and that strawberry field was huge.”*

**Providing precise information about the exact location of the hazard is feasible and would be in line with other hazard notification systems.** County Agricultural Commissioners already receive location information about upcoming applications through Notices of Intent (NOIs) submitted by growers about planned use of restricted material pesticides. And NOIs are already accessible to the public, but unfortunately only after applications have already taken place, and so are not useful for allowing people to take steps to protect themselves.

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<sup>3</sup> Dereumeaux, C., Fillol, C., Quenel, P., and Denys, S. (2020). Pesticide exposures for residents living close to agricultural lands: A review. *Environment International*, 134, 105210.

<sup>4</sup> [Deziel et al., 2017](#), [Gibbs et al., 2017](#), [Gunier et al., 2011](#), [Hogenkamp et al., 2004](#), [Kawahara et al., 2005](#), [Ward et al., 2006](#)

<sup>5</sup> Outdoor air concentrations of trichlorfon within 50 m of [paddy fields](#) were five times higher than those measured further away ([Kawahara et al., 2005](#)), and high levels of chlorpyrifos in outdoor air were identified at households located within 100 m of crops ([Gibbs et al., 2017](#)). Chlorpyrifos, chlorthal-dimethyl, iprodione, phosmet, and [simazine](#) dust concentrations were higher in residences located between 500 m and 1250 m from treated lands ([Gunier et al., 2011](#)). Similarly, the decrease in concentrations of chlorpropham in house dust was borderline statistically significant with increased distance from agricultural fields ([Hogenkamp et al., 2004](#)). The meta-analysis performed in 2017 confirmed the sharp decrease in house dust pesticide concentrations with increased distance from treated fields (between 3 m and 1125 m) ([Deziel et al., 2017](#)).

<sup>6</sup> Unpublished research interviews from “Say Before You Spray: Assessing the Health and Behavioral Impact of Pesticide Use Notification”, UC Davis, funded by National Institutes of Health, 2022

Rather than simply requiring the posting of Notices of Intent, DPR elected to pursue a more transformative route by adopting a new regulation, which will allow for a more robust, expansive and transparent system of public notification. The state has invested \$10 million to make this happen. DPR has identified challenges with including field location information in its notification design because of the inconsistency of NOIs. As part of its new regulation, however, DPR can fix this inconsistency problem, which would not only be helpful for the notification system but would likely help County Agricultural Commissioner staff in their review of NOIs and in tracking pesticide applications for DPR's Pesticide Use Reporting system - a win-win.

**Other air quality notification systems provide precise location information shared via publicly-transparent maps that anyone can use to find any location of concern in California.** Most of these include a search function where a specific address can be included, and a number of these California mapping systems are accompanied by proactive alerts people can sign up for to receive texts, phone calls or emails when the hazard is within a certain distance of their address/es of concern. Here are examples of some of these websites, which are available to all:

- <https://fire.airnow.gov/>
- <https://aqicn.org/map/california/>
- <https://www.fire.ca.gov/incidents/>
- <https://www.frontlinewildfire.com/california-wildfire-map/>
- <https://siteportal.calepa.ca.gov/nsite/map/help>
- <https://map.purpleair.com/1/mAQI/a10/p604800/cC0#3.22/35.02/-102.59>
- <https://www.sfchronicle.com/projects/california-air-quality-map/>

**We want to make sure that the tax dollars appropriated by the legislature to develop this system are well spent and result in a well-utilized, comprehensive, health-protective notification system.** To reiterate, the community groups that are part of the CPR coalition have noted repeatedly that people are not motivated to use a system that does not provide the precise location information they need to take action to protect their families. Our members have informed us that the lackluster participation in the pilots is a direct result of the failure to include exact location. There is a sense that it's not worth the time, trouble and privacy concerns to sign up for notification that is not actionable. Therefore, we urge DPR staff to revise the proposal to include exact location information, to the field level.

**The Agricultural Council of California agrees that field location information should be included in the notification system.** In their July 15, 2022 letter to DPR, the Ag Council recommended that “[i]nformation that should be included in a pesticide application notification should include the planned date of application, *the field section or location based on the address or mapping required by Agricultural Commissioners*, and the RUP to be applied” [emphasis added]. This is a commonsense approach. Information already known to the County Agricultural Commissioners should not be withheld from the public.

In closing, we share the voice of residents of agricultural communities in their own words:

- “I’m currently a Junior attending Greenfield High School. When I was in 6th grade, I suffered an asthma attack. Now this would have slipped by as nothing more than that, but my mom requested a report on the pesticides applied that day near the school. Beforehand my knowledge of pesticides was very vague, and it wasn’t until I found out that seven pesticides used that day induced asthma attacks, that I wanted to do something to help make other people aware of this danger. If there had been a notification system in place to inform us of the pesticides applied near the school, then this could have been avoided, and it is for that reason that it is critical to implement an exact location notification system to prevent any other person, specifically children, from having to endure such a traumatic event<sup>7</sup>.”
- “Lo que me preocupa es que no tenemos un aviso de cuándo van a fumigar. Ya de perdida para que cuando ellos vayan a fumigar los niños no vayan al parque, porque hay un parqucito comunitario y ese parque queda frente a los fields<sup>8</sup>.”

*“What worries me is that we are not notified of when they’re going to spray. At minimum so that when they’re going to spray, children don’t go to the park, because there is a small community park and that park is in front of the fields.”*

- “We live outside the city limits of Oakdale on River Rd. One morning last week we saw workers spraying the almond orchard behind our home. We were outside having coffee and retreated indoors. We actually were questioning how people are informed of spraying near homes when we read the August 3, 2022 Modesto Bee article on farm spraying. We would definitely support a text, email or phone notification, 24 - 72 hour warning, and being notified of any harmful pesticides that are being used<sup>9</sup>.”
- “. . . hay unas personas que viven en la orillita, solamente está el canal y en la orillita está la casa de estas personas. Yo me sentí triste cuando ellos dijeron que ellos han ido hasta Sacramento, con que nomás les avisen que van a esprayar. Hasta dijo el nombre del veneno, pero en realidad no me acuerdo cómo se llama.

Es una persona adulta, está viejito ya el señor. Dijo que él sufre alergia a eso, que se estaba muriendo y que él nomás lo que pedía es que le avisaran cuando esprayaran eso para cerrar sus ventanas, porque le hacía mucho daño<sup>10</sup>.”

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<sup>7</sup> Community member testimony

<sup>8</sup> Unpublished research interviews from “Say Before You Spray: Assessing the Health and Behavioral Impact of Pesticide Use Notification”, UC Davis, funded by National Institutes of Health, 2022

<sup>9</sup> Community member testimony

<sup>10</sup> Unpublished research interviews from “Say Before You Spray: Assessing the Health and Behavioral Impact of Pesticide Use Notification”, UC Davis, funded by National Institutes of Health, 2022


*“ . . . there are some people who live on the periphery [of the fields]; there is only the canal [in between], and on the edge of it is their house. I felt sad when they said that they had gone to Sacramento just wanting to be told when they are going to spray. He even said the name of the pesticide, but I don't really remember what it's called.*

*He's an adult, this man is already very old. He said he's allergic to it, that he's dying, and that all he asked was that they warn him when they were going to spray so he could close his windows, because it was causing him a lot of harm.”*

**For DPR to provide anything less than the actual location of the hazard of concern would be a continued environmental injustice.** We believe that if the communities most impacted by highly hazardous pesticide applications were wealthy white communities, there would be no question about the need to provide exact location information. Field locations are *already* recognized as public information, accessible after the fact via Public Records Act requests. The Department has a deliberate choice to make: it can provide precise location information to the public, as in any of the other public health and safety notification systems; or it can take the discriminatory step of excluding the known location of the environmental hazard, significantly reducing the system's utility for people to protect themselves.

**We are grateful to DPR for taking on this challenging issue and for responding to the call of community members who, for years, have wanted access to this information to better protect their own health.** Please ensure that Californians and their families receive the information they deserve and need to protect their health.

Sincerely,



Jane Sellen  
Co-Director



Angel Garcia  
Co-Director