

Santa Cruz County Agricultural Commissioner's Office Can Get By with a Little Help from Its Friends

Planting Seeds of Change Requires Help from Growers, Community, and Board of Supervisors

Summary

The Watsonville City Council responded to public demands for advance notice of pesticide use in nearby neighborhoods with a City Council resolution. Forms stating when and where pesticide application would be taking place are required to be submitted to the Agricultural Commissioner for approval before the application can take place. It was believed that the Commissioner's office could post the submitted and approved notices online, indicating that pesticide application was about to take place.

It turned out that the proposed solution is more complicated because the submitted location information is vague. Complicating the situation further, online posting by the Commissioner's office is currently not feasible.

This report examines why this is the case, and what is required to achieve advance online notification to the public. This investigation explored the current challenges of posting Notices of Intent before the pesticide is applied, and what information the Notice of Intent would have to contain to be useful to the public. We concluded that advance notice of pesticide applications could be accomplished with help from the State of California Department of Pesticide Regulation, the Board of Supervisors, growers, applicators, and the impacted community. The Agricultural Commissioner's Office is not in a position to accomplish this complicated task on its own.

Background

The Agricultural Commissioner's mission includes "promoting and protecting agriculture, assuring environmental quality, and protecting the health, safety and welfare of Santa Cruz County's citizens." [1]

Improper pesticide use could affect the public's health. In California, the County Agricultural Commissioner (CAC) is responsible for ensuring the safe application of pesticides. Restricted pesticides (also known as Restricted Materials) are deemed to have a higher potential to cause harm to public health, farm workers, domestic animals, honey bees, the environment, wildlife, and crops.^[2]

Restricted Pesticides Permits

A California Department of Pesticide Regulation (DPR) permit is required before any restricted pesticides can be applied. There is a rigorous process to obtain this permit. These permits are obtained through and processed by the CAC. Each permit must be evaluated by the CAC before the permit is considered DPR approved. Once it is approved, depending on the crop, it is only valid for one to three years. A copy of the Restricted Pesticides Permit is attached as <u>Appendix A</u>. During that time, if the grower or pesticide applicator with a permit needs to use restricted pesticides, they must submit a Notice of Intent To Apply Restricted Materials (NOI) for approval under the permit. That NOI must be approved by the CAC 24-72 hours before the restricted pesticides can be used.

Watsonville City Council Resolution

The public complained to the Watsonville City Council to seek adequate advance notice of imminent pesticide use,^{[7] [8]} so that they could close their windows, bring children and pets indoors, or perform other simple measures to prevent unwanted exposure.^[7] Since growers and pesticide applicators must submit advance notices to the CAC, the public requested the Watsonville City Council issue a resolution that requested the CAC post the NOIs online before the pesticides are applied.^[9]

On October 27, 2020 the Watsonville City Council issued Resolution 198-20 stating its support for posting the NOIs online in advance of the pesticide use.^[10]

The permit and NOIs are available to the public through a public records request. This process takes as much as two days or longer. The Watsonville City Council's concern was that the public needs sufficient advance notice, as nearby vulnerable residents and workers may need to seek shelter or take other measures to prevent exposure during the application. Online posting would provide timely notification.

Although exposure events are rare, there have been recent documented cases in Monterey County where mishaps with soil fumigants occurred. [15] [16] [17] Soil fumigants comprise over 70% of the Restricted Materials used in Santa Cruz County, and the Watsonville City Council resolution focused on drift-prone soil fumigants. [18] [19]

Location, Location, Location

Currently the information submitted with the NOI application is insufficient for the public to pinpoint where the pesticide application will occur. This is caused by a variety of circumstances. First, not all fields have been issued a county address, or the county address issued refers to a farm tract consisting of many fields. Second, some of the fields are oddly shaped, and may be planted with multiple crops in odd configurations. Specifying what portion is going to be treated on the NOI application becomes difficult. Often the growers rely on the CAC staff being personally familiar with the farm layout. Consequently, NOIs are often submitted with anecdotal location descriptions that are not familiar or useful to the general public. The result is that people cannot tell how close the pesticide application may be to houses, schools, and parks. [12] [19] [20]

Challenges for the CAC staff

During the October 27, 2020 Watsonville City Council meeting, the CAC stated that his office did not have sufficient staffing or expertise to carry out the Watsonville City Council's request for advance public posting of the NOIs. [10] [12] [19] He said that there were several obstacles the CAC office faces before it could post the notices online.

Required DPR Software Entries

Each NOI must be approved by the CAC Office before it is valid. The CAC Office receives NOI applications by fax, telephone, email, and in person. [6] Permits and NOIs must be entered into a DPR software program called CalAgPermits. [21] CalAgPermits accounts are granted by the CAC and each account is password-protected. [22] While the CAC Office encourages growers to use CalAgPermits to file their NOI applications, that is rarely done. Many growers may not have internet access or the equipment or experience required to file electronically. This requires CAC staff to manually enter the permit and NOI application information into CalAgPermits. This places an added burden on the CAC staff as data entry is time consuming, which then can result in a delay. This delay may cause the data entry to occur after the pesticide is applied. During the City Council meeting the CAC expressed concern that additional staff may be needed to implement timely public posting of NOIs. [12] [19] [20]

Seasonal Time Crunch

Fumigant NOI applications are concentrated between July and October.^[19] NOI applications for fumigations can come into the office at 20 per day during this period. This is the highest workload period of the year for the CAC. In 2018, the CAC processed close to 300 NOIs in just four months.^[12] [20] [23]

Scope and Methodology

This investigation was performed in response to the Watsonville City Council's Resolution requesting that the CAC post each NOI before the pesticide is applied. This investigation explored the CAC's challenges for alerting the public in advance.

The information in this report was received primarily through interviews, newspaper articles, a site visit to the Santa Cruz CAC office, internet research and review of Watsonville City Council minutes and the Watsonville City Council resolution.

During the CAC site visit, example permits, NOI applications and the CalAgPermits software were reviewed. The internet research included a review of other Agriculture Commissioner's County websites, the California Agriculture Department's website, and the DPR's website. Grand Jury reports from Santa Cruz and other counties were also reviewed, along with various not-for-profit websites such as SafeAgSafeSchools.

We also reviewed the state and local requirements governing restricted pesticide use, local CAC procedures, and the requirements on pesticide applicators and growers for permits and NOI applications.

Investigation

Notice of Intent (NOI)

Advance permission from the CAC is required before restricted pesticides can be applied. An NOI referenced to a valid approved permit must be submitted before each restricted pesticide application. [6]

- Permission may be granted after a NOI application is submitted by the applicator or grower.^[6]
- NOIs must be submitted for approval prior to 24 hours in advance of the pesticide application depending on the pesticide.^[6]
- After the NOI is approved, the information is entered into CalAgPermits. [19] [20]

Each NOI application requires significant information, as is evident from the sample form in Figure 1.

STATE OF CALIFORNIA PR-ENF-126X (REV. 11/07) Page 1 of 1	1-126X (REV. 11/07) NOTICE OF INTENT TO APPLY					DEPARTMENT OF PESTICIDE REGULATION					
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Figure 1. From California Department of Pesticide Regulation^[24]

The required information would seem to provide everything needed to alert the public to the location, time, specific pesticide, and amount of pesticide being applied. Steps to avoid exposure could then be taken.

Referring to the form, the Watsonville City Council resolution stated,

If Notices of Intent (NOI) were posted online, concerned residents would have the option to know when a highly toxic pesticide will be applied nearby, providing the opportunity to take health protective measures, such as shutting windows or keeping children and others at risk indoors [18]

When completing the form, the applicant's location information may be vague. When a blank NOI application form is examined, the fields, such as "Location," imply that all the necessary information will be provided showing where the pesticide will be applied. The reality is that these forms are typically filled out with anecdotal locations, not a property address, parcel number, GPS coordinate or other information which the public could readily identify. [12] [19] [20]

Some NOI applications refer to the "Location" information using localized maps of cultivated fields within a farm, or even photographs from a drone. These depict only a small area so it is not possible to know where the area is unless you have familiarity with that particular farm. [12] [19] [20] Some NOI applications refer to a Meridian-Township-Range-Section which is roughly equivalent to one square mile. This unit is too large and imprecise as it could represent a field anywhere from a few yards' distance to almost a mile and a half away. [25]

There are successful notification programs that require user-friendly maps. For example, regulations were implemented by the DPR for pesticide use within a quarter mile of a school site. The fact that the DPR requires a map showing both the exact area of the field to be treated, and the impacted school site on the same map, demonstrates that useful location information could be required. See an example given in the "Annual Notification of Pesticides Used Near Schools and Child Day Care Center" forms. [27]

Restricted Pesticides

In 2018, the last year reported by DPR, 1,251,410 pounds of pesticides were applied in Santa Cruz County. This county ranked 30th out of 58 counties in the amount of pesticides applied to agricultural fields. The restricted pesticides most often applied in the county are soil fumigants. Soil fumigants form a gas to control pests that live in the soil. Two soil fumigants are used in the county, and in 2018 they accounted for the two most applied pesticides by weight.

In 2018:

- 536,745 pounds of Chloropicrin were used in 157 applications and
- 208,950 pounds of 1,3-Dichloropropane were used in 141 applications. [23]

The applications are concentrated between July to October. During this period, NOI applications submitted to the CAC can be as many as 20 per day. [19]

Fumigation is big business, as it can cost around \$5,000 per acre. [19] Growers and applicators are reported as being generally considerate and cooperative, communicating with their neighbors and following the school notification regulations. In Santa Cruz County, the CAC approves fumigation timing only when a set wind level is not forecasted even though the DPR has no wind-level requirement. The CAC reports it enforces a maximum wind-likelihood before it will approve an NOI fumigation application. [19]

Pesticide Use Near Schools

In 2018 special regulations went into effect governing pesticide application within a quarter mile of schools and day care centers. [26] [28] These regulations require growers to notify such schools and daycare centers by April 30 of any intended pesticide applications from July through the following June. This notice requirement includes all pesticides, not just restricted materials. Our CAC's office has posted an interactive map showing the ½ mile boundary around every school in Santa Cruz County. [29]

In addition, the fumigant requirements are far stricter. The applicator cannot spray within ¼ mile of a school or day care center (or adjacent park) when they are in session. Furthermore, the application must be finished 36 hours before the school or daycare re-opens.

If the grower adds a pesticide not on the annual pesticide application disclosure list, or a new grower takes over the land after the notification deadline has passed, a 48-hour notice of a specific application of the new pesticide or all pesticides from a new grower are required. These are the only conditions under which advance notification is required by DPR.

Notably, in the case of a fumigant or high drift pesticide application, a map that shows the location of the application site, and the school, day care center or adjacent park, must be provided in the yearly disclosure document. It is stated on the required form:

The attached map shows the location of the school site and the field(s) within 1/4 mile of the schoolsite. The property boundaries of the school site were determined by the county agricultural commissioner. Please contact the county agricultural commissioner if you believe that the property boundaries are incorrect...^[27]

A similar map showing the location of the pesticide application with the surrounding areas of homes, schools, or day care centers within a ½ mile radius of the application could be required for the NOI. At this time it is not. [24] [27]

These Pesticide-Near-School regulations demonstrate there is an ability for advance public notice. The Monterey County organization, FarmingSafelyNearSchools, publicized its ability to publicly push advance notice out via text and email messages to anyone who opted-in. This program is no longer available since a DPR funding grant ran out. This defunded program could be used as a model pilot program for Santa Cruz County.

May 7, 2020 Letter from DPR to All County Agricultural Commissioners

During COVID Shelter-in-Place orders, the DPR issued a notice acknowledging that with current distance learning, every home with children should be considered a school or day care center and treated accordingly if located within a ¼ mile of a pesticide application. The DPR sent this letter as guidance and did not issue actual regulations on May 7, 2020 to all County Agricultural Commissioners. [32] Page 3 stated:

Many of the general considerations regarding drift and potential exposures at school sites apply to homes as well as schools...because most children are at home distance-learning during most of each day and on weekends...all CACs must strictly enforce all applicable health protections around homes and schools during the COVID-19 emergency...these requirements apply 7-days a week.^[33]

The letter was issued on May 7, past the April 30 deadline for yearly notifications. If this were a regulation, 48-hour notice would be required for all homes with children within ½ mile of a pesticide application.

CalAgPermits Software

The CalAgPermits system is a statewide online pesticide use and reporting system.^[21] Its current capabilities include submission of Restricted Materials Permits, Pesticide Use Reports, and Notice of Intent forms.^[34] To date, it has not been designed for advanced public notice of pesticide application.^[12] [20] This program has more than 20,000 account holders.^[21]

Currently the CalAgPermits software is not extensively used by growers in the county. [19] More often growers directly submit their applications to the CAC in person, via email, facsimile, and USPS mail. Use of the software itself is free to growers and applicators. Contracting with companies who use third party software which interfaces with CalAgPermits is pricey. These services submit permit applications and NOIs for some of the larger growers but not many small growers use such services due to cost. To mandate that NOIs and permit applications be submitted through the CalAgPermit software would require training. [12] [20] [21]

Conclusion

The CAC is not in a position to develop its own online posting software or modify the existing statewide software to accommodate public posting, especially if each notice requires research and modification of its content. [12] [20] Research suggests the DPR is in the beginning stages of gathering public input this summer on advance public notice of pesticide use. [35] Some growers may be interested in, and comfortable with, electronic entry. Some growers may be concerned that advance public notice might elicit negative reactions. [36]

The public has expressed an interest in access to advance notices of pesticide application. [10] [14] [31] The CAC must answer these concerns. Setting up a pilot program to engage selected growers could help establish a method to provide the public with advance notice, provided the applications submitted use locations that could be easily located on a map. A pilot program could help provide useful feedback to the DPR and determine whether advance public posting of pesticide use is feasible.

Findings

F1. Location information on the Notices of Intent provided by the growers and qualified applicators does not adequately describe the location of the pesticide application in a way that someone not intimately familiar with the farm could understand. This means that timely online posting of the current Notices of Intent, even if possible, would not be helpful to the public. The Department of Pesticide Regulation requires a map useful to the public on the *Annual Notification of Pesticides Used Near Schools and Child Day Care Centers* form.

- **F2.** The Department of Pesticide Regulation's policies on application of pesticides near schools and its May 7, 2020 letter to California Agricultural Commissioners show its awareness of the changing need to inform and protect the public living near agricultural pesticide application sites.
- **F3.** Department of Pesticide Regulation policy changes must be influenced by the Board of Supervisors. The Agricultural Commissioner cannot exert such influence. The Board of Supervisors are in the best position to lobby the Department of Pesticide Regulation.
- **F4.** The Agricultural Commissioner has the difficult job of reconciling conflicting interests. The Agricultural Commissioner must consider and protect the interests of the growers, the nearby community members, the county schools, and the Department of Pesticide Regulation.
- **F5.** There is a demonstrated capability for advance public notice of pesticide use.

Recommendations

- **R1.** Within six months, the Agricultural Commissioner's Office should initiate a pilot program to train interested growers and applicators to use the CalAgPermits software. Goals of the pilot program should include recommendations enhancing the usefulness of the software program to growers and reducing the workload of the Agricultural Commissioner's Office. (F1, F2, F4)
- **R2.** Within six months, the Board of Supervisors should assess and initiate online posting, text, or email notification of pesticide applications for nearby neighborhoods. (F3, F4)
- **R3.** Within six months, the Board of Supervisors should lobby the state and the Department of Pesticide Regulation to require that specific location information useful to the public be included on forms such as the Restricted Material Permits and the Notice of Intent forms. (F1–F4)
- **R4.** Within six months, the Board of Supervisors should collaborate with other counties to lobby the Department of Pesticide Regulation for funds to implement a statewide program of notification, similar to the now defunded FarmingSafelyNearSchools program. (F5)

Required Responses

Respondent	Findings	Recommendations	Respond Within/ Respond By		
Santa Cruz County Board of Supervisors	F1–F3, F5	R2–R4	90 Days September 27, 2021		

Invited Responses

Respondent	Findings	Recommendations	Respond Within/ Respond By		
Santa Cruz County Agricultural Commissioner	F1–F5	R1	90 Days August 30, 2021		

Definitions

- CAC: Santa Cruz County Agricultural Commissioner's Office
- CACASA: California Agricultural Commissioners and Sealers Association. A
 voluntary organization of County Commissioners and County Sealers of Weights
 and Measures from California's 58 counties. CACASA provides the venue for
 collaborative opportunities to address matters of statewide significance that affect
 California's agricultural production, natural resources, marketing, food safety,
 equity, and public health as it relates to our environment.^[37]
- CDFA: California Department of Food and Agriculture
- DPR: California Department of Pesticide Regulation. The state Agency that regulates pesticide use in California, mainly through the County Agricultural Commissioner's Office in each county.
- NOI: Notice of Intent To Apply Restricted Materials. Usually referred to as Notice
 of Intent, or NOI. [6] [24]
- Pesticide: Any substance or mixture of substances which is intended to be used for preventing, destroying, repelling or mitigating any pest, and any plant growth regulator, and any "spray adjuvant" that is used with a pesticide and is intended to be an aid to the application or effect of the pesticide. [38]
- Qualified Applicator: A qualified pesticide applicator is an individual or business
 who applies or supervises the application of federally restricted use pesticides or
 state restricted materials. To obtain a license or certificate to become a Qualified
 Applicator one must submit the proper application, pay the obligatory fees, and
 pass the required examination.

The Department of Pesticide Regulation (DPR) issues licenses and/or certificates to: persons and businesses that apply or sell pesticides, pest control dealers and brokers, persons who advise on agricultural pesticide applications and it also certifies pesticide applicators who use or supervise the use of restricted pesticides. [39] [40] [41]

- Restricted Materials: Pesticides deemed to have a higher potential to cause harm to public health, farm workers, domestic animals, honey bees, the environment, wildlife, or other crops compared to other pesticides. With certain exceptions, restricted materials may be purchased and used only by or under the supervision of a certified commercial or private applicator under a permit issued by the County Agricultural Commissioner's Office (CAC).^{[2] [42]}
- SASS: Safe Ag Safe Schools, A coalition of over 50 organizations and individuals working together to reduce the threat of pesticide exposure in the Monterey Bay area. [14]
- Soil Fumigants (EPA Definition): Pesticides that, when applied to soil, form a
 gas to control pests that live in the soil and can disrupt plant growth and crop
 production. Soil fumigants are used on many high value crops and provide
 benefits to growers in controlling a wide range of pests, including nematodes,
 fungi, bacteria, insects, and weeds. [43] [44]

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Site Visits

Agricultural Commissioner's Office

Appendix A – Restricted Materials Permit

From the California Department of Pesticide Regulation^[45]

		APPL	ICATION - RES	TRICTED MATERIAL									
		FOR POSSESSION	PERMIT	PERMITTEEPERMIT NO									
RMITTEE ADDRESS		CITY	ZIP	PHONE	TYPE OF PER	RMIT	EXPIRAT	ION DATE					
			SEASONAL					JOB					
PRIVATE APPLICATOR		TRUCTURAL PCO		AGRICULTURAL PCO	COMMER	CIAL APF	PLICATOR						
NOTICE OF INTENT REQUIRED	N	IUST BE SUBMITTED A	T LEAST HOUR	RS PRIOR TO APPLICATION. M	ETHOD:								
PESTICIDES/PESTS													
			6.		11								
			7.		12.								
			J		14								
	T 1		0.		15.			T DILLITION	_				
LOCATION SEC TWI	N RNG ID	COMMODITY	ACRES/UNITS	PESTICIDES	PESTS	F* M*	RATE	DILUTION/ VOLUME	APPL	DATE/TIM			
									\vdash				
						+							
						_	-		-				
O NAME	ADDRESS		PHONE	PCO NAME	AD	DDRESS			PHONE				
JUSTIFICATION FOR NON-AG USE: CONDITIONS:													
CONDITIONS.													
Inderstand that this permit does not reliev	o mo from liahi	lity for any damage to	noreone or proporty car	read by the use of these postici	ides I waive any claim of	*EC	DEMIII ATION: I	LIQUID BBAIT	D-DIIS.	т			
ability or damages against the County Dep	artment of Agr	iculture based on the i	ssuance of this permit. I	further understand that this pe	ermit may be revoked whe		F	FUMIGANT G(GRANUL	ES			
esticides are used in conflict with the man spection at all reasonable times and wher	never an emero	ency exists by the Dep	artment of Pesticide Re	gulation or the County Departm	ent of Agriculture of all			/PWETTABLE P		UUTHER			
reas treated or to be treated, storage facilit ternatives and mitigation measures pursu								AIR GRGROU FUMIGATION O		?			
chnological factors, I have adopted those													
						TITLE		DATE					
PLICANT			SIGNATURE	_		IIILE		DATE					