



**PESTICIDE REGISTRATION
AND EVALUATION COMMITTEE (PREC)
Meeting Minutes – January 18, 2019**

Committee Members/Alternates in Attendance:

Brian Larimore – Department of Resources, Recycling and Recovery (CalRecycle) – via webcast
Jodi Pontureri – State Water Resources Control Board (SWRCB)
Karen Morrison – Department of Pesticide Regulation (DPR)
Kevi Mace-Hill – California Department of Food and Agriculture (CDFA)
Lori Lim – Office of Environmental Health Hazard Assessment (OEHHA)
Matt Hengel – UC Davis Department of Environmental Toxicology
Ruben Arroyo – California Agriculture Commissioners and Sealers Association (CACSA)
Stella McMillin – California Department of Fish and Wildlife
Valerie Hanley – Department of Toxic Substances Control (DTSC)

Visitors in Attendance:

Abhi Kulkarni – California Walnuts
Anne Katten – California Rural Legal Assistance Foundation
Arthur Lawyer – Exponent
Chris Reardon – Pest Control Operators of California
Darren Van Steenwyk – Clark Pest Control
Dave Lawson – Western Plant Health Association (WPHA)
Delia Jimenez Cioc – County of Riverside Agricultural Commissioner’s Office
Emily Saad – Exponent
James Nakashima – Office of Environmental Health Hazard Assessment (OEHHA)
Jean-Mari Peltier – Environmental Solutions Group (ESG)
Mark Weller – Californians for Pesticide Reform
Mike Ziess
Rima Woods – Office of Environmental Health Hazard Assessment (OEHHA)
Sosan Madanat – Lighthouse Public Affairs

DPR Staff in Attendance:

Alexander Kolosovich – Pesticide Registration Branch
Andy Rubin – Risk Assessment Section
Ann Prichard – Pesticide Registration Branch
Aron Lindgren - Pesticide Registration Branch
Brenna McNabb – Pesticide Registration Branch

DPR Staff in Attendance continued...

Charlotte Fadipe – Director’s Office
Craig Cassidy – Director’s Office
Daniel Rubin – Director’s Office
Denise Alder - Pesticide Registration Branch
Doug Downie – Pest Management and Licensing Branch
Emma Wilson – Worker Health and Safety Branch
Harvard Fong – Worker Health and Safety Branch
Jill Townzen – Pesticide Programs Division
Jolynn Mahmoudi-Haeri – Pesticide Registration Branch
Kara James – Pesticide Registration Branch
Ken Everett – Pesticide Programs Division
Ken Spence – Director’s Office
Margaret Reiff – Pesticide Registration Branch
Marylou Verder-Carlos – Pesticide Programs Division
Randy Segawa - Pesticides Program Division
Rochelle Cameron – Pesticide Registration Branch
Russell Darling – Pesticide Registration Branch
Teresa Marks – Director’s Office

1. Introductions and Committee Business – Karen Morrison, Chair, DPR

- a. Approximately forty-one (41) people attended the meeting.
- b. No corrections to the minutes for the meetings held on September 21, 2018 and November 16, 2018.

2. Eye Decontamination Regulation – Harvard Fong, DPR

The Department of Pesticide Regulation’s Worker Health and Safety Branch is proposing to amend Title 3 of the California Code of Regulations (3 CCR) section 6734, Handler Decontamination Facilities. The current decontamination stations in the field are not all adequate for worker use. Due to the problems associated with these defective stations, Worker Health and Safety is proposing a citation of the American National Standards Institute (ANSI) Z358.1 decontamination requirements replace the current regulation. This would require the usage of ANSI Z358.1 compliant eyewash stations as well as the use of compliant, portable eyewash units. The ANSI Z358.1 definition for personal wash is a supplementary device that supports plumbed and/or self-contained units, by delivering immediate flushing fluid to the eyes or body. Some of the bottles currently used to flush the eyes and body are compliant with ANSI Z358.1 for personal use, but do not meet the criteria of plumbed or self-contained eyewash equipment.

ANSI Z358.1 compliant eyewash stations are ideal because the stations tend to position the person’s face in the proper position, which allows water to spray appropriately over the eyes,

instead of into the eyes. The present devices are compliant with 3 CCR section 6734, however DPR is proposing a change to the regulations to ensure DPR's decontamination equipment is up to standard with 3 CCR and the Occupational Safety and Health Administration.

3. Proposed Decision for Reevaluation of Second-General Anticoagulant Rodenticides **– Brenna McNabb and Denise Alder, DPR**

California law requires DPR to continuously evaluate registered pesticides. DPR fulfills these requirements through its reevaluation program. In accordance with California regulations, California Food and Agricultural Code section 12824 and Title 3 of the California Code of Regulations (3 CCR) section 6220, DPR is required to investigate information that indicates a pesticide may have caused or is likely to cause an adverse effect. This information can come from numerous sources. If the Director finds that a significant adverse impact has occurred or is likely to occur, the pesticide shall be reevaluated and trigger the reevaluation process.

The Second-General Anticoagulant Rodenticide (SGARs) grouping includes four active ingredients: brodifacoum, bromadiolone, difenacoum, and difethialone. DPR registers SGAR products for rodent control, and specifically for different types of mice and rats. SGARs are unique because the rodent consumes lethal dose in a single feeding. However, the mechanism leading to these results also leads to delayed action of anticoagulant. This allows multiple feedings on SGAR products, which leads to above lethal concentrations in the target pest and threat of non-target wildlife feeding on SGAR exposed rodents. SGARs can kill rodents in one lethal dose, but it may take several days after the rodent feeds on the product to die. The rodent may feed on the product multiple times before death, which leads to higher concentrations of SGARs in the rodent. The reevaluation of brodifacoum closed in 2014 and resulted in DPR adopting regulations on all four SGAR active ingredients (3 CCR sections 6000, 6400, and 6471). These regulations designated SGARs as California restricted materials, added use restrictions, and resulted in a change of its current use pattern. California restricted materials can only be sold by licensed dealers and can only be purchased and used under the direct supervision of certified applicators. After

Following the brodifacoum reevaluation, DPR continued to receive incident reports from the California Department of Fish and Wildlife (CDFW) and research studies. DPR published "An Investigation of Anticoagulant Rodenticide Data Submitted to the Department of Pesticide Regulation", on November 16, 2018, along with Notice of Proposed Decision to Begin Reevaluation of Second-Generation Anticoagulant Rodenticides and Public Report (California Notice 2018-22). This investigation considered peer-reviewed scientific publications, statewide sales and use reporting, unpublished wildlife incident and mortality data, and evaluated 11 studies and 152 CDFW loss reports that were submitted to DPR since 2014. DPR determined the reviewed data demonstrates SGARs have a significant adverse impact to non-target wildlife. Based on this investigation, the Director finds significant adverse impact has occurred or is likely to occur from SGARs and proposes to begin reevaluation. To support this finding, DPR issued California Notice 2018-22. There are 75 products currently registered in California that would be included in this reevaluation. This notice also established a 30-day comment period, which was

later extended to 60-days. The amended comment period closed January 16, 2019, after receiving approximately 17,000 comments. The notice is currently under review and the final determination by the Director will determine the initiation of reevaluation and development of any data requirements.

For information, please visit DPR's website at <<https://www.cdpr.ca.gov/docs/registration/reevaluation/reevals.htm>> or contact Environmental Scientist, Ms. Brenna McNabb, at <Brenna.McNabb@cdpr.ca.gov> or by telephone at 916-445-0179.

4. Interim Recommended Permit Conditions for Chlorpyrifos – Ken Everett, DPR

In July 2015, Chlorpyrifos was designated as a California restricted material. The requirements include a permit from the county agricultural commissioner prior to purchase and use, applications to be made or supervised by a certified applicator, and an evaluation by the county agricultural commissioner of local conditions prior to a proposed application. Based on the evaluation, the commissioner may approve, deny, or condition a permit.

Chlorpyrifos is an organophosphate insecticide used on more than sixty crops. The top ten crops (orange, almond, walnut, cotton, alfalfa, grapes, wine grapes, lemon, tangerine, and sugar beet) account for more than 90% of the usage for this insecticide. This insecticide is mainly used in the Central Valley, Central Coast, and Imperial regions for very popular crops such as almonds, cotton, grapes, alfalfa, and sugar beets. The most popular application method is via the ground, followed by air and then other, non-specific methods, such as chemigation or granules.

According to the California Toxic Air Contaminant (TAC) Act, California Food and Agricultural Code sections 14021-14027, the California Air Resources Board (ARB) is required to monitor pesticides at DPR's request and DPR is required to assess bystander health risks from pesticide air exposure. A Scientific Review Panel (SRP) then reviews DPR's assessment and California regulations specify the criteria to list a pesticide as a TAC. If a pesticide meets TAC criteria, DPR is required to mitigate bystander health risks from pesticide air exposure. DPR will then determine if mitigation is necessary and implement mitigation measures. The following is a chlorpyrifos TAC timeline for monitoring and risk assessment:

- July 2018 – Risk assessment finalized; SRP issued findings
- September 2018 – Proposed regulation for TAC listing released for public comment
- November 2018 – Regulation comment period ends
- April 2019 – TAC listing regulation goes into effect
- Summer 2019 – Consultation with other agencies regarding mitigation
- Fall 2019 – If needed, development of mitigation regulation
- Spring 2020 – Proposed regulation for TAC mitigation released for public comment
- Spring 2021 – TAC mitigation regulation goes into effect

DPR placed interim permit conditions, which included:

- Application method restrictions
- Requirements for pest control adviser recommendation and notices of intent
- Only low drift application or “critical uses” are allowed, with ground equipment
- Buffer zone of 1320 feet (1/4 mile) during application plus 24 hours, with only handlers and transit allowed
- Setback of 150 feet from sensitive sites

The application method restrictions prohibit aerial applications, restrict airblast applications, applications with wind speeds of 3-10 miles per hour, application sizes no more than 40 acres in a 24-hour period, a trained person during application for chemigation, and ensuring granules are incorporated or cleaned up. In addition to these restrictions, DPR is requiring pest control adviser recommendation that describes the type of application to be made, as well as the submission of a notice of intent to the agricultural commissioner within 48 hours prior to application.

Some allowed uses include low drift applications for any crop, which must meet the precision sprayers Natural Resources Conservation Service criteria. This allows granular products and drip chemigation, which are exempted from setbacks and buffers. In addition to this, general critical uses for any crop are allowed for Section 18 (emergency exemption), Section 24c (Special Local Need, SLN), and the requirement for quarantine, invasive pest. DPR has also been working the University of California extension to identify crop pest combinations that are critical and have very few, if not any alternatives to chlorpyrifos. There are 19 specific crop and pest combinations, some of which include:

- Alfalfa for weevils, blue alfalfa aphids, and cowpea aphids
- Almonds for leafhopper bugs and stink bugs
- Asparagus for garden symphylans and asparagus aphid
- Citrus for ants
- Cole leafy vegetables for root maggots
- Cotton for cotton aphid and sweet potato whitefly
- Garlic for root maggots
- Grapes for ants and vine mealy bugs
- Onions for root maggots
- Peppermint for garden symphylans and mint root borers
- Walnuts for borers

DPR is now requiring a buffer zone (quarter mile or 1320 feet) around all allowed applications, except granular and drip irrigation. Also, only handling activities and transit are allowed in the buffer zone. The buffer zone is in effect during application and afterward, however, it can extend into roads and other properties without permission and may overlap. Applications within half a mile cannot exceed 40 acres. In addition to buffer zones, setbacks are also required, except granular and drip applications. A setback of 150 feet is required for areas frequented by non-

occupational bystanders, especially children. There cannot be any chlorpyrifos application in the setback, even if there is no one there.

For information, please visit DPR's website at
<https://www.cdpr.ca.gov/docs/enforce/compend/vol_3/append_o.pdf>.

5. Committee Comment

Ruben Arroyo asked how much one decontamination station that meets ANSI Z358.1 would cost. He also asked a small farm with possibly only one pickup truck would place such decontamination equipment and what could be used to meet the standard. Harvard Fong replied that the cost of such equipment is approximately \$100 to \$200 but can also reach \$800 depending on the type of unit. These eyewash stations can be placed on the back of pickup trucks or any other accessible position. One other requirement for the mixed load stations is that the eyewash station must be within a ten second unimpeded walk from the work area.

Lori Lim asked if the eyewash units are refillable and reusable. Harvard Fong replied that they are reusable and workers can fill them with normal water or a preserved water solution. Emma Wilson also added that there is a standard height requirement for the stations, which is no less than 33 inches and no greater than 53 inches from the surface from which the user stands. These stations must also be at least 6 inches away from the nearest wall or obstruction.

Lori Lim asked when the SGARs were first used in California. Brenna McNabb replied that the first generation of SGARs were first used federally in 1982. Lori Lim followed up stating that this issue with SGARs should have been addressed earlier because these products have been used for so long and it was known that rodents are consuming multiple doses before dying. Brenna McNabb replied that DPR initiated the brodifacoum reevaluation back in 1999, but when the U.S. Environmental Protection Agency came out with their rodenticide cluster (all ten active ingredients), DPR worked with them before concluding regulations. Lori Lim then asked if there are any signs the reevaluation of SGARs will be fast-tracked. Brenna McNabb replied that the Director would make a final decision by March. This issue is a priority, but the department also has to make sure the necessary information is there before moving forward. At this time, it is too early to determine how long this process will take.

Lori Lim asked if DPR has communicated with pest control operators to let them know what is going on so they can minimize the use of SGARs or find alternatives. Brenna McNabb replied that DPR is considering the comments received from pest control operators, so they are definitely aware of what is going on.

Kevi Mace-Hill asked if DPR is reaching out to sponsor any studies to obtain more data or is going to rely on what is already available. Brenna McNabb replied that DPR would develop data requirements if reevaluation is initiated and the Director's final determination is pending at this time. DPR may consider that option for more data, however, nothing has been finalized. Denise

Alder added that the reevaluation process does allow DPR to request specific data from registrants or request submission from others to provide that information.

Lori Lim commented that the risk assessment is mainly restricted to particular scenarios, such as bystander's acute exposure to spray drift. This does not address any other exposure scenarios, such as workers. She then asked when DPR is going to conduct repeat exposure assessment for bystanders and all of the potential exposure scenarios for the workers. Randy Segawa replied Lori Lim is correct in that the current risk assessment mainly covers bystanders,;however, there are current requirements to address the worker exposure. DPR will continue to follow the standard process to mitigate acute exposure and then check if seasonal and long-term exposure need additional mitigation.

Kevi Mace-Hill commented that while there may be alternatives, there are other considerations besides the presence of alternatives, such as resistance management. In some of these cases, the alternatives directly conflict with biological control, which is the preferred method of control for these pests.

6. Public Comment

Jean-Mari Peltier asked what the period for submission of comments would be on the regulation. Harvard Fong replied that he does not when the period is. Karen Morrison added that DPR will issue a notice for the regulation, which will be sent out through the regular noticing forums.

Dave Lawson commented he was involved with brodifacoum when the regulations were developed. This ingredient was introduced back in the 1990s and there was an increase in the sales rates and reviews over time. During the mid-90s, many of the secondary poisons came from outside rodents and not rats or mice. This reevaluation is necessary because there are many different facts from detailed reports over time. The new regulations are very effective and can help decrease the number of animals that are effected by secondary exposure.

Arthur Lawyer asked if DPR could make data requirements without going into the reevaluation. Karen Morrison replied that DPR has to make the determination before asking for data.

Dave Lawson asked Ruben Arroyo if he receive any comments in regards to the permit conditions mentioned. Ruben Arroyo replied that the permit conditions were suggested to the county agricultural commissioners and have been implemented statewide. The limitation of 40 acres and critical uses has been an issue because it limits what the workers can do in that area.

An unknown woman asked what protection is in place, such as Kern County for children entering school or daycare early in the morning near farming communities that begin working very early in the morning as well. Ken Everett replied that if there are occupied sensitive sites within the buffer zone, then the application could not occur, so this is the main protection. She then asked the same question once more, about what is being done to protect the children in these areas. Ken Everett replied that the annual notice for application does not apply in these cases and

the growers have to submit a notice of intent (NOI) 48 hours before spraying in order to be approved to spray. Ruben Arroyo added that the annual notification for schools and interim permit conditions. The new permit conditions for chlorpyrifos make it illegal to spray.

Anne Katten commented that the worker protection standard would not adequately address field worker exposure because it does not do anything to reduce residue exposure or take-home exposure. The quarter mile buffer zone is not adequate, but it is important that there is a buffer zone, setback and wind speed control. Anne Katten asked what type of compensation is available to renters or workers to vacate their properties if it is within a buffer zone. Ken Everett replied there is nothing specified for that type of situation because it would have to be an agreement between the grower and the occupant of the house.

Anne Katten asked what kind of oversight the department will do to make sure that all of the recommendations were appropriate in regards to the type of crop and type of pest. Ken Everett replied the oversight is part of the restricted materials process so the grower would come in for their permit and the county would review the site, the crop, and the pest. If the criteria is not met, they cannot spray chlorpyrifos unless they have a precision sprayer. DPR's Enforcement Branch visits counties to observe the workers, and review their permits.

Mark Weller commented, in regards to children being exposed to chlorpyrifos, and stated that much of Kern County is made up of farm-worker communities. He stated that even with these regulations and permits, this would not protect fetal development and other issues due to drift, food and water exposure, etc. He then said DPR needs to suspend and initiate cancellation of registrations for all chlorpyrifos products.

Doug Downie mentioned there are copies and additional information online that people can take.

7. Agenda Items for Next Meeting

Address current pesticide drift data and safeguards and prevention of downwind drops

The next meeting is scheduled for March 15, 2019 at 10:00 a.m. in the Sierra Hearing Room on the second floor of the CalEPA building, located at 1001 I Street, Sacramento, California.

8. Adjourn