PESTICIDE REGISTRATION AND EVALUATION COMMITTEE (PREC)
Meeting Minutes – November 19, 2021

Committee Members/Alternates in Attendance:

Garrett Keating – Department of Industrial Relations (DIR)
Heather Williams – Department of Resources Recycling and Recovery (CalRecycle)
Jaime Rudd – Department of Fish and Wildlife (DFW)
James Seiber – University of California (UC), Davis, Department of Environmental Toxicology
Jeff Fowles – Department of Public Health (CDPH)
Katherine Sutherland-Ashley – Office of Environmental Health Hazard Assessment (OEHHA)
Kevi Mace – California Department of Food and Agriculture (CDFA)
Lynn Baker – Air Resources Board (ARB)
Matt Hengel – University of California (UC), Davis, IR-4 Program
Patti TenBrook – U.S. Environmental Protection Agency (EPA), Region 9
Rich Breuer – State Water Resources Control Board (SWRCB)
Ruben Arroyo – CA Agricultural Commissioners and Sealers Association (CACASA)
Tom Ineichen – Structural Pest Control Board (SPCB)
Tulio Macedo – Department of Pesticide Regulation (DPR)
Valerie Hanley – Department of Toxic Substances Control (DTSC)

Visitors in Attendance:
Note: Only attendees who identified themselves using their full name are listed below

Anna McGrath
Anne Katten – California Rural Legal Assistance Foundation
April Vingum
Asha Sharma
Barbara LeVake
Ben Sacher
Brad Clements
Brian Gress – California Department of Food and Agriculture (CDFA)
Carmela McHenry
Christopher Finarelli
Dawn Robertson
Eric Mashburn
James Nakashima – Office of Environmental Health Hazard Assessment (OEHHA)
Jayne Walz
Jing Tao
John Bottorff
Kathy Westcott
La Vans
Lei Han

Visitors in Attendance Continued:

Levi Howell
Liz Rea
Lorena Sanpedro
Luke Roling, KP Public Affairs
Michael Barber, SBM Life Science Corp
Michele Brunlinger
Ronnie Capili
Sue Moon
Suzanne Hume

DPR Staff in Attendance:

Aniela Burant – Environmental Monitoring Branch
Andrew Turcotte – Pesticide Registration Branch
Aron Lindgren – Pesticide Registration Branch
Atac Tuli – Environmental Monitoring Branch
Brittanie Clendenin – Pesticide Registration Branch
Kara James – Pesticide Registration Branch
Minh Pham – Environmental Monitoring Branch
Nan Singhasemanon – Pesticide Programs Division
Nathan Desjarlais - Enforcement Branch
Nino Yanga - Pesticide Programs Division
Savannah Hadley – Pesticide Registration Branch

1. **Introductions and Committee Business – Tulio Macedo, Chair, DPR**

a. Approximately eighty-one (81) people attended the meeting.
b. The comment period for the citrus/bee protection area regulation closed on June 2, 2021 and the proposed regulations are currently under review at the Office of Administrative Law.
c. The comment period for the carbon monoxide pest control device regulations closed on September 8, 2021 and the Department of Pesticide Regulation (DPR) is reviewing comments received during the comment period.

2. **Pesticide Registration Process – Aron Lindgren, DPR**

Federal and state law govern the manufacturing, sale, distribution, and use of pesticide products. Federal authority to regulate pesticides is found in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Code of Federal Regulations. The Department of Pesticide Regulation's (DPR) authority to regulate pesticides is found in FIFRA section 24(a) and various other California laws and regulations. These codes and regulations ensure proper, safe, and efficient use of pesticides essential for food and fiber production, and for protection of public health and safety. A pesticide must be registered with the U.S. Environmental Protection Agency

(U.S. EPA) before being registered with DPR. Required registration of pesticides protects the environment by prohibiting, regulating, or ensuring proper stewardship of those pesticides and assures pesticides are properly labeled and appropriate for the use designated by the label.

There are more than 13,700 pesticides registered today containing a broad spectrum of pesticide types. Types range from surface disinfectants, bleach, lawn and garden to protection tools, pet protection products, and insecticide repellants, as well as products to facilitate commercial food and fiber production. Additionally, there are also California-only registered pesticide products such as agriculture spray adjuvants, pool and spa maintenance materials, and some impregnated material (clothing apparel and fabric items impregnated with a pesticide that is marketed to protect the user from nuisance insects.

The Registration Branch is responsible for pesticide product registration and licensing activities. This is accomplished with a comprehensive administrative pesticide label and scientist review of an application to register or amend currently registered pesticide products. All applications must be paper based and mailed in. The registration process is summarized below.

The intake team documents all application submission contents, creates a mail log record, and issues a track ID in the pesticide tracking system. The Tracking system enables the registrant to receive email updates as their application moves through registration process. The Branch Chief may be involved in this stage if concurrent registration or an expedited expedite is requested. An ingredient review may be needed if the active ingredient is difficult to identify or if it has not been registered with the state. If an application or submission contains a new active ingredient, a chemical record needs to be created before the submission can move on. If the submission is accompanied with data volumes, the data needs to be catalogued by DPR's indexing team. Pesticide data indexing applications are publicly facing and all product data is available on DPR's Web site. The intake team also identifies who will review the submission. Registrants will have an assigned regulatory scientist, but there are some special assignments based on active ingredient or product use. For example, there are specific regulatory scientists who handle all products with active ingredients new to the state.

Regulatory Scientists (RS) review all documents provided to ensure completion, accuracy, and quality. Regulatory scientists review product labels to make sure they meet specific label requirements outlined in 40 CFR § 156.10. They also verify that the proposed label aligns with U.S. EPA because California labels cannot have anything listed on their labels that the U.S. EPA has not approved. At this point, the process can conclude if all data requirements have been met and the labeling is correct. Often times, the requirements are not met and scientific evaluation may be necessary.

If scientific evaluation is necessary, the RS will route the submission for review. Aa notice is sent out on DPR's Materials Entering Evaluation listserv. Each evaluation program reviews different products based on type and use, and the regulatory scientist decides which disciplines are needed. They may consult with an evaluation scientist to determine whether a submission

requires reviewing or which disciplines may be needed. Not all products go through review, many rely on previously reviewed product data and scientific evaluation reports.

If the submission is routed for review, an evaluation scientist assesses the data in conjunction with the label to determine if a product is supported by either the data supplied by the company or data DPR has on file. A determination is documented in a report and is peer reviewed by colleagues and again by a supervisor for sign off. After the identified scientific evaluation disciplines are complete, a public report is generated.

To complete the registration process, a program manager makes a final determination to register or deny the product/amendment. The submission is routed back to the RS. The decision is then posted for public comment and a notice is sent to the Notice of Proposed and Final Decisions listserv. The public comment period remains open for 30 days. DPR evaluates all comments raising a significant human health or environmental point prior to making a final registration decision. If DPR makes a final decision to register, a written evaluation of the comment is included when the final registration decision is posted and sent to the listserv. If the final decision is to register a new product, DPR issues a license, creates correspondence, and sends the letter and stamped-accepted label to the company. An electronic profile of the label is saved in DPR's electronic pesticide product label database, which is available to the public. If the final decision is for a label amendment, DPR sends correspondence and the stamped label to the company and updates the database, if needed.

Continuous evaluation of registered pesticides' adverse effects reporting is required for registration. The Registration Branch receives and records adverse effects disclosures, coordinates human health risk assessments, and coordinates DPR's pesticide revaluation program. If a registrant has information on an adverse effect associated with the use of a pesticide regarding human health or the environment, the company must submit that information to DPR. The Registration Branch compiles these reports and may lead DPR to request additional information from registrants and in some cases trigger reevaluation. DPR conducts human health risk assessments to evaluate the risks to people associated with pesticide use. If specific uses cause concern and are identified, DPR adopts mitigation measures to reduce the risk of pesticide exposure and mitigate the risk of adverse human effects. Reevaluation is an apparatus for continuous evaluation of registered pesticides, and is the legal mechanism that allows DPR to require companies who have registered products in California to conduct tests and submit data for analysis by DPR scientists.

Committee Comment

Brian Gress asked how DPR would assess a product that does not provide control of a pest on its own, but rather is meant to be used in combination with another product as part of a larger pest management program. Tulio Macedo replied that DPR would evaluate efficacy based on label claims. Tulio added that for adjuvants, the department will evaluate how much that product will weigh the efficacy of other products. Matt Hengel added that the IR4 program works with DPR

on evaluation to ensure that the product will be efficacious for its intended use and adds that data when registration is occurring in California, in conjunction with the rest of the country.

Garrett Keating with California Division of Occupational Safety and Health requested further explanation regarding what triggers the human health risk assessment. Tulio Macedo answered that the information received from adverse effects and other sources may trigger prioritization and will determine what will be included in a risk assessment. Tulio elaborated that the registration branch makes current and past risk assessments available on the Web site and ensures all information needed to perform the evaluation is available.

Public Comment

Suzanne Hume asked why is only the active ingredient registered? Roundup showed that the product is far more dangerous than just glyphosate. How can you ensure public and environmental safety without testing and registering the actual product being used? Aron Lindgren responded that DPR reviews the entire formulated product however, the active ingredient is the main focus because it is the material that has the toxicant or associated with the toxicant. Aron continued stating that the remaining formulation typically supports the active ingredient and the ingredients have different functions. Tulio Macedo added that when DPR performs a registration evaluation, the entirety of the formulation is reviewed and require companies to submit the entire formula.

Tammy Qualls, P.E., with Qualls Environmental Consulting asked what triggers a pesticide to be reviewed by the surface water group. Aron Lindgren replied that pesticide use mainly determines if the surface water group should review. Aron added if it is an agricultural product or if there is exposure to water ways, consultation with surface water or environmental monitoring groups may be requested. Tulio Macedo expanded that the product's use pattern is a determinant of what product will go through environmental monitoring review. Tulio stated specific active ingredients that are flagged for review by environmental monitoring, surface water or groundwater programs and products that are determined to have a potential for leaching, are some unique instances that will also trigger the review process.

Due to time constraints, the following questions were not answered live.

John Bottorff submitted the following questions via email:

> For production registration, these are new products, so how much scientific evaluation data is typically available for review? Looking at a history of toxic pesticides that were used for decades before being stopped, the current process is doing little to nothing to actually protect human health and the environment. DDT, RoundUp, chlorpyrifos and now neonicotinoids for example. How can the process be changed so products are not approved until they are shown to be safe. The DPR system now assumes products are safe which makes no sense especially considering the track record of the industry. The Intercept recently published a 6-part series on how the EPA is failing to evaluate and test

> pesticide and chemicals due to industry interference. I hope all of you have read the series as it directly impacts what you do. Here is the safety series <theintercept.com/2021/07/02/epa-chemical-safety-corruption-whistleblowers/>. What are DPR and PRECs policies and procedures to ensure their mission to protect is not being interfered with? How can the process of registration and testing be completely transparent to the public so we can see things like what data was used to evaluate a product?

Aron Lindgren replied with the following response via email:

> Data requirements are specific to the type of pesticide considered for registration. See the following link for product specific Data Requirements <cdpr.ca.gov/docs/registration/data_requirements.pdf>. Each product registered/licensed is supported by scientific studies conducted under the specified guidelines. The front end review of pesticides are essential to identify and mitigate any adverse effects when used according to the label instructions. Data requirements are specific to the type of pesticide considered for registration. See the following link for product specific Data Requirements <cdpr.ca.gov/docs/registration/data_requirements.pdf>. However, CCR 6220 enables the department to investigate information received that indicate a pesticide may have, or is likely to cause, an adverse impact. If the investigation indicates a significant adverse impact has occurred or is likely to occur or that such an alternative is available, the pesticide involved shall be reevaluated. CCR 6252 directs DPR to consult on registration decisions with public agencies which have jurisdiction by law over the use of pesticides or over activities or resources which may be affected by the use of pesticides. Additionally, CCR 6255 directs the Department to make registration decisions subject to scientific evaluation available to the public for comment. These strategies assure that DPR policies and procedures are not interfered with regards to pesticide registration.

James Nakashima submitted the following questions via email:

> Could you provide a couple examples of registered impregnated products?

Aron Lindgren replied with the following response via email:

> Products made from pesticide impregnated material may include apparel (e.g., jackets, shirts, hats, socks, pants, shorts) or non-apparel (e.g., bedding, tents, seat covers, chopping blocks, shower curtains, mouse pads) which bear pesticidal claims. Registration Requirements for Products Made From Pesticide Impregnated Materials and Bearing Pesticide Claims (ca.gov) <cdpr.ca.gov/docs/registration/canot/2015/ca2015-13.pdf>.

Catherine Dobbs submitted the following questions via email:

> Inactive ingredients can have human health effects - how can we add them to the list? Is there any evaluation of pesticide mixtures? Does PREC keep stats on registrations how many at what stage approved by month?

Aron Lindgren replied with the following response via email:

> Assuming "inactive ingredients" referenced in the question are the inert ingredients in an end use formulated product; pesticide product formulations are assessed for human health effects, not individual ingredients. Assuming "pesticide mixtures": in the question relate to tank mix partners; pesticide product chemistries are evaluated as a unique stand-alone formulation(s). However, if a specified companion product is labeled and required for the end use solution, the mixture would be considered during the scientific review. PREC does not keep records or statistics. PRB does manages this data.

Levi Howell submitted the following questions via email:

> What are the normal review timeframes (or timelines) for various submission types? Such as new product registrations, amendments, notifications, etc? What are the normal review timelines vs realistic review timelines today? Does DPR anticipate any review timeline decreasing due to the increased registration fees beginning in 2022? Are any of these normal timelines still impacted by COVID reviews? Is DPR expecting to release an electronic submissions portal for pesticide registration actions that will eliminate the current paper submission process? What is the timeline for implementing such a new electronic submissions portal?

Aron Lindgren replied with the following response via email:

> Please see PESTICIDE REGISTRATION BRANCH ANNUAL PROCESSING TIMEFRAMES, California Notice 2021-14 <cdpr.ca.gov/docs/registration/canot/2021/ca2021-14.pdf>. The PRB does not anticipate any short term changes in application processing time due to the pesticide renewal fee increase. Effective April 28, 2021, DPR is no longer expediting applications for registration of disinfectant products that address surface transmission of SARS-CoV-2 (COVID-19), California Notice 2021-04 <cdpr.ca.gov/docs/registration/canot/2021/ca2021-04.pdf>. The Department is actively working towards an electronic submission portal, CalPEST. However, PRB does not anticipate eliminating paper based submissions subsequent to activation of the online application. DPR anticipates a full launch of the CalPEST electronic submission by the end of 2024.

Sue Moon submitted the following questions via email:

> What is the timeline for implementing such a new electronic submissions portal? What are the current timeframes for various submission types (New product registrations, amendments, notifications, etc.)? Are any of these normal timelines still impacted by COVID reviews?

Aron Lindgren replied with the following response via email:

> Please see PESTICIDE REGISTRATION BRANCH ANNUAL PROCESSING TIMEFRAMES, California Notice 2021-14 <cdpr.ca.gov/docs/registration/canot/2021/ca2021-14.pdf>. Effective April 28, 2021, DPR is no longer expediting applications for registration of disinfectant products that address surface transmission of SARS-CoV-2 (COVID-19), California Notice 2021-04 <cdpr.ca.gov/docs/registration/canot/2021/ca2021-04.pdf>.

3. Pesticide Reevaluation Program Overview – Brittanie Clendenin, DPR

The Reevaluation Program is part of the Pesticide Registration Branch. Other branches within the Department of Pesticide Regulation (DPR) assist the reevaluation staff with reevaluating pesticide products after they have been registered in California. The reevaluation team coordinates the review of scientific data with other branches and communicates data requirements and decisions with the affected registrants and the public. The program is currently comprised of four staff members and two managers: Denise Alder, Senior Environmental Scientist; Brenna McNabb, Environmental Scientist; Brittanie Clendenin, Environmental Scientist; Andrew Turcotte, Environmental Scientist; Shelley Lopez, Environmental Program Manager; and Ann Prichard, Environmental Program Manager. Denise Alder and Shelley Lopez are currently reassigned to assist with the CalPEST program.

After pesticides are registered in California, DPR continues to evaluate the pesticides as required by California Food and Agriculture Code (FAC) section 12824. The reevaluation process is just one way that DPR implements continuous evaluation. DPR also fulfills this obligation with human health risk assessment, adverse effects reporting, environmental monitoring including air, surface water, and groundwater quality, investigation and evaluation of pesticide illness incident reports, and exposure monitoring such as residue studies to collect data on potential exposure patterns.

In addition to FAC 12824, which requires DPR to continuously evaluate pesticides, California Code and Regulation (CCR) section 6220-6228 outlines the requirements of the reevaluation program. These sections require that DPR investigate information that indicates the pesticide may have caused or is likely to cause a significant adverse effect. During an investigation, the Director will initiate reevaluation if they find any of the following outcomes: significant adverse impact has occurred, significant adverse impact is likely to occur, or an alternative may significantly reduce an adverse environmental impact.

Other DPR branches, County Agricultural Commissioners, other state agencies and the public may submit data to the program or request the program conduct a reevaluation. Upon receiving data and supporting evidence, the program will conduct an initial evaluation. Factors that may result in a registered product or group of products entering reevaluation are, public or worker health hazard, environmental contamination, residue detected over tolerance, fish or wildlife hazard, lack of efficacy, hazardous packaging, and inadequate product labeling.

The reevaluation process begins with a trigger or factor that informs DPR of an issue that DPR then investigates and determines if there is an adverse effect, at that time the reevaluation is initiated. Once a reevaluation is initiated, there are multiple sources of outreach to inform the public. DPR will complete a data call-in for any data that has already been generated. The data is then evaluated along with any data previously on file. During this time, if the evaluation is sufficient DPR will close out the reevaluation but most cases registrants are requested to conduct or provide additional data and is continued until the data is deemed sufficient and a final determination can be made. Based on the determination, DPR would implement mitigation measures if needed to conclude the full reevaluation process.

DPR has three ways to conclude the reevaluation process. If the data show that use of the pesticide presents no significant adverse effects, DPR closes the reevaluation without added mitigation measures. If new restrictions are necessary, DPR places controls on the use of the pesticide to mitigate the potential adverse effects. As a part of this route, DPR may work the registrants and U.S. EPA to revise labels in order to mitigate hazards, and additional "controls" could include designating products or active ingredients as California restricted materials, or putting regulations in place. Lastly, if the adverse effect cannot be mitigated, DPR suspends or cancels the product registration(s) after public noticing and subsequent hearings.

DPR currently has four open reevaluations and ten active ingredients currently in review. The most recent reevaluation is the Second Generation Anticoagulant Rodenticides (SGARS) initiated in 2019 and includes four rodenticide active ingredients, Brodifacoum, Bromadiolone, Difenacoum, and Difethialone. Reevaluation was initiated based on possible adverse effects to non-target wildlife. DPR issued a data call-in and is currently in the data evaluation stage. Effective January 2021, AB 1788 prohibits most uses of the rodenticides until the reevaluation is complete. Another reevaluation currently open is Nitroguanidine-substituted Neonicotinoids with the active ingredients including clothianidin, imidacloprid, dinotefuran, and thiamethoxam. This reevaluation was initiated in 2009 based on possible adverse effects reports showing possible effects to honey bees. The data was evaluated and DPR published the 2018 California Neonicotinoid Risk Determination document <cdpr.ca.gov/docs/registration/reevaluation/chemicals/neonicotinoid_risk_determination.pdf > which found that certain agricultural uses result in a risk to pollinators. DPR is currently in the mitigation stages of this determination and is working to mitigate risks through regulations. The chloropicrin reevaluation was initiated in 2001 based on high air concentrations and data indicating potential human health effects and is currently in the data development stages. DPR required the company to generate new data and is waiting to be received. Lastly, the cyfluthrin reevaluation was initiated in 1998 based on respiratory irritation outbreaks reported among

orange harvesters being exposed to residues. DPR required registrants to conduct additional data and is currently under risk assessment.

A recent reevaluation for Copper Antifouling Paint concluded in 2018, which included all copper-based antifouling paints and coatings, were found to have dissolved copper concentrations in over half the water samples taken from salt water marinas that exceeded the California Toxics Rule chronic water quality standard for copper. Copper antifouling pesticide products applied to boat hulls in salt and brackish water marinas were found to be a major source. DPR implemented regulations that set a maximum acceptable copper release rate of 9.5 micrograms per square centimeter per day on recreational vessels. DPR found that copper-based antifouling paints and coatings applied to boat hulls were leaching copper into the waterways at high levels causing adverse impacts to microorganisms. DPR implemented regulations in California Code of Regulations (CCR) section 6190 that set a maximum acceptable copper release rate of 9.5 micrograms per square centimeter per day on recreational vessels. Under these regulations, copper antifouling paints are required to submit leach rate data on all products. All products above this rate were discontinued and all new products coming into California for registration must submit this data to DPR. This is an example of how DPR can identify an adverse impact then implement mitigation measures to mitigate concern and closeout reevaluation.

California Notice 2018-01, Expanding Use of Pesticide Products Under Reevaluation <cdpr.ca.gov/docs/registration/canot/2018/ca2018-01.pdf> states once a reevaluation is initiated, DPR may not expand the use of the active ingredient relative to the concerns that prompted the reevaluation. If DPR determines that a new proposed product or amendment is an expansion of use, DPR will not process the application for the new or amended product. If pesticide registrants looking to submit an application for registration of a new product or amending a current registered product that contains an active ingredient under evaluation, registrants should consider whether these submissions will be considered an expansion of use before submitting to DPR. A submission that expands use will be returned and a refund will not be issued.

There are four ways to stay up to date on reevaluation activities, periodically review the reevaluation program Web site <cdpr.ca.gov/docs/registration/reevaluation/reevals.htm>, following the reevaluation semiannual reports that are issued twice a year, sign up for the California Notice to Stakeholders electronic listserv, and attend the Pesticide Registration Evaluation Committee (PREC) meetings where reevaluation team periodically presents.

Committee Comment

Jamie Rudd asked, in regards to copper release rate of vessels that might have copper paints is there anything that takes into consideration the cumulative impacts of the densities of the boats in the waterways. Nan Singhasemanon added when the leach rate cap was determined, various models were used to study multiple marinas, cumulative impacts, and single boats to determine how the leach rate from a single boat would affect larger marinas with copper. Jamie replied that

also goes for other reevaluation processes reviews modeling after cumulative impacts as well? Nan stated cumulative reviews are on a case by case basis. Tulio Macedo interjected that the reevaluation processes and risk assessment processes will assess worst case scenarios for a particular chemical use.

Lynn Baker asked in reference to the chloropicrin and cyfluthrin slide indicating reevaluation has taken approximately two decades and is still not completed, does the department consider that to be acceptable. Brittanie Clendenin responded that DPR works to reevaluate pesticides as fast as possible and in situations where data needs to be conducted, the process can be prolonged. Brittanie added, with chloropicrin data is still being developed and cannot be concluded until those impacts are understood and in regards to cyfluthrin, DPR is currently working on risk assessment and has been prioritized. Lynn followed up with the question does the department have a target time frame for reevaluation completions. Tulio Macedo clarified that the department is considering options and prioritizations in order to try to get those products into the reevaluation process in a faster manner.

Public Comment

Due to time constraints, the following questions were not answered live.

John Bottorff submitted the following questions via email:

> How often are pesticides reevaluated? What is the average time to complete a reevaluation? How do you determine what data and studies to use and if the sources are unbiased? I am concerned industry directly and indirectly funded studies are regularly being used which risks bias in the data results.

Brittanie Clendenin replied with the following response via email:

> Active ingredients and/or pesticide products are placed into reevaluation when the Department of Pesticide Regulation (DPR) receives information/data indicating a possible adverse impact occurred, if after initial investigation DPR finds that an adverse impact likely occurred. During reevaluation, DPR typically receives data from multiple sources including companies, public, and open literature. DPR scientists evaluate each study and only rely upon studies that are found to be scientifically sound. The amount of time it takes to complete a reevaluation varies widely depending on many factors including the amount of data currently available, length of time it takes to generate required new studies, evaluation of the data (risk assessment), and development of mitigation, if needed.

John Bottorff submitted the following questions via email:

> Cyfluthrin and chloropicrin have been in the reassessment process for over 20 years! There is absolutely no reason why it would take so long. Any product that is deemed to

be possibly dangerous should be stopped immediately. Why is the precautionary principle not being followed? If it is a lack of funds, then the manufacturer needs to pay the cost. You need to massively increase the registration fees. DPR should be following a similar model as the FDA in evaluating and approving the chemicals that are sprayed on all of our food and get into all of our water.

Brittanie Clendenin replied with the following response via email:

DPR has a rigorous process for evaluating pesticides before there are registered for sale and use in California. Once a pesticide is registered in California, DPR continuously evaluates the pesticide through environmental monitoring, adverse effects reporting, pesticide illness and incident reporting, exposure monitoring, and risk assessment Neither statute or regulations provide DPR with the authority to prohibit the sale/use of pesticides under reevaluation. However, once placed into reevaluation, DPR will not act upon applications to register or amend a pesticide product if registration or acceptance would "expand use" relevant to the concern that prompted the reevaluation. In addition, DPR may implement mitigation measures during the course of a reevaluation.

While the cyfluthrin and chloropicrin reevaluations have been ongoing longer than most, during this time, DPR and/or the U.S. Environmental Protection Agency (U.S. EPA) have implemented mitigation measures for these chemicals. For example, based on scientific data, DPR implemented mitigation measures for chloropicrin including permit conditions and California-specific label requirements. Information on chloropicrin-specific mitigation is available at <cdpr.ca.gov/docs/whs/active_ingredient/chloropicrin.htm>. Additional chloropicrin data requirements remain outstanding. U.S. EPA also implemented mitigation measures for cyfluthrin. Closing out the cyfluthrin reevaluation is dependent upon completion of risk assessment and implementation of further mitigation measures, if determined to be necessary. DPR will close the reevaluations once all required data has been received and evaluated, and a complete analysis (risk assessment) of the data has been conducted.

John Bottorff submitted the following questions via email:

In DPR's history, how many pesticides have been canceled?

Brittanie Clendenin replied with the following response via email:

Over the years, DPR has cancelled/suspended several pesticide products either by regulation or by following the cancellation process found in Food and Agricultural Code (FAC) section 12825 and 12826. Thus far, DPR has mitigated concerns arising from pesticide products placed under reevaluation through other mitigation measures. In some cases, DPR was able to work with pesticide registrants and U.S. EPA to amend product labels to add mitigation measures. In other situations, DPR adopted mitigation measures in regulation. If DPR determines a significant adverse exists that requires mitigation, and

there was no other way to bring the products into compliance, DPR would proceed with cancelation/suspension of the product pursuant to FAC section 12825 and 12826. In the past, DPR has found that registrants will voluntarily cancel their product's registration rather than go through cancellation/suspension proceedings.

4. **Update on the 1,3-Dichloropropene Mitigation Pilot Study – Minh Pham, DPR**

1,3-Dichloroproprene (1,3-D) is a pre-plant fumigant used to control nematodes, insects, and disease organisms in the soil. Its major uses in California include fruit and nut trees, strawberries, grapes, and carrots. It is currently registered and managed as a restricted material so it requires approval from the Department of Pesticide Regulation (DPR) and the County Agricultural Commissioners (CAC).

One of the key questions given for the 1,3-Dichloropropene Mitigation Pilot Study project is that a lot of the residents throughout the state feel that the use of totally impermeable film (TIF) tarping is the best pathway to reduce emissions. DPR studied comparable reduction mitigation measures that would give similar benefits to TIF tarping. With the state being so large with different economic pressures, DPR researched economically feasible and easily implemented options that would give a comparable reduction.

The goals of the project are to develop feasible alternative mitigation practices and study potential 1,3-D emission reduction capabilities from these practices, provide growers and applicators flexibility with feasible alternatives that achieve emissions reductions comparable to TIF tarping, and using the study results to support future mitigation development to address acute exposure of 1,3-D. Using computer modeling, the team created myriads of designs that would give comparable emissions benefits reductions to those of TIF tarping. Within the last year, five field application site studies have been completed and the data is currently being processed. Studies occurred in Stanislaus, Sutter, Merced, and Kern counties. The data will provide scientific background and a foundation for the mitigation development to address acute exposure of this product moving forward and the pilot project is set to be completed by the end of 2021. The field studies are aimed to determine feasibility of proposed mitigation measures, validate emission reductions determined from computer modeling, and collect additional soil and weather data for inputs that can be used in future modeling. Real time weather monitoring and emphasis on soil characterization analysis have been added due to the understanding that soil and weather conditions can heavily change emissions.

Mitigation options consist of applications using higher soil moisture, additional soil compaction, deeper injection specifically 24-inch injection, alternating TIF tarping and bare soil, or various combinations of each. The majority of the monitoring studies were fields that were typically two to five acres. These acreage size range gave the most conservative results due to our ability to put adequate amount of air samplers that were equally spread around the field and capture emissions leaving without potential gaps. To date, five field studies were completed which looked at 24-inch injection of the fumigant, 18-inch injection with increased moisture in the field, higher soil moisture with compaction, and 50% TIF tarping.

Data from upcoming field studies are pending and will be used to further verify these conclusions. Air concentration, soil characteristics, meteorological, and moisture data collected from all field studies will be used as inputs to refine computer modeling. Results from all field studies will be used to support mitigation development in addressing acute exposure for 1,3-D.

Committee Comment

Lynn Baker asked did the pilot studies include a range of soil types. Minh Pham replied, a range of soil types were studied in effort to build out the inputs on the computer modeling system which is why different areas were targeted throughout the state.

Rich Breuer asked how will environmental factors be separated in terms of relationship to either improve or reduce environmental factors versus just the physical component of depth of rolling and compaction. Minh Pham clarified that the computer model contains historical data used to developed a soil database containing those different factors. Minh added it also contains different geographic and weather conditions to support the more in depth work being completed in the field.

Brian Gress asked were all of these studies conducted using the max label rate of 1,3-D? Minh Pham noted the studies are conducted using the max rate. Brian followed up asking if there will be a full report released with the full study methodology. Minh stated that the pilot program typically does these field studies one to two times a year and do plan on releasing the individual data sets and a full comprehensive data set.

Jim Seiber asked if there are any alternatives that would be used in place of 1,3-D? Minh Pham noted that it is part of the department's mission to take a look at 1,3-D specifically but alternatives for 1,3-D are being evaluated in the agricultural community. Minh added that the environmental monitoring branch is researching how it can be used safely and effectively in the community and is trying to build the scientific background to support that decision.

Public Comment

John Bottorff asked in regards to tarping to reduce drift and pesticide exposure, what is being done to reduce the pesticide residue on the tarps and are pesticides leaching into the soil and water tables after the tarps are taken to be disposed. Minh Pham stated there have been various efforts to look at what residue remains on the tarps after use and there wasn't a significant amount on the tarps but some additional agencies are looking into that. Minh noted that TIF tarping is not the only alternative being studied and it is understood to be expensive and contains an additional waste component.

Due to time constraints, the following questions were not answered live.

Jing Tao from California Office of Environmental Health Hazard Assessment submitted the following questions via email:

> Were there fields using current fumigation methods as controls to be compared with mitigation options in each study? If so, what is the fumigation method/setting for the control fields?

Minh Pham replied with the following response via email:

> DPR evaluated whether a control field would be appropriate when conducting these studies. We concluded that having a control field near our field studies would incorporate potential cross contamination and would adversely affect our principle study. Soil types can also vary widely in the same plot of land, and this also introduces a challenge to a control field. From an economic feasibility standpoint, monitoring studies are also expensive and time consuming to perform with large laboratory analysis expenses.
>
> One of the goals of these field studies is to provide additional flux data that may be used to confirm the estimates of our computer models. Such computer models are one of the few options available to control for differences in field conditions when evaluating the impact of different mitigation methods. We have amassed a significant number of large-scale studies performed by DPR and other researchers to allow confirmation of our model predictions, and those models allow us to supplement our on-field work by performing modeling exercises such as varying the application method in a given set of soil or environmental conditions.

Jing Tao from California Office of Environmental Health Hazard Assessment submitted the following questions via email:

> If no control fields, how do you justify the impact of possible different soil and weather conditions between the new and old studies?

Minh Pham replied with the following response via email:

> Similar to the previous response, the incorporation of a control field near our principal field study would introduce cross contamination concern. As we continue to build out a robust dataset of studies, we are confident that we are able to isolate various inputs (soil, weather, etc.) when we move into the modeling component of the study. Our work with these application field studies allow us to refine our computer model and allows us to confidently adapt its inputs to provide the most representative results for fumigant behaviors. Again, we are confident that the results of this study and the collection of old studies provide for a solid foundation when evaluating the impacts of soil characteristics, weather, etc.

Jing Tao from California Office of Environmental Health Hazard Assessment submitted the following questions via email:

> Depth feasible for use with crops like sweet potatoes and almonds?

Minh Pham replied with the following response via email:

> I believe this question is in regards to whether the deeper injection depths were feasible for use with crops like sweet potato and almond. We believe that the deeper injection (24 inch) injection method is a feasibly option for many different crops, geographic locations, and various environmental and pest pressures throughout the state. This method will become available as one of several application methods available for use by the growers.

Jing Tao from California Office of Environmental Health Hazard Assessment submitted the following questions via email:

> What is the impact of deeper injection on pesticides getting into water?

Minh Pham replied with the following response via email:

> 1,3-Dichloropropene (1,3-D) is volatile based on its chemical properties. As such, we believe that this fumigant immediately makes its way upwards once it is injected into the soil. For this reason, we focused our developed mitigation pathways on using higher moisture in the soil, incorporation of a compaction layer, and/or TIF tarping as methods to achieve emission reductions. My teams in the Environmental Monitoring Branch also specialize in monitoring of groundwater and surface water, and there has been no indication that 1,3-D has an adverse impact on water when applied with the 18 inch or 24-inch injection methods.

John Bottorff submitted the following questions via email:

> Is there a map of where DPR air monitoring is going on? And is there a request process to do air monitoring?

Minh Pham replied with the following response via email:

> Information about DPR's Air Monitoring Network (AMN) and other ambient air monitoring projects can be found at: <cdpr.ca.gov/docs/emon/airinit/comspec.htm>. That website houses all our air monitoring projects and reports. Also on that site is our AMN Site Selection report < cdpr.ca.gov/docs/emon/airinit/air_network.htm> which outlines our process and evaluation of all of California communities and our selections for where to place the ambient air monitors.
>
> If the question pertains to DPR's 1,3-Dichloropropene Mitigation Pilot Projects, a map for each site in the pilot is currently unavailable. A map will be available upon the completion of the pilot project as part of the final reports. During the pilot project, we

solicited for volunteers among growers, applicators, and stakeholders throughout the state to collaborate in this study.

John Bottorff submitted the following questions via email:

> For injecting fumigants, what research has been done to see if there is an increase in pesticides in water and soil from the injection?

Minh Pham replied with the following response via email:

> The Environmental Monitoring Branch, houses the Air Program, Surface Water Protection Program, and the Groundwater Protection Program whose core responsibility and commitment are the continuous evaluation of pesticide use in California and their effects on ambient air, surface water and runoff, and well and ground water. These 3 programs work together to understand the fate of pesticides from agricultural use and to ensure DPR has the correct mitigation options in place to address any adverse risk to human health or the environment. Information about the Environmental Monitoring Branch can be found at: <cdpr.ca.gov/docs/emon/ehap.htm>.
> Historically, UC researchers, registrants, and other agencies looking into chemicals and their behaviors have also performed research, some of which is submitted to DPR as part of the registration process. This information provides details on a products efficacy, chemical properties and behavior, potential adverse impacts, etc. These items are evaluated by multiple stations across DPR to ensure that California specific requirements are met prior to the registration and approval for use of the product in California.

5. **Paraquat Updates – Nathan Desjarlais, DPR**

The Federal Insecticide Fungicide and Rodenticide Act (FIFRA) establishes U.S. Environmental Protection Agency (U.S. EPA) as the primary authority to regulate pesticides in the United States. With the exception of pesticide labeling, FIFRA gives the U.S. EPA authority to delegate pesticide enforcement authority to states. However, FIFRA section 24(b) provides that the state cannot impose or continue in effect any requirements for labeling or packaging, in addition to or different from those required by FIFRA. This is referred to as a federal preemption of pesticide labeling. FIFRA also mandates a continuous review of existing pesticides. Starting in 2006, the U.S. EPA has been reviewing every pesticide every 15 years through its registration review program. U.S. EPA initiated its registration review for paraquat in 2011.

In California, the Food and Agricultural Code (FAC) provides authority for DPR to regulate pesticides in the state. Some authority is delegated to our local partners, the County Agricultural Commissioners (CACs). As covered by an earlier speaker, through the registration process DPR must review and accept the labeling of pesticide products before they can be sold or used in California.

Paraquat Dichloride was first registered as a pesticide with the U.S. EPA in 1964. The active ingredient is a mixture of positive paraquat cations and negative chloride anions. The cations are the toxic components that work by inhibiting photosynthesis, desiccating and destroying plant cells hours after application. Due to the development of glyphosate-resistant weeds, many growers have recently been turning to paraquat for more effective weed control. In California, paraquat was listed as a restricted material in 1974 due to toxicity to humans. All paraquat products are restricted use pesticides, there are no homeowner or residential uses of paraquat.

U.S. EPA's 2016 human health mitigation measures (HHMM) for paraquat sought to minimize human health incidents by limiting the use to certified applicators only, providing stewardship and training materials for paraquat users, emphasizing paraquat toxicity on the label and other supplemental warning materials, and requiring closed-system packaging and use of a closed transfer system for end-use containers less than 120 gallons.

To provide background on paraquat use trends in California, using pesticide use report data, DPR presented a graph depicting acres treated and numbers of applications from 2010 to 2020. Included on the graph are notations for the paraquat label and packaging changes required by the 2016 HHMM showing a gradual increase from ~103k acres in 2010 to ~124k acres in each 2018 and 2019. Then the use fell off the cliff in 2020. Comparing 2019 to 2020 there was a large reduction of over 9,000 paraquat applications and over 400,000 acres treated. Because cotton is one of the major crops in California that paraquat is used, PUR data from 2020 was compared to the same periods in 2019. Herbicide applications in January to March were up slightly in 2020 compared to 2019. There was a reduction of acres treated for cotton defoliation later in the year by over 50,000 acres when comparing 2020 to 2019. Across all crops it is unknown how much weather, label changes, pandemic, pest pressure or other factors may have affected the reductions of paraquat usage.

A second graph presented the average acreage treated with paraquat each month from 2010-2020 using the top five crops in California: Alfalfa, almonds, cotton, grapes and grape wine, and walnuts. Alfalfa treatments increased in winter months from November through February, almonds and grapes have an increase in summer months, cotton has a small increase in the beginning of the year and a large spike in October for cotton defoliation season.

In October 2020, U.S. EPA posted the paraquat proposed interim registration review decision (PID) for public comment. After receiving and reviewing those comments, the U.S. EPA posted its completed interim registration decision to the docket in August 2021. This allows the U.S. EPA to move forward with aspects of the registration review that are complete and implement interim risk mitigation through label changes. There are many changes to the labeling in the interim decision but the focus will be on worker safety changes and residential buffers during this discussion.

The first worker safety change is to the closed system exemption language. The current labeling allows closed system users to reduce or modify personal protection equipment (PPE) when they use a closed system. For containers less than 120 gallons, the closed transfer system packaging

and the use of closed systems are required. For mixers and loaders, U.S. EPA noted in the interim decision that there were no inhalation risks of concern and most dermal risks were not of concern when PPE and closed systems were used at the same time. As a result, one of the changes that U.S. EPA is requiring is mixers and loaders may not reduce or modify their PPE when they use a closed system.

In the PID, to mitigate the risk to aerial applicators U.S. EPA was looking to prohibit aerial applications for all crops, except cotton desiccation uses. U.S. EPA will now be limiting aerial paraquat applications to 350 acres per pilot per 24-hour period except there is no limit for cotton desiccation uses. For the other aerial applications, U.S. EPA believes that it may be necessary to use two or more pilots per day to stay under the 350-acre limit. U.S. EPA also believes it may be difficult to find qualified pilots which could delay some applications. Based on the 2010-2020 use report data in California, paraquat is applied to over 140 crops with over 50 crops receiving at least one aerial application over that 11-year period. Each year, aerial applications represent and average of 18% to all acreage treated with paraquat.

To reduce inhalation risk to applicators, paraquat labels will require enclosed cabs when applying to more than 80 acres within 24 hours or applicators to use specific PPE when applying to 80 acres or less within 24 hours and not in an enclosed cab. U.S. EPA believes growers not currently in possession of an enclosed cab would most likely consider an alternative pesticide, hire a pest control business, borrow an enclosed cab tractor, purchase equipment, or treat over multiple days using a respirator.

The restricted entry interval (REI) will be updated from the current 12 hours or 24 hours, depending on the situation, to 48 hours for all paraquat applications, except for cotton desiccation. For example, with one product label, dormant season applications such as almonds, grapes and walnuts in November currently have a 12-hour REI. Alfalfa has two different REIs depending on how it's are being used. Growers continuing to use paraquat will have to adjust their schedules to accommodate the increased REIs with the 48-hour change. There may also be an additional cost to growers as field posting signs will be required around treated fields unless access is controlled to ensure no employee is within one quarter mile during the REI. Some growers may instead switch to a different product with a different REI which could have increased costs or have reduced efficacy.

The current REI for cotton desiccation is 24 hours but will be increased to 7 days. The interim decision noted during crop harvesting that there is potential for residues of paraquat to transfer to worker's skin as they are expected to contact the cotton bolls directly. U.S. EPA states that the 7-day REI mitigates some risks to the cotton picker operator and the module builder operator. A shorter REI would not be protective enough and a longer REI could make paraquat unusable in some situations.

U.S. EPA's 2020 PID only allowed aerial applications for cotton desiccation and the aerial buffer in the PID was only for those applications. In the interim decision, the U.S. EPA changed that to allow aerial application on all crops using paraquat and has applied the residential area drift

buffer to ensure the application does not reach any bystanders. The buffer distance is either 50 or 75 feet depending on the rate per acre.

For more on the interim decision and the other upcoming changes to the paraquat labeling, the docket can be viewed at <regulations.gov/docket/EPD-HQ-OPP-2011-0855>

U.S. EPA states in the interim decision that without changes to the product labeling, the risks from exposure to paraquat are too high to meet the FIFRA risk-benefit registration standard. U.S. EPA believes any remaining risks are outweighed by the benefits associated with the use of paraquat.

It is unclear when we will see these label changes in the field. The interim decision was signed July 2021 and posted to docket August 2021. Registrants had 60 days from when the interim decision was published to submit amended product labels to the U.S. EPA. With the 2016 HHMM, U.S. EPA allowed registrants 12 months from stamp date to distribute products which did not comply with the applicable phase. It is also important to note DPR must review and accept the changes before the product can be sold in California.

Committee Comment

Lynn Baker stated the U.S. EPA proposed residential buffer zones of 50 to 75 feet depending on the application rate and DPR currently has requirements of 660 feet, are they going to keep that instead of allowing for the change? Nathan Desjarlais clarified that what DPR has in regulation is not going to change because of the label requirements. Nathan stated pesticide regulation is a series of layers, starting with the label, then regulation, then local permit conditions and depending on the local conditions, the commissioner could increase the buffer zones if appropriate. Nathan added that if data shows that bigger buffer zones are needed, the Department would take that into consideration.

Jim Seiber asked was there air monitoring data to support the buffer zones for paraquat. Nathan Desjarlais stated he would need to review the interim decision more thoroughly but did see discussion of modeling along with additional comments. Jim asked if it was possible to see that data on air monitoring for these applications. Patti TenBrook supplemented Nathan's response by stating that typically the U.S. EPA is taking about spray drift, not ambient air quality and it's all based on modeling of the particle drift not ambient air levels. Tulio Macedo clarified that dependent of what is set up by the U.S. EPA in regards to the distance of buffer zones, California has to go through a more stringent regulation. Nathan clarified that this buffer was originally only for cotton applications and the U.S. EPA may have the data or explanation in the docket.

Lynn Baker stated that DPR has the 660 feet buffer zone around the use of paraquat for cotton applications and suggested DPR take a look at the use of paraquat on other crops to see if the 660 feet buffer be extended to other uses beyond just cotton. Lynn also recalled providing data to the Department on paraquat for the buffer zone distances in the early 80s. Nathan Desjarlais stated the Department can take that under consideration and for background section 6470 was adopted

by the Department before 1985, which lines up with his recollection. Prior to that, there were enforcement letters to CACs suggesting permit conditions dating back to when paraquat was first adopted as a restricted material to when rulemaking was completed.

Public Comment

Anne Katten asked are any buffers required for field workers or any other occupational settings and will any types of backpack spraying applications still be allowed. Nathan Desjarlais replied that buffers for residential areas are defined on the label and currently not aware of any buffers for field workers or other occupational settings. Nathan clarified California Code of Regulations section 6614 does prevent those kinds of applications as well as Food and Agricultural Code section 12972 to prevent substantial drift. Nathan confirmed backpack applications will be prohibited by the paraquat labeling changes.

Due to time constraints, the following questions were not answered live.

John Bottorff submitted the following questions via email:

> Paraquat is incredibly toxic, 1 sip can kill an adult. How many incidents of paraquat poisoning happen in California per year? Has that number gone down since the 2016 HHMM order?

Nathan Desjarlais forwarded the following response via email from Michel Oriel with DPR's Worker Health and Safety Branch:

> In looking at Pesticide Illness Surveillance Program (PISP) data, based on preliminary findings, it appears there has been a decrease in the number of reported paraquat (alone or in combination with other active ingredients) illnesses since 2016. The majority of individuals affected were handlers (69%, 2008-2017). Ingestion, intentional or accidental, accounted for a small number of cases (17%, 2008-2017). The proportion of ingestion cases decreases when the data from 2019-2021 is taken into account.

James Nakashima submitted the following questions via email:

> Your table was a little hard to see, but it looked to me as if most of the paraquat use was in nut and fruit orchards and they likely would not use aerial applications as it would harm the leaves – so I assume it was some sort of ground spray application to target the weeds between trees.
>
> What I was trying to say was that aerial applications would most likely be used for cotton and other plants. Usually the PUR data will indicate if the pesticide was applied by aerial or ground.

Nathan Desjarlais replied with the following response via email:

> Yes, I agree Excel can be very hard to see some times. The spreadsheet looks fine on my large screen but it may not have been very visible through Zoom. And I apologize that I may have misunderstood the question. You are correct, the PUR data does generally indicate whether the application was by air or ground. I mentioned in the presentation that over the 11-year period over 50 crops had at least one aerial application of paraquat. Most of the aerial paraquat applications are to annual crops (e.g. cotton, tomatoes, corn, etc.). However, there are aerial applications to permanent crops like almonds, pistachios, walnuts, grapes, peaches, etc. I presume these applications to permanent crops happen when the trees or vines are dormant, because, as you noted, if there is foliage on them an aerial paraquat application would likely harm the leaves. I haven't looked further into the PUR data to confirm that though. There are also other outliers like asparagus which is a perennial crop where paraquat can be used prior to the emergence of the spears or after the last harvest is completed.

John Bottorff submitted the following questions via email:

> Is there a master list of residential buffer zones? The buffer zone for ANY pesticide application should never be less than 1/4 mile for residential areas.

Nathan Desjarlais replied with the following response via email:

> Thank you for your feedback on residential buffer zone size. Buffer zones are intended to mitigate risks to bystanders. They are based upon scientific data and evaluation of the resulting potential risks from a pesticide application. Generally, buffer zones may differ for each combination of an active ingredient, application rate, and application method. For the most part, buffer zones are found on pesticide product labels. We are not aware of a master list of residential buffer zones.

Anne Katten submitted the following questions via email:

> Has paraquat use for cotton defoliation increased in recent years with phase out of other desiccants and reduced use of the chlorate desiccant?

Nathan Desjarlais replied with the following response via email:

> The presentation was focused on the changes U.S. EPA will be implementing on the paraquat labeling, with brief information on history and paraquat use in California to supplement that and provide context. DPR did not specifically evaluate cotton defoliation uses of paraquat or the effect of changes to other active ingredients on paraquat use as it was outside the scope of the presentation.

6. Statewide Pesticide Notification System – Nino Yanga, DPR

The California Department of Pesticide Regulation (DPR) is beginning to develop a statewide pesticide notification system to provide the public with transparent and equitable access to information about pesticides used around them so they can take additional precautions to protect their health.

DPR received $36.5 million in funding over two years to bolster existing scientific research and grant programs that promote safer, more sustainable pest management practices, enhance environmental monitoring activities, and continue to strengthen its enforcement and community engagement activities. $10 million was additionally allocated to DPR to begin the development of a statewide pesticide notification system to provide more transparent and equitable access to information to the communities about pesticides used around them. The notification system will advance environmental justice and further protect public health by allowing the public the opportunity to make their own decisions about any additional precautions they may want to take to protect their health. Since receiving funding, DPR is currently in the process of gathering information and collecting public input on the design and development of a statewide notification system.

DPR has created a timeline to show the public engagement activities that have been held, upcoming activities as well as next steps. DPR held community focus groups in August that were attended by representatives from the regulative community such as regulators, growers and community advocacy groups and their representatives. The focus groups were facilitated by representative from the Consensus and Collaboration Program of California State University, Sacramento. DPR used the feedback received by these focus groups to inform the recently conducted webinars. DPR is currently compiling comments from the webinars and comments submitted to the dedicated email account, <projectnotify@cdpr.ca.gov>. The ideas and feedback gathered will guide workshops planned for early next year. The workshops will be smaller discussions focused on technical and practical details of the notification system. Collectively, the engagement activities will be used to develop and test out potential solutions, ultimately leading to launching a pesticide application notification system throughout the state. The summary of the focus group discussions is available at <cdpr.ca.gov/docs/pesticide_notification_network/> where the summary and recordings of the webinars will also be posted. If you are interested in the workshops, please visit the department Web site for updates.

What emerged from the four focused listening sessions were common shared wants and goals for the statewide notification system to develop a set of project guiding principles. These principles are the foundation in which to evaluate and judge the success of the project.

The system will provide timely information about pesticide applications to enable health-protective actions, improve equity and transparency, provide equitable access to communities about the pesticides used around them, complement regulations that govern the safe, legal application of pesticides, prioritize pesticide applications that have greater potential to cause

health impacts, and encourage regular communication between growers, pesticide applicators, local government, and nearby communities.

Aside from the guiding principles, DPR also identified important practical considerations in the development of the notification system that was gathered from the diverse perspectives and feedback received from the focus groups. These practical considerations include how to provide notifications in an effective way, how far in advance should a notification be sent, and what types of information will be most useful and meaningful to base decisions on.

DPR will consider helpful and meaningful information and resources already available, both at the state and county level. DPR will strive to develop a system that avoids duplicative work to provide a clear message with a focused purpose. What is important about the guiding principles and their practical considerations is that they will form the basis for evaluating the notification system. DPR is in the early stages of designing a statewide pesticide notification system and currently obtaining as much public input as possible.

For updates on the project, check our webpage: <www.cdpr.ca.gov/pesticide_notification-network>

To subscribe to the listserv:
<https://www.cdpr.ca.gov/docs/dept/listserv/sub1113.htm>

To provide comments (to December 6, 2021 only):
ProjectNotify@cdpr.ca.gov

Committee Comment

Lynn Baker suggested DPR consider in addition to the advance notification of agricultural applications that you also consider including advanced notification with regard to structural fumigations to the public.

Tom Ineichen asked who will be involved in the workshops and what is the expected outcome of notification. Nino Yanga replied that the notification system is still in the planning stages and feedback is being consolidated so there are not many details available at this time.

Public Comment

An anonymous attendee asked when will the pesticide workshop start. Nino Yanga stated at this point it is aimed to be held in first quarter next year and is not decided if it will be face to face or virtual at this time.

Due to time constraints, the following questions were not answered live.

Catherine Dodd submitted the following questions via email:

> Is there a reason CDPR does not require CACs to post the NOIs they receive now? This would certainly inform development of pilot projects as well as begin to protect communities. CDPR can require CACs to post what they are receiving from farmers in terms of NOIs right now. It would provide a great laboratory for what will need to be improved in developing the system.

Nino Yanga replied with the following response via email:

> The development of the statewide notification system will include a formal regulatory process. The regulation will establish statewide requirements for the system's implementation. This ensures consistent implementation of the notification system across the state and is an important step to both structure and memorialize the system. In the near term, DPR is working closely with County Agricultural Commissioners on voluntary local pilot projects to test the effectiveness of design elements for the statewide notification system.

Catherine Dodd submitted the following questions via email:

> One of the principles is to prioritize the pesticides by health impact. - these are consistently not based on the most recent science who determines and how often are they prioritized? Should be: based on most recent science which we need more of.

Nino Yanga replied with the following response via email:

> Thank you for your feedback. We are currently in the public comment period for the Guiding Principles and Practical Considerations and will incorporate your feedback into that process.

7. Agenda Items for Next Meeting

The next meeting is scheduled for January 21, 2022 at 10:00 a.m. This meeting will be held virtually on the Zoom platform and broadcast live on the CalEPA webcast page. <video.calepa.ca.gov/>

8. Adjourn