



**PESTICIDE REGISTRATION
AND EVALUATION COMMITTEE (PREC)
Meeting Minutes – November 18, 2022**

Committee Members/Alternates in Attendance:

Brian Gress – California Department of Food and Agriculture (CDFA)
Garrett Keating – Department of Industrial Relations (DIR)
Heather Williams – Department of Resources Recycling and Recovery (CalRecycle)
Jeff Fowles – Department of Public Health (CDPH)
Katherine Sutherland-Ashley – Office of Environmental Health Hazard Assessment (OEHHA)
Lynn Baker – Air Resources Board (ARB)
Mai Ngo – Department of Toxic Substances Control (DTSC)
Matt Hengel – University of California (UC), Davis, IR-4 Program
Patti TenBrook – U.S. Environmental Protection Agency (EPA), Region 9
Phillip Crader – State Water Resources Control Board (SWRCB)
Tom Ineichen – Structural Pest Control Board (SPCB)
Tulio Macedo – Department of Pesticide Regulation (DPR)

Visitors in Attendance:

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

Abhishek Dhiman – Air Resources Board (ARB)
Anne Katten – California Rural Legal Assistance Foundation
Armand Ruby
Helena Roberts
Jacob Villagomez
James Nakashima – Office of Environmental Health Hazard Assessment (OEHHA)
Jane Sellen – Californians for Pesticide Reform
Jing Tao – Office of Environmental Health Hazard Assessment (OEHHA)
Justine Weinberg – Department of Public Health (CDPH)
Kevi Mace – California Department of Food and Agriculture (CDFA)
Mark Weller – Californians for Pesticide Reform
Mary-Haley Ousley
Sarah Aird – Californians for Pesticide Reform
Stephanie Burt
Steve Zelinka – Air Resources Board (ARB)
Taylor Roschen

DPR Staff in Attendance:

Aisha Iqbal – Pesticide Registration Branch
Alyssa Knudsen – Pesticide Registration Branch
Andrew Turcotte – Pesticide Registration Branch

DPR Staff in Attendance (cont'd):

Andy Rubin – Human Health Assessment Branch
Aniela Burant – Environmental Monitoring Branch
Aron Lindgren – Pesticide Registration Branch
Atac Tuli – Environmental Monitoring Branch
Brenna McNabb – Pesticide Registration Branch
Brittanie Clendenin – Pesticide Registration Branch
Jennifer Teerlink – Pesticide Programs Division
Justin Kroes – Environmental Monitoring Branch
Kara James – Pesticide Registration Branch
Maziar Kandelous – Environmental Monitoring Branch
Nan Singhasemanon – Pesticide Programs Division
Nazila Nikchi – Environmental Monitoring Branch
Randy Segawa – Environmental Monitoring Branch
Yvan Delgado – Environmental Monitoring Branch

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

- a. Approximately forty-five (45) people attended the meeting.
- b. For this meeting, the Department of Pesticide Regulation (DPR) is focused on responses to technical and clarifying questions related to the rulemaking presentations. Comments on the proposed rulemaking may also be submitted via the public hearing outlined in [Notice of Proposed Regulatory Action DPR 22-005](#) – Health Risk Mitigation and Volatile Organic Compound Emission Reduction for 1,3-Dichloropropene
<<https://www.cdpr.ca.gov/docs/legbills/rulepkgs/22-005/22-005.htm>>

2. An Overview of the Proposed 1,3-Dichloropropene Regulation – Maziar Kandelous, DPR

The proposed regulation in [Notice of Proposed Regulatory Action DPR 22-005](#) – Health Risk Mitigation and Volatile Organic Compound Emission Reduction for 1,3-Dichloropropene will improve the Department of Pesticide Regulation's (DPR) current management of the health risk from 1,3-Dichloropropene (1,3-D). <[cdpr.ca.gov/docs/legbills/rulepkgs/22-005/22-005.htm](https://www.cdpr.ca.gov/docs/legbills/rulepkgs/22-005/22-005.htm)> The current requirements focus on mitigating cancer risk. This regulation will mitigate both cancer risk and acute risk, and also offer potential reductions in VOC emissions. DPR is also working to accelerate the adoption of safer and more sustainable pest management practices through the Sustainable Pest Management workgroup and DPR's grant program to support alternatives to fumigants.

1,3-D is a fumigant used to control pests in soil and has been managed as a restricted material. This means it requires applications to be conducted or supervised by a certified applicator and

requires a permit from the county agricultural commissioner (CAC). Since the 1990s, with one update in 2015-16, DPR has been using the township cap program for controlling cancer risk.

Current 1,3-D requirements for controlling non-occupational bystander risk are outlined in a memorandum of understanding between DPR and the registrant. The memorandum limits the adjusted total pounds per calendar year to 136,000 pounds for each township, which is called a township cap. The registrant tracks proposed and actual use on a real time basis, and no more applications within a township are allowed once the cap is reached.

There are also requirements for product labels and DPR-recommended permit conditions. No applications are allowed within 100 feet of occupied structures (setback). The maximum application rate is 332 pounds per acre. Totally impermeable film (TIF) tarps may be cut or removed only nine days or more after the application. Applications in December are prohibited, and soil moisture should be at least 25% of the field capacity.

The lawsuit of Vasquez versus DPR successfully challenged the township cap program as an underground regulation. On November 7th, 2022, DPR submitted a notice of proposed regulatory action to the Office of Administrative Law pursuant to the court order.

The proposed regulation is aimed at mitigating acute risk and cancer risk. Mitigation for acute risk is based on the 2021 risk management directive. The mitigation measures are setbacks and restrictions on the fumigation methods, and the target populations are non-occupational bystanders. For cancer risk, the mitigation measure is based on the 2016 risk management directive. The target population is non-occupational bystanders, and the more stringent setbacks and related requirements proposed in this regulation replace the township cap. The added benefit of these proposed regulations is the potential reduction in VOC emission to reduce Ozone.

DPR used two main models to develop mitigation measures included in the regulation. Staff used the HYDRUS model to estimate emissions of 1,3-D from application sites. HYDRUS uses 1,3-D chemical properties, soil properties, and the details of the application method to estimate the emission of 1,3-D from application sites. Staff used the AERMOD model to estimate the concentration of 1,3-D in ambient air. AERMOD uses the estimated flux from HYDRUS, meteorological conditions, and application size and timing to estimate concentrations. The estimated concentration of 1,3-D in the ambient air was then used to develop mitigation measures.

The proposed regulation includes various restrictions and requirements. TIF tarp applications are subject to specific requirements. Soil moisture requirements would be more stringent. There are 23 fumigation methods allowed in this regulation, and it provides a specific description and restriction for each method. It also introduces new application methods with promising potential to reduce emissions, such as 24-inch-deep injection and partial TIF tarping. Other requirements include the extension of seasonal restrictions to November through February, with a higher application factor. It also introduces more stringent setback and related requirements. The

proposed regulation also requires DPR to publish an annual report to evaluate the use and monitoring data and determine if additional restrictions are needed.

TIF tarps with a mass transfer coefficient of equal or less than 0.046 centimeter per hour are recognized as TIF tarps. DPR will maintain a list of TIF tarps that meet permeability and printing requirements. TIF tarps can be cut or removed no sooner than 10 days after application. Current regulation allows cutting or removing TIF tarps at nine days.

Soil moisture should be at least 50% of field capacity. Current regulation allows the soil moisture to be between 25 and 50% of field capacity. There are three options to comply with this requirement: irrigate with three inches of water 48 to 72 hours prior to fumigation, determine the soil moisture content using the feel and appearance method, or determine the soil moisture using a soil moisture sensor.

For trees and grapes, if TIF tarps are not used, they are restricted to methods with 24-inch injection only. The regulation provides descriptions and restrictions for all 23 allowed fumigation methods, which include five newly developed methods evaluated through the pilot project. The five newly developed methods include deeper injection and partial TIF tarping.

To assist in developing regulations, DPR conducted a pilot project in 2020-2021 to evaluate the feasibility of new fumigation methods that would achieve emissions reductions comparable to TIF tarping. Those studies were conducted in the counties of Kern, Merced, Stanislaus, and Sutter. The studies include one application at 18 inches as a baseline, three applications at 24 inches, and one application at 18 inches with 50% TIF tarping. The estimated flux data from the pilot project showed that the newly developed application methods offer emissions reduction potential comparable to TIF tarping.

The proposed regulation also includes requirements for setbacks surrounding occupied structures and sites that are occupied for 72 hours. Applications are prohibited within the setback unless structures are and remain unoccupied for seven days after the application. There must be at least 36 hours of separation between two applications with overlapping setbacks.

The setback distance varies from 100 to 500 feet, depending on the application rate (maximum rate of 332 pounds per acre), acreage (maximum size of 80 acres), application timing (two seasons: March - October and November – February), and fumigation method. The 23 application methods allowed under this proposed regulation are classified into eight groups and the proposed regulation provides a detailed setback table for each group. These tables show the combination of application rates, setback distances, and application sizes for each field fumigation method (FFM).

One of the restrictions introduced by the proposed regulation is the extension of the seasonal restriction to November through February with a higher application factor. For example, on an 80-acre field at an application rate of 100 pounds per acre, the setback distance during the

months of March through October would be 100 feet. During the months of November through February, the setback for this same scenario would increase to 500 feet. If the target application rate is 332 pounds per acre, which is the maximum application rate, the application size could be as large as 20 acres during the months of March through October, assuming a setback distance of 500 feet. Under the same conditions for application rate and setback distance, the maximum application size would be 5 acres during the months of November through February.

Different application methods within the same season may have different setback requirements. For example, during the months of March to October, on an 80-acre field, with one application rate of 150 pounds per acre, the setback for FFM 1224 (untarped, 24-inch, broadcast) is 100 feet. For FFM 1206 (untarped, 18-inch, broadcast), the setback would increase to 500 feet. If the target application rate is 332 pounds per acre, the application size could be as large as 80 acres for FFM 1224, assuming a setback distance of 500 feet. Under the same conditions for application rate and setback distance, the maximum application size would be 20 acres for application method 1206.

The proposed regulation requires DPR to publish an annual report that includes use for each township and evaluation of the top ten townships in different counties. The report must also include a summary of ambient air monitoring data and evaluation of locations with concentrations more than 0.27 parts per billion (ppb) for one year average or 55 ppb for 24 hours. The evaluations must include estimated peak 24-hour, peak 72-hour, and average one-year concentrations. The report also determines if additional restrictions are needed. The proposed regulation requires DPR to have a public comment period for the draft annual report.

In the proposed regulation, setbacks and fumigation method restrictions replace the township cap. DPR analyzed 1,685 statewide township-year combinations during the historical high 1,3-D use period of 2013 through 2016. This analysis showed that the highest one-year average 1,3-D concentration is 0.35 ppb. This is 63% of the 0.56 ppb regulatory target concentration for non-occupational bystander cancer risk. However, the DPR risk management directive specifies the 0.56 ppb target concentration as a 70-year average value. This provides an additional margin of safety, because as the number of years of data increases, the average concentrations tend to decrease. For example, for the above analysis, the highest five-year average 1,3-D concentration is about 0.25 ppb, which is smaller than the highest one-year average value of 0.35 ppb.

The University of California - Davis and the California Department of Food and Agriculture conducted an economic analysis and estimated the impact of proposed regulations, including setbacks and fumigation method requirements. Estimated costs were based on geographic information system (GIS) analysis of pesticide use report data. The estimated average annual impact of the proposed regulation is about \$1,366,000.

DPR began consultation with other agencies in March 2022, including County Agricultural Commissioners, Air Pollution Control Districts, Office of Environmental Health Hazard

Assessment (OEHHA), California Air Resources Board (ARB), California Department of Food and Agriculture, and U.S. Environmental Protection Agency. There have been ongoing consultations with the Pesticide Registration and Evaluation Committee (PREC) and the Agricultural Pest Control Advisory Committee (APCAC). The next consultation with APCAC will occur at the upcoming meeting in December.

The estimated timeline for the proposed regulation is broken down into several segments. During the period of November 2022 to January 2023, DPR submitted the proposed rulemaking to the Office of Administrative Law (November 7), discussed this rulemaking for the PREC committee (November 18), will present the same information to APCAC in December, and will hold a hearing in January. From February to May 2023, DPR will respond to comments, consult, and revise the proposed regulation, if necessary or appropriate. If needed, there will be a second public comment period in June 2023. In August 2023, DPR will start to review the final regulations to prepare everything for the regulation to take effect in January 2024.

The following chart represents a summary of changes to the requirements.

Part of Requirements	Current (Permit Conditions, MOU, Label)	Proposed (Regulation)
Setback from occupied structures		
Setback distance and time	100 ft for 7 days	100-500 ft for 7 days
Setback application rate limit	332 lbs/ac	332 lbs/ac
Setback acreage limit	None	80 ac
Seasonal requirements	Dec prohibited	Mar-Oct, Nov-Feb
Multiple applications	None	36 hours separation
Fumigation method requirements		
TIF tarp requirements	None	Permeability and printing
TIF tarp minimum cut time	9 days	10 days
Tree and grape requirement	None	24-in or TIF tarp
Soil moisture	≥25% field capacity	≥50% field capacity
Cancer Risk	Township cap of 136,000 adjusted total pounds	More stringent setbacks & application method restrictions

The public comment period began November 18, 2022 and ends on January 18, 2023. DPR will accept written comments submitted via U.S. mail, via email to dpr22005@cdpr.ca.gov, or by facsimile at 916-324-1491. DPR will also accept oral and written comments at the public hearing on January 18, 2023. The hearing will be held at the CalEPA headquarters building (1001 I St, Sacramento, CA 95814) and will also be accessible virtually starting at 9:30 a.m. Further details on submitting comments and the hearing are available at the [DPR Web site](http://cdpr.ca.gov). <cdpr.ca.gov>

Committee Comment

Lynn Baker asked for an explanation of printing in reference to TIF tarps. Maziar Kandelous replied that the printing describes the type of tarp being used in the application. Maziar added that the requirements for the printing include the size of the printing and the distance of the printing from the edge of the field, so it could be visible to anyone evaluating the field to see if the correct TIF tarp is being used.

Lynn Baker asked if DPR or the CAC will be tracking product use in high use areas to make sure that township use does not exceed what the models have determined is acceptable, since there is no township cap proposed. Maziar Kandelous replied that all the use information will be included in the annual report, including information on whether more restrictions will be required in upcoming years.

Garrett Keating asked if DPR has done a sensitivity analysis of how the soil moisture regulation plays with the concentrations, specifically referring to the accuracy of the touch and feel method. Maziar Kandelous replied that all the soil moisture determination methods were evaluated through DPR's modeling, and that the department is comfortable with using those three methods to ensure enough moisture in the soil to help reduce emissions.

Garrett Keating commented that these regulations address non-occupational bystanders but asked how worker structures such as housing would be addressed by this regulation. Maziar Kandelous replied that those structures would fall outside the scope of this regulation.

Lynn Baker stated that the Air Resources Board (ARB) participated in workgroup meetings with DPR and OEHHA, but was not aware that OEHHA had changed what constituted the cancer potency for 1,3-D. Lynn asked for clarification on the discrepancy between DPR's and OEHHA's target level for cancer protection. Nan Singhasemanon replied that the work done in the risk mitigation aspect was based on the risk management decision in late 2021 in consultation with OEHHA and other agencies. Nan added that the regulation development was focused very specifically on the regulatory target set in that directive. Lynn asked for additional clarification as, based on Mark Weller's comment (see Public Comment section below), it sounded like OEHHA submitted a comment in June 2022 after the original consultation stating that OEHHA no longer agreed with the decided target level. Nan responded that he was not familiar with the memo Mark referred to, but that it borders into a policy question that would be better addressed later in the rulemaking. Lynn replied that this information would be important to provide prior to the end of the comment period because, as ARB's representative on the workgroup and PREC,

ARB was not planning to provide additional comments on the 1,3-D draft regulation. Lynn added, however, that if there is an issue about the agreement of whether or not the cancer potency factor is sufficient, ARB may want to make a comment in support of OEHHA's comment. Nan clarified that the Risk Management Directive (RMD) from 2021 was very focused on the acute regulatory target, so the cancer aspect was not necessarily addressed. Nan added that the RMD to address cancer risk was back in 2016, so it probably wasn't discussed much in the workgroup.

Garrett Keating commented that it seemed like this meeting was intended to be focused on the bystander regulations that are up for discussion, but that the Department of Industrial Relations will be tracking worker regulations and will look further into worker exposure questions, when and if it comes before PREC.

Public Comment

Mark Weller asked why the June 2022 Office of Environmental Health Hazard Assessment (OEHHA) 1,3-D Safe Harbor level was not used in calculation of the lifetime cancer risk level for this draft regulation. Mark added that the OEHHA No Significant Risk Level (NSRL) converts to 0.04 ppb, 14 times below DPR 0.56 ppb from 2016. Mark then asked if DPR plans to go before farmworker communities and tell them CDPR regulation is sufficient to protect them when another branch of CalEPA indicates it is 14 times too weak. Maziar Kandelous replied that for this meeting, only technical questions and clarifying questions on the presentation will be answered. Maziar added that these questions should be submitted to the rulemaking process and will be addressed at the public hearings. Tulio Macedo added that Mark's questions will be recorded for this meeting and will be reflected in the video recording and meeting minutes.

Mark Weller asked how the 24-hour 55 ppb target also addresses the lifetime risk when only four days at 55 ppb would put the annual average above 0.56 ppb even if all other days of the year are zero ppb. Tulio Macedo replied that this question would also be addressed accordingly after the comment period and encouraged participants to submit comments using the methods referenced at the end of Dr. Kandelous' presentation. DPR staff provided the following response via email:

During the PREC meeting, DPR staff did not respond to this question; however, we would like to direct your attention to one of the documents relied upon for the proposed 1,3-D rulemaking package: Segawa, Randy and Yuzhou Luo. 2022. "[Analysis of the Sufficiency of Acute Mitigation Measures to Mitigate Cancer Risk from 1,3-Dichloropropene.](#)" Department of Pesticide Regulation Memorandum, November 3, 2022., PDF." <cdpr.ca.gov/docs/emon/pubs/ehapreps/analysis_memos/1-3-d/7-analysis_of_the_sufficiency_of_accute_measures_to_mitigate_1-3-d.pdf> The content of this document should address the question you posed (above). [Additional rulemaking documents for 1,3-D mitigation](#) can be found at <cdpr.ca.gov/docs/legbills/rulepkgs/22-005/22-005.htm>

Anne Katten with California Rural Legal Assistance Foundation (CRLAF) stated that the pilot studies on the two-acre fields found up to 150 parts per billion measured at the field edge and asked how much higher the levels are predicted to be with the modeling on a 40- or 80-acre field. Anne added that CRLAF is very concerned about farm workers and dairy workers who may be on site every day and stated that barns are not protected by any setback. Maziar Kandelous replied that this regulation and the tables listing setbacks are for non-occupational bystander risk. Maziar added that if there are questions about the farm workers, those questions should be sent as public comments for the regulation and will be addressed accordingly.

Anne Katten clarified that the litigation challenged the way the township cap was set and not the concept of having geographic use caps. Anne added that CRLAF thinks that the existing use cap should be maintained for at least a year to check that the regulation is functioning as intended. Anne asked why no deadline for releasing the annual report or putting additional needed mitigations in place was included in the regulatory proposal. Maziar Kandelous replied that would be another good comment to submit to the public comments for the regulation.

Ione Yuen submitted the following comment via email:

I understand that the studies are attempting to minimize the acute and cancer exposures, but I was wondering if there was any consideration for the needs of the growers. The field fumigation timing is important for the growers to get their crops into the ground. The additional soil moisture requirement in these drought years may be difficult as water is not free for some growers. Our small growers are already struggling make back their costs so have stopped planting this past year. Additional requirements and costs will make it even more difficult. They use the field fumigation for club root fungus and they have reported a 25% yield reduction when they did not fumigate.

The 36-hour separation may create issues for growers as growers may also have restrictions due to School Notification rules which require that they finish 36-hours before school is in session.

Sarah Aird with Californians for Pesticide Reform expressed concern that Mark Weller's and Anne Katten's questions were not addressed. Sarah added that this meeting was understood to be an opportunity to ask and have technical questions answered and it doesn't make sense to wait for an answer until public comments in January, and then wait months to receive an answer. Sarah asked for someone to commit to at least getting back to Mark in the next day or two via email. Tulio Macedo stated that these comments and concerns will be part of the record and DPR will consider the request to address comments received in writing in the near future.

Jane Sellen asked why DPR failed to cite both the OEHHA NSRL and the Vasquez judgment and their list of documents relied upon for the development of this draft rule. Maziar Kandelous replied that this question would be included in the public comments.

Mark Weller commented that it appears that either DPR is pretending, or it has never been brought up that OEHHA, on June 21, issued a proposition 65 NSRL for 1,3-D. Mark asked if this had been part of the background discussion and added that any further discussion should include the proposition 65 NSRL that OEHHA set in June.

Jane Sellen echoed the comment made by Mark Weller. Jane stated that it's inconceivable that the OEHHA NSRL was ignored in this rulemaking, but as plaintiffs in the Vasquez case, Californians for Pesticide Reform believes that clearly directed DPR to develop a rule for occupational bystander exposure, and this rule does not do that. Jane added that, most troublingly, DPR tried to explain in its draft rule making, that using residential bystander will make it more health-protective. Jane added that it feels untrue to make that claim when clearly ignoring occupational bystander exposure means that DPR gets to ignore OEHHA. Jane further added that it appears that DPR's plan was to ignore occupational bystanders so that they can sideline OEHHA, whose proposed lifetime cancer risk level is 14 times more health-protective than what DPR is using. Jane then asked how it is possible that DPR is attempting to make the claim that this is more health-protective by ignoring occupational bystanders, and why DPR is not using OEHHA's NSRL to guide the State's professional risk assessors. Tulio Macedo replied that these questions and comments will be included in the record.

3. Volatile Organic Compound Emissions Inventory Update – Justin Kroes, DPR

In 1963, the U.S. Clean Air Act passed into law. Through subsequent amendments, the Clean Air Act charged the U.S. Environmental Protection Agency with approving state plans to regulate emissions of air pollutants, including ground level ozone, or smog. In contrast to ozone in the upper atmosphere, ground level ozone is harmful to human and environmental health. Human health effects include increased rates of respiratory infection in healthy individuals, aggravation of existing respiratory illness, and premature death. Ground level ozone forms in the lower atmosphere through a series of chemical reactions, but two key chemical precursors are nitrogen oxides and Volatile Organic Compounds (VOC). VOCs are emitted from many sources, one of which is pesticides. Pesticide emissions of VOCs are regulated by two California agencies. The Air Resources Board regulates consumer pesticide products. DPR regulates agricultural and structural pesticide product applications.

In 1994, DPR committed to reducing emissions of VOCs by a set percentage of emissions in a baseline year (1990) within five nonattainment (NAA) areas, which are defined as areas that have not met Clean Air Act standards for ozone. As part of this commitment, DPR conducts an annual inventory of VOC emissions and publishes the results in an annual inventory report. DPR's VOC inventories, which began in 1997, focus on the peak ozone period between May and October. Within that period, VOC emissions are calculated for each pesticide application by multiplying applied product mass and the fraction of a product assumed to contribute to atmospheric VOCs. For fumigant applications, emissions are further adjusted by a factor that accounts for the effect of application method on emissions. Emissions are totaled within each

NAA and compared to an emissions reduction target. The reduction target for four of those NAAs is 20% of their 1990 baseline-year emissions, and the San Joaquin Valley NAA has a reduction target of 12% of its 1990 baseline-year emissions. Each reduction target is equivalent to a regulatory limit.

As of 2020, emissions for each NAA remain below their limits, meaning that the NAAs are achieving mandated reductions. To prevent emissions from rising above regulatory limits in future years, if the inventory report determines that an NAA's emissions exceed 95% of its regulatory limit, restrictions on pesticide applications and products are triggered. In the San Joaquin Valley NAA, those restrictions are a general moratorium on the use of so-called high-VOC nonfumigant products on any of seven crop types. In the other four NAAs, restrictions are limits on total fumigant emissions allowed in subsequent report years. Fumigant limits are established through individual fumigant allowances, and the ability of counties to deny notices of intent or permits to apply fumigations within an NAA boundary. No fumigant restrictions are currently active, however, nonfumigant restrictions enacted with the release of the 2013 inventory report have been active in the San Joaquin Valley NAA since 2015. With the release of the 2019 report, those restrictions were extended through 2022. The unreleased 2020 report has determined that a key metric, known as hypothetical emissions, were lower than the San Joaquin Valley's trigger level.

Per Title 3 of the California Code of Regulations (CCR), section 6884 subsection c, if prohibitions for high-VOC nonfumigant products are in effect, those prohibitions must remain in effect until the hypothetical VOC emissions comply with the limit or trigger level for at least two consecutive years. As previously mentioned, the unreleased 2020 report determined that the 2020 hypothetical emissions are lower than the San Joaquin Valley's trigger level for the first time. If the 2021 report also determines that the 2021 hypothetical emissions are lower than the trigger level, then prohibitions may be lifted in the San Joaquin Valley NAA. The 2021 report will make a final determination on whether or not prohibitions can and/or will be lifted by the start of the next ozone season, and possible prohibition period, in May 2023. Additional sections of Title 3 CCR define VOCs, list required emissions reductions in NAAs, detail the restrictions, and mandate the publication of the annual inventory reports.

The five ozone NAAs within California are categorized as Sacramento Metro, San Joaquin Valley, Southeast Desert, Ventura, and South Coast. Except for Ventura, each NAA covers multiple California counties. Note that emissions are liable to change every year due to a number of factors, such as changes in weather patterns and agricultural economic pressures.

In the Sacramento Metro NAA, 2020 emissions were 1.2 tons per day (tpd), which is below the regulatory limit of 2.2 tpd. No fumigant limits or restrictions are currently active in this NAA. In the San Joaquin Valley NAA, emissions were under 15 tpd, which is below the regulatory limit of 18.1 tpd. As mentioned earlier, restrictions on the use of certain high-VOC nonfumigant products in the NAA were triggered in 2015 by the 2013 inventory, and they have continued

through 2022. The unreleased 2020 annual report determined that hypothetical emissions were lower than the San Joaquin Valley trigger level for the first time. This means that whether restrictions can and/or will be lifted will be determined by the 2021 emissions report. In the Southeast Desert NAA, 2020 emissions were just over 0.4 tpd, which is below the regulatory limit of 0.92 tpd. No fumigant limits or restrictions are currently active in this NAA. In the Ventura NAA, 2020 emissions were over 1.2 tpd, but below the regulatory limit of 3.0 tpd. No fumigant limits or restrictions are currently active in this NAA. In the South Coast NAA, 2020 emissions were under 0.9 tpd and below the regulatory limit of 8.7 tpd. No fumigant limits or restrictions are currently active in this NAA.

Additional information about the [Air Protection Program](#), [Air Monitoring Network](#), and [VOC Emissions from Pesticides Program](#) can be found on DPR's Web site.

<cdpr.ca.gov/docs/emon/airinit/airmenu.htm>,
<cdpr.ca.gov/docs/emon/airinit/air_network.htm>,
<cdpr.ca.gov/docs/emon/vocs/vocproj/vocmenu.htm>

Committee Comment

Lynn Baker asked when the next VOC inventory update will be available and what period it will cover. Maziar Kandelous replied that DPR is currently analyzing the 2021 data and that the analysis of that data will be presented at the first PREC meeting after the analysis is complete.

Public Comment

James Nakashima commented that the decline in San Joaquin emissions is relatively large (2 tpd) and asked what is changing in terms of specific products or agricultural practices to drive this decrease. Justin Kroes replied that questions and comments about specific emission values can be submitted during the public comment period once DPR publishes the draft report. Justin added that there are a number of factors that are not accounted for or represented within the VOC inventory data that DPR works with, and that inter-annual variation is normal. Maziar Kandelous added that the annual report will contain additional details and will be published on DPR's Web site very soon. Maziar added that if there are still questions after the report is published, those questions can be submitted during the public comment period.

Melissa Koshlaychuk with the California Strawberry Commission asked if the VOC regulations apply to totally impermeable film (TIF) tarped fumigation and how one can figure out how the VOC regulations apply to 1,3-D fumigation. Justin Kroes replied that the emissions from TIF tarps are represented in the VOC emissions inventory, but there are not any VOC-specific restrictions on TIF tarping. Justin added that there are other aspects of DPR and the Air Protection Program that touch on that, but nothing specific in terms of the VOC program.

4. Agenda Items for Next Meeting

The next meeting is scheduled for January 20, 2023 at 10:00 a.m. This meeting will be held virtually on the Zoom platform and broadcast live on the [CalEPA webcast page](https://video.calepa.ca.gov/).
<video.calepa.ca.gov/>

5. Adjourn