



May 1, 2016

Pam Wofford  
California Department of Pesticide Regulation  
1001 I Street, PO Box 4015  
Sacramento, CA 95812-4015

RE: Proposed changes to Air Monitoring Network

*Sent via e-mail*

Dear Ms. Wofford,

On behalf of the Californians for Pesticide Reform coalition and the 44 co-signatories listed below, I want to thank you for the opportunity to provide comments on the proposed changes to DPR's Air Monitoring Network (AMN). We are encouraged that you are considering changes to the AMN that would better address the concerns of affected communities, and would like to reiterate the coalition's priorities as stated in our man meetings and previous comment letters to DPR, CalEPA and ARB.

Modifying Objectives: Our primary objective in seeking modifications to the AMN is to make sure that scarce monitoring resources are used most effectively to capture true community exposure. Better data are needed both in order to protect those facing the highest potential exposure, and to create effective modeling tools that can be applied elsewhere, thereby expanding the utility of the AMN. **We believe that DPR's objectives should be modified to include the goal of evaluating the highest level of potential exposure**, which is not currently addressed either explicitly or implicitly in the existing stated objectives.

Change of Locations: There is a sufficient body of data collected by the Air Monitorin Network from 2011-2014 to identify weaknesses in the existing network, and to justify relocating monitoring sites that are not providing useful data. The current locations do not adequately represent factors that are known to result in a greater likelihood of exposure to pesticides in the air – notably proximity to fields and weather conditions favorable to pesticide drift. For example, in communities across the state, you can find homes and schools in areas more likely to have pesticide exposure because they are closer to and downwind from fields. As a result, the data collected from the existing monitoring network is of limited usefulness.

Monitoring should be conducted in communities most at risk of pesticide drift and airborne pesticide exposures. Communities located in areas with significant use of the two highest priority classes of pesticides - organophosphates and fumigants - should be prioritized. Because crop and use patterns for these two different classes of pesticides are different, ranking of communities should consider the top uses for each class separately, rather than a combined score. Further prioritization based on meteorological conditions favorable for

drift (wind direction and typical frequency of calm days) can be used, as long as critical agricultural areas are still represented.

Within communities, selection of monitoring sites should consider the following:

- An evaluation of pesticide use close to and upwind of candidate monitoring sites. Monitors should be placed near locations of the highest use of pesticides of high toxicity and volatility within a community.
- An evaluation of weather conditions close to candidate monitoring sites. Monitors should be placed where they will capture maximum potential drift based on evaluation of meteorological analysis.
- A preference for schools. Three of the six DPR and ARB monitoring sites are currently located on or adjacent to school sites (Rio Mesa in Oxnard, Ohlone near Watsonville and Shafter in Kern). It is important to maintain monitoring sites at or near schools, but the selected schools should be closer to and downwind of fields than the current location at Shafter High School.

Specific changes to the locations should be made as follows:

**DPR Sites:** The DPR sites should be moved to sites that better capture peak exposure.

- **Salinas airport:** Relocating this monitoring site is the coalition's highest priority. The current site at Salinas Airport is downwind (south-east) of Salinas's urban core, with very few pesticide applications of monitored pesticides within the one square mile section where the monitor is located. Because of the high degree of community interest in air monitoring data in Salinas, we urge DPR to maintain an air monitoring site in Salinas, but to select a new location that is downwind of the highest density of fumigant use. Previous monitoring by ARB in north Salinas found high fumigant levels. A more suitable site is Gavilan Middle School, which is surrounded on three sides by strawberry fields. The new site should include seasonal chloropicrin monitoring to fully evaluate sub-chronic exposure.

- **Shafter (Kern County):** The air monitoring site at Shafter High School in Kern County should be moved to one of the smaller communities flagged in DPR's reanalysis if a suitable monitoring site can be located. If not, then the site should be relocated from Shafter High to nearby Sequoia Elementary, northwest of the Shafter site and closer to fields.

**Ripon:** We support DPR's plan to stop monitoring at this site.

**ARB Sites:** We urge DPR to ask ARB to continue seasonal chloropicrin monitoring at all of its monitoring sites, and to consider monitoring for MITC at sites near high use.

- **Santa Maria:** ARB or DPR should add monitoring for non-fumigant pesticides, because of high use of organophosphates and fungicides nearby.

- **Rio Mesa (Oxnard):** ARB or DPR should continue monitoring here or relocate to another suitable site in Ventura County.

- **Ohlone Elementary (Watsonville):** Because of the high degree of community

engagement at Ohlone Elementary and proximity to fields upwind, we advocate maintaining this air monitoring site.

Adding Pesticides: We support the addition of the proposed pesticides of public health concern: 2,4-D, Captan, Fenpyroximate (Fujimite), Imazalil (Magnate), Methomyl (Lannate) Pendimethalin (Prowl).

Sampling Frequency: Given limited monitoring resources, DPR should focus on more targeted seasonal monitoring. During the high-use season, multiple samples per week would allow for better characterization of peak exposures, reduce the impact of failed or lost samples, increase the overall capacity to correlate air concentrations with use data and meteorological conditions, and better evaluate cumulative exposures.

Monitoring Schedule: DPR and ARB should consider monitoring additional communities in alternating years to capture data in a wider range of locations. There is a range of variables that impact air concentration, including meteorological conditions, topography, applicatio methods, and pesticide chemistry. By expanding the number of locations, Air Monitorin Network data will reflect a wider range of these variables, improving the degree to which the dataset represents exposures in California communities.

DPR should also consider adopting a randomized schedule, to prevent growers from adapting use to predicted monitoring.

Thank you again for the opportunity to provide input on the AMN. Communities throughout California live, learn and play in close proximity to fields, making it essential that DPR conduct a rigorous evaluation of pesticide exposures in the air in order to better protect them from health harms. To achieve this, the AMN must be improved to better capture real-world exposures.

Sincerely,



Sarah Aird, Co-Director, Californians for Pesticide Reform

**Co-Signatories:**

California Association of Bilingual Educators, Pajaro Valley Chapter 66, Lucia Villarreal, Chapter President

California Institute for Rural Studies, Gail Wadsworth, Executive Director

California Rural Legal Assistance Foundation, Anne Katten, Pesticide and Work Safet Specialist

California Walks, Wendy Alfsen, Executive Director

Carmel Valley Women's Network, Darby Moss Worth and Ruth Gingerich, CPNP, MSN, Co-Chairs

Center for Biological Diversity, Jonathan Evans, Environmental Health Legal Director and Senior Attorney  
Center for Environmental Health, Caroline Cox, Research Director  
Center for Farmworker Families, Dr. Ann Lopez, Executive Director  
Center on Race, Poverty and the Environment, Caroline Farrell, Executive Director  
Central California Asthma Collaborative, Kevin D. Hamilton RRT, RCP, Executive Director  
Clean Water and Air Matter (CWAM), Renee Donato Nelson, President  
Communities for Sustainable Monterey County, Member of the Safe Ag, Safe Schools coalition, Luana Conley, Director  
Community Science Institute, Denny Larson, Executive Director  
Dolores Huerta Foundation, Lori de León, Legislative Associate  
El Quinto Sol de America, Isabel Arrollo, Executive Director  
Environmental Working Group, Bill Allayaud, California Director of Government Affairs  
EPIC - Environmental Protection Information Center, Natalynne DeLap, Executive Director  
Farmworker Association of Florida, Jeannie Economos, Pesticide Safety and Environmental Health Project Coordinator  
Farmworker Justice, Virginia Ruiz, Director of Occupational and Environmental Health  
Fisherman's Choice LLC, Katrina Wetle, Owner  
Food Empowerment Project, Lauren Ornelas, Founder/Executive Director  
Friends of the Earth, Lisa Archer, Director, Food and Technology Program  
Justin Matlow, Educator, Safe Ag, Safe Schools, drift catcher monitor  
Klamath Forest Alliance, Kimberly Baker, Executive Director  
Label GMOs, Pamm Larry, Director  
Live Oak Friends Meeting, Terrill Keeler and Kitty Mizuno, Co-Clerks  
Monterey Bay Central Labor Council, Robert Chacanaca, President  
Northwest Center for Alternatives to Pesticides, Kim Leval, Executive Director  
Occidental Arts and Ecology Center, Dave Henson, Executive Director  
Pajaro Valley Federation of Teachers AFT 1936, Francisco Rodriguez, President  
Parents for a Safer Environment, Susan JunFish, MPH, Executive Director  
Pesticide Action Network North America, Paul Towers, Organizing and Media Director  
Pesticide Free Marin by 2016, Barbara Bogard, Co-chair  
Pesticide Free Zone, Ginger Souders-Mason, Director  
Physicians for Social Responsibility - San Francisco, Robert M. Gould, M.D., President  
Physicians for Social Responsibility - Los Angeles, Martha Dina-Arguello, Executive Director  
Promotores Comunitarios del Desierto, Eduardo Guevara, Executive Director  
Safe Ag, Safe Schools, Carole Erickson, Co-Chair  
Sprout Up - Santa Cruz Chapter, Rebekkah Scharf, Chapter Director  
Stop West Nile Spraying Now, Samantha McCarthy, Coordinator  
Sustainable Seaside, Kay Cline, Chairperson  
Swanton Berry Farm, Jim Cochran, President  
Turning Green, Judi Shils, Executive Director  
Wine and Water Watch, Shepherd Bliss, Steering Committee Member

Cc: Brian Leahy, Director, California Department of Pesticide Regulation  
Matthew Rodriguez, Secretary, California Environmental Protection Agency

May 2, 2016

Pam Wofford  
Environmental Program Manager  
Department of Pesticide Regulation  
1001 I Street  
Sacramento, California 95814

**RE: Proposed Changes to DPR Air Monitoring Network**

Dear Pam Wofford,

The undersigned organizations are writing to state our opposition to many of the proposed modifications to the Air Monitoring Network (AMN) and our disappointment in the process the Department of Pesticide Regulation (DPR) is using to address this issue. The administrative process is flawed including limited opportunity for input from the agricultural community, and much of the proposal lacks scientific justification.

In our view, DPR must do better and that begins with more meaningful interaction with the undersigned and others in California agriculture.

Objectives

We concur with DPR that AMN objectives should not be modified. To do otherwise would equate to DPR abandoning its rationale for establishing the AMN. The question remains, however, as to how DPR's proposed modification of its community selection process furthers the AMN objective to "track trends in air concentrations over time."

Sampling Frequency

We oppose modification of the AMN that would allow the Air Resources Board (ARB) to randomly sample air quality. No explanation was provided for such action at the Pesticide Registration and Evaluation Committee (PREC) other than an offhanded statement that the ARB essentially was already performing such sampling. We believe we are entitled to more than the response provided and request a full explanation from DPR.

DPR's scientific justification for continuing the current sampling frequency appears adequate and we agree that modifications to sampling frequency (e.g. more frequent sampling during peak season, seasonal monitoring in coastal regions, multiple samples per week) are not warranted.

### Community Selection

The purpose of the AMN is to sample ambient air in communities with high exposure potential. Significant stakeholder input in 2011 and again in 2014 helped achieve this goal.

Other programs such as air monitoring at application sites and evaluation of specific types of pesticides are presently conducted by DPR and therefore should not be included in the AMN proposal. Specifically, the AMN evaluates communities with high use of multiple pesticides and estimates exposure using collected data. The pesticides chosen for monitoring were based on selection criteria including use, volatility, and DPR risk assessment priority.

We are aware of concerns expressed by some regarding the use of fumigants and organophosphates, however, DPR has not provided scientific justification to support narrowing of its focus to such compounds when engaging in the community selection process. Further, no scientific justification has been offered by DPR for reducing or discontinuing evaluation of numerous other pesticides and breakdown products currently subject to the AMN.

We also question whether the modification to factor in wind speed meets the stated objective of the AMN to “attempt to correlate concentrations with use and weather patterns.” To our knowledge, there are significant variabilities regarding wind speed that could negatively impact the accuracy of resulting data, thereby distorting the overall exposure assessment of the community.

### Site Selection

We oppose modifications of the site selection criteria to include locations predominantly downwind from fields, and the manner in which distance from applications are weighted. Please provide more detailed scientific justification including how these modifications would improve attainment of the AMN objectives.

There appears to be significant modification of site selection criteria that calls into question the relationship of the data from relocated sites to historical data from existing sites and therefore could interfere with the goal of assessing long term exposure. ARB already performs application site monitoring and ambient air monitoring on behalf of DPR to assess mitigation measures for edge of field and off-site movement so it is unclear how this modification would achieve the overall goal of community assessment.

### AMN

We request that DPR provide a comprehensive analysis of the AMN as presently structured, including adequacy of the regulatory program and current measures that protect against sub-chronic and chronic risks. A final report of the findings of the current program is necessary for the public to understand the data collected through this project. We appreciate the commitment DPR made at the PREC to provide this report and ask that DPR provide a timeframe for its completion.

Finally, we believe that additional meetings between DPR and agriculture are critically important before you proceed with your proposal. We need to understand what has caused DPR to take such action and for DPR to understand our objections. We therefore request that you contact Rachel Kubiak at [rachelk@healthyplants.org](mailto:rachelk@healthyplants.org) as soon as possible to arrange an initial meeting with the undersigned and others from the industry who would like to participate. Thereafter, we may submit to DPR additional comments to be included in the administrative record.

Sincerely,

African-American Farmers of California  
Agricultural Council of California  
Almond Hullers and Processors Association  
California Agricultural Aircraft Association  
California Citrus Mutual  
California Cotton Ginners Association  
California Cotton Growers Association  
California Farm Bureau Federation  
California Fresh Fruit Association  
California Strawberry Commission  
California Tomato Growers Association  
Far West Equipment Dealers Association  
Nisei Farmers League  
Western Agricultural Processors Association  
Western Growers Association  
Western Plant Health Association



Exponent  
1150 Connecticut Ave, NW  
Suite 1100  
Washington, DC 20036

telephone 202-772-4900  
facsimile 202-772-4979  
www.exponent.com

May 2, 2016

Ms. Pam Wofford  
Environmental Program Manager  
Environmental Monitoring  
Department of Pesticide Regulation  
1001 I Street  
P.O. Box 4015  
Sacramento, California 95812-4015

RE: Proposed Changes to the Pesticide Air Monitoring Network

Dear Ms. Wofford:

The Chloropicrin Manufacturers' Task Force (CMTF) and the Metam Task Force (MTF) asked Exponent to review and comment on the proposed changes to the California Department of Pesticide Regulation (CDPR) pesticide ambient air monitoring program as described in CDPR's presentation to the Pesticide Registration and Evaluation Committee (PREC) on March 18, 2016.

In its March 18 presentation, CDPR discussed potential changes to the Air Resources Board (ARB) and CDPR monitoring sites. The most notable proposals were the possible movement of the monitoring sites to locations which CDPR considered to be more suitable for fumigant and organophosphate monitoring.

CDPR should consider carefully whether to move any of the monitors. The Shafter, Ripon, and Salinas sites are well suited for pesticide monitoring given that all three communities are surrounded by significant agriculture. All three have shown detections of pesticides. Also, the benefit for risk assessment of repeated monitoring at these sites should not be discounted. The remainder of this letter discusses these points in more detail.

### **Site Selection Criteria**

CDPR is proposing to monitor for 32 pesticides, but to have the community selection be based on the use of only fumigants and organophosphates because, CDPR stated, fumigant and organophosphate concentrations more often approach or exceed toxicity screening levels in its existing datasets.

To rank high use areas for fumigants, CDPR previously developed a complicated system that calculated fumigant usage in three zones around a location: (1) use within the community (community zone), (2) use within the community and one mile of the community (local zone), and (3) use within community and five miles of community (regional zone). Rankings for 1267 communities were based on three years of use data (2012-2014) and the three zones.

The scientific basis for this averaging methodology is, at best, unclear. First, the rankings were based on use density in pounds per square mile. It is not clear what the denominator here refers to. Is it square miles of the community? This would seem like the only value that could be used for the first zone. For zones (2) and (3), is it square miles of the one-mile and five-mile radii around the community?

If the denominator for use density is based on the area of the community, there could be some large differences in estimated use density that are not reflective of actual proximity to use, leading to arbitrary differences in use density among communities. Consider an example where there was 100,000 lbs of use of a fumigant within a certain radius, and in one scenario the site was 0.1 square miles and in the other the site was one square mile. In terms of usage, these scenarios are not meaningfully different. However, in terms of use density using the community area as the denominator, the use density is 1,000,000 lbs/square mile for the first scenario and 100,000 lbs/square mile for the second, which is a 10-fold difference.

It also is not clear how CDPR estimated the use density for the first zone, or how the values for zones (1) and (2) differ. The use data is presumably based on California's Pesticide Use Reporting (PUR) system. These use data are reported on a one-square-mile basis. How was use density within the community calculated for communities with less than a square mile of area? For example, the first ranked site was Edmundson Acres, which is only 0.066 acres. Fifteen areas the size of Edmundson Acres would fit into a one square mile area. With a granularity of only one square mile in the PUR, the use density within Edmundson Acres cannot be reliably estimated.

Thirteen of the fifteen alternative sites for fumigants listed in the presentation have areas less than one square mile. Therefore, the lack of pesticide use granularity for sub-square-mile areas could be a potentially widespread problem in estimating use density. By contrast, the currently monitored CDPR sites are in communities that are substantially larger than one square mile. Shafter, Ripon, and Salinas are 27.9, 5.5, and 23.2 square miles, respectively and the PUR has sufficient granularity to reliably estimate the use density for these towns.

### **Wind Speed Adjustment**

CDPR is proposing to adjust its use density calculations for the wind speed near a site. Specifically it proposes to divide the use density by wind speed, which will result in areas with generally lower wind speeds having higher adjusted use densities. Exponent appreciates CDPR's goal of adjusting for air dispersion; however, air dispersion is complex and depends on a variety of factors, including wind speed, ambient temperature, and characteristics of the planetary boundary layer such as atmospheric stability and mixing height. Additionally, over time, the variability in the wind direction is an important factor.

### **Consideration of Wind Direction**

CDPR also is proposing to consider wind direction in its siting criteria to ensure that monitors are "predominantly downwind" of fields. While this seems initially to be a reasonable consideration, wind direction is highly variable within days and across seasons. Also, the location of pesticide use varies from year-to-year. Therefore, wind direction should be only one

Pam Wofford  
May 2, 2106  
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consideration of many in locating monitors and not be accorded undue weight in CDPR's analysis.

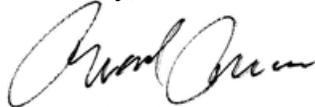
### **Trend Analysis**

Trend analysis was one of the goals of the monitoring network, and the ability to conduct a trend analysis is lost if the stations are moved. Trend analysis is highly useful in understanding the potential changes in pesticide inhalation exposure over time due to changes in pesticide use and agricultural practices. Exponent is not aware of any comparable air monitoring network in the United States. Therefore, CDPR should consider the lost opportunity to conduct a trend analysis if stations are moved.

### **Conclusion**

Exponent's evaluation of CDPR's proposal is only preliminary given the limited amount of information available on CDPR's methodologies. Exponent encourages CDPR to provide more details on the methods and provide preliminary analyses for review. When these become available, we will provide a more comprehensive review.

Sincerely,



Richard Reiss, Sc.D.  
Principal Scientist and Group Vice President

cc: Sara Beth Watson (CMTF)  
Lisa Campbell (MTF)

## FROM ARB

April 29, 2016

### Comments on Proposed Changes to DPR & ARB Pesticide Air Monitoring Networks

1. Objectives and target pesticides – The objective of DPR’s pesticide air monitoring network is to collect long-term data to assess chronic (annual average) public exposure to pesticides in communities heavily impacted by cumulative agricultural pesticide use. DPR collects data on 32 pesticides during one 24-hour sampling period per week at each of their three monitoring sites. ARB staff supports the current objectives of DPR’s pesticide air monitoring network and the list of pesticides that DPR has selected to monitor.

Since 2010, the pesticide air monitoring conducted by ARB staff in support of DPR’s toxic air contaminant program has consisted of: a) operation of two air monitoring sites; b) one 24-hour sampling period every six days at each site; and c) analysis of samples collected weekly at three monitoring sites (ARB’s two sites and one site operated by DPR) for 2-3 soil fumigants (the third fumigant is only monitored during certain months of historical use). Historically, ARB staff had conducted seasonal ambient air monitoring and application-site monitoring in support of DPR’s evaluation of pesticides as potential toxic air contaminants and to evaluate efficacy of newly implemented mitigation measures.

2. Sampling frequency – DPR proposed to randomize days selected for monitoring throughout the week and requested that ARB randomize the day selected for collecting 24-hour air samples at ARB’s fumigant monitoring sites. ARB staff currently conducts monitoring every six days. ARB staff will randomize this schedule so that samples are not always collected every six days.
3. Community selection – DPR currently conducts air monitoring in three communities for 32 pesticides (including soil fumigants and organophosphates). Communities were prioritized for monitoring based on total pesticide use. DPR proposed to continue monitoring for the same and possibly additional pesticides, but to reprioritize communities based solely on the use in recent years of soil fumigants and organophosphates. This reprioritized list will be factored in as DPR considers selecting different communities for monitoring. ARB staff supports this approach, due to the concern about public exposure to fumigants and organophosphates in ambient air.
4. Community selection adjusted for wind speed – In addition to proximity to areas near expected pesticide use, DPR proposed to factor in the average wind speed as a part of the community selection process. A community located in an area with lower average wind speeds will likely have higher long-term average air concentrations of pesticides compared with a community with similar pesticide use located in an area

with higher average wind speeds, due to dilution and turbulent mixing of the atmosphere. ARB staff supports this approach.

5. Selection of two sets of communities for monitoring – DPR proposed to select two sets of communities for monitoring: one set of communities based on historical use (2012-14) of four soil fumigants and one set of communities based on historical use (2012-14) of eleven organophosphates. DPR proposed to conduct monitoring in one set of communities in even-numbered years and the other set of communities in odd-numbered years. ARB staff is concerned that this approach may not be representative due to variations from year to year in weather and pesticide use. Instead, ARB staff suggests that DPR select communities based on the proposed selection criteria (discussed in comments 3 and 4) and conduct monitoring for 2-3 years in each community before comparing pesticide use data with monitoring results, and considering whether to continue monitoring or select different communities.
6. Monitoring site selection based on wind direction – Once a community has been selected, DPR proposed to modify the criteria for monitoring site selection to factor in potential monitoring sites that are downwind under the prevailing wind direction of agricultural fields that in recent years have received or are expected to receive applications of the pesticides that DPR will be monitoring. ARB staff supports this approach.
7. Site selection criteria regarding public access – DPR’s proposed site selection criteria included the need for a site to be “accessible to public.” We understand that the intent was to convey that sites need to represent potential public exposure (locations that are publicly accessible), not that the public would have access to the equipment at the monitoring site. We suggest that this be clarified.
8. Changes to ARB’s monitoring sites – ARB staff currently operates two monitoring sites and analyzes samples collected at three sites for 2-3 soil fumigants. DPR proposed to take over the operation of the two sites, and requested that ARB select and operate two additional monitoring sites in communities based on DPR’s assessment of areas of high fumigant use. ARB staff supports this approach.

## FROM JAMES SEIBER

Pam Wofford

My comments on the proposed changes are

1. Put more effort into modelling pesticide air concentrations, and only as much effort as needed to validate the modelled concentrations with real monitoring data. My thoughts are that modelled air concentrations can be used as a good first effort in calculating downwind and ambient exposures as can be done with monitoring on a fixed schedule.
2. Put more effort into determining pesticide concentrations when multiple applications are occurring in the same airshed. EG fumigants in Salinas, or orchard sprays in the Sacramento Valley. Presently models do not handle multiple applications well.
3. Develop drone-based monitors that can move around in response to changes in weather patterns
4. Develop a comprehensive summary of all of the pesticide air monitoring data collected to date, and then 'mine' that data base for exposure-relevant data. The summary should first be peer-reviewed by experts in the area., in addition to ARB and DPR staff.

I applaud the department for conducting its pesticide air monitoring plan--very important for health of all, including in undererved populations at risk.

Jim Seiber

Nichino America, Inc. respectfully disagrees with the draft proposal to add Fenpyroximate to the multi-residue method for air monitoring and requests that the Air Monitoring Network reconsider its proposal.

Nichino America, Inc. disagrees with the characterization of Fenpyroximate as a public health concern, which appears to be the driver for its inclusion to the multi-residue method for air monitoring. Available information does not support the conclusion that currently sold products containing Fenpyroximate are a concern to public health. As explained in your e-mail dated April 26, 2016, the public health concern for Fenpyroximate “was mostly due to the drift incidences that have occurred in California that have resulted in reported illnesses.” The reported illnesses you refer to are captured in the Pesticide Illness Surveillance Program<sup>[1]</sup>, which contains data recorded through 2013. As noted in the 2013 program report<sup>[2]</sup>, Nichino began a transition in early 2014 from the original EC formulation (FujiMite 5EC), which was associated with the reported illnesses, to a new, low-odor formulation (FujiMite XLO). The original EC formulation has not been manufactured for distribution in California since 2013. Since the transition to the low-odor formulation (FujiMite XLO) for use in California, Nichino is not aware of any reported illness incidents since the beginning of 2014. The ProPharma Group<sup>[3]</sup> documented one incident in 2014 outside of California related to outdoor agricultural use of the original EC formulation, but has not documented any incidents related to outdoor agricultural use of any products containing Fenpyroximate in 2015 or 2016 to date.

The proposal to add Fenpyroximate to the multi-residue method for air monitoring may be related to the increase in VOC emissions in the San Joaquin Valley non-attainment area attributed to Fenpyroximate<sup>[4]</sup>. The reported increase in VOC emissions for Fenpyroximate, however, was not due to changes in the use of Fenpyroximate-containing formulations, but rather to the transition from a calculated emissions potential to an experimental emissions potential. To further address concerns about the use of high-VOC content organic solvent-based fenpyroximate formulations, Nichino has initiated a second transition from the organic solvent-based low odor EC formulation (FujiMite XLO) to a water-based SC formulation (FujiMite SC) for use in California. Manufacturing of FujiMite XLO formulation for California ceased in 2016; remaining stocks in the channels of trade are expected to be used in 2016. The transition to the water-based FujiMite SC formulation in California should be completed prior to 2017.

In addition to the change in formulations and decreasing trends in reported illness incidents, there are no public health concerns about the volatilization of Fenpyroximate. This was the conclusion in the U.S. EPA Office of Pesticide Programs draft *Human Health Bystander Screening Level Analysis: Volatilization of Conventional Pesticide*<sup>[5]</sup>. This document highlights the development and use of a Volatilization Screening Tool that provides a consistent and health-protective framework to assess the potential bystander inhalation risks resulting from volatilization of conventional pesticides. The screening tool uses physical and chemical properties to predict flux (i.e., the rate at which a chemical volatilizes off of a treated field); a computer model (AERSCREEN4) to estimate air concentrations at different distances from a treated field; and chemical-specific human health toxicological data to estimate potential bystander inhalation risks. The document provides details on the volatilization screening methodology

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<sup>[1]</sup> <http://www.cdpr.ca.gov/docs/whs/pisp.htm>

<sup>[2]</sup> <http://www.cdpr.ca.gov/docs/whs/pisp/2013/2013sumdata.pdf>

<sup>[3]</sup> [www.ProPharmaGroup.com](http://www.ProPharmaGroup.com)

<sup>[4]</sup> [http://www.cdpr.ca.gov/docs/emon/vocs/vocproj/2014\\_annual\\_rpt\\_main.pdf](http://www.cdpr.ca.gov/docs/emon/vocs/vocproj/2014_annual_rpt_main.pdf)

<sup>[5]</sup> <https://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2014-0219-0002>

and presents the results of the screening analysis that the EPA completed using this methodology. The screening analysis examined all of the conventional pesticides being evaluated in the Registration Review process, including Fenpyroximate.

The EPA concluded that Fenpyroximate passed the quantitative screen. Passing this screen means that the concentration of concern (i.e., the inhalation point of departure<sup>[6]</sup> divided by the total uncertainty factors or COC) was not exceeded for any crop scenario at any distance downwind from any size field. For a pesticide that passes the screening analysis, the EPA has high confidence that use of the pesticide will not result in any meaningful bystander inhalation risk due to volatilization of residues and further data would generally not be required.

The information discussed above demonstrates that adding Fenpyroximate to the multi-residue method for air-monitoring will result in little or no additional value. It will, however, add to the costs of the program, including sample collection, sample analysis, and results reporting. It also may influence growers to select alternate products that may not be as safe or effective as Fenpyroximate products marketed as the water-based FujiMite SC formulation.

Nichino America, Inc. requests that the Air Monitoring Network reconsider its proposal to add Fenpyroximate to the multi-residue method for air monitoring.

Please contact me if you have any questions.

Sincerely,

Bill

**Bill Berti, Ph.D.**

Manager, Regulatory Affairs

Office: 302.442.6003

Cell: 302.685.3108



4550 New Linden Hill Road, Suite 501  
Wilmington, DE 19808

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<sup>[6]</sup> Inhalation POD is the chemical-specific human-health point of departure selected for the inhalation route of exposure in a chemical's most recent human health exposure or risk assessment.