



**PESTICIDE REGISTRATION  
AND EVALUATION COMMITTEE (PREC)  
Meeting Minutes –March 20, 2015**

**Committee Members/Alternates in Attendance:**

Ann Prichard, Department of Pesticide Registration (DPR)  
Charles Salocks, Office of Environmental Health Hazard Assessment (OEHHA)  
Crystal Reul-Chen, Department of Resources Recycling and Recovery (CalRecycle)  
Eric Lauritzen, CA Agricultural Commissioners and Sealers Association (CACASA)  
James Seiber, University of California, Department of Toxicology  
Lynn Baker, Air Resources Board (ARB)  
Patti TenBrook, U.S. Environmental Protection Agency (U.S. EPA), Region 9 –via webcast  
Rebecca Sisco, University of California, IR-4 Program  
Rich Breuer, State Water Resources Control Board (SWRCB)

**Visitors in Attendance:**

Anne Katten, California Rural Legal Assistance Foundation  
Brian Bret, Dow AgroSciences  
Catherine Caraway, OEHHA  
John Steagall, Department of Food and Agriculture (CDFA)  
Justine Weinberg, CDPH –via webcast  
Laura August, OEHHA  
Marla Livengood, California Strawberry Commission  
Paul Towers, Pesticide Action Network North America

**DPR Staff in Attendance:**

Amberlyn Ferleman, Worker Health and Safety Branch  
Andi Cameron, Pesticide Registration Branch  
Ann Schaffner, Worker Health and Safety Branch  
Denise Alder, Pesticide Registration Branch  
Donna Marciano, Product Compliance Branch  
Edgar Vidrio, Environmental Monitoring Branch  
George Farnsworth, Enforcement Branch  
Jeanne Martin, Enforcement Branch  
John Inouye, Pesticide Registration Branch  
Jolynn Mahmoudi-Haeri, Pesticide Registration Branch  
Ken Everett, Enforcement Branch  
Leslie Crawl, Worker Health and Safety Branch  
Leslie Ford, Fiscal Services and Business Operations Branch  
Lisa Ross, Worker Health and Safety Branch  
Lu Saepanh, Fiscal Services and Business Operations Branch



**cont. DPR Staff in Attendance:**

Marshall Lee, Pest Management and Licensing Branch  
Mike Zeiss, Worker Health and Safety Branch  
Michel Oriel, Worker Health and Safety Branch  
Nino Yanga, Worker Health and Safety Branch  
Pam Wofford, Environmental Monitoring Branch  
Randy Segawa, Pesticide Programs Division  
Shelley Lopez, Pesticide Registration Branch

**1. Introductions and Committee Business –Ann Prichard, Chair, DPR**

- a. About thirty-six (36) people attended the meeting and twenty-nine (29) viewers on the webcast.
- b. Charles Salocks commented that the minutes for the previous meeting held on Friday, January 16, 2015 sent to the PREC listserv had formatting issues in the first table.

**2. CalEnviroScreen: A Tool For Evaluating California Communities –Laura August, OEHHA**

CalEnviroScreen is a screening tool used to help identify California communities that are disproportionately burdened by multiple sources of pollution and are particularly vulnerable. The tool uses nineteen indicators of environmental and socioeconomic conditions. Features of the tool include combining information from multiple mediums (i.e., air, water, and soil), the data represents multiple factors (i.e., exposures, environmental conditions, population sensitivity, health conditions, and socioeconomic factors), and provides information at roughly community scale.

California Government Code §65040.12(e) states “environmental justice means the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations, and policies.” The California Environmental Protection Agency’s (CalEPA’s) responsibilities include identifying and addressing “...any gaps in existing environmental programs, policies, or activities that may impede the achievement of environmental justice” (California Public Resources Code §71113). This requires the development of interagency environmental justice strategies (e.g., the Interagency Working Group on Environmental Justice and the California Environmental Justice Advisory Committee). CalEPA’s Interagency Working Group on Environmental Justice’s definition for cumulative impacts states “...exposures, public health or environmental effects from the combined emissions and discharges in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socioeconomic factors, where applicable and to the extent data are available.” These definitions guided the creation of the Cal EnviroScreen tool and emphasized on geographic areas.

Environmental justice concerns stem from the numerous studies that have shown multiple pollution sources are disproportionately concentrated in low-income communities with high-minority populations. Additionally, studies have reported communities with certain socioeconomic factors (i.e. low-income, low-education) have increased sensitivity to pollution. The combination of multiple pollutants and increased sensitivity in these communities can result in higher cumulative pollution impacts. The 2010 OEHHA Report can be viewed at <http://oehha.ca.gov/ej/pdf/CIReport123110.pdf> and included in the report is pilot method of how a community can be ranked and identified throughout California using CalEnviroScreen.

The development of CalEnviroScreen began with California Environmental Statutes (from 1999-2000) which created the Advisory Committee Recommendations and CalEPA Environmental Justice Action Plan (2004). From there the Cumulative Impacts Work Group (2008-2013) was established and proposed the screen tool in 2010. As part of the release of the screening tool, extensive public outreach was provided through workshops and consultation services. After addressing public comments, the CalEnviroScreen public versions were released in 2013-2014.

Features of the CalEnviroScreen tool include that it is relatively simple to use, combines information from multiple media (air, water, soil), data are represented by multiple factors (exposures, environmental conditions, population sensitivity, health conditions, and socioeconomic factors), provides information at the community scale, and allows for comparison between geographic areas.

There are four major categories of data sets that are used by the CalEnviroScreen: exposures, environmental effects, sensitive populations, and socioeconomic factors. When developing these different data sets there were certain criteria used for selecting indicators including widespread environmental concerns, population characteristics that may influence vulnerability to pollution, be publically available, location-based, and good quality data. Some of the indicators include particulate matter concentrations (PM<sub>2.5</sub>, an air quality measurement used by Air Resources Board), ozone concentrations, diesel particulate matter emissions, drinking water contaminants, pesticide use, toxic releases from facilities, traffic density, cleanup sites, groundwater threats, hazardous waste facilities/generators, impaired water bodies, solid waste sites/facilities, age, asthma emergency department visit rate, low birth weight rates, educational attainment, linguistic isolation, poverty, and unemployment. Although, race or ethnicity is not a CalEnviroScreen indicator, the racial and ethnic composition of all census tracts are provided in the web maps and spreadsheet. The tool uses 2010 Census Tracts information. There are about 8,000 census tracts in California with an estimated 4,000 people per tract. For each indicator, all census tracts are scored using percentiles. This provides a meaningful way to interpret the data sets rather than use of a raw number. The percentile represents a relative score for all 19 indicators. The CalEnviroScreen score is calculated by combining all indicator scores, which allows for comparison of different areas. Higher scores equate to greater pollution burdens and population vulnerability. The highest 75-100th percentile (top 25%) represent “disadvantaged communities” under the 2012 Senate Bill (SB) 535.

The pesticide use indicator uses information from the DPR’s Pesticide Use Reporting. The indicator only uses a subset of the more toxic and higher exposure potential pesticides and

recognizes the use of pesticides does not equate to exposure rates. There were a total of 69 pesticides in the subset. The pounds of pesticides applied in each one-mile grid cell from the Public Land Survey System. These grids were then overlaid on all census tracts across California. The tool is looking into including other types of pesticide use other than production agricultural such as other agricultural uses (parks) and non-agricultural (structural pest control) and using county data for non-agricultural pesticides.

The cleanup sites indicator uses the California Department of Toxic Substances Control's EnviroStor Cleanup Sites Database and boundaries for the U.S. Environmental Protection Agency's Superfund sites. The sites are weighted based on type, status while multi-ring buffers around the site were placed, and the closer to the site, the higher potential of impact.

The tool is being used in ongoing planning and decision-making within CalEPA, the Environmental Justice Small Grant Program, the Environmental Justice Compliance and Enforcement Working Group, trainings, and outreach. In addition, under SB 535 (2012) the tool was used to identify disadvantage communities to allocate funds for various projects. California Health and Safety Code §39711 states CalEPA "shall identify disadvantaged communities for investment opportunities... based on geographic, socioeconomic, public health and environmental hazard criteria."

The CalEnviroScreen webpage located at <<http://oehha.ca.gov/ej/ces2.html>> contains the CalEnviroScreen Report, maps for individual indicators, descriptions of each indicator, the mapping application, the online maps of results and additional data. The site also provides an excel spreadsheet of results by census tract and a Google Earth results file. The CalEPA Greenhouse Gas-Reduction Investments to Benefit Disadvantaged Communities (SB 535) webpage can be viewed at <<http://www.calepa.ca.gov/EnvJustice/GHGInvest/>> and the ARB's Cap-and-Trade Auction Proceeds webpage can be viewed at <<http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/auctionproceeds.htm>>.

### **3. DPR 2015 Rulemaking Calendar –Randy Segawa, DPR**

DPR is currently working on a number of various regulations for proposal to the Office of Administrative Law (OAL) as rulemaking packages.

Soil Fumigants Notification will implement Food and Agricultural Code §11456, §12976, §14005, and §11502.5. Most pesticide labeling includes notification or monitoring to neighbors before a fumigation application. This regulation will most likely include all soil fumigants. DPR will be conducting a series of fumigant workshops. The first workshop to develop regulation concepts for Field Fumigation Notifications will be held on Thursday, April 9, 2015 at 10:00 a.m. in the Sierra Hearing Room on the second floor of the Cal/EPA building, located at 1001 I Street, Sacramento, California. Additional workshops will be held in the summer and fall. Presently, the timeline for publication of the Soil Fumigants Notification proposed regulations is 2015/2016.

Research Authorization regulations will propose a seventy-two hour notification to California County Agricultural Commissioner's prior to a pesticide application under a research

authorization. This regulation will include additional information that is required prior to an issuance of a research authorization. Title 3 of the California Code of Regulations (3 CCR) §6260, §6262, §6264, and §6266 will be affected.

DPR's Registration Program is required to be financially self-sufficient based on 3 CCR §6216 and will be increasing product registration fees. A workshop was held January 14, 2015 and the public comment period was extended until March 13, 2015. DPR anticipates the adoption of the emergency regulation change be effective October 1, 2015.

DPR is proposing its sixth volatile organic compound regulation change. In 2013, DPR gave interim approval for low emission fumigation methods using totally impermeable films. Interim approval can only be granted for three years. Once three years has passed, DPR is required to adopt final regulations. In 2012, U.S. EPA made major label changes to fumigant products and this regulation will allow for consistency between the label and the regulations. DPR anticipates a formal public comment period on the proposed regulation this summer. 3 CCR §6000, §6445, §6447.2, 6447.3, 6448.1, 6449.1, 6450.1, 6452.2, 6452.2 and § 6784 will be affected.

Assembly Bill (AB) 425 requires DPR to set a maximum allowable leach rates for copper antifouling paints and the regulation change will fulfill AB 425 requirements. DPR is in progress of a reevaluation for Copper Antifouling Pants to determine the contribution of hull cleaning to the copper concentrations in water quality. DPR anticipates the adoption of the regulation by November 2016.

Fieldworker training, emergency medical care posting, and exempting user seal checks for filtering face piece respirators regulations are being implemented for consistency with U.S. EPA's changes to the worker protection standard. The proposed timeline for the regulation may be delayed. 3 CCR §6726, §6739, and §6764 will be affected.

DPR has proposed to designate chlorpyrifos as a restricted material when used for agricultural commodities. The public comment for this regulation change closed November 2014. DPR anticipates the rulemaking package to be submitted to the OAL April 2015 and the regulation change to be in effect July 1, 2015. 3 CCR §6400 will be affected.

DPR will be proposing mitigation of hazards associated with pesticide use adjacent to schools by setting application restrictions and requiring notification to schools. DPR anticipates a series of workshops will be held regarding this rulemaking in May/June this year. Section of 3 CCR are to be determined.

Personal protective equipment or eye and hand protection proposed rulemaking requires ANSY standard for eyewear protection and harmonizes hand protection standards with U.S. EPA. The public comment period ended last January and the package has been sent to OAL for review. DPR anticipates the regulation changes to go into effect July 1, 2015. 3 CCR §6000, §6486.7, §6720, §6724, §6738-6738.4, §6771, §6793 and §6795 will be affected.

The closed system specifications rulemaking package proposes the closed system specifications to be triggered based on precautionary statements and not the signal word as it is now. The public comment period for this proposal closed last February and DPR anticipates the regulation changes to be effective by the end of 2015. 3 CCR §6000, §6742, §6746, and §6793 will be affected.

#### **4. Pesticide Illness Surveillance Program (2012 Report) –Amberlyn Ferleman and Michel Oriel, DPR**

Pesticide illness is a reportable condition in California and DPR has the responsibility for collecting human health effects resulting from pesticide exposure. Mandatory reporting of pesticide illnesses has been a part of the California pesticide safety program (which DPR administers) since 1971, under California Health and Safety Code (HSC). HSC §105200 states “Any physician and surgeon who knows, or has reasonable cause to believe, that a patient is suffering from pesticide poisoning or any disease or condition caused by a pesticide shall promptly report that fact to the local health officer by telephone within 24 hours...”

The Pesticide Illness Surveillance Program (PISP) receives reports of suspected pesticide exposures through several paths. California law requires physicians to report pesticide related illness. Through a contract DPR has with California Poison Control System (CPCS), CPCS offers a way for doctors to satisfy the reporting requirement (e.g., doctors call and CPCS sends pesticide-related inquiries to DPR). The majority of cases received by CPCS are non-occupational. PISP receives occupational reports through agreements with California Department of Public Health’s Occupational Health Branch and California Department of Industrial Relations by manually extracting suspected pesticide illnesses. Additionally, online reporting of illness from mumps to botulism to pesticide illness can be found at California Reportable Disease Information Exchange. PISP relies on County health officers and poison control centers to send DPR non-occupational cases. These cases typically come in the form of PIRs (Pesticide Illness Reports) while occupational cases are commonly received through audits of Doctor’s First Reports of Occupational Illness and Injury from the Department of Industrial Relations. The PIRs must fit three criteria before being sent out to the California Agricultural Commissioner (CAC) offices for investigation. The three criteria are evidence of a pesticide or pesticide involvement, medical consultation, and health effects.

Once the PIR is sent to the CAC and the investigation is completed, they are sent back to PISP. PISP thoroughly evaluates each case to make a determination of the likelihood of pesticide involvement and abstract key pieces of data for entry into the database. Examples of data collected include pesticide involved, medical information, circumstances of exposure, application equipment, and enforcement information. Anyone can make an illness complaint to a County Agricultural Commissioner. If the person releases their medical records pertaining to the incident or if more than five persons were involved, PISP will add the case to DPR’s database, which contains over one hundred and twenty variables. PISP scientists extract relevant information from Investigative reports. The scientists weigh physical and medical evidence to determine causal relationship, the pesticide involved, medical information, circumstances of exposure, application equipment, and enforcement information (e.g. violations).

DPR maintains its surveillance of human health effects of pesticide exposure in order to evaluate the circumstances of exposure that result in illness. PISP scientists identify potential issues and trends, evaluate the effectiveness of DPR's regulations, contribute in the development of legislation, further DPR's scientific knowledge of pesticide exposure and prevention, and finalize the PISP Annual Report and the California Pesticide Illness Query (CalPIQ). For example, in Ventura County in 2000, pesticide applied by an air blast sprayer to a lemon orchard across the street from a school, drifted onto a school as children arrived for class. This triggered Assembly Bill 947 (Jackson), allowing County Agricultural Commissioners to regulate any pesticides or materials within a quarter mile of schools. Another example of PISP's effect upon legislation is PISP has received reports of large drift episodes affecting bystanders over the years, which resulted in Senate Bill 397 (Florez). This bill ensures that people (bystanders, non-occupational) who are exposed to agricultural pesticide drift receive immediate and proper treatment and stipulates that people will be reimbursed for medical bills incurred from the exposure.

PISP Annual Report summarizes data received and added to the database, such as number of cases investigated versus number of episodes, mechanisms that identified cases, outcomes of illness investigations, and summary of pesticide-associated hospitalization and disability. In 2012, there were a total of seven fatal cases and all but one was self-deliberate. The one non self-harm case involved a man who was attempting to burglarize a business during a sulfur dioxide fumigation.

CalPIQ is an online tool allows users to search using many different variables relating to pesticide related illnesses. For example year of incident, by county, pesticide criteria, application site, exposure type, etc. CalPIQ can be found online at [http://apps.cdpr.ca.gov/calpiq/calpiq\\_input.cfm](http://apps.cdpr.ca.gov/calpiq/calpiq_input.cfm) and the PISP Data Dictionary is available at [http://www.cdpr.ca.gov/docs/whs/pisp/data\\_dictionary.pdf](http://www.cdpr.ca.gov/docs/whs/pisp/data_dictionary.pdf).

Past annual reports summarizing data starting in 1996 are available on DPR's Web site at <http://www.cdpr.ca.gov/docs/whs/pisp.htm>. For more information regarding PISP, please visit <http://www.cdpr.ca.gov/docs/whs/pisp.htm>. Additionally, you may contact Research Scientist, Amberlyn Ferleman at [Amberlyn.ferleman@cdpr.ca.gov](mailto:Amberlyn.ferleman@cdpr.ca.gov) or by telephone at 916-445-6101.

## **5. Committee Comment**

James Seiber inquired if the program, BioMonitoring, is incorporated in the CalEnviroScreen tool. Laura August stated OEHHA is considering the BioMonitoring program. However, the program is not currently used in the CalEnviroScreen.

Crystal Reul-Chen asked what was not included in miles away from rural areas. Laura August stated that each cleanup site is assigned a weight; however, if the census tract states people do not live within one kilometer of the site, the weight does not contribute to the CalEnviroScreen score.

Crystal Reul-Chen inquired if OEHHA is considering expanding the CalEnviroScreen's health indicators. Laura August stated OEHHA is looking into incorporating cardiovascular disease into the tool but OEHHA is cautious due to health record confidentiality and accuracy of data.

Rich Breuer inquired how the drinking water contaminants were represented in the CalEnviroScreen tool. Laura August stated OEHHA collected information from California's public and community drinking water systems and worked with California's drinking water program. OEHHA's Methodology for a Statewide Drinking Water Contaminant Indicator can be found at <<http://oehha.ca.gov/ej/pdf/CES20FinalDWMMethodology2014.pdf>>.

Rebecca Sisco asked if the CalEnviroScreen tool is updated every two years. Laura August stated OEHHA is considering a two-year update, though an update is not mandated. The next update is expected for fall of 2016.

James Seiber inquired if communities are currently using the CalEnviroScreen tool. Laura August stated many communities and environmental advocates are currently using the data and OEHHA is considering provided training materials so the data can be interpreted accurately.

Rebecca Sisco asked what makes the registration fee increase an emergency regulation. Ann Prichard stated statute states the registration fee increase be completed under emergency regulations.

Charles Salocks inquired if organotin compounds were still used in antifouling paints. Randy Segawa stated the organotin compounds may still be used on naval ships but cannot be used on recreational ships.

Crystal Reul-Chen asked what type of doctor training happens in regards to pesticide illness reporting. Michel Oriol stated the responsibility of physician training falls under OEHHA. Charles Salocks stated OEHHA has an online course titled recognition management and reporting pesticide illness and OEHHA is working towards improving this area.

James Seiber inquired if there is a way to look at more recent data and see where improvements can be made. Amberlyn Ferleman stated DPR is always seeking where improvements can be made and has noticed a trend of agricultural cases tending to decrease over the years compared to non-agricultural cases. DPR is looking into outreach to non-agricultural users.

Lynn Baker inquired when doctors are required to report a pesticide illness once the case has become known. Amberlyn Ferleman stated doctors are required to report a case within twenty-four hours. Lynn Baker further inquired how timely PISP is able to process the information received. Amberlyn Ferleman stated there is an average year time lag between the reporting of the case, the investigation of the case by the County Agricultural Commissioners, and PISP receiving the case for assessment. However, PISP is aware of the cases currently being investigated and will take immediate action when necessary.

James Seiber asked regarding drift how many of the cases are due to workers not adhering to regulations in place and the buffer zone restrictions. Amberlyn Ferleman stated DPR makes an attempt to recognize any possible violations made by workers. Michel Oriel stated the PISP program looks into the labeling of the pesticide product as well.

Crystal Reul-Chen inquired if there is investigation into chronic health effects. Michel Oriel stated at this moment, DPR's database is not set up to capture chronic illness reports.

#### **6. Public Comment**

Justine Weinberg inquired how many symptoms are needed for the PISP program to call it a case and to include it in your database. Amberlyn Ferleman stated the PISP program considers at least one symptom as a case. Other state programs require two or more symptoms, as they are unable to investigate each case and rely solely on medical reports.

#### **7. Agenda Items for Next Meeting**

No agenda items identified for the next meeting.

The next meeting is scheduled for Friday, May 15, 2015 at 10:00 a.m. in the Sierra Hearing Room on the second floor of the Cal/EPA building, located at 1001 I Street, Sacramento, California.

#### **8. Adjourn**