DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE REGISTRATION AND EVALUATION COMMITTEE
Meeting Minutes – September 16, 2010

Committee Members/Alternates in Attendance:

Syed Ali, State Water Resources Control Board
Lynn Baker, Air Resources Board (ARB)
Martha Harnley, Department of Public Health (CDPH)
David Luscher, Department of Food and Agriculture
Stella McMillin, Department of Fish and Game (DFG)
Ann Prichard, Department of Pesticide Regulation (DPR)
Rebecca Sisco, University of California, IR-4 Program
Charles Salocks, Office of Environmental Health Hazard Assessment (OEHHA)
Barry Wilson, University of California, Department of Environmental Toxicology
Gabrielle Windgasse, Department of Toxic Substances Control (DTSC)

Visitors in Attendance:

Denise Alder, DPR
Henry Buckwalter, Western Plant Health Association
Angela Csondes, ARB
Parakrama Gurusinghe, DPR
Anne Katten, California Legal Rural Assistance Foundation
Eileen Mahoney, DPR
Brandi Martin, DPR
Jeanne Martin, DPR
Patricia Matteson, DPR
Sue Peoples, DPR
John Sanders, DPR
Randy Segawa, DPR
Jay Schrieder, DPR
Darren Van Steenwyk, Clark Pest Control / Pest Controllers of California

1. Introductions and Committee Business – Ann Prichard, Acting Chairperson, DPR

a. About 14 people attended the meeting.
b. No corrections to the minutes of the previous meeting held on July 15, 2010, were identified.

2. Update on U.S. EPA Science Advisory Panel Meeting on Field Volatility – Martha Harnly, CDPH

Martha Harnley provided an update on the U.S. Environmental Protection Agency's (U.S. EPA's) Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory

Panel (FIFRA SAP) scientific issues associated with field volatilization of conventional pesticides. The meeting took place on December 1-3, 2009 in Arlington, Virginia. Additional information is available at <http://www.epa.gov/scipoly/sap/meetings/2009/120109meeting.html>

Scientific Panel Members: The scientific panel consisted of 18 members including Dr. James Seiber, Department of Food Science Chair at U.C. Davis; Dr. Michael Majewski, Research Chemist at U.S. Geological Survey; and Martha Harnley, Research Scientist at California Department of Public Health. Dr. William Popendorf, Department of Biology at Utah State University was the lead for the Risk Assessment Sub-Panel. The meeting was open to the public and lasted for three days. Fourteen written comments were submitted from citizens, farmers, industry, and advocacy groups such as Pesticide Action Network of North America (PANNA) and California Rural Legal Assistance, Inc. (CRLA).

Meeting Minutes: After the meeting, the panel members were responsible for reviewing and editing minutes and providing additional documentation. The final minutes consist of a 98 page document which is available on U.S. EPA's Web site at: <http://www.epa.gov/scipoly/sap/meetings/2009/december/120309meetingminutes.pdf>.

Quotes from the final minutes: The overall issue with the "Standard Operating Procedures for Estimating Residential Exposure Assessment," (i.e., Residential SOPs) is that they are a "set of standard instructions for estimating indirect residential exposures." However, "methodologies for assessing indirect exposures are not currently included in residential SOPs" including: indirect exposures resulting from "field volatilization of conventional pesticides." Additionally, the panel was not charged to address fumigants as the previous panel had. This panel was also not charged to address aerosols or particulate drift. Three topic areas include: a) exposure assessment; b) toxicological assessment; and c) risk assessment. Each panel member was assigned to a topic area; Ms. Harnley was assigned to exposure assessment. U.S. EPA prepared a background document for the panel and provided an approach to each topic area. Panel members commented on this approach.
Ms. Harnly provided individual U.S. EPA questions to the SAP and summarized individual answers from the committee in her Power point presentation which is posted on DPR's PREC Meeting Minutes Web page at: <http://www.cdpr.ca.gov/docs/dept/prec/precsummary.htm>.

3. Update on Neonicotinoid Reevaluation – Denise Alder, DPR

At the July 15, 2010, PREC meeting, Ms. Stella McMillin suggested an update on the reevaluation of neonicotinoids: imidacloprid, clothianidin, dinotefuran, and thiamethoxam. Denise Alder pointed out that the last discussion of this topic was presented at the

March 5, 2009 PREC meeting.

Background information: DPR initiated the reevaluation of certain pesticide products containing the neonicotinoids: imidacloprid, clothianidin, dinotefuran and thiamethoxam on February 26, 2009. The reevaluation was based on adverse effects data submitted by Bayer CropScience for imidacloprid. The adverse effects data included residue studies of imidacloprid use on ornamental plants. Additionally, honey and bumble bee studies were submitted. DPR's evaluation of the adverse effects data noted two critical findings: high levels of imidacloprid in leaves and blossoms of treated plants; and, increases in residue levels over time. The nitroguanidine insecticide class of neonicotinoids includes imidacloprid, clothianidin, dinotefuran, and thiamethoxam. Clothianidin, dinotefuran and thiamethoxam were included in the reevaluation because they are in the same chemical family as imidacloprid. Based on available data, DPR scientists believe these active ingredients would have the same potential residue concerns as imidacloprid. Data also indicate that these active ingredients are similar to imidacloprid in toxicity to honey bees.

Types of products: Currently, the reevaluation includes 222 products and 41 registrants. Originally, the reevaluation included 282 products and 50 registrants. The reduction in products/registrants is based on registrants choosing to not renew their product's registration or the product fit exemption criteria. Excluded from the reevaluation were certain products such as those formulated as a gel or impregnated in a strip; termiticide; flea control products combined with rodenticide; pet spot applications; ant and roach baits; premise application for control of nuisance pests; and manufacturing use only products. These types of products were excludes as they are are unlikely to move into plants that bloom or be a source of forage for honeybee or pollinators. The list of products included in the reevaluation available on DPR's Neonicotinoid Reevaluation Web page has not yet been updated to include the reduced list of products.

Data requirements: DPR's data requirements can be broken into two types: field-based studies and acute toxicity studies. DPR is requiring field-based residue analysis in pollen, nectar, and leaves from specific agricultural orchard and row crops grown in specific soil types for each of the four active ingredients. For products containing imidacloprid, DPR is requiring residue data on almonds, citrus, cotton, cucurbits, fruiting vegetables, pome fruits, and strawberries. For products containing thiamethoxam, DPR is requiring residue data on cucurbits, fruiting vegetables, pome fruits, and strawberries. For products containing dinotefuran, DPR is requiring residue data on cotton, cucurbits, and fruiting vegetables. For products containing clothianidin, DPR is requiring residue data on pome fruits. To determine the crops of focus for data requirements, DPR utilized California's Pesticide Use Reporting (PUR) database. These field-based residue studies collected from representative crops grown in California will assist DPR scientists to better understand the impact of neonicotinoids on honey bees. For the acute toxicity studies, DPR is requiring registrants to conduct an acute dietary concentration (LC_{50} study) on honey bee brood starting with the larval stage through emergence for each of the four active ingredients. The proposed data requirements listed both LD_{50} and LC_{50} values. However, during the

comment period, DPR located existing LD_{50} values and as a result, only LC_{50} values are required. Depending on the data collected, additional studies may be required including a chronic bee study, honey residue analysis, greenhouse or field toxicity studies. There is a study protocol posted on DPR's Neonicotinoid Reevaluation Web page that was fully vetted by U.S. EPA and USDA. DPR scientists feel this protocol will yield sufficient LC_{50} data on the effects to brood and larva.

Project progress to date: In 2009, DPR received compliance proposals from the identified data generator registrant for each of the four active ingredients. Shortly thereafter, these four registrants submitted additional information and studies for consideration in satisfying the data requirements of the reevaluation. DPR is communicating with U.S. EPA's Office of Pesticide Programs (OPP) and Pest Management Regulatory Agency (PMRA) Health Canada on this reevaluation. Concerns about the effects of neonicotinoid pesticides are not unique to California and DPR, OPP and PMRA are working together to investigate potential affects pesticides may have to honeybees.

<u>Imidacloprid project status:</u>
Field studies:

- Cotton and fruiting vegetable (tomato) residues were collected in August 2010. The registrant collected blossoms and leaves in cotton. In tomatoes, the registrant collected anthers (pollen) and leaves. The requirement for leaf sampling is to ensure that the sample site received an adequate pesticide application to analyze residues in pollen and nectar. DPR anticipates receiving a final report in March of 2011.
- Citrus investigations are currently being conducted at U.C. Riverside. DPR received the study protocol and is currently determining if these data can be bridged to the reevaluation data requirements.
- Cucurbit, pome fruit, and strawberry sampling are anticipated to be conducted in the first and second quarter of 2011. The reason for the delay in sampling for these crops was due to problems locating treated fields before the bloom period.

Acute toxicity studies:

- The registrant submitted an existing whole hive study and a request to bridge LC_{50} values.

<u>Thiamethoxam project status:</u>
Field studies:

- Fruiting vegetable (tomato) blossom and leaf residues were collected in July 2010.
- The registrant is experiencing location challenges for sampling cucurbits. When DPR determined which crop/crop groups to sample, it was based upon the PUR which is a year behind. When the registrant went to locate actual sample sites for cucurbits, they found that the growers had switched to a different crop for the

same location. DPR and the County Agricultural Commissioners are working with the registrant to locate fields for sampling cucurbits.

- Pome fruit sampling are anticipated to be conducted in the first quarter of 2011.
- The registrant submitted a waiver request from sampling strawberries. What the registrant found was that the growers were choosing to use imidacloprid instead of thiamethoxam. Therefore, there isn't an adequate number of fields available for sampling residues on strawberries.

Acute toxicity studies:

- The study is in process utilizing the protocol posted on DPR's neonicotinoid reevaluation Web site.

More information can be found at DPR's Neonicotinoid Reevaluation Web page: <http://www.cdpr.ca.gov/docs/registration/reevaluation/chemicals/neonicotinoids.htm>.

4. Air Monitoring Network – Randy Segawa, DPR

Randy Segawa discussed the final plan and draft protocol for the air monitoring network. Randy discussed the following key protocol issues:

1. Sampling schedule: DPR would like comments on how it should select which days to sample
2. Sampling locations: DPR would like comments on the proposed sampling location in each community
3. Quality control: DPR would like comments on what type of QC samples should be collected and how often
4. Screening levels: DPR would like comments on the updated health screening levels
5. Reporting: DPR would like comments on if it should evaluate use data before reporting monitoring results

Details on these issues, particularly figures showing the proposed sampling locations and pesticide use in the area, can be found at: <http://www.cdpr.ca.gov/docs/emon/airinit/air_network_0910.pdf>. Comments are due by the next PREC meeting on November 9, 2010.

5. Public Comment

None received.

6. Agenda Items for Next Meeting

No agenda items were suggested.

The next meeting will be held on Tuesday, November 9, 2010, in the Sierra Hearing Room on the second floor of the Cal/EPA building, located at 1001 I Street, Sacramento, California.

7. <u>Adjourn</u>