

US EPA ARCHIVE DOCUMENT

AGENDA
FIFRA SCIENTIFIC ADVISORY PANEL (SAP)
OPEN MEETING
December 7, 2010

FIFRA SAP WEB SITE <http://www.epa.gov/scipoly/sap/>
OPP Docket Telephone: (703) 305-5805
Docket Number: EPA-HQ- OPP-2010-0761

Hyatt Regency Crystal City at Reagan National Airport
Tidewater Room
2799 Jefferson Davis Highway
Arlington, VA 22202, USA

Scientific Issues Related to Pesticide Exposure Models and Climate Change
(Please note that all times are approximate. See note at the end of the Agenda)
Tuesday, December 7, 2010

- 8:30 A.M. Opening of Meeting and Administrative Procedures – Fred Jenkins, M.S.,**
Designated Federal Official, Office of Science Coordination and Policy, EPA
- 8:35 A.M. Introduction and Identification of Panel Members**
Kenneth Portier, Ph.D. Session Chair, FIFRA Scientific Advisory Panel
- 8:40 A.M. Welcome and Opening Remarks**
Steven Bradbury, Ph.D., Director, Office of Pesticide Programs (OPP), EPA
- 8:45 A.M. Background of Ongoing Federal Activities Related to Climate Change**
Joel Scheraga, Ph.D., Senior Advisor for Climate Adaptation
Office of Policy, EPA
- Overview of EPA and Federal Work
- Margaret Walsh, Ph. D., Ecologist, Climate Change Program Office, USDA
- Discussion of Climate Change impacts on Agriculture
- C. Ben Beard, Ph.D., Associate Director for Climate Change
National Center for Emerging and Zoonotic Infectious Diseases, CDC
- Discussion of Trend in Vector Borne Disease
- 9:35 A.M. OPP's Review of Climate Change and Pesticide Risk Assessment**
Richard P. Dumas, Pesticide Re-Evaluation Division
OPP, EPA
- OPP's Model Review/Charge Questions
- Christine Olinger, Health Effects Division, OPP, EPA
- Dietary Exposure Assessment (Human Health Exposure Case Study)
- Kelly O'Rourke, Health Effects Division OPP, EPA
- Non-dietary Exposure (Human Health Exposure Case Study)
- Faruque Khan, Ph. D., Environmental Fate and Effects Division
OPP, EPA
- PRZM-EXAMS (Ecological Exposure Case Study)

10:40 A.M. BREAK

10:50 A.M. Public Comments

11:30 A.M. Charge Questions Part I: OPP's Approach

Charge Question 1

- OPP is seeking guidance on its approach to climate change to date and suggestions on how to approach future work.
 - a. Comment on the approach that OPP used to evaluate the models in light of the expected likely effects and impacts of climate change to determine whether climate change would influence the inputs and parameters.
 - b. Of the areas identified as likely to be affected or the effects are uncertain, please offer suggestions as to the likely importance of these factors on risk assessment. Comment on potential approaches to address the uncertainty.

12:30 P.M. LUNCH

1:15 P.M. Charge Questions Part II: Temporal and Spatial Considerations

Charge Question 2

- OPP reviews chemicals and assesses risks as needed at least every 15 years. Over a 15 year time period, pesticide use and crop residues from monitoring data could change as a result of climate change.
 - a. Based on current projections, will the pace of climate change significantly increase the uncertainty in our exposure assessments?
 - b. If yes, which inputs are likely to change in such a manner that the uncertainty in the exposure assessment would significantly increase? Comment on how OPP might explore this issue.

2:05 P.M. Charge Question 3

- Over time, the environment will change due to climate change and these changes will be manifested differently in different regions of the country. Irrespective of climate change, there already exists a wide variety of climatic conditions across the country. Because climatic conditions vary greatly across the country, often data collected for exposure assessments are from studies performed at multiple locations chosen to be geographically representative of the entire country.
 - Please comment on the geographic changes anticipated due to climate change relative to the existing climate diversity within the U.S. Over what time period might climate change significantly affect the range of diversity in weather conditions in the U.S in such a way as to significantly increase our uncertainty in pesticide exposure assessments?

2: 55 P.M. BREAK**3:10 P.M. Charge Question 4**

- All exposure assessments rely in some degree on historical data – weather, residues on food, cultural practices, pesticide use practices, etc. In many situations data that are directly used as inputs into an exposure assessment can readily be updated with each successive assessment. For example, a dietary exposure assessment today would rely on recent monitoring data, while an assessment in 5, 10 or 15 years from now would rely on more up-to-date monitoring data than an assessment conducted today. In other situations, data are used to develop a parameter in a model, such as the runoff curve discussed in section III.B.1.e. of the background paper. Please comment on the significance of climate change on the reliability of embedded model parameters. How might OPP systematically approach an evaluation of the significance of such model parameters?

4:10 P.M. Charge Question 5

- Currently, OPP uses weather data from 1960-90 in its ecological assessments, giving equal weight to every year. OPP intends to acquire more recent data. Please comment on the effects of using these data in light of climate change. If this is viewed as an important factor, will aggregating the data from 1960-2010 be appropriate in light of climate change? For example, would the use of data from the last 10 years be a more appropriate indicator of future weather patterns or should OPP consider adding a predictive component to weather data? If the use of predictive models is appropriate, provide any sources of ongoing research or relevant models that might be explored.

5:00 P.M. Charge Questions Part III: Priority Setting

Charge Question 6

- Please consider a systematic approach for OPP to prioritize future work on climate change. Identify priority areas to help guide OPP in determining inputs/models that would be most important to help assure that our assessments do not underestimate exposure and risks (include magnitude and uncertainty).

5:45 P.M. ADJOURN

Please be advised that agenda times are approximate; when the discussion for one topic is completed, discussions for the next topic will begin. For further information, please contact the Designated Federal Official for this meeting, Fred Jenkins, via telephone: (202)-564-3327; or email: jenkins.fred@epa.gov.