

**Pesticide Analytical & Response Center
Minutes for Board Meeting of September 27, 2006
ODA Conference Room D**

Board Members Present

Chris Kirby – PARC Board Administrator
Dale Mitchell – ODA Co-Chair
Michael Heumann – DHS Co-Chair
Gene Foster – DEQ
Brad Knotts – ODF
Richard Kepler – ODF&W
Garnet Cooke – OR/OSHA
Dave Miller – State Fire Marshal

Guests Present

Kevin Masterson – DEQ
Kristina Davis - ODA

Board Members Absent

Gordon Simeral – OSFM
Sandy Giffin – OHSU/Poison Control

Consultants Present

Rose Kachadoorian – ODA, PARC
Dr. Fred Berman – CROET
Joan Rothlein – CROET
Lauren Slusser – OSPH

Consultants Absent

Dr. Jeff Jenkins – OSU
Dr. Dan Sudakin – OSU
Will Lackey – ODOT

I. Introductions:

- a. All present were introduced. Called to order: approximately 9:10 am.
- a. Garnet Cooke clarified one point from the July minutes, and indicated that the following sentence should be changed from: "She also learned that the batches of herbicides ... were highly contaminated with dioxin..", to "She also learned that the batches of 2,4,5-TP (Silvex) and 2,4,5-T ... were highly contaminated with dioxin..".
- a. Minutes from the July 19, 2006 meeting were accepted, as amended.

II. Old Business:

Waldport Working Group Update

- a. Michael Heumann is working with the local health department to obtain a list of names of physicians and other health care providers in the area. He has received a list of names of the health clinics in the Waldport area. In addition, he received the name of a Nurse Practitioner in Alsea (Mary Ann Carr). This information has been shared with Mike Watson at USEPA Region 10, and with Dr. Dan Sudakin at OSU.
- a. Michael Heumann asked the Oregon State Cancer Registry to review data from the area. They are reviewing data and the numbers are small. At this time, the observed does not appear to be in excess to the expected numbers; no trends have been identified. They will continue to review the situation.
- a. Dale Mitchell brought up the allegation of illegal dumping. According to Gene Foster, there are no reports of illegal activity. Additional review of DEQ's database might be explored. Keith Anderson (DEQ Manager in Eugene) has been in contact with EPA concerning these allegations. There are no indications or data that validate the concerns of illegal dumping.
- a. Garnet Cooke brought up the possibility of using old aerial photographs to determine historical use of the area, and the possibility of old industrial plants. Perhaps old utility pole treatment plants.
- a. Michael Heumann said that someone in the community alleged that the high school was built on the grounds of an old mill, not a hazardous waste site. Michael Heumann will ask Amy Chapman about local actions and historical information.

- a. Kevin Masterson indicated that DEQ has a list of suspected sites that they can look up. He will find out from the Eugene office if there are any locations.

Florence Case

- a. There was a conference call on September 25, 2005 to discuss implementation of the PARC recommendation that information about the Florence case should be used to train emergency medical technicians, fire fighters and other first responders about the importance of using respiratory and other personal protection when responding to an incident in an enclosed space (especially when there is reasonable information that a hazard may exist). Participants on the call included: Stan Thomas and Garnet Cooke of OR-OSHA, Chris Kirby of ODA, John Fowler of the Oregon Fire Chiefs Association, Susie Werner and Donna Wilson of the DHS Emergency Medical Services Section (EMS), and Lauren Slusser and Michael Heumann of DHS-OPHD.
- b. Garnet Cooke will meet with emergency and the Department of Public Safety Training(DPST) personnel to discuss how to incorporate the lessons learned in the Florence case into existing training.
- c. Trainers in Bend said that they are always looking for real life and useful scenarios.
- d. Michael Heumann stated that the pesticide program at OPHD is going to develop a one page write-up and share it with the other participants to use as part of the training program.
- e. Michael Heumann indicated that on September 26, 2006 they had a telephone conference with US EPA OPP (product registration), WA State officials, and NIOSH. An incident with a child in WA was discussed. In this situation, a child napped on the carpet that had been previously overtreated (3 to 4 times the label rate of insecticide bombs were used), and unfortunately the child never woke up. A second incident in Washington was discussed that involved an older adult with a history of COPD. In this case, a pyrethrin product leaked onto a 63 year old woman when she reach for the product from an overhead shelf, and she was covered with pyrethrins. She went to sleep that evening and woke up with a cough and then died. Another example described by EPA involved an elderly person who was overexposed, developed severe breathing difficulties, but received immediate help. This person survived. EPA staff mentioned that a draft re-registration document was being developed. A handout of Federal Register notices and an article from the American Journal of Industry Medicine were distributed to PARC meeting participants.
- f. Dale Mitchell indicated that the Florence Case has been sent to EPA Region 10 for Enforcement Review.

III. New Business:

Forestry

- a. Brad Knotts brought up a situation in which a property near Dallas was hand sprayed, but an individual still has concerns. This individual frequently has concerns.
- b. Brad Knotts indicated that they let people know in the area within a week of applications. There have been no violations of the Forest Practices Rules. There is no indication that there is any validity to the concerns associated with planes spraying herbicides, arsenic or unknown hazardous waste. The Forestry

Department continues to be sensitive to the needs of citizens and provides information.

PARC Coordinator Position.

- a. Chris Kirby provided an update on PARC Coordinator Position.
- b. Application period closed on September 1, and now the applications (15 of them) are being evaluated.

Presentation- Water Quality

- a. Pesticide Stewardship Partnerships Kristina Davis (ODA) and Kevin Masterson (DEQ) discussed the benefit of increased interagency cooperation, and discussed mostly the Hood River and Mill Creek Basin experiences. Presence of pesticides in water (Hood River area) is most likely due to drift or possibly mixing/loading overflows, because the presence in the water was not associated with rain events. DEQ is not the agency that will determine the source of the pesticide in water, but they will work with OSU-Extension, SWCD and other agencies in continuing to provide the steam monitoring data that will assist in evaluating the basin-wide effectiveness of pesticide best management practices. New Research on Pesticides and Water Quality - Pyrethroids: approximately 90% of the toxicity problems were in urban areas and 80% of the tested creeks had levels that could be considered lethal (sediments). See Attached Presentation.
- c. Fred Bergman brought up the need for continuing education. Joan Rothlein brought up the issue of drift and migrant labor camps. Richard Kepler mentioned that only one major change was needed with Dacthal, and that was to change from broadcast applications to row applications.

Presentation- Public Health Department

- a. Michael Heumann gave a presentation titled, "Data Search for Pesticide Poisoning Cases Involving Indoor Commercial Applications of Pyrethrins and/or Pyrethroids." He mentioned that people who may develop an immediate reaction to an application, often remove themselves from the exposed location, which may reduce the severity of exposure. Inhalation is the most common route of exposure, and exposure to indoor air accounts for approximately half of the reported exposures. Most of the symptoms involve the respiratory system. He provided hand-outs at the meeting. Oregon is one of 14 states that is part of the Sentinel Event Notification System for Occupational Risks-Pesticides (SENSOR-Pesticides) program. See Footnote concerning Pyrethrin/pyrethroid terms. The differences between these terms were not extensively discussed during the PARC Board meeting, but are provided by the PARC Board Secretary for clarification.

New PARC Incidents and Cases

- a. Rose Kachadoorian provided a hand-out with 12 recent incidents. It was decided at the meeting to classify one of the incidents as a case, and one of the incidents as a possible case. A situation that was classified as a case, involves a school employee who was exposed to wasp killer (Tralomethrin (0.01%) and d-trans Allethrin (0.05%)) in the classroom. This employee was hospitalized after several days of exposure. Michael Heumann suggested that it could be a reaction to the solvent in the pesticide formulation, if not the active ingredient. The incident that was decided to be considered as a possible case involves a truck driver who was

exposed to disinfectant (o-phenylphenol (0.19%) and ethyl alcohol (68.00%)) in the cab of his truck and in the sleeping area behind the cab, for an extended period of time. The disinfectant was used for mold control. He was forced to abandon his truck and did seek medical attention. Fred Berman said that it was important to track patterns. Michael Heumann said it could be a teachable moment regarding correct mold control procedures.

Updates

- a. Oregon Public Health Division: Lauren Slusser provided information from the last two months. She said that there were 42 cases and 9 of them were work related; 19 happened at home; 26 involved insecticides/herbicides; and 24 of them involved a pyrethrum or synthetic pyrethroid.
- b. Forestry: Brad Knotts discussed Eugene Weekly article and why herbicides are used in particular situations. OFW depends on EPA and Oregon Pesticide Control Law. Mentioned Forest Dwellers article (forestry applications and schools).
- c. DEQ: Laboratory is moving to Hillsboro.
- d. State Fire Marshal's Office: No update
- e. OR-OSHA: Garnet Cooke discussed project between her agency and DEQ.
- f. CROET: Toxicology Information Center moved from 1st floor to 3rd floor of the CROET building.
- g. Public: No Public were present to provide comment.

Adjourned at noon

Next meeting scheduled for November 15, 2006.

Materials Distributed –

- 1) "Pesticide Analytical Response Center (PARC)- Recent Incidents, Prepared for September 27, 2006 PARC Board meeting.
- 2) PowerPoint presentation Handout: "Data Search for Pesticide Poisoning Cases Involving Indoor Commercial Applications of Pyrethrins and or Pyrethroids."
- 3) American Journal of Industry Medicine article: Acute Pesticide-Related Illness Among Emergency Responders, 1993-2002.
- 4) Federal Register Notice: July 26, 2006 (Volume 71, Number 143) Pyrethrins Reregistration Eligibility Decision; of Availability.

Attachments

- 1) Presentation – Joint presentation by ODA/DEQ

FootNote

Footnote Pyrethrins/Pyrethroids- Terms (From EPA's RED for Pyrethrins, June 2006)

PARC Board Minutes – September 27, 2006

Pyrethrins are botanical insecticides. The term “pyrethrins” refers to all six isomers found in pyrethrum, extracts which are obtained from the dried and ground flowers of the pyrethrum plant, *Chrysanthemum cinerariaefolium*.

The individual isomers are referred to by the common names of the acid followed by an Arabic number 1 or 2 (i.e., pyrethrin 1, pyrethrin 2, cinerin 1, cinerin 2, jasmolin 1, jasmolin 2). If the term pyrethrins is followed by a roman numerical designation, than it refers to all of the isomers of that number in the pyrethrum extract (e.g., pyrethrins I includes pyrethrin 1, cinerin 1, and jasmolin 1). See Table 1 for a summary of terms.

Pyrethrins have limitations because of the cost of production and instability in sunlight; therefore, many synthetic pyrethrins-like compounds were developed to be more stable in sunlight and cost effective. These compounds are referred to as synthetic pyrethroids.

All pyrethrins and pyrethroids alter nerve function by modifying the normal biochemistry and physiology of nerve membrane sodium channels.

| Table 1: Pyrethrins Terms | |
|----------------------------------|---|
| Pyrethrum | Plant extract from <i>Chrysanthemum cinerariaefolium</i> , containing all 6 isomers |
| Pyrethrins | pyrethrin 1, pyrethrin 2, cinerin 1, cinerin 2, jasmolin 1, jasmolin 2 |
| Pyrethrins I | pyrethrin 1, cinerin 1, and jasmolin 1 ¹ |