

Maryland Pesticide Reporting and Information Workgroup
DRAFT Minutes
July 9, 2013
9 a.m. to 12 p.m.

House Environmental Matters Committee
(All presentations and meeting materials can be found at
http://mda.maryland.gov/about_mda/Pages/Pesticide-Information-and-Reporting-Workgroup.aspx)

Members in attendance: The Honorable Steve Lafferty, The Honorable Roger Manno, Carol Holko, Dr. Rick Kutz, Sherm Garrison, Andy Fellows, Steve Weber, The Honorable Charles Otto, Dr. Andrea Kidd Taylor, Dr. Judy LaKind, Dr. Clifford Mitchell, Dr. Jed Miller, Doug Myers, Dr. Ron Ritter, Julie Spagnoli, Brian Schoonmaker

Members absent: The Honorable Joe Bartenfelder, Ruth Berlin, Dr. William Bowerman, The Honorable J.B. Jennings

Staff: Dennis Howard and Joanna Kille

Guests: Jen Brock-Cancellieri, Ryane Necessary, Mark Schlossburg, Joe Midusiewski, Brian Herrington, Kathy Carmello, Mindie Flamholtz, Hunter Carpenter, Mary Ellen Setting, Val Connelly, Lynne Hoot

The Co-Chairs of the workgroup went over the duties of the workgroup and the legislation. Delegate Lafferty asked each workgroup member to introduce themselves. Delegate Lafferty stated that this first meeting would be largely informational and that he hoped people would be respectful of each other. The Co-chairs went over the duties of the workgroup.

Ms Kille went over the meeting logistics – all meetings will be held in the House Environmental Matters Committee room. The next meeting is Monday, August 12, 2013 from 1-4pm. There will be one meeting a month until the end of the year. Mr. Schoonmaker asked if a member can't make the meeting can they send someone in their place? Delegate Lafferty said that if it is someone associated with the group then that is fine. Senator Manno clarified that the alternative would not be able to vote should the need arise. Mr. Weber asked how the group was going to make decisions on issues. Delegate Lafferty said that he would like to reach a consensus point with most issues. If the group wants to take a vote up or down then the report can reflect any divided opinion.

EPA Pesticide Regulation Process

Dr. Rick Kutz

(<http://mda.maryland.gov/Documents/FIFRA.pdf>)

Delegate Lafferty asked Dr. Kutz why he had been asked to give an overview of EPA to the workgroup. Dr. Kutz said that no one on the workgroup had a similar work experience. He worked in the Office of Pesticide Programs for 15 years. He rose to the rank of branch chief within the Technical Services division of the EPA Office of Pesticide Programs. Monitoring activities were transferred to the Office of Toxic Substances. He was also at Towson University

for some time. MDA staff also reported that EPA workers were furloughed and not available for the presentation.

Dr. Kutz said the article on pesticide registration provided to the workgroup was very good. His talk will focus on the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). FIFRA was first enacted under President Truman in 1947. FIFRA is a complex law with a lot of articles and sections. Some have been implemented and others have not. The objective of FIFRA is to provide federal control of pesticide sale and use. All pesticides must be registered and it is a violation of federal law if a pesticide used is not registered. Some issues have ended up in federal court. The primary focus is to ensure pesticides being sold do what they say they do and that users follow directions on the label. This law was initially administered by USDA. When the Environmental Protection Agency (EPA) was created, pesticide regulation responsibilities were transferred to EPA.

FIFRA is somewhat unique because it requires risk/benefit analyses. The risk assessment evaluates the biological effects of the compound as shown by toxicological tests and includes an exposure assessment covering both human and environmental elements. The benefit analyses are done largely by economists and take into account both the availability of alternatives and some financial considerations. When you are reviewing a pesticide, you also have to look at whether there are substitutes available. For example, when DDT was banned, farmers in Delaware that grew peppers received a waiver because it was the only chemical that could control the European corn borer, and the benefit of allowing DDT on the crop outweighed the risk. EPA has moved to an environmental and public health agency which requires a “reasonable certainty of no harm” before a pesticide can be registered.

Ms. Spagnoli noted that there were significant amendments to FIFRA in 2004, 2007 and 2012 (Pesticide Registration Improvement Act or “PRIA”). PRIA 3 set up a fee for service for pesticide registrations. Registrants collectively pay \$27 million in annual maintenance fees. These fees are used to fund re-evaluation of registered pesticides, worker protection programs and other selected grants. An additional \$4 million (\$800,000 per year for five years) is being collected from registrants to support IT improvements, including tracking systems and databases. Mr. Fellows asked if an EPA person had been appointed to the workgroup. The Co Chairs said no. Mr. Fellows said it seemed as though there were two different standards – reasonable certainty of no harm and then unreasonable harm. He asked if the feds provide information to the state. Delegate Lafferty asked if the data provided by industry is like FDA’s process. Dr. Kutz said that, like FDA, most data are provided by industry. Ms. Spagnoli said that studies are conducted under EPA (Office of Chemical Safety and Pollution Prevention (OCSPP)) guidelines and are required to be conducted in accordance with Good Laboratory Practices (GLP) regulations. Companies conducting studies under GLP are subject to audits by EPA.

Dr Kutz added that if the registrant intentionally lies or doesn’t reveal data it is a federal felony. There have been several cases taken up where this has happened and is taken very seriously by the Justice Department. Mr. Fellows asked about worker safety standards. Does this involve quantity of exposure and how is that enforced? Dr. Kutz said there are regulated entry and training requirements and most are enforced at the state level. Delegate Otto said that the

standards are specific to each product sold. Dr. Kutz added there are also requirements for aerial spraying in concert with worker safety standards.

Mr. Myers asked about registration priorities and sunset provisions. Dr. Kutz said that if a company comes in with a chemical that is safer and less toxic, EPA will prioritize that chemical's approval. Ms. Spagnoli said that the product that has a lower risk has a shorter registration process time frame. She also said that the re-registration program has been replaced with a registration review program. Every 15 years each pesticide has to be reviewed and re-registered.

Maryland Department of Agriculture (MDA)
Current State Laws and Regulations
Dennis Howard

Mr. Howard provided an overview of the Pesticide Applicators Law, passed in 1970, the requirements of licensing and certification, the pesticide label, pesticide enforcement program, storage, complaints, security, incident reporting, pesticide survey, worker protection and endangered species.

Dr. Ritter asked what one needs to do to maintain a pesticide applicator certificate? Mr. Howard said if you have an applicator certificate, it is mandatory to attend a 6-8 hour annual recertification training. Private applicators must attend every three years. Commercial applicators, public agencies, and consultants must attend annual training. Mr. Howard reiterated that the label is the most important part and that the State has the same language as federal law. Senator Manno asked whether the label says, "do not use within x or y." Mr. Howard said yes, some labels do. State pesticide regulatory people have been lobbying EPA to make improvements to labels. States used to have problems with the word "may" on the label because they could not enforce under the law. The word "shall" is now used instead.

Mr. Schoonmaker said that labeling information such as "cannot apply in the rain" reporting wind speed, etc are required by law. Senator Manno asked for clarification that a use might be appropriate in one area or inappropriate in another area. How do you know that someone is using the product appropriately? Mr. Howard said not using a product according to the label is a violation of federal law and criminal charges can be filed as well. Mr. Schoonmaker cited a pesticide misuse case in Utah as an example. Senator Manno asked whether MDA has authority under state law as well. Mr. Howard said MDA has both criminal and civil penalty authority. For civil penalties, the first offense is \$2500, second is \$5000, going to a maximum of \$25,000. A person can also get up to a one year in jail depending on the judge's decision. It is, however, very rare to go to court. MDA has had one or two large incidents with one ending up in federal court. MDA processes nearly 20 violations per year. MDA does not take action if it does not have clear evidence. If MDA gets a complaint the inspector will conduct an on-sight inspection/investigation. They will pull samples, i.e. grass, dead vegetation, etc and take that back to the MDA plant pathologist or State Chemist. MDA pesticide inspectors will also pull records where they might find a violation. Delegate Lafferty asked whether the process is mainly complaint driven. Mr. Howard said yes complaints tips and also routine inspections to

determine compliance during use observations. Dr. LaKind asked if log records were kept internally by the applicator and Mr. Schoonmaker said they were.

Dr. Taylor asked how often the inspectors monitor the pesticide applicators out in the field. Mr. Howard said MDA has seven inspectors. Last year 1,500 companies were registered in Maryland. There are 3,349 certified applicators and 1,023 commercial and public agency applicators. Senator Manno asked how many applications are done per year. Mr. Howard said he did not have the number. Senator Manno asked Mr. Schoonmaker what applicators are required to do. They have to follow the label. Mr. Howard also stated that the State Chemist reviews produce samples on a regular basis as well. There have been no violations in the past 4-5 years in which produce samples were found to have illegal pesticide residues. Mr. Weber stated that FDA takes produce samples of pesticide residues and asked if this information is reported back to the states. Mr. Howard said only if there are violations.

Mr. Howard continued his power point presentation and referred workgroup members to the pesticide regulation webpage for further information. http://mda.maryland.gov/plants-pests/Pages/pesticide_regulation.aspx

Mr. Howard talked about the pesticide usage surveys that have been done in the past but the funding had dried up. MDA was able to secure funding for the 2011 survey. Mr. Howard mentioned the worker protection standards and regulations. They differentiate between handlers and workers. Dr. Taylor asked if there were a minimum number of workers that had to be working in the field to come under the standards. Mr. Howard said there was no minimum number but there was an exemption for family members. He mentioned the pesticide disposal program and that funding was always a problem. Senator Manno asked if the only way to collect data was by request. Mr. Howard said data collection is always a part of an investigation. Inspectors have to look for data during a routine inspection and MDA has the authority to collect that data. When there are repeated problems we get a year's worth of required data. Mr. Fellows asked if MDA reports enforcement actions. Mr. Howard said that information is posted on MDA's website. Mr. Fellows asked about enforcement issues with worker standards. Mr. Howard again said yes. He cited a case in Northern Baltimore of a place that was out of compliance and that a lot of times it is an educational process which is needed.

Mr. Fellows asked about appropriate use and questioned whether applicators often use more pesticide product than is appropriate. Mr. Howard stated that due to the high cost of many of the pesticides, there is no incentive for applicators to apply more than necessary. Mr. Howard also stated that using more pesticide than the product label allows is a violation of both state and federal laws. Mr. Fellows asked if there is an easily readable list of actions that can be extracted from the database. Mr. Howard stated yes.

Dr. Taylor asked what the MDA inspectors do. Mr. Howard said they conduct use observations, etc and are basically a one stop shop. EPA also asks MDA to do import inspections at the Port of Baltimore. MDA pesticide inspectors can get two to three different kinds of inspections done during one visit and are very efficient. Delegate Otto said MDA was very comprehensive and they dread when an MDA inspector comes in to inspect.

Department of Health and Mental Hygiene (DHMH)
Dr. Clifford Mitchell, MD
Overview of DHMH and Pesticides

Dr Mitchell said that in Maryland, a physician or health care provider is required to report to the health dept if there has been a pesticide-related illness. They have received two complaints in seven years. The reporting allows the department to respond in the appropriate manner. Pesticide exposure is a public health concern.

The second function of the reporting requirement is that it gives DHMH a mechanism for gathering information. This is similar to infectious diseases reporting. This system has been in place since before 2006. One example of a problem was a situation in Denton, Maryland. A food service establishment was having issues with flies and decided to open up 3-4 fly bombs while there were employees in the facility. Both Mr. Howard and he were involved. This was not an approved use of a pesticide. Mr. Howard said that it was actually a misuse of a pesticide. Other information is reported at Johns Hopkins as well. DHMH and MDA work closely on overexposure. The problem with the pesticide exposure report is that doctors don't report.

Dr. Mitchell said that the Maryland Poison Center data is also looked at. The problem is that most of those exposures are from emergency room data. There is very little follow up to do on DHMH's part. In general if you look at pesticide reporting there is no effective mechanism for looking at trends in pesticide exposures. We look at national health and examination information from food, inhalation, and transmission from mother to child. The number of incidents overexposure is very small. This is not useful for judging the need for reporting. The public health department doesn't get a lot of reports. The reports we do get have to do with worker exposure. There are exposures from consumer use. There are many opportunities for strengthening pesticide exposure information not in the agricultural sector but from consumers. Additionally, there has always been concern that agricultural workers do not have access to healthcare where a report can be done. We have information on pesticide exposures to workers but only when there is a healthcare delivery system. There are a lot of impediments to getting that information

Dr. Taylor talked about the need for improving the recording system. Serum is taken from people because it is a biological marker for exposure. There are ways to monitor the cholinesterase levels over time. This is an indicator of exposure to pesticides but for only certain pesticides like carbamates and organophosphates. Mr. Schoonmaker said that organophosphates and carbamates have not been on the market for 10 years.

Ms. Spagnoli asked if DHMH traces the adverse effects of pests. Dr. Mitchell said yes specifically for West Nile Virus and bed bugs. DHMH has an active program on vector borne diseases, including a monitoring program for vectors themselves. There is not a lot of data on pesticide applications in any systemic way. Ms. Spagnoli asked if there was any tracking of misuse. Dr. Mitchell said no. The Maryland Poison Center may get reports and we can look at data a little but but it is not specific about setting and data.

Maryland Department of the Environment (MDE)
Dr. Jed Miller, MD
Overview of the Toxic Materials Permit and NPDES permit

Dr. Miller presented permit-related information on behalf of MDE's Water Management Administration. His presentation discussed the Toxic Materials Permit (TMP) and the National Pollution Discharge Elimination System (NPDES) permit. The TMP allows for the application of pesticides to State waters if it is limited to a target species or geographic area. DNR assists MDE in reviewing the potential impact to nearby endangered or threatened species, downstream public water supply, and other uses of the waters. Permits are brief and consist mostly of operational requirements. The Federal NPDES permit is separate from TMP requirements. This is a general permit that was implemented in 2011. Much of it is modeled off of the EPA's proposed general permit. The permit is composed of effluent limits, monitoring, and reporting. Effluent limits are not numerical, but narrative. Monitoring is not retrieval of water samples, but rather a requirement that the permittee check to verify that proper procedures are being followed. Reporting is fulfilled by operating under a management plan that includes proper record keeping. The permit will regulate four use patterns: flying insect control over water, aquatic weed control, aquatic animal control, and forest canopy spraying over water. There is no requirement to submit a notice of intent for coverage under this permit. The permit is linked to the information that MDA gets from commercial applicators. Ms. Holko said there were requirements to look for adverse effects of pesticide applications under the NPDES, but that monitoring was not the purpose of the program.

Dr. LaKind asked who takes care of pesticide monitoring. The response was DNR. In fish tissue sampling, is there any testing of pesticides and is there any other way to test. Yes, there has been pesticide testing in fish tissue in the past, though PCBs and Methyl Mercury were found to be the contaminants prompting most advisories and are the basis for most current advisories. Delegate Lafferty asked about soil and water testing. Mr. Howard said MDA does not have the resources to test but the pesticide use survey can help with monitoring. Dr. Kutz mentioned that federal agencies have limited ambient monitoring programs for pesticides. Ms Spagnoli also said that EPA uses environmental and ecological effects data to assess effects. This is all done through the FIFRA process. Delegate Otto said they are required to pay a \$1,000 fee to MDE for the Community Right-to Know program. Dr. Miller noted that the community right to know and worker right to know programs are at MDE.

Department of Natural Resources
Sherm Garrison
The Project Review Division

Mr. Garrison said that the Department of Natural Resources (DNR) Land Resources Program manages more than 300,000 acres of Maryland lands used as State Parks, Natural Environmental Areas, Natural Resource Management Areas, Wildlife Management Areas, State Forests, Demonstration Forests, and Chesapeake Forest Lands and often include water resources, like lakes, wetland and stream resources. In addition, these properties often include built and managed infrastructure (buildings, trails/bridges/dams).

The managed use of these State properties is seemingly tempered more often these days with conflicts with invasive species - usually non-native insects, plants and animals that can grow quickly, limit public access, use or feed on key native plants and trees that comprise much of our State lands. When warranted, the Department will use pesticides to extend the life of physical infrastructure, protect native and endangered plants and animals or to protect the managed use of these properties.

Some DNR Foresters are Certified Pesticide Applicators and they help develop and implement plans for pesticide use on DNR lands or help monitor contracts with commercial pesticide applicators for larger applications.

The Forest Service's public service guides on managing forests and invasive species that threaten native plants or public use often provide details on control options by landowners. Information about pesticide application is a secondary control if non-pesticide methods are available. Details about how to find and work with professional, licensed applicators is provided for difficult or larger treatment issues.

DNR's Wildlife and Fisheries Programs are concerned about impacts of pesticide use on non-targeted wildlife and aquatic life as well as those on endangered species lists and, in some instances, pesticides or their use near selected habitats.

DNR's Integrated Policy and Review Unit includes a Project Review Division that reviews internal and external projects for agency comment/action. Environmental reviewers examine and provide comments on select Toxic Materials Permit (TMP) applications that the Department of the Environment has received for pesticides for aquatic plant controls (usually algicides), but occasionally aquatic plants, as well as wetland-related insect stages (mosquito larvae). In 2012, The Project Review Division reviewed 272 TMP applications.

Funding has dropped off for toxics monitoring. EPA's Chesapeake Bay focus is on nutrients and sediments at this time. USGS does monitor and do broad suite of organics. DNR is interested in application process and is a big user of pesticides. Dr. Taylor asked what the focus has been. Mr. Garrison said that it was nutrients and sediments in the Chesapeake Bay, including oxygen levels, etc. It has been many years since there has been a focus on toxics.

Delegate Lafferty asked him to clarify what he meant by toxics. Mr. Garrison said DNR does a review of toxics materials for specific issues related to aquatic issues. One of the things that MDE looks for is whether something is out of place. The toxic review looks at ponds and standing waters. Mr. Fellows asked whether there was any way to review transgender fish. Mr. Garrison said the problem is that it could be anything that alters the endocrine balance of fish. There are many kinds of pesticides out there and he is not sure that USGS even knows. They are waiting to get better documented results which include cause and effects. MDE is watching from literature and research and is interested in exploring the information.

Mr. Fellows asked if more people were looking at drinking water? Dr. Miller said there is an interest in emerging contaminants but it could be a broad number of things. Dr. Mitchell said

that there was no requirement for well testing. Currently it is drilled only. There is no requirement for further testing unless there is a problem with the well unless the homeowner decides to test.

Mr. Schoonmaker said doesn't USGS have a program? Mr. Garrison said yes, but they have funding issues. They conduct a survey every two years. It is pretty extensive but very costly. He added that he was not aware of recent fish kill studies. Mr. Myers said that fish kills are the result of dissolved oxygen and that this is not a good place to look at pesticides. There is no cause and effect relationship. Mr. Garrison said you could look at fish tissues as well. Mr. Schoonmaker said the intersex fish issue was because of birth control that had gotten into the water.

Delegate Lafferty said that the next meeting will be focused on data gaps. Dr. Mitchell said there was a potential void. Ms. Spagnoli asked if the group could also look at what data is already there as well. Delegate Lafferty said yes. Dr. Lakind said she was interested in looking at the subtle effects of pesticides, including neurobehavioral effects as well.

Pesticide Advisory Committee Overview

Dr. Rick Kutz

<http://mda.maryland.gov/Documents/PesticideAdvComm.pdf>

Dr. Kutz indicated that the Maryland Pesticide Advisory Committee was established in 2003 by an Executive Order of the Governor. Its mission is to advise the Maryland Department of Agriculture and other State Agencies, based on sound science, on the proper use, management and control of pesticides. The Committee places particular emphasis on employing integrated pest management techniques. Dr. Kutz said that under FIFRA there is an advisory committee that provides scientific advice to the EPA on scientific policy issues. The Maryland Pesticide Advisory Committee is a companion committee created by MDA.

Delegate Lafferty asked if there were any final comments from the workgroup and asked for suggestions for upcoming meetings. Dr. Mitchell asked about suggestions for speakers. Are other academics available and what would be the mechanism for putting that forward? Delegate Lafferty said that he wanted to ensure that any speakers were cogent to the issues. He asked Ms Holko about needs/gaps, who is using data, etc. Dr. Taylor asked how agencies monitor scientific data. Dr. Miller said that there was no formal pathway but they will look at emerging evidence. This information goes through Dr. Miller and is shared with others in the department. It is a nice way to elevate certain topics. MDE has no formal means by which literature, etc is discussed. Inquiries from the media can prompt discussion. This is a healthy way to communicate.

Dr. Mitchell said they use the Maryland Pesticide Network and both he and Dr. Miller talk to DNR. There is not a systematic forum for research. A lot of states are struggling to work with federal agencies. He talks to CDC because some of the most sophisticated monitoring is done by them. Mr. Garrison said that there was no formal process at DNR. But, there are seminar series. He participates in the Maryland Water Monitoring Council where research is submitted. A lot of people attend these events where a lot of information is available.

Ms. Holko said MDA partners with other state agencies for programs that apply pesticides. The public keeps you honest. Professional organizations provide a lot of help as well.

Senator Manno said this group has a lot of responsibilities. To the extent that agencies and industries can provide information on existing data might help move things along. Perhaps the end product will determine whether we do something. There are other things we can do to get to that point. Dr. LaKind said the group should determine the need for a data reporting program. And, the need should be clear to understand. It may be entirely different for research data needs and business needs. Andy Fellows said that there is a tremendous amount of comprehensive data in the private sector. A lot of information may be out there but it is not accessible for research. We need to determine how best to do this. Delegate Lafferty said if there is no need for broad information then we need to look at existing information and what is actually needed for public health, etc. Mr. Myers asked if the Chesapeake Bay program identified gaps in their report. Dr. Mitchell asked what other states have been doing. Delegate Lafferty said that Ms. Holko and Mr. Howard have reviewed what other states are doing and this could be taken up at a third meeting possibly. Delegate Lafferty suggested a doodle poll for other meetings.

Delegate Lafferty thanked the group and the meeting adjourned at 11:47am.