

Maryland Pesticide Information and Reporting Workgroup
Minutes
Thursday, October 17, 2013
1pm-4pm
House Environmental Matters Committee Room

Members present: The Honorable Steve Lafferty, The Honorable Roger Manno, The Honorable Charles Otto, Steve Weber, The Honorable Joe Bartenfelder, Carol Holko, Julie Spagnoli, Dr. Ronald Ritter, Dr. William Bowerman, Andrew Fellows, Dr. Jed Miller, Ruth Berlin, Brian Schoonmaker, Sherm Garrison, The Honorable J.B. Jennings, Dr. Rick Kutz

Staff: Dennis Howard, Joanna Kille

Members absent: Dr. Andrea Kidd Taylor, Dr. Judy LaKind, Dr. Clifford Mitchell

Delegate Lafferty introduced a nursing class from Washington Adventist University that was in the audience. Dr. Kutz asked that the minutes be revised to reflect technical changes he had sent to Joanna Kille. The minutes were approved with Dr. Kutz's changes. Delegate Lafferty said that one of the charges for the workgroup was concerns about privacy. He had asked Valerie Connelly and Lynne Hoot to discuss their concerns on behalf of the Maryland Farm Bureau and the Maryland Grain Producers about the privacy issues with a pesticide database for agricultural producers. Concerns can be categorized into business, security, misuse of information, and liability.

Business:

- Farmers do not want their private product use and trade secrets to be shared, putting them at a business disadvantage.
- For specialty crops, pesticide information may be used to gain a market advantage for one sector over another.

Theft:

- People looking to do harm with chemicals pose a threat to farmers if their pesticide information is made public. Others knowing the product, amount and location of chemicals creates opportunity for theft and misuse.
- Electronic data is the most vulnerable form of data and there is the potential for the database to be hacked and private information compromised.

Misuse of Information:

- California is now using pesticide and other chemical data to overlay on zip code maps (called Cal Envirosan) and indicate that application means exposure.
- Only collecting agricultural application data means that other applications are not taken in to account and the blame for any kind of exposure will be pushed onto the shoulders of agriculture.

Liability:

- As was the case with the Hudson family, even if a producer has done nothing illegal, lawsuits can be brought against them and it costs a great deal to be proven innocent. If pesticide information is compiled into a database then this is a weapon for those opposed to pesticide use to use against farmers.
- Use does not equate to exposure but information may be used to suggest it does.

California Farm Bureau, previously in favor of their state's pesticide reporting program, is now concerned about the manner in which the information is being used and threats to farmers safety. If notices of intent to apply pesticides are made public then there is the threat of activists destroying crops or disrupting spraying.

Valerie Connelly said only 37% of farmers nationwide keep their farm information on computers. For example, Maryland orchard operator Nathan Milburn keeps his pesticide records on index cards, as is the case with other farmers. Therefore, transferring this information into electronic form could be costly and time consuming. Ms. Hoot echoed Ms. Connelly's sentiment that a majority of Maryland farmers do not keep electronic records. Ms. Hoot said that the agriculture community would prefer to continue with the NASS survey method as opposed to a database reporting program. Delegate Lafferty asked whether a prospective database would be a good idea. Ms. Connelly said that while initially California had a prospective database, it was now moving to an instantaneous one.

Delegate Lafferty asked how people are keeping records. Ms. Connelly said no one is keeping records on the computer. They are keeping them in a way that is convenient for them. Computer databases are vulnerable. The California Farm Bureau said that they originally liked the system because they could track pesticides, and track reduced pesticide use and toxic chemicals. But computer databases are vulnerable.

Ms. Connelly mentioned that a neighbor lives next door to Mr. Milburn who has a pond. Every time a fish from the pond died he has called the state because he thinks it is a result of the spraying. The state determined it was a lack of oxygen causing the problem. Ms. Connelly mentioned the Hudson case as well where the agencies did an inspection based on a complaint about a pile of dirt, determined it wasn't manure but the case continued to be pressed by an environmental organization. The Hudson family ended up with \$500,000 in legal fees. This case is a concern to every farmer. Delegate Lafferty asked how would you suggest privacy be protected. MS. Connelly said that the Maryland Farm Bureau has brought a lawsuit re nutrient management in order to defend a statute that includes a privacy provision. The Waterkeeper group keeps appealing the case. The dispute was over what could be obtained after three years. Unfortunately if there is a health concern people are looking for someone to blame. Liability is the biggest issue.

Ms Berlin said that Ms. Connelly's concerns were understandable. She asked when Ms. Connelly spoke with the California Farm Bureau whether there were any issues around competition or theft. Ms. Connelly said she didn't ask those questions. However, the misuse of data now is of concern. Pest control companies, for example, notify they are spraying 24 hours ahead of time. At this point while no lawsuit has been filed they are concerned. Mr. Fellows

asked whether California farmers were happy with the database system since it demonstrates a lowering of pesticide use. Ms. Connelly said that Maryland Farm Bureau likes the survey better.

Mr. Fellows asked about databases like Southern States and Willards. Ms Connelly said farmers do different things for those databases and sometimes have two sets of records. Mr. Fellows said he thought that one of the benefits of a database is that it would be helpful to agriculture. Ms. Connelly said a monitoring system would be better.

Twenty five percent of farmers are certified private licensed applicators. Seventy five percent are either doing their own applications of general use pesticides or hiring people for that purpose. of general use pesticides or hiring them. Ms Holko said that in California, farmers receive on the ground compliance assistance help. Ms. Connelly said that California Farm Bureau has hundreds of employees to provide assistance for a lot of different things. Maryland Farm Bureau has ten employees. You can't compare the two. Dr. Kutz asked if there were ways to estimate use would you favor that. Ms. Connelly said that more frequent use of the survey and more surveys are a good thing, as is available funding. Farmers would be more comfortable with something like the ag census. Mr. Schoonmaker said that most pest control businesses keep records on paper. Most companies will have 40-50 applications per day. Very small businesses are already putting in 12 hours a day. Mr. Schoonmaker has 15 employees and he would have to hire a whole new person. This would be a huge problem for the pest control industry.

Dr. Bowerman was concerned about how to train and educate farmers. This issue wouldn't work well with a webinar. Dr. Bowerman asked what percentage of farmers would have to add additional IT services. Ms. Hoot said most of her Board members have an email address but these are farmers who have emails and computers but they don't read emails. Their business is outdoors and they get in late. Ms Connelly said that according to USDA data, 62 percent of farmers have internet access. Of that 65 percent own a computer, with 37 percent of that number keeping records on a computer. Delegate Lafferty thanked them for speaking and then introduced Jeff Zellmer from the Maryland Retailers Association.

Mr. Zellmer referenced item 9 of page 16 of the legislation as to whether it is feasible to collect data from retailers and homeowners. He said it was not easy, nor feasible. There are between 15,000 and 20,000 retailers across the state, which includes bait stores that sell cans of Off, and every grocery, hardware and drug store, along with building supply companies. It is impossible to keep track of this information. This came up years ago in the old Environmental Matters Committee through fertilizer legislation.

Senator Manno asked whether the reporting could be done on an annual basis. Mr. Zellmer said the only way that you could track it is through the manufacturers. Senator Manno said he would like to have a better understanding of what is coming in versus what is going out. Homeowner use is separate from the retail side. Delegate Lafferty said that you should be able to figure out what is being used based on the fact that people go to their local stores and purchase Items. Senator Jennings mentioned the horse feed assessment fee which is funded based on the amount of feed in the state. Logistically when the bill was first introduced, the state said it would be difficult to collect the fee. As a result, the burden is pushed on the manufacturers and it is not up to retailers. Senator Jennings suggested a trip to a retailer would be a good idea.

Senator Manno said that residential use is as much of a problem. He knows what his family sprays. Then multiply that by thousands of residents. This is a huge concern. We somehow need to dig down into the data. Senator Jennings said that technology is great. However, most companies don't have good technology. They have lots of different systems. Maybe someone like Home Depot and Lowes could do something but smaller guys can't do this. This is more of a burden on them.

Ms. Spagnoli said products need to be tracked by their EPA registration number. However, retailers do not sell products based on the EPA registration number. The UPC code could apply to different variations with different EPA registrations. The idea of being able to get reliable information is probably not realistic. A lot of people don't realize things are pesticides so she does not know how accurate his information will be. A number of products are exempt from registration so cannot tracked by EPA number. Also, retail sales do not equate use, nor tell where they were used.. There have been efforts at the federal level to conduct a comprehensive research study on consumer use. A nationwide survey was done over a year's time. The data from the survey is used in EPA's risk assessments.

Ms. Berlin said we are talking about outdoor and not indoor information. Ms. Holko said we were missing a lot of data. In Oregon officials tried to collect data from 1700 households. Forty percent of the results lacked sufficient information. Participants were unable to provide good information. Minnesota did a study using eight different methods. It was a summary of monitoring approaches costs and resources. Mr. Fellows asked if you could merge UPC codes with EPA registration codes. Ms Spagnoli said they don't link to UPC codes. Large customers using a large amount of product are tracking sales through UPC codes. Mr. Schoonmaker said that EPA codes are not tracked. You would have to reprogram all the retailer systems at a huge cost. Home Depot alone devotes 1200 square feet to pesticides. There is a lot of homeowner demand for these products.

WORKGROUP DISCUSSION

Delegate Lafferty said there were very specific charges to deal with as an interim report. Workgroup members filled out a survey regarding their personal opinions on the responsibilities of the workgroup and a lot of good comments were submitted. He thanked MDA for doing the survey. There are very specific charges to deal with in an interim report. We will look for ways to find any common ground on issues. Perhaps we can make the National Agricultural Statistics Service (NASS) survey more robust. Dr. Kutz said there might be a better way to assemble data because most workgroup members do think there is a data gap based on the results of the SurveyMonkey. We need some kind of reporting system.

Delegate Lafferty asked whether there was a need for a reporting system. If a researcher contacted the Secretary and asked for this information, he may already have the authority to provide that. How can researchers access it? Ms. Holko said MDA has a recordkeeping requirement under the Pesticide Applicator Law. Records must be maintained in various ways for two years. The Department may ask for the records at any time. Typically these records are used for enforcement purposes. Delegate Lafferty said he doesn't recall hearing that anyone had requested this information. Ms. Holko said that if a request comes in then we would have to send out a request for the information for certified and licensed applicators. This can be done but

we have never been asked for this information before. Ms. Berlin said that federal agency scientists have said that a viable database needs to be quality assured and centralized and that also they can't look at trends without comprehensive data. Ms Holko also said that MDA has existing authority under the Pesticide Registration and Labeling law (Agricultural Article 5-102) section to develop a program and referenced the authority to do the NASS survey under this section.

The group then turned to question 4 of the workgroup survey -- What is the appropriate format to make pesticide data available for research? Delegate Lafferty asked whether format mattered. Mr. Fellows said there were other state databases to look at. What about the existing chemical database at MDE.

Dr. Bowerman asked whether we can get it in terms of whether toxicity terms are meaningful. There are different formulations, trade secrets, etc. If we put it in a usable database we need to make the information meaningful. He runs the monitoring program for the State of Michigan. They are only looking at 38 pesticides. What is the real impact of a chemical in Maryland? We are trying to protect humans and the environment from the misuse of chemicals. Here we are talking about reporting use. He thought the EPA presentation was wonderful because it got into the complexity of the issue. What do you do with the information to make it usable? From use to chemodynamics, what happens to the environment? Let's look at the bee example and ecosystem health. Do I get to the answer quicker by sampling bees and looking at the pollen? You can truncate the number of pesticides by looking at bee data. There can be cause and effect linkages. The design of the database is paramount. We have not talked about what is the question and then developing a database or monitoring designed off those questions.

Ms. Berlin said that the California database is a good model. The system and technology can separate out. A good system can do all of that and provide the data needed. Dr. Bowerman said that he was talking about monitoring and not use. Ms. Holko said that Dr. LaKind could not be at the meeting but she had asked Carol to mention that relating use to exposure is problematic. One option might be to approach this as a pilot project using a scientific method. Identify the problem, develop a hypothesis and then determine what it would cost and seek funding. Ms. Berlin noted that scientists are already doing such studies such as USGS's Dr. Blazer who researches the link between Atrazine and intersex fish in the Potomac. However, the researchers need to know what to look for in a specific geographic area and not guesstimate what might have been applied in the region.

The studies they want to conduct is to determine if there is a link between any pesticides applied in a region at a certain time and an event such as a fish kill or birth defect cluster. The needs of the different sectors – public health, Bay restoration researchers and researchers studying honeybee decline are assessing different issues/linkages. Ms Holko said that MDA is also concerned about the cost. Collecting use data for the sake of use data is not going to be helpful. Mr. Schoonmaker reiterated that use doesn't equal exposure. The California database is being portrayed as providing information on exposure. If we have a survey we can get to an answer much faster and you could start with a baseline survey. Dr Bowerman said that within Great Lakes water quality they looked at chemicals of mutual concern. Looking at the data, they are putting chemicals that go above the thresholds on the list. That's all we can afford to do. How

do we get the data to look at the cause-effect linkages? How do you get to the big data and look at cancer clusters?

Ms. Spagnoli said that more data is collected during the pesticide registration process than any other type of product. Hundreds of studies are completed. Environmental assessments are done and put into models where use is already assumed. Lawn products are assumed to be used on lawns. EPA assesses exposure with an assumption of use. What is the additional value from use data, except to reduce exposure assumptions? She agrees with Dr. Bowerman that maybe some of the assumptions need to be refined. But use data is not going to give us any additional information, not better gathered from other sources. Better resources are needed for monitoring, etc. We need to identify the specific problem and focus on it.

Ms. Berlin said that if there already is this assumption of use data then why are all of these experts saying they need this data. We don't have the time to look at one pesticide. We need a comprehensive system. She talked about public health issues related to pesticides. Dr. Kutz said that exposure and pesticide use reporting were two different concepts. For exposure, the National Center for Environmental Health exposure does national biomonitoring and look at 1,000 pesticides and other chemicals through human, urine and human blood serum. This is the risk assessment paradigm. It is a very good database. Most people involved in risk assessment say that human monitoring is the gold standard.

Dr. Miller noted that the workgroup's formal task regarding the need for a data reporting program was not specific to research needs, while the task about data format was specific to research needs. He said that a database would need to contain metadata, which is detailed information about the data, so that people who use the data know exactly what they are using and where it came from. The data format question may depend on whether we consider researchers alone versus together with other audiences. For instance, researchers may find downloadable data tables to be appealing for their needs, though the general public or agencies would probably not find [raw] data tables useful. Regarding data usefulness, even though data on pesticide usage might not be valuable for detailed mechanistic research, such data can be valuable for population-level research. Population-level research can be an important link when there is knowledge from animal and mechanistic studies, and it can help guide research questions as well.

Delegate Lafferty asked whether the NASS survey could be more robust, more specific and done at a local level. Can you get disaggregated information? Mr. Weber said you could get more participation through NASS and there would be value in targeting the issue. Delegate Bartenfelder said that when you compare California to Maryland you are comparing apples to oranges. California is a very large state and Maryland is a small state with a cleaner and safer environment. What concerns him as a former elected official and farm is that a monitoring system is so important. Whatever we do here is a band aid solution unless we can monitor or see what is coming in. Look at what is coming in. We would be passing on extra burdens but are looking for results. When you think about 4-5 inches of rain on the Susquehanna River – it flows downstream, bringing everything with it.

Mr. Schoonmaker said that he estimates that in their industry probably 60-80% of applications are done by homeowners and they are not getting counted. Mr. Fellows said that a voluntary

survey is not helpful and should be mandatory. Delegate Bartenfelder said it's not likely Pennsylvania will do anything unless Maryland does.

Ms. Berlin said maybe we don't need to look at all chemicals. She referenced Dr. Mitchell's idea that we have mandatory reporting of a small set of pesticides of greatest concern, and that might make it more manageable. Ms Berlin said a voluntary survey sounds like a sample. Delegate Lafferty asked what you do to get more people to respond. She said it should be mandatory. Dr. Kutz said that NASS is a recognized organization that can do a more robust survey. Statistical methods are beyond reproach. For exposure assessment one should look at NASS which is an economic agency that generates estimates. There is definitional detail. USGS and NRCS of USDA delineate watershed boundaries.

Ms. Holko said that NASS can do more than the survey they did for MDA. NASS is the gold standard for agricultural surveys. The survey was low budget and the questions were sent out to everyone licensed. There was a 40-60 percent response rate. The database is confidential. The survey was also sent out to 1,500 farmers in the state. NASS did not do any phone follow up but still got more than a 50% response rate from the regulated and non-regulated communities.

Senator Manno asked if we could get granular data. . Senator Manno asked what level of data can be retrieved. Ms. Holko said we might be able to get countrywide data for probably \$160,000 or more. Senator Manno said Maryland has a structural deficit of \$500 million. How will we get money to do anything? How was the survey funded? Ms. Holko said in the past MDA received federal funding through the Clean Water Act. MDA's most recent survey was funded with pesticide product registration fees. Currently they are \$100 per product to fund all pesticide regulatory activities. Manufacturers pay the fees.

Ms Berlin said the NASS survey would not provide the comprehensive data-based program researchers have presented that is needed. Maryland's product registration fees are the second lowest in the Bay-area states. The only one lower is Delaware. New York charges \$600. If you raised \$1 million it would be a \$78 increase per product. This would be in the middle range of six states. Senator Manno said without a funding stream for the survey, it would be an unfunded mandate or cost to the agency. However it is funded he could not imagine this not affecting other agricultural programs. Ms Holko said that it would make it one of the highest in the region and would put minor use products at risk. No one is required to sell their products in the state.

Mr. Garrison said the only thing we have is an accounting of everything including waste water treatment plans. We can't monitor everything in the Bay. We collect samples as appropriate and know what we are looking for. We have different levels of monitoring. When you design a monitoring system you look at the available data. Monitoring is very expensive. Senator Manno said if there is a dollar sign is it cheaper to go with a NASS survey and some kind of monitoring system. Mr. Garrison said we don't have any information on homeowner data so maybe there is a hybrid approach.

Dr. Bowerman said that in Michigan there was a citizen referendum that passed requiring that the state look at pesticides and their biocumulative impacts. Initially they received \$190,000 in grants. Now it is down to \$138,000. Ninety samples cost \$200,000 over the first five years. We need to figure out what we are monitoring and what we want to protect. Dr. Miller discussed

how a strengthened NASS survey might be used by MDE. He noted that his comments were about the NASS survey alone and not in comparison to a pesticide reporting system. A NASS survey at a finer level of geographic detail, particularly more detailed than the county level, could help guide monitoring of water bodies for potential impairments and for analysis of fish tissue. However, since most current water quality standards are for legacy pesticides rather than current-use pesticides, and knowledge about potential health risks of many current-use pesticides has not been established, a strengthened NASS survey would likely not be of immediate use to MDE for these activities.

Ms. Spagnoli said that doubling the fee doesn't necessarily mean you will double the revenue. For many companies about eighty percent of sales come from about twenty percent of products. Small volume products may be dropped. This will impact minor use pesticides. Mr. Fellows said it is good we are discussing cost-effective and least burdensome means. He thought that the \$2.6 million price tag for the database was high. Mr. Fellows said a database would be a good idea and that maybe grant funding could be used. He also said that "polluters" should pay. Ms. Holko said the manufacturers pay on the front end through the EPA registration process. and that fewer products would be available for use if a bill were to pass. Ms. Holko said that MDA's cost estimates are good and in line with other states with reporting programs. Ms. Berlin noted that one of the reasons that the New York database was so expensive was because a lot of the data was sent to China for review. She also mentioned sampling and referenced D.C.'s new pesticide reporting bill. Its registration fee went to \$200. Mr. Schoonmaker said that the D.C. registration fee did not go up to \$200 and there aren't too many farms in D.C. The fee was increased for a few registrations. If some of the products in Maryland were not available we would have issues with disease being spread. A small incremental increase could be absorbed in the form of a NASS survey. If you doubled all of the registration fees for a database that covers agricultural and professional use products, there would be opposition from the consumer products group because they aren't covered in the database. The pesticide industry believes that fees should be used to address pesticide regulation and enforcement.

Mr. Weber said that for small fruit growers like himself, minor use is a big issue. When you say let the polluters pay, as a grower, if EPA has registered it, I have done everything I am supposed to do and am following the law am I really polluting? Food safety issues are big right now. If you want to sell something to a large chain store, you must do all of these things, have an abundance of caution and don't take the dog into the orchard. All of these things are important.

Ms. Berlin said that the products are the same across the country and that they can be purchased online everywhere in the country at the same price. We need to look at registration fee increases. Senator Manno said how much is enough? The state needs somewhere between \$2.6 million and \$200,000. We need to look at surrounding states. He used the example of the alcohol tax which is reasonable given what D.C. was charging. And do we want to raise a fee at all when agencies may get level funded or cut this year If we push for a Cadillac version we may lose the whole thing. We need to move the ball forward, where things are coming from, etc and build on that model. The dollar sign is very important.

Mr. Schoonmaker said the cost would be passed on. The cost that people in our business will have to absorb in order to do this will put some people out of business. As a result, people will apply their own products which may lead to a misapplication of pesticides. Mr. Fellows said the

budget information is good and we need to recognize the registration fee issue. Is there a way to do a more affordable system? He believes it's difficult to have a voluntary system. We should look at ways to make it less expensive (geographic? Smaller group of pesticides?)

Ms. Holko said polluters do pay. Mr. Howard issues fines for violations of the Pesticide Applicator Law. MDA doesn't receive any of the fines back into the program. Saying that people selling registered products should somehow pay is counterintuitive. There is a cost to regulators and regulated community. There is a cost to our agency and this will have a real impact on the underpinnings of our existing programs. What MDA needs is more resources for enforcement.

Delegate Lafferty thanked everyone for their comments. The issue is complex and there is no simple pathway. At the next meeting we will be looking at the totality of the comments and whether we can lay out potential recommendations. We have two more meetings before the end of the year and we need to have something more specific. Ms. Berlin said that if we have to choose between a voluntary aggregated survey and a limited mandatory system, we should look at limiting the number of pesticides to be reported on, to reduce cost of a mandatory system and provide the data on what is used when and where. Dr. Miller noted that, as the group develops recommendations, options such as phasing-in could be considered, rather than thinking of things from an all-or-none perspective. This might allow the group to develop recommendations with more depth than if things are only considered in absolute terms. Senator Manno would like to make sure it doesn't get shredded. Maybe a graduated plan would be softer on the palate. Politically he has great concerns the workgroup would put something out there that would be torpedoed. Ms. Holko expressed concern about protecting data. The Pesticide Applicator Law doesn't currently have specific authority to protect the data that we collect. This would require legislation. Dr. Kutz recommended that someone from NASS come to the next meeting and talk about what is and is not possible.

The meeting adjourned at 4pm.