

# MASSACHUSETTS PESTICIDE BOARD MEETING

## ***Minutes of the Board Meeting held at the Hurley Building, 19 Staniford ST; Conference RM 612 A & B; on Tuesday, December 11, 2018***

The Meeting was called to order at approximately 10:05 A.M.

### **BOARD MEMBERS IN ATTENDANCE**

Commissioner John Lebeaux (Chair)	Present
Marc Nascarella, DPH, Designee for Commissioner Bharel, M.D.	Present
Michael Moore, DPH, Food Protection Program	Absent
Peter Hazelton, DFG, Designee for Commissioner Amidon	Present
Kathy Romero, DEP, Designee for Commissioner Suuberg	Absent
Ken Gooch, DCR, Designee for Commissioner Leo Roy	Present
Richard Berman, Commercial Applicator	Absent
John Looney, Public Member	Present
Brian Magee, Toxicologist	Absent
Laurell Farinon, Conservation	Absent
R. Christopher Brittain, Public Member	Present
Steven Bird, M.D., Physician	Absent
Steven Ward, Farmer	Present

The Board did meet or exceed the minimum number (7) of members present to form a quorum and conduct business.

### **OTHER INDIVIDUALS PRESENT:**

C. Whiting Rice, The Whiting Group; NPMA; Bob Mann, NALP; Laura Kelley, POCCA; Bob Leon, GES & NPMA; Ted Brayton, Griggs & Browne; Bruce Taub, Esq. Counsel for Town of Brewster; Ashley Randle, Assistant Commissioner, MDAR; Taryn Lascola-Miner, Director, MDAR; Jessica Burgess, Esq. Counsel for MDAR; Hotze Wijnja, Ph.D., MDAR; Michael McClean, MDAR; and Steven Antunes-Kenyon, MDAR

### **DOCUMENT(S) PRESENTED**

- Pesticide Board Agenda for December 11, 2018
- Minutes of the Tuesday, September 25, 2018 Pesticide Board Meeting
- List of Open Issues/Questions from C. Whiting Rice and POCCA
- MDAR Response to Questions Posed by C. White POCCA
- Handout (PPT) for Presentation by C. Whiting Rice, The Whiting Group for POCCA
- Article titled *The Weedkiller in Our Food is Killing Us*, by Erik Brockovich

**A. Approval of the Tuesday, September 25, 2018 Meeting Minutes**

Commissioner Lebeaux presented the Minutes from the Tuesday, September 25, 2018 Meeting for the Board’s consideration.

**Voted:** To accept the minutes of the Tuesday, September 25, 2018 Meeting.

**Moved:** John Looney

**Second:** Marc Nascarella

**Abstained:** John Lebeaux and Peter Hazelton

**Approved:** 5 – 0 – 2

**B. Eversource VMP with Conditions – A Brief Update**

Director Taryn Lascola-Miner briefly stated that the Eversource VMP with related conditions remains under review by Department.

**C. Presentation of MDAR Response to Questions Posed by C. Whiting Rice, Laura Kelly and other Representatives of POCCA**

Director Taryn Lascola-Miner explained that the Department wrote a response to a number of the questions and issues presented to the Board and the Department. This prepared written response is part of the Board packet of materials. What follows is a summary of the presentation provided:

**Taryn Lascola-Miner, Director**

- **How Setbacks from Pesticide Application are Determined:** The regulatory setbacks, written to protect private wells, public groundwater sources, are based on horizontal distances overland—not vertical distances that would measure from grade level to groundwater. To the best of the Department’s knowledge, there is no evidence, currently available, that suggests ROW herbicides are impacting the water sources on Cape Cod. The Department does not now find that the ROW regulations should be modified to include vertical distances to private and public groundwater resources. Notwithstanding the current findings, the Department is committed to reviewing these issues and any new related scientific findings.
- **Request for Eversource Pesticide Application Records:** Pesticide application records are submitted and maintained by the Department via annual use reports. Under regulations, specific records are also maintained by individual pesticide applicators and/or their employers. The latter more detailed records are only made available to the Department upon a reasonable request. While concerned parties may wish to obtain this data, the Department does not find this to be a reasonable request. The Department would like to clarify that the Pesticide Regulations do not require utilities and other ROW proponents to decrease their pesticide usage.
- **Local Regulation of Pesticide Use:** Under the language currently found in the Massachusetts Pesticide Control Act, the Department is the only Agency with authority to regulate pesticide

use. Local regulation of pesticide applications by municipalities is not permitted in Massachusetts. In certain States where such local regulation is permitted, the lack of regulatory consistency across the different municipalities is often found to be problematic.

- **Review of VMP and YOP Public Comments:** The Department does review the public comments submitted and forwards those comments to the ROW Advisory Panel. Under the current framework, the specific methods employed by the Panel, in their review, discussion, and subsequent treatment of such public comments, are determined by the Panel members themselves and not by the Department.
- **Position of the Department on Proposed Legislation:** As the State Pesticide Regulatory Agency, the Department does not take a position on proposed legislation.
- **Treatment of Studies and other Informational Resources Submitted to the Department for Review.** The Department does indeed value and review the information submitted by concerned or interested on pesticide related matters. When appropriate, such information and related concerns are also shared with other Federal and State Agencies.

**Jessica Burgess, Esq., MDAR Legal Counsel**

- **Land Ownership and ROW:** Concerns or issues related to land ownership and utility easements are not matters under the Department's authority. The Department does not get involved in private land ownership matters. Parties with such concerns or issues, should bring them directly to the attention of the utility.
- **NSTAR vs. Eversource:** The use of the corporate names NSTAR and Eversource Energy are determined by the legal agreements related to the merger of these corporate entities. Parties with questions or concerns relative to such corporate name usage, should bring them directly to the attention of the utility.

**Hotze Wjinja, Ph.D., Environmental Chemist**

- **Update on Cape Cod Monitoring Study:** The Department has indeed developed a plan for monitoring pesticide residues in public water supply wells. The Department has worked with the Cape Cod Commission and Mass GIS to determine which wells will be monitored as locations that include ROW herbicide applications and flow of groundwater to be tested. There are currently 5-wells in this study with sample collection that started in September and occurs on a monthly basis. A sixth well is also being prepared for inclusion in the study. Samples are being analyzed by the Massachusetts Pesticide Analysis Laboratory (MPAL) located at the University of Massachusetts in Amherst. Included in the residue analysis are ROW herbicides and select pesticides that are commonly used in landscape management or lawn care. These latter landscape pesticides, including 2,4-D, imidacloprid, and chlorothalonil, are used more commonly on Cape Cod than the pesticides used for Cape Cod ROW management. Results of the first round of samples analyzed came back as not detected or below the limits of detection. The second and third round of samples have yet to be analyzed. Sample collection and analysis will

continue from a 1-year and 6-months up to 2-years. The Department hopes to expand the study by including additional wells to cover other areas of Cape Cod.

- **Review of ROW Herbicides:** The Department works with the DEP, Office of Research and Standards (ORS), on the review of *Herbicides Approved for Use in Sensitive Areas*. It's recognized that some of these reviews were completed more than 10-years ago and may be in need of additional review and updates. The Department has started looking at reviews completed more recently by other Agencies, especially the U.S. Forest Service, that have completed reviews for most of the materials used in ROW programs approved in Massachusetts. As part of this effort, the Department provides a link to the U.S. Forest Service review of glyphosate on it's website. The Massachusetts DEP had an intern that specifically worked on a review of glyphosate related scientific literature. The work by DEP shows that there are a lot of Agencies working on such reviews and that the EPA was also working on a comprehensive Registration Review of Glyphosate. Consequently it was decided to wait until the EPA review was complete; such that, these documents might be used in any updates made by the Department.
- **Review of Surfactants:** The Department has written a review document of surfactants. This review is posted online and includes surfactants used in glyphosate formulations. It has resulted in a *Surfactant Policy* that the DAR and the DEP, ORS use in their review of *Materials Approved for Use in Sensitive Areas*. The joint Agency review of herbicides, used in ROW does include an assessment of exposure to pesticides from potential groundwater contamination. While the discussion of hydrology and groundwater are important in the analysis of these issues, the most important part of the environmental fate of these residues is played-out above ground. This is a result of the interception of herbicide applications by plant foliage. A small fraction of the amount applied does land on the soil surface, but these residues are subject to environmental fate processes, such as degradation processes and soil binding. The Department's analysis shows that under worst case scenarios only a minor fraction would migrate deeper into the soil and potentially reach groundwater. This indicates that such groundwater contamination does not result in residue concentrations that approach levels of concern or other related standards.
- **Issues Related to Glyphosate:** Glyphosate has received a lot of media attention, but it has also been used for decades and is one of the most widely studied of all pesticides. Due to its wide scale use and related registrations, it has been reviewed by many governmental agencies throughout the world. In a recent court case that concluded in August of 2018, Monsanto was ordered to pay a large settlement to a man who used glyphosate containing products and who later developed Non-Hodgkin's Lymphoma. While this court case certainly garnered a lot of attention, it's important to note that jury findings and related opinions do not change the state of the science. The preponderance of scientific data on glyphosate does not support the claim that glyphosate is a human carcinogen. Pesticide registration, as codified in the U.S., is a very rigorous process that follows strict guidelines and protocols to ensure that the decisions made are based on sound science. A court trial, on the other-hand, is a very different process where attorneys select information that supports their case and emotional aspects play an important role. At the end of this trial, it was a jury of non-specialists—who rendered their verdict in what is a very complicated case. The attorney suing Monsanto selected just 7-studies to support their case, but after considering more than 160 studies, the U.S. EPA Scientific Advisory Panel states that the strongest evidence is for glyphosate to be considered non-carcinogenic in humans. In

the Agricultural Health Study where over 50,000 applicators were followed for 20-years concluded that there was no link between glyphosate exposure and cancers of the lymphoid system. Another recent glyphosate study claims that glyphosate adversely impacts the gut of honey bees. While this is an interesting new area of study, the data currently available from this one study is limited and the issue will certainly require further study. The Department will continue to follow this issue and will work closely with Chief Apiary Inspector, Kim Skyrms, Ph.D., to be sure the matter is properly addressed.

The Board, as well as members of the public in attendance, then engaged Hotze in a brief discussion of the issues related to his updates and presentation on glyphosate.

## ***D. Presentation by C. Whiting Rice and Ms. Laura Kelly, POCCA***

### **C. Whiting Rice**

C. Whiting Rice provided a brief presentation on hydrology and geology on Cape Cod and why the depth to groundwater may be appropriate as setbacks to ROW herbicide applications on the Cape. Mr. Rice stated that the materials shown in his presentation were all from the U.S. Geological Survey or from the Cape Cod Commission. A twenty-two (22)-page Power Point Slide Show handout was also provided to the Board for their use. Mr. Whiting Rice shared his extensive knowledge of the Cape's hydrology and geological features. He related the impacts on the Cape's groundwater resources to both natural phenomena and anthropomorphic activities.

Some of the more significant points in this presentation include the following:

- The U.S. EPA has concluded that the Cape Cod Aquifer is one of the most productive in the Northeast and that it's a sole source aquifer—critically important to its residents.
- There are approximately 160 gravel packed municipals supply wells and hundreds private wells on the Cape—all of which are fed by this aquifer.
- The Capes groundwater resources are fed exclusively by precipitation—there are no other sources replenishing this system.
- The water table on Cape Cod is relatively constant and it's the overlaying topography that primarily determines the depth to the groundwater.
- Water below the surface typically flows around one-foot per day due to gravity—making its way toward the coast line and out to sea.
- On the Cape, there are six reservoirs or pockets of groundwater that exist and these pockets are relatively thin; such that, they are often referred to as lenses.
- These lenses or pockets of water are held in-place by bedrock and very fine silts, saltwater on the sides, clays and bedrock on top and very thin surface areas.
- Because of the soils, Cape Cod's groundwater can be very easily contaminated and has been impacted by military activities, gas stations, landfills, fire-fighting academies, and pesticide spills.
- The Cape Cod Commission has a number of groundwater monitoring wells that they sample each month to determine groundwater levels—all of these wells run at a depth of less than 50-feet.

- The maps and data show that almost all of the groundwater is between 50 feet or closer to the surface.
- If the ROW setback from public groundwater sources and private wells was applied to vertical distances to groundwater, then many of the monitoring wells and water table areas would be better protected.
- Typically there are 270 million gallons of water per day that moves through this entire system.
- The majority of Cape surface is made up of sands and gravel and are highly permeable.
- The wellhead protection regulations with horizontal set-backs were put in to protect deep ford wells in bedrock and gravel, they do not provide the protection needed on the Cape.
- That the Whiting Group, POCCA and others believe that the use of pesticides at less than a 50-foot vertical setback may be harmful to water quality on Cape Cod.

Pesticide Board member John Looney, Ph.D., added comments and clarifications to both geological and hydrological elements of this presentation.

MDAR Environmental Chemist, Hotze Wijnja, Ph.D., reiterated his earlier points relative to the fate of pesticides applied in ROW. He commented that the features of the top soil are an important factor in the movement of pesticides. To assume that pesticides simply move through the soil with water is not accurate. The interaction of pesticides, applied to foliage with some residues landing on the soil surface is much more complex. In fact, it's this soil surface layer where most of the environmental fate processes take place for such pesticides.

**Ms. Laura Kelly, President of POCCA**

Ms. Kelly explained that she is working with the towns on Cape Cod to share with them the studies that prove harm to humans and bees from pesticide usage. It's up to people to voluntarily not use pesticide products; such as, those that contain glyphosate. She believes that the Pesticide Board Members and the Department have the education and studies needed to help see the conflicts and controversies. While the pesticides may originally come out as safe, we are seeing more countries stopping the use of these materials. And while homeowners may not know better, the utilities do know and they can avoid using materials like Roundup. She argued that there are studies and evidence showing harm and asks what more the Pesticide Board needs to see. Ms. Kelly argued for the precautionary principle and stated that it's cheaper, easier, and more effective to do something before the groundwater on the Cape becomes contaminated. She and others have been working with the Pesticide Board for over 2-years, but they need the Board to use its knowledge and power to do more to protect their natural resources. She is looking for better communication from the Board and wants to see less silence and more action from the Board.

Commissioner Lebeaux pointed out that some of the issues being raised before the Board might be better presented and addressed directly to the Department.

A broad discussion then ensued between the Board, Ms. Kelly, Bruce Taube, Bob Mann and other members of the public. This conversation was about the importance of following the scientific data, matters related to collecting pesticide use reporting data, and the role of the Board vs. that of State Legislators; with regard to creating new laws or rules that seeking to protect the people of Massachusetts even further.

No motions were made or votes taken.

### ***E. Pesticide Program Updates***

Director Taryn Lascola-Minor explained that the Pesticide Program has been busy processing renewals. Currently some 4,000 applicators have renewed and there remain another 4,500 that have yet to submit their renewals. Some 210 licenses are waiting review by staff. Another 200 individuals requested hard copy only renewal forms—avoiding use of the new EIPAS. Based on feedback from Staff, the overall experience is better than last year—however calls and emails are still significant.

The Department did issue an advisory rule prohibiting the use of pesticide on cannabis. This new rule is not sitting well with some growers.

The CY 2019 exam dates are now being entered into the new system after having resolved administrative / contractual delays with our primary exam facility The Lantana.

### ***F. Pesticide Advisory Council Update, Bob Leon***

The Advisory Council is working on the Consumer Information Bulletins; especially, the Bulletin relative to the application of pesticides for termite control.

The Council is discussing the issues relative to those companies; such as those doing mosquito control, that primarily utilize FIFRA 25B or minimal risk products. In so doing, these businesses avoid the requirement for a Massachusetts Pesticide License.

The Council is looking at the possibility of requiring a license for anybody who is applying pesticides for hire—even those that use FIFRA 25B products.

### ***G. Legal Updates***

No legal updates were needed at this time.

### ***H. Meeting Adjournment***

**Voted:** To adjourn Tuesday, June 19, 2018 Meeting.

Moved: John Looney

Second: Steve Ward

Approved: 7 – 0

The Meeting was adjourned at approximately 12:09 a.m.