VERMONT AGENCY OF AGRICULTURE, FOOD AND MARKETS (AAFM) VERMONT PESTICIDE ADVISORY COUNCIL (VPAC) JANUARY 17, 2017 MEETING MINUTES

MEMBERS IN ATTENDANCE

Bosworth, Sid Giguere, Cary Hazelrigg, Ann Hoffman-Contois, Razelle LaValley, Jenn (Admin) Levey, Rick Palmer, Eric Schultz, Barbara

MEMBERS ABSENT

Darrow, Casey Shively, Andy

GUESTS

Misha Cetner Perry Thomas Judy Bellairs Nat Shambaugh

Meeting Called to Order

1:03 pm EST

Meeting Adjourned

2:57 pm EST (S. Bosworth moved, E. Palmer seconded)

Announcements

- Introductions were made for the benefit of those new to the Council.
- Minutes from the September 6, 2016 meeting were reviewed and approved with no edits (B. Schultz moved, C. Giguere seconded). Final minutes will be posted on the VPAC SharePoint.
- Razelle inquired regarding the status of the SharePoint site. Cary reported it is functional and technical issues are under discussion.
- Razelle reported that Nat Shambaugh provided a copy of a report he prepared under contract for the Lake Champlain Basin Program entitled *Organic Contaminants of Emerging Concern in the Lake Champlain Basin: A Review of Current Knowledge, 2016.* Per his request, an electronic copy has been distributed to the Council. A copy has also been posted to the SharePoint. She also shared his email requesting that the Council initiate review of treated seeds per Act 99.
- Razelle shared that EPA's Office of Pesticide Programs (OPP) recently released for comment preliminary pollinator-only risk assessments for four neonicotinoids and an updated assessment for one other. There is a 60 day comment period. In addition, OPP has announced amendment of the registration of the formulated herbicide product Enlist Duo (active ingredients glyphosate and 2,4-dichlorophenoxyacetic acid) to expand allowed uses and include additional states where this product may be used on specific crops. This reaffirms and expands the original decision before the remand. Razelle also noted that on January 12, 2017 OPP issued EPA's *Policy to Mitigate the Acute Risk to Bees from Pesticide Products.*
- In response to Razelle's inquiry, Barbara reported that the Pesticide Use Impact Assessment (PUIA) group effort as described in the September 6, 2016 minutes is still underway.
- In response to Razelle's inquiry, Cary reported that the Invasive Species workgroup effort as described in the September 6, 2016 minutes is ongoing as well. He stated the group has meet twice since September to go over some of the issues encountered when making recommendations regarding control of invasive species and conflicting requirements. He noted that folks in the natural heritage program have agreed to draft a proposed set of recommendations for use by the Public Service Board. In the interim, AAFM has obtained party status for anything regarding increased use of herbicides including management of invasive species.

Public Comment - Nat Shambaugh noted that the above mentioned Report he authored is a compilation of organic chemistry data that is currently available, not an analysis of that data. He described how this effort is the first step in possibly deciding on potential future efforts and can help identify gaps in information available from AAFM, Vermont Department of Environmental Conservation (DEC), New York State and Ouebec. Mr. Shambaugh also requested that the Council initiate discussion of seeds treated with neonicotinoids as treated articles. He offered that there is a growing body of information on this topic and increasing concern as to the potential for release of such chemicals into the environment from such use. He stated that Canada recently proposed phasing out all outdoor uses of imidacloprid because of risks to aquatic insects. He noted that EPA's Office of Pesticide Programs recently released their draft aquatic risk assessment for imidacloprid and it is his understanding that this essentially agrees with the Canadian assessment of aquatic risks. He noted that AAFM has information regarding levels detected in some surface waters that may exceed threshold levels for aquatic insects. Judy Bellairs identified herself as a representative of the Sierra Club and stated that she would also like to see review of treated articles be taken up quickly by the Council. Razelle agreed this is a topic of concern. She offered that her understanding of Act 99 does not indicate that this particular topic is to take priority over all others but is an additional important function of the Council. Unless legal counsel advises the Council otherwise or there is a direct request from the Secretary of AAFM for this topic to take precedence, review of treated seeds as treated articles becomes another important topic the Council will work towards addressing along with other work. She offered that she has been trying for several years to carve out time for the Council to conduct a comprehensive review of buffers currently employed and determine if revision is warranted. However, other time critical efforts have precluded the Council from taking on this particular large effort. Rick inquired regarding the neonicotinoid/tile drain study AAFM has underway. Nat stated a summary is provided in his Report and that he is willing to offer a presentation at a future Council meeting if so desired. At the close of the meeting, Mr. Shambaugh offered further public comment. Specifically, he requested that a contact be added to the AAFM VPAC webpage; that a distribution list be established and maintained to notify those outside the Council of impending meetings and that

relevant meeting materials be posted to the VPAC Share Point and those that desire be notified of such.

Business

Discussion of use of solid Sonar® herbicide products

Razelle offered a brief summary of the long history of discussion amongst stakeholders in Vermont regarding the potential use of solid/pelletized forms of Sonar® aquatic herbicide products (active ingredient fluridone) in the waters of the State in order to control the growth and spread of aquatic nuisance plant species. She noted that despite extensive dialog with the registrant and associated researchers, many questions and uncertainties remain including, but not limited to, concerns regarding potential use in shallow areas, dissolution and the potential for exposure including the concept of "attractive nuisance". She noted that DEC Aquatic Nuisance Control permit application 2240-ANC requests potential use of the pelletized formulation SonarOne[®], or in lieu of such, use of Sonar[®] A.S. (a liquid formulation), as part of a program to control the growth and spread of Eurasian watermilfoil in Lake Iroquois. Perry Thomas (Program Manager of the DEC Lakes and Ponds Program) and Misha Cetner (Permit Analyst in Lake and Shoreland Permitting) provided an overview of 2240-ANC including but not limited to, the proposed treatment plan, estimated amount of active ingredient proposed for use per formulation and maximum number of booster applications requested for each. Mr. Cetner noted that use of the pelletized version may maintain a lower concentration earlier in the treatment season. He posited that use of the pelletized product may result in overall reduction in pesticide use. Dr. Thomas referred to an efficacy chart provided by the registrant which has been shared with the Council. She offered some background information on the Lake Iroquois Association (LIA) noting that their mission is to manage milfoil effectively and that they have a very good system of communication. Barbara inquired if efficacy is determined solely by concentration of active ingredient and the potential impact of site-specific factors such as site chemistry and flow. Razelle noted that based on information she has reviewed to date and recent conversations with colleagues in New York, it is her understanding that efficacy and release rate are highly influenced by site-specific factors. Rick asked if there are potential benefits of using a pelletized formulation over a liquid and how SonarOne® was selected for potential use over other pelletized formulations. While Mr. Cetner did not have information as to how SonarOne® came to be proposed, he stated that that the theory behind use of pellets is that these will allow for slow release, prolonged contact and posited this may result in an overall reduction in pesticide use. Cary described that in concept, pellets would sink to the bottom and allow for prolonged release of active ingredient in the bottom foot or so of the water column allowing for increased intake through a plant's root system. He noted however, that the rate of release and actual concentration achieved is uncertain even with the best release study graphs. The graphs indicate active ingredient is still being released many weeks post application. Unlike use of liquid formulation, with pellets, the release rate is variable as the pellets dissolve and the process is influenced by many site specific factors. Sid noted that the characteristics of the individual water body will really impact this process. All present participated in an extensive discussion of various aspects of the proposed use of such products, including but not limited to, previous requests and reviews including an extensive effort in 2012, application rate, dissolution, the number of potential treatments, influence of site-specific factors, the need for robust monitoring, uncertainties regarding cost, potential spill concerns, label requirements and other important factors. Timing of the permit process was discussed. Ann asked if the pellets themselves are dark in color. Razelle replied they appear to be dark brown in photographs on the registrant's website. Rick raised several questions regarding stated application rate, the manner in which the application would occur and what the actual application rate would really wind up being in the areas treated. Nat Shambaugh inquired regarding the target dose in the littoral zone. Mr. Cetner noted that treatment of approximately 80 acres of littoral zone is proposed. Rick noted such an approach could essentially constitute a spot treatment with a whole lake treatment rate. Cary and Sid also noted questions regarding calculations and noted that while it is contended that pellets will treat where they are applied, the application rate provided for review is based on whole lake treatment not the 80 acres where treatment is being proposed to occur. Razelle shared the State of New York regulatory requirements regarding use of solid Sonar® products and her understanding of their approach. In response to Rick's inquiry, she explained the basis of New York's action level of 50 micrograms active ingredient per liter of water. She provided a brief overview of the Vermont Department of Health review process. With respect to fluridone, she noted review has included consideration of n-methylformamide, a potential degradate. Mr. Cetner did not have information as to whether the proposed use of the pelletized version would represent a cost savings. Dr. Thomas raised the question of the potential impact of a thermocline on treatment. Barbara summarized two important points: what is the maximum concentration that may be present at any time at any location and what are the uncertainties regarding. Dr. Thomas stated the LIA would obey any permit requirements that are instituted including providing an alternative source of domestic water in the event that a domestic water use restriction was instituted. It was noted that as both the liquid and pelletized versions were included in the permit application, continued discussion of use of the pelletized products does not preclude comments regarding proposed use of the liquid formulation. All agreed it would be appropriate to continue discussion of this topic at the next meeting. Mr. Cetner, Cary and Razelle offered to help identify and invite parties such as the registrant and applicator who may be able to offer additional information. It was agreed that this is a good path forward. Dr. Thomas and Mr. Cetner left the meeting upon conclusion of this discussion.

Other Business

Rick and Barbara raised the topic of the Agency of Natural Resources (ANR) PUIA process and noted work is underway on updating the ANR PUIA policy. Barbara offered that a solid process is required to ensure that there is good, consistent interagency review. Razelle described the informal, interim approach currently employed by the Council as noted in the July 2016 meeting minutes "The Council unanimously agreed that when a member becomes aware of a PUIA, that person will notify the Chair and provide the Chair with a copy of pertinent documents for distribution to the entire Council. The Chair will add discussion of the PUIA to an upcoming meeting agenda. If immediate review is warranted, the member providing materials to the Chair should request that a meeting be called as soon as possible." The Council discussed the origin and history of PUIAs, the need for a well-designed work flow and review process and the few PUIA that have been brought to the Council for discussion. The Council fully agreed that the work underway to develop an updated, clear review process is vital. Rick asked where he should direct inquiries regarding availability of environmental sample data related to the Vermont Yankee Facility. Razelle suggested that such inquiries should be directed to Dr. William Irwin, Vermont Department of Health. Eric noted he may also have some relevant fish tissue data and if so will share with Rick.

Next Meeting Date: To Be Determined