THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

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MDAR MASSACHUSETTS DEPARTMENT OF AGRICULTURAL RESOURCES

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PESTICIDE BOARD SUBCOMMITTEE MEETING MINUTES

December 17, 2024

BOARD MEMBERS IN ATTTENDANCE

Michael Moore, DPH, Food Protection Program, (Chair)	Present
Taryn LaScola, MDAR, Designee for Commissioner Randle	Present
Meg Blanchet, DPH, Designee for Commissioner Goldstein	Present
Nicole Keleher, DCR, Designee for Commissioner Arrigo	Present
Richard Berman, Commercial Applicator	Present

The Board did meet or exceed the minimum number (3) of members present to form a quorum and conduct business.

A. REVIEW OF MINUTES FOR November 19, 2024

Motion: R. Berman
Second: N. Keleher
Discussion: None
In Favor: R. Berman, N. Keleher, M. Moore, T. LaScola, M. Blanchet
Opposed: None
Abstained:

B. PRODUCT REGISTRATIONS

Motion: That the Pesticide Board Subcommittee registers the pesticide products listed on the EIPAS PR December 17, 2024, Subcommittee cover sheet with the exception of the following products:

1. Merit 75 WSP Insecticide, EPA Reg. No. 101563-62,
2. NovaGraz, EPA Reg. No. 62719-751,
3. Olympia Insecticide, EPA Reg. No. 83529-239,
4. Morale 80WDG, EPA Reg. No. 103087-13,
5. Terro Clothes Moth Killer, EPA Reg. No. 149-25, and
6. PIC Bitebarrier Vapor Release System, EPA Reg. No. 91879-1-3095.

Moved: R. Berman
Second: T. LaScola
Discussion: None
In Favor: M. Blanchet, R. Berman, T. LaScola, N. Keleher, M. Moore
Opposed: None
Abstained: None

Motion: That the Pesticide Board Subcommittee has determined that the use of NovaGraz, EPA Reg. No. 62719-751, containing 2,4-D dichlorophenoxyacetic acid at 35.11%, be categorized as restricted use pursuant to the Subcommittee's decision on April 14, 1989, to register products containing 20% or more of 2,4-dichlorophenoxyacetic acid (2,4-D) and/or its derivatives as state restricted use.

Moved: R. Berman
Second: T. LaScola
Discussion: None
In Favor: M. Blanchet, R. Berman, T. LaScola, N. Keleher, M. Moore
Opposed: None
Abstained: None

Motion: That the Pesticide Board Subcommittee has determined that the use of the following products may pose unreasonable adverse effects to the environment as well as to pollinators, when taking into account the economic, social, and environmental costs and benefits of their use in the Commonwealth and are thereby restricted. This is pursuant to the Subcommittee's decision on March 1, 2021, to modify the registration classification of products containing neonicotinoids, including **imidacloprid**, that have outdoor non-structural uses or outdoor non-agricultural uses on the label from general to state restricted use:

1. Merit 75 WSP Insecticide, EPA Reg. No. 101563-62, and
2. Olympia Insecticide, EPA Reg. No. 83529-239,

Moved: R. Berman
Second: N. Keleher
Discussion: None
In Favor: M. Blanchet, R. Berman, T. LaScola, N. Keleher, M. Moore
Opposed: None
Abstained: None

Motion: That the Pesticide Board Subcommittee has determined that the use of Morale 80WDG, EPA Reg. No. 103087-13, containing bromacil, may cause an unreasonable risk to man or the environment, when taking into account the economic, social, and environmental costs and benefits of their use. This determination is based upon the leaching potential and toxicological concern of these substance as defined in the "Protection of Groundwater Supplies from Non-Point Source Pesticide Contamination" Regulations. Therefore, the Subcommittee hereby modifies the registration classification of agricultural/commercial pesticide products containing **bromacil** from general to restricted use for groundwater concerns.

Moved: R. Berman
Second: T. LaScola
Discussion: None
In Favor: M. Blanchet, R. Berman, T. LaScola, N. Keleher, M. Moore
Opposed: None
Abstained: None

C. NEW ACTIVE INGREDIENT MOTION

Miller presented information on the new active ingredient *transfluthrin*, formulated in the product PIC BiteBarrier (15.6% by weight, in EPA Reg. No. 91879-1-3095) and Terro Clothes Moth Killer (0.95% by weight, EPA Reg. No. 149-25). The former is for use in tents, stables, recreational vehicles, campers, port-a-potties, garages, and kennels to kill mosquitoes, stable flies, and sand flies. The Terro product is labeled for use in storage spaces to control moths. Both are spatial repellents containing a transfluthrin-impregnated textile that passively diffuses volatilized transfluthrin into the air space immediately around the device in indoor and semi-enclosed spaces.

Transfluthrin is a pyrethroid, which is a synthetic compound based on natural pyrethrin insecticidal compounds found in some flowering plants. Its mode of action involves interfering with voltage-gated sodium channels in axonal membranes. Pyrethroids target the sites typically found in insects.

The EPA benefits determination document notes that transfluthrin is structurally distinct enough to be effective against mosquitoes that have become resistant to other pyrethroids. The proposed new end-products have been deemed to be a unique product form that does not rely on direct human contact with treated surfaces.

Handling Precautions: The label signal word for these products is 'Caution' and no Personal Protective Equipment (PPE) is required. Products are activated when a user peels off its covering. BiteBarrier has a higher concentration of active ingredient, and its precautionary statement says it is 'harmful if inhaled'. The Terro product states it is 'harmful if swallowed' and directs users to avoid eye or clothing contact. Washing hands is considered sufficient for minimizing any dermal exposure risk. Terro has an additional physical/chemical hazard statement prohibiting contact with oxidizing agents.

Uses: BiteBarrier is labeled for use in tents, stables, RV campers, port-a-potties, garages, and kennels to control mosquitoes, stable flies, and sand flies. The Terro product is only for moths and their eggs and larva to protect clothes from insect damage in closets and indoor storage containers.

The storage and disposal directions on the labels prohibit water, food, or feed contamination. The instructions state that used products must be placed in the trash. There is no label environmental hazard language since there are no non-enclosed outdoor uses of these products.

Transfluthrin mammalian studies, which EPA uses to assess human health risks, show an overall low toxicity profile. Acute eye irritation and inhalation toxicity are categorized as Toxicity Category III (low) and acute oral and dermal toxicity are both Category IV, which is the lowest level and considered practically non-toxic. It has not been found to be a dermal sensitizer. No rat mortality was observed at the highest doses. In studies in both sexes, the lowest observed adverse effects concentration (LOAEC) was ~0.22 mg/L based on clinical signs of toxicity (ungroomed and bristling coat, tremors, and hyperactivity). The no observed adverse effect concentration (NOAEC) was less than 0.05 mg/L.

In determining safety factors to identify exposure levels of concern for different human population groups, EPA deemed the Food Quality Protection Act to not apply because transfluthrin is a non-food use chemical. However, an additional sensitivity factor of 3X was applied in the case of children under the age of 6 based on increased quantitative susceptibility seen in studies on pyrethroid pharma-co-kinetics and at high doses in the scientific literature.

Repeat-dosing studies show that multiple exposures did not change the observed NOAEL due to rapid clearance of transfluthrin from the body, so the single-day exposures were used for hazard assessment. Dietary administration of transfluthrin at high doses resulted in lower hepatic triglyceride levels, increased liver and/or kidney weights, and microscopic renal findings in parental rats, but no neurotoxic effects were

observed. Neurotoxic effects were only observed in bolus/gavage studies, which caused greater maximal plasma concentrations immediately after dosing. Ingestion of transfluthrin via diet appears to be a slow enough exposure pathway that the body excretes the compound before levels can rise very high.

A cancer classification has not been determined because carcinogenicity studies are not required for non-food use pesticides. However, transfluthrin is not expected to pose a cancer risk at the anticipated exposures. EPA notes that it is negative for mutagenicity in the full mutagenicity battery, it has a short half-life in the body (4-6 hours) and therefore does not accumulate in humans, and the transfluthrin database did not show any specific target organ toxicity.

Human exposure to transfluthrin may occur via inhalation as the device slowly diffuses the active ingredient into the air. However, negligible dermal exposure by handlers or residents is expected since the product should not be moved after it is placed or hung, resulting in minimal potential contact. Children are not expected to have incidental oral exposure from the uses of these end-products.

EPA used the 90-day inhalation study for short-term inhalation at the NOAEL for human exposure risk calculations. The high end of these exposure scenarios assumed up to 18 hours of exposure per day in the case of children in campers. Based on the proposed use of the passive diffusion device, EPA particularly looked at residential post-application inhalation exposures expected for adults (at all use sites), children 3 to <6 years (for use in garages/barns) and children 1 to <2 years (for use in tents, RV/campers). There are no risk estimates of concern for any life stage, with calculated inhalation margins of exposure (MOE) ranging from 190 to 150,000 (note: the lower the margin of exposure and closer it is to established Level of Concern – LOC - the greater the potential hazard). The level of concern here has been set at 100 for children <6 years of age, which is about half the MOE for the greatest exposure risk scenario; the LOC value was lower for adults and children ≥6 years of age, which was set at 30 - and therefore even less risk relative to the margins of exposure in examined scenarios.

Environmental ecotoxicity data indicate transfluthrin is practically non-toxic to birds and mammals on an acute exposure basis. In all avian studies, no chemically induced mortalities or sublethal effects were observed, though mean body weights were decreased and reductions in body weight gains were observed in >1254 mg a.i./kg diet groups compared to the control.

Transfluthrin is highly toxic to freshwater aquatic vertebrates and invertebrates. For rainbow trout, no mortalities were observed at 0.52 mg/L but at 0.89 mg/L mortality was 90 -100%. No chronic effects on fathead minnows were observed at the highest test concentration. *Daphnia magna* experienced very high acute exposure toxicity as well as a chronic NOAEL of 0.036 micrograms/L. Toxicity modeling for marine organisms suggests that marine fish sensitivities are similar to those of freshwater, but marine invertebrates are likely an order of magnitude more sensitive than freshwater invertebrates. However, marine exposure with the proposed product use patterns is expected to be negligible.

Honey bee studies showed transfluthrin to be highly toxic (LD50 = 0.0239 µg a.i./bee) on a contact exposure basis. In the oral toxicity study, 20% and 13% of bees died in 0.15 and 0.50 µg a.i./bee test concentrations, respectively, but the lack of clear dose-response relationship prevented the study from establishing a definitive LC50.

EPA's environmental exposure risk assessment concluded that there are no risk concerns for terrestrial aquatic plants or animals for the proposed uses. Honey bees and listed terrestrial invertebrates could have exposure if they were to enter a treated area like a tent or stable. However, given the relatively limited area around the transfluthrin dispensing devices (assuming a 15-foot radius), potential degradation, surface binding, and dilution in air, EPA makes an overall 'No Effect' determination for federally listed invertebrates.

Transfluthrin is moderately volatile and likely to undergo rapid degradation through indirect photolysis, with a model-estimated half-life of 1.6 days. It is immobile in soil (estimated Koc of 50,000) and undergoes microbial degradation in a matter of days in soil.

Groundwater Protection: Transfluthrin does not meet the criteria for being classified as a potential groundwater contaminant in Massachusetts.

Move: that the Pesticide Board Subcommittee approve the product registrations for PIC Bitebarrier Vapor Release System, EPA Reg. No. 91879-1-3095, and Terro Clothes Moth Killer, EPA Reg. No. 149-25, containing the new active ingredient transfluthrin, which has never before been registered in Massachusetts.

D. *EPA Announcements related to Chlorpyrifos and Atrazine*: Staff will update the Subcommittee on the recent announcements for these pesticides.

Wijnja summarized information from the announcements for these pesticides. Relative to Chlorpyrifos, the EPA proposed a rule to revoke tolerances for chlorpyrifos. This rule revokes all tolerances for chlorpyrifos, except for those tolerances associated with 11 food and feed crops that remain registered. EPA is taking this action in response to a decision by the U.S Court of Appeals for the Eighth Circuit. This action will support EPA efforts to cancel most uses of chlorpyrifos on food to reduce exposure and protect public health. Wijnja summarized the background information and developments that ultimately resulted in this proposed rule. The remaining food and feed crop uses are limited to specific states and Massachusetts is not among those states. The registration review process for chlorpyrifos continues and EPA plans to issue an interim decision in 2026.

The announcement for Atrazine was related to proposed updated mitigation measures to reduce exposure to non-target species and minimize impacts to federally endangered and threatened (listed) species and their designated critical habitats. The updated mitigation proposal also incorporates the revised level at which atrazine is expected to adversely affect aquatic plant communities, an expanded use of robust surface water monitoring data, as well as the runoff mitigation menu and point system from the final Herbicide Strategy. The updated mitigation proposal is the result of the developments related to the ecological risk assessment for atrazine conducted as part of registration review, litigation, and reevaluations and refined analyses following input from a Scientific Advisory Panel and public comments and letters to the agency.

E. Discussion of next steps in response to the *Petition to Suspend the Registrations of Anticoagulant Rodenticide Products in Massachusetts* submitted by the Harvard Law School Animal Law & Policy Clinic to the Subcommittee. (Vote required)

Absent statutory requirements or guidelines regarding how the Subcommittee should receive this and future petitions, Chairperson Moore solicits feedback from the Subcommittee on two questions:

- How should the Subcommittee proceed upon receiving this petition?
- How should the Subcommittee proceed with any others in the future? What should be the process?

Berman notes that regarding the current petition, at the October 2024 meeting MDAR was conducting outreach to wildlife clinics, veterinarians, and Mass Fish & Wildlife as well as other potential sources of data on rodenticide impacts on the environment. Staff would compile submitted information for Subcommittee review. EPA also released a draft Biological Evaluation for a number of rodenticides in early December 2024, with more information and possibly regulatory guidance to come. Suggests continuing this work before voting to initiate an individual review.

LaScola provides an update that some resources have been found to support obtaining additional information on AR impacts in the form of a scientific review using a third-party contractor. This would be similar to the scientific reviews conducted for neonicotinoids and glyphosate to inform the related individual reviews undertaken by the Subcommittee.

Keleher asks if there is a timeline for using the designated resources due to potential limited availability. LaScola said she would check and report back any time restrictions on these funds, which could be dependent on Subcommittee action to authorize this use and quotes received from bidders. Scope would likely include how ARs work, environmental impacts, risks, and benefits, as well as a review of peer-reviewed scientific studies/data.

Blanchet asks if the scientific review would include recommendations. LaScola responds no, it would summarize and aggregate available information to aid the Subcommittee in decision-making.

Berman asks if the RFP [Request For Proposal] would be available for Subcommittee review prior to posting. LaScola replies that it would take the general form of the glyphosate RFP – qualitative comparisons between public health and environmental impacts, EPA documents, summaries of existing reports and studies, use pattern data, peer-reviewed scientific literature, comprehensive reference list, and possibly how other states are approaching this issue. Both Moore and Berman expressed interest that public health issues (e.g., food establishments, apartments, etc.) and potential implications for health code violations be included in the information for evaluation by the Subcommittee. LaScola also notes that any information deemed necessary by the Subcommittee not in the scientific review can be sought separately by MDAR. She reiterated the complexity of this sort of decision-making and the need for comprehensive, data-supported information on which to base Subcommittee actions.

Motion: That the Subcommittee designate MDAR to act on its behalf to procure a qualified entity to conduct a scientific review of rodenticide anticoagulants, which will then be used as part of a larger individual review once completed. The authority delegated to MDAR staff shall include engaging in any necessary procurement and executing any contracts on behalf of the Subcommittee.

Moved: T. LaScola
Second: N. Keleher

Discussion: Berman asks if the Subcommittee can see the RFP language prior to public posting. LaScola says yes, but it may delay procurement to wait for the next Subcommittee meeting. Moore asks if the Subcommittee reviewing the language prior to the next meeting would be a public record and follow MA Open Meeting Law. MDAR Deputy General Counsel Burgess replies that since LaScola is drafting the RFP, it can only be worked on by other Subcommittee members at the next public meeting. The other option is to express what components are desired at this meeting, MDAR will incorporate them into the RFP, and it will be publicly available before the January meeting. Moore asks if discussion violates procurement law in any way (for example, if a potential vendor hears it now). Burgess says no because this is a public meeting open to all, the topic was on the posted agenda, and the discussion is at a high level. LaScola notes that if the funds need to be used by the end of FY25 (6/30/25), more time in the procurement stage could reduce the amount of time available for the contractor to complete the work. Burgess and LaScola confirm language can be included to leave the scope flexible enough for future refinement by the Subcommittee if needed.

In Favor: M. Blanchet, T. LaScola, N. Keleher, M. Moore
Opposed: None
Abstained: R. Berman

Moore notes that future petitions may come before the Subcommittee but general discussion on how these might be considered may be addressed at a later date.

F. Consideration of requests to allow a presentation by a member of the public to be included on the agenda of a future Subcommittee meeting. (Vote required)

Moore provides context regarding current practices. Outside speakers have been invited to present information to the Subcommittee in the past involving specific topics under consideration (for example, beekeepers, cranberry growers, or technical experts on a particular pesticide with knowledge/expertise outside that of MDAR). The Subcommittee does not have meetings open to general public comments.

Moore invites Subcommittee member thoughts on more public comment during meetings and, if so, what format could that take. Berman points out that the Subcommittee has administrative functions at its meetings dictated by statute, unlike a public hearing. He notes the benefits of comments to the Subcommittee being submitted in writing, which allows more time for Subcommittee members to process the comments. LaScola adds that some entities do submit comments via email to MDAR, which always forwards them to all Subcommittee members so they can hear from the public. She points out that a request to be on a meeting agenda to give a presentation is a different action than opening a meeting to public comment. She suggests that a presentation request could be considered on a case-by-case basis by either the Chair or the whole Subcommittee as to whether it should be placed on the next meeting agenda.

Moore notes that he can report the number of comments submitted to the Subcommittee by the public on an issue to acknowledge their receipt and consideration. He says the question of how to best incorporate public comments into an individual review process will continue to come up and the form this takes may vary. For example, the neonicotinoid individual review was established by the legislature with an appropriation requiring a public hearing for comments, but that is not true of all individual reviews prior to Subcommittee vote. Nonetheless, Moore points out that some members of the public may have similar expectations for all individual reviews going forward.

Moore mentions that in the Department of Public Health during comment periods very few members of the public attend virtual/public meetings but a large number of written comments are submitted. He suggests that, at minimum, a process for acknowledging public comments (number submitted in favor/against, general summary of comment content) in a future AR individual review would be desirable. Berman says he read the ~40 comments recently submitted regarding ARs and agrees with this approach.

G. NEW BUSINESS

There was no new business brought forward.

Berman mentions enabled use of zoom emoji function potentially being distracting during Subcommittee meetings. LaScola responded that the function was intended to be disabled due to prior requests. Keleher noted that users can individually hide emojis to prevent them from appearing on their own screen.

H. ADJOURN

Motion: To adjourn the December 17, 2024, Subcommittee Meeting.

Moved: T. LaScola
Second: M. Blanchet
Discussion: None
In Favor: M. Blanchet, R. Berman, T. LaScola, N. Keleher, M. Moore
Opposed: None
Abstained: None