PESTICIDE BOARD SUBCOMMITTEE MEETING

MINUTES OF MEETING

September 17, 2019

The Hurley Building, 19 Staniford Street., FL 6th A&B Conference RM #612 Boston, MA

MEMBERS PRESENT

- Taryn LaScola, Alternate Designee for Commissioner John Lebeaux
 - Department of Agricultural Resources
- Marc Nascarella, Designee for Commissioner Monica Bharel
 - Department of Public Health
- Nicole Keleher, Designee for Commissioner Leo Roy
 - Department of Conservation and Recreation
- Richard Berman
 - Commercial Applicator

ALSO PRESENT:

- Susie Reed, Department of Agricultural Resources
- Hotze Wijnja, Department of Agricultural Resources

I. PRODUCT REGISTRATIONS

VOTED

That the Pesticide Board Subcommittee registers the pesticide products listed on the EIPAS PR September 17, 2019 Subcommittee cover letter with the exception of the following product:

- 1. Harrell's Protectmax Chlorothalonil 6L, EPA Reg. No.60063-7-52287
- 2. Harrell's Protectmax Chlorothalonil DF, EPA Reg. No. 60063-3-52287
- 3. Barrachlor Fungicide, EPA Reg. No. 6836-389
- 4. Vibrance Ultra Potato, EPA Reg. No. 100-1628
- 5. GF-3566, EPA Reg. No. 62719-724

Moved: Berman Second: Nascarella Approved: 3-0

STATE RESTRICTED USE MOTIONS

RESTRICTED USE AS DEFINED UNDER THE GROUNDWATER REGULATIONS

Move: that the Pesticide Board Subcommittee has determined that the use of the following products:

- Harrell's Protectmax Chlorothalonil 6L, EPA Reg. No.60063-7-52287, Harrell's Protectmax Chlorothalonil DF, EPA Reg. No. 60063-3-52287 and Barrachlor Fungicide, EPA Reg. No. 6836-389 containing *Chlorothalonil*
- 2. Vibrance Ultra Potato, EPA Reg. No. 100-1628 containing *Sedaxane*
- 3. may cause an unreasonable risk to man or the environment, taking into account the economic, social and environmental costs and benefits of use. This determination is based upon the leaching potential and toxicological concern of this 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 *Chlorothalonil* and *Sedaxane* from general to restricted use for groundwater concerns.

Moved: Berman Second: Nascarella Approved: 3-0

2,4-dichlorophenoxyacetic Acid (2,4-D) MOTION

Move: That the Pesticide Board Subcommittee register the following products:

1. GF-3566, EPA Reg. No. 62719-724

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: Berman Second: LaScola Approved: 3-0

II. NEW ACITIVE INGREDIENT

Discussion of the new active ingredient *Pyrimisulfan*, Sedge Stop Nutsedge Weed Killer, EPA Reg. No. 2217-1021

Pyrimisulfan is a new active ingredient formulated in Sedge Stop Nutsedge Weed Killer, EPA Reg. No. 2217-1021, for use on turf to control sedges and broadleaf weeds. It is a selective systemic herbicide for post-emergent control of target weeds.

The mode of action for this chemical is Acetolactate Synthase (ALS). Pyrimisulfan belongs to chemical family pyrimidinyl (thio) benzoate.

Pyrimisulfan was first registered by U.S. EPA in 2018. The meeting packet included the 'Final registration decision for new active ingredient Pyrimisulfan' (USEPA, 2018), which is available at www.regulations.gov in Docket ID: EPA-HQ-OPP-2017-0236.

Pyrimisufan use profile is on various types of turf, and non-crop sites. The application rate 0.06 lbs. of active ingredient per acre, with maximum yearly rate of 0.09 lbs a.i. per acre. The product is a granular formulation that is applied by rotary spreaders or shaker can. Re-treatment interval (RTI) is 30 days.

This chemical has a low acute toxicity profile, classified in category III for oral, dermal and primary eye irritation, category IV for acute inhalation, and dermal irritation. It is not a dermal sensitizer and classified as not likely to be carcinogenic to human. The primary target organ is the thyroid. There were no evidence of quantitative or qualitative susceptibility in developmental and reproductive studies. The potential neurotoxicity effects included response to noise, tremors, and decreased motor activity. However, these were only observed at high dosages, and not observed in sub-chronic studies. The database was found adequate to evaluate the risk to infants and young children.

Dietary risk assessment was based on exposures through drinking water, which was found to below the level of concern. Residential risk exposure based on post-application margin of exposure (MOE) was not of concern. Occupational Exposure based on dermal and inhalation routes show margins of exposure that were not of concern.

The environmental fate profile of this chemical is characterized by being highly soluble in water, slightly to moderately persistent depending on the soil type, moderately persistent in water system, not likely to volatilize from soil or water, highly mobile soils, low binding to soil (Koc values less than 50). Degradates are also mobile in the environment.

Ecological effects information indicates that there is some potential effects to certain non-target plants. It is practically non-toxic to fresh water fish, estuarine marine fish and aquatic invertebrates on an acute exposure basis. Risk regarding birds and mammals were found to be low, and this chemical was found to be practically non-toxic to bees and earth worms.

The Environmental Protection Agency concluded this active ingredient has similar benefits as other pre- and post-emergent turf herbicides that are currently available. It has the benefit that it can be applied to wet or dry leaves. This product can be considered to provide another tool in the tool box for turf grass management.

EPA registered this active ingredient unconditionally. Relative to the Massachusetts groundwater protection regulations (333 CMR 12.00), it was indicated that this active ingredient does not meet criteria for potential groundwater pollutant.

Additional discussion was related to the SDS for this product. The Subcommittee viewed the toxicological information somewhat misleading and suggested that MDAR staff seek clarification from the registrant. The aspect that caught attention was related to the carcinogenicity information. The information from EPA on the active ingredient indicates that pyrimisulfan is classified as 'not likely to be carcinogenic to humans'. The Nutsedge SDS (on page 6) shows that one of the ingredients is listed as a carcinogen by various agencies. While it is indicated that this carcinogenicity listing is for one of the other ingredients ('trade secret'), the Subcommittee viewed this as a source of confusion in the context of the information on the active ingredient that was discussed at the meeting. Furthermore, it seems that some of the information could be clarified by more clearly indicating the information for components versus information for the product.

The Subcommittee suggested that staff contact the registrant and seek clarification on the aspects described above. The Subcommittee tabled the motion to approve the registration application. This was based on a discussion related to the SDS for this product.

Move that the Pesticide Board Subcommittee approve the product registrations for the following pesticide products. These products contain the active ingredient **Pyrimisulfan** and have never before been registered in Massachusetts.

- Sedge Stop Nutsedge Weed Killer (EPA Reg. No. 2217-1021), and labeled for use on turf to control sedges and several broadleaf weeds.
- This motion was tabled and additional information was requested.

Discussion of a new active ingredient Mefentrifluconazole.

The New active ingredient mefentrifluconazole formulated in six different products, two are labeled for turf and four are for use on various different crops and some are co-formulated with other fungicides.

Massachusetts usage of this new active ingredient is for turf by golf course superintendents, particularly for control of dollar spots. Other usage include on grapes, pome fruits, stone fruits, beans, peas, and potatoes.

Mefentrifluconazole is a broad spectrum fungicide classified as demethylation inhibitor (DMI), which acts by inhibiting cell membrane synthesis.

Application of the chemical done by ground, aerial, and chemigation based on use site. Agricultural use rates range from 0.09 to 0.18 lbs. active ingredient per acre, with a maximum of 0.54 lbs per year. The rate on turf is 0.91 lbs a.i./ acre per application, with a maximum annual rate of 1.82 lbs a.i. per acre. Retreatment Interval depending on use site and crops ranges from 7 to 28 days.

This active ingredient was first registered by U.S. EPA in 2019. The meeting packet included the final registration decision for new active ingredient Pyrimisulfan (USEPA, 2019). This and

other supporting documents are available at <u>www.regulations.gov</u> in docket: EPA-HQ-OPP-2018-0002.

Toxicity profile of this active ingredient is characterized by a low acute toxicity profile; oral toxicity in category III, inhalation and dermal in category IV. It is mildly eye and skin irritating, classified in category IV. Co-formulated products are classified in category II acute toxicity classification based on dermal toxicity.

The target organ is the liver. Sub-Chronic effects include increase adrenal glands. There was no evidence of increased susceptibility based on developmental and reproductive studies. Neurotoxicity effect included unsteady gait and decreased motor activity.

No acute endpoints were selected for the general population, but there were acute end-points for females. Food Quality Protection Act Safety Factor reduced to 1x based on the data set. Furthermore, this chemical was classified as not likely to be carcinogenic to human.

Dietary risk was based on food and drinking water exposure and was estimated to be below levels of concern. Occupational risk based on dermal and inhalation exposure showed margin of exposure (MOE) values that were below the level of concern. The assessment was based on baseline personal protection equipment. Occupational post application risks were identified for use in grapes. This risk was mitigated by label changes to reduce exposure. The use of this chemical on turf, golf courses, and residential post application risk assessment was below level of concern. The aggregate risk assessment found exposures below levels of concern.

Environmental fate characteristic of this chemical include being very persistent with a half-life value in different types of soil ranges from 130 days to more than 1000 days. Photolysis in water results in rapid break down. The chemical strongly adsorbes to soil, does not volatilize, and low water solubility, and is not expected to bio-accumulate.

Ecological risk information indicates this chemical is highly toxic to fish, aquatic invertebrates, but metabolites are practically non-toxic. Chronic risk was identified for fish, but only with turf and ornamental treatment. This risk was mitigated by lower application rates for these uses.

Acute risks to birds and mammals were found to be low, but chronic risks were identified for uses with higher rates (turf & ornamentals). This risk was mitigated by lower label rates and reduced number of applications per season.

This chemical is practically non-toxic to honey bees on acute basis by contact and oral exposure. Chronic risk was identified for the higher rates on turf. However, the real risk is expected to be lower since turf is not bee attractive. Risks to terrestrial plants were below the level of concern.

Benefits of new active ingredient includes improve efficacy for control of certain diseases in certain crops. The active ingredient is an additional triazole in the family of compounds for fungal disease control in turf. It was granted a reduced risk status for use on almond and potatoes, and has value in resistance management.

This new active ingredient was unconditionally registered by U.S. EPA. The database is considered complete for risk assessment purposes. Risk mitigation efforts included label language to reduce exposures associated with the use on grapes and on turf & ornamentals.

Relative to the Massachusetts groundwater protection regulations (333 CMR 12.00), it was indicated that this active ingredient does not meet criteria for potential groundwater pollutant.

Move that the Pesticide Board Subcommittee approve the product registrations for the following pesticide products. These products contain the active ingredient **Mefentrifluconazole** and have never before been registered in Massachusetts.

- Maxtima Fungicide (EPA Reg. No. 7969-404), labeled for disease control in turfgrass in nonresidential areas
- Navicon Fungicide (EPA Reg. No. 7969-403), labeled for disease control and plant health in nonresidential turfgrass
- Cevya Fungicide (EPA Reg. No. 7969-407), labeled for disease control in grapes, pome fruits, stone fruits and tree nuts.
- Provysol Fungicide (EPA Reg. No. 7969-411), labeled for disease control in beans, citrus, peanut, potato, rapeseed, and sugar beet.
- Veltyma Fungicide (EPA Reg. No. 7969-409), labeled for disease control in beans and peas, citrus, corn, peanut, potato, rapeseed, sorghum, soybean, and sugar beet.
- Revytek Fungicide (EPA Reg. No. 7969-406), labeled for disease control and plant health in corn, peanut and soybean.

Moved: Berman Second: Nascarella Approved: 4-0

III. Consideration of Remote Participation Policy: Follow up on previous discussions of remote participation at meetings, the Subcommittee will consider adopting a remote participation policy based on the Open Meeting Law Guide.

This agenda item was tabled for consideration at the next meeting.

IV. New Business

MOTION TO ADJOURN THE MEETING

It was moved, seconded and passed unanimously.

VOTED

To adjourn the September 17, 2019, Subcommittee Meeting. Moved: Berman Second: LaScola Approved: 4-0 Meeting adjourned at 10:00 a.m.