NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Materials Management, Bureau of Pesticides Management
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January 24, 2022

VIA EMAIL

Dear Pesticide Registrant:

Re: Notice of the Intent to Reclassify Thiamethoxam Containing Products as "Restricted Use" Pesticide Products in New York State

The New York State Department of Environmental Conservation (Department) has reviewed the current registration classification of all thiamethoxam products registered in New York State.

The United States Environmental Protection Agency (U.S. EPA) recently released a Proposed Interim Registration Review Decision for thiamethoxam which outlines numerous concerns (https://www.epa.gov/sites/default/files/2020-01/documents/clothianidin_and_thiamethoxam_pid_final_1.pdf). A brief summary of this proposed interim decision is included in the appendix.

Due to concerns raised regarding potential impacts to various environmental resources, including pollinators, the Department intends to reclassify all thiamethoxam products labeled for seed treatment as "restricted use." The reclassification will ensure proper use by trained applicators, and require sales and use data to be annually reported to the Department in accordance with the Pesticide Reporting Law. This will provide a practical mechanism for obtaining information on use location and amounts for thiamethoxam which are currently registered as "general use" in New York State.

The following products have been identified with seed treatment directions:

The above-listed products will be **reclassified as "restricted use"** in accordance with New York State Department of Environmental Conservation Regulations 6 NYCRR 326.23(e) on **January 1, 2023**.

Please be aware that pesticide products classified as "restricted use" are restricted in their purchase, distribution, sale, use and possession in New York State. Furthermore, each product may only be purchased and used by a certified applicator in New York State.

According to New York State Department of Environmental Conservation Regulations 6 NYCRR Part 326.3(a): “It shall be unlawful for any person to distribute, sell, offer for sale, purchase for the purpose of resale, or possess for the purpose of resale, any restricted pesticide unless said person shall have applied for, and been issued a commercial permit.”

The Pesticide Reporting Law within Environmental Conservation Law Article 33 Title 12 requires all certified commercial pesticide applicators to report information annually to the Department regarding each pesticide application they make. Commercial pesticide retailers are required to report all sales of restricted use pesticide products and sales of general use pesticide products to private applicators for use in agricultural crop production. If no sales are made within New York State, a report must be filed with the Department indicating this is the case.

If you require information on how to obtain a commercial permit or have questions regarding reporting requirements, please contact the Pesticide Reporting and Certification Section, at (518) 402-8748.

If you have any questions regarding this letter, please contact Jeanine Broughel, Chief of our Pesticide Product Registration Section, at 518-402-8768 or Jeanine.Broughel@dec.ny.gov.

Sincerely,

/s/

Scott Menrath, P.E.
Director
Bureau of Pesticides Management

Enclosure

APPENDIX

The following summary was compiled taking language directly from various sections of the United States Environmental Protection Agency (EPA) January 22, 2020 Proposed Interim Registration Review Decision (PID) for thiamethoxam.

Thiamethoxam is a systemic, neonicotinoid insecticide with a unique spectrum of activity that acts on the nicotinic acetylcholine receptors (nAChRs) of the central nervous system of insects. It is in the N-nitroguanidine group of neonicotinoids, in subclass 4A of the Insecticide Resistance Action Committee (IRAC) mode of action classification scheme. Thiamethoxam is commonly used to target piercing sucking pests such as aphids, leafhoppers, and whitefly in addition to certain hard to kill pests such as pepper weevil and thrips. Thiamethoxam is registered to control various insects on a wide variety of agricultural use sites (e.g. field, forage, fruit, spice, and vegetable crops) and non-agricultural use sites (e.g. in and around residential/domestic dwellings, food handling establishments, commercial/ institutional/industrial areas, livestock pens, poultry houses, wood or wooden structures, and transportation vehicles). Products containing thiamethoxam can be applied via methods such as aerial, ground foliar sprays, soil treatments, chemigation and as a seed treatment. Products containing thiamethoxam are formulated as wettable powder, dust, granular, microencapsulated, soluble concentrate/solid, flowable concentrate, emulsifiable concentrate, and ready-to-use solutions.

The largest agricultural use for thiamethoxam, in terms of pounds of active ingredient applied, has been in the form of seed treatments. On average, between 2005 and 2014, approximately 800,000 lbs. a.i. of thiamethoxam were used annually for seed treatments on various field crops including corn, cotton, soybean, potato, and wheat. There are also seed treatments registered for various vegetable crops. More recent data on seed treatment usage are not available.

EPA recognizes that the neonicotinoids, including thiamethoxam, are a key tool for growers that provide unique and effective pest control. However, the agency has identified ecological risks of concern, particularly to pollinators and aquatic invertebrates, as a result of many of the same attributes that make the neonicotinoids effective pest management tools. Risk mitigation measures are being proposed to address ecological risks of concern identified for pollinators, birds, mammals, and to aquatic invertebrates; and human health risks of concern to occupational handlers from certain thiamethoxam uses, as described in the Scientific Assessments section of the PID.

There are human health exceedances identified for several occupational use scenarios. EPA is proposing to mitigate these risks through the requirement of additional Personal Protection Equipment (PPE) such as gloves, respirators, or requiring closed loading systems for seed treatment on labels. Technical registrants are in general agreement with the proposed label changes that will significantly reduce, and eliminate in many scenarios, potential exposure to workers.

There are significant exceedances noted for honeybees. The protection of honeybee colonies is particularly important as, although honeybees are not native to the United States, they play a critical role in the pollination needs of many U.S. crops. While honeybees are often the focus, non-honeybees such as bumble bees, leafcutter bees, and blue orchard bees also play a unique and important role in commercial pollination services, and therefore are also

important to protect both bees and agriculture. Additionally, it is important to put forth mitigation that reduces impact to wild native species of bees, as well as honeybees. Rate reductions for certain crops where bee exposure exists or crop stage restrictions that limit exposure during critical periods in the growing season, are expected to have the highest potential impact in reducing risks to all bees.

Due to the persistence of neonicotinoids in the environment, there are also potential exceedances to bees noted for thiamethoxam from usage on poultry litter in chicken houses at the maximum rate and number of applications annually. Once applied, this litter can be taken out of the chicken houses and utilized as fertilizer on agricultural fields, allowing for exposure to bees. The agency is proposing to mitigate these potential risks by reducing the number of poultry house (whole house) applications allowed annually for thiamethoxam.

There are potential risks to birds and small mammals associated with seeds that are coated with neonicotinoids. Mitigation was considered with the understanding of the high benefits associated with seed treatment uses (e.g., early-stage crop protection from soil and above-ground pests), which have the potential to reduce overall neonicotinoid exposure and offer a lower overall risk profile compared to foliar uses. The agency is proposing additional advisory label language, amplifying Best Management Practices (BMPs), and education programs to help inform farmers about the importance of picking up spilled seed, in order to reduce overall exposure to birds and mammals. High-tech planting equipment using GPS and computer controls is becoming increasingly common in the U.S., and these technologies also help decrease incidence of spills over older, human-operated equipment.

Potential risks to aquatic invertebrates, which fill a foundational role in ecological food webs, are a concern. EPA is proposing several measures for reducing overall exposure including targeted annual application rate reductions and drift and runoff mitigation.

Risks of concern were identified to honeybees in EPA’s assessments. The protection of honeybee populations is particularly important as honeybees play a critical role in the pollination needs of many U.S. crops. In 2017 pollination services from operations with more than 5 colonies were valued at over 160 million dollars, and annual honey production in the US was valued at over 340 million dollars. Although the focus of the pollinator risk assessments is on honeybees, the agency recognizes that numerous other species of bees occur in North America and that these non-Apis bees have ecological importance in addition to commercial importance in some cases.

For example, it is important to note that several species of non-Apis bees are commercially managed for their pollination services, including bumble bees (Bombus spp.), leaf cutting bees (Megachile rotundata), alkali bees (Nomia melanderi), blue orchard bees (Osmia lignaria), and the Japanese horn-faced bee (Osmia cornifrons). Importantly, a growing body of information indicates native bees play an important role in crop and native plant pollination, in addition to their overall ecological importance via maintaining biological diversity. EPA is therefore proposing mitigation that reduces impact to honeybees that are also expected to benefit other pollinating insects. Of these measures, reductions in maximum application rates for certain crops where pollinator/bee exposure may occur, or crop stage restrictions which limit exposure during critical periods in the growing season, are expected to have the highest potential impact in reducing risks to all pollinators. These measures were developed in a

manner intended to preserve the majority of pest management utility, while also considering risk reductions for bees.

EPA reached out to a variety of stakeholders while drafting its mitigation strategy in order to gain a better grasp of growing practices and potential benefits. EPA also conducted an analysis of common or rare application rates, which was helpful in identifying when conservative assumptions were made in the risk assessments regarding maximum rates. This analysis also allowed the agency to determine where targeted rate reductions would decrease overall potential risks, while minimizing potential impacts to users. Proposed mitigation measures were identified by evaluating each neonicotinoid active ingredient and each use scenario for each crop individually, to determine the best path forward. Overall, EPA is proposing to address potential risks posed by current registered uses of thiamethoxam through the following risk mitigation measures:

- Restricting certain thiamethoxam uses
- Requiring additional PPE
- Reducing maximum application rates or restricting applications during pre-bloom and/or bloom, targeting certain uses with potentially higher pollinator risks and lower benefits
- Preserving the current restrictions for application at-bloom
- Requiring additional label language reducing use by homeowners
- Applying targeted rate reductions for higher risk uses
- Requiring additional spray drift and runoff reduction label language
- Promoting voluntary stewardship efforts to encourage the use of best management practices, education, and outreach to applicators and beekeepers

In selecting appropriate mitigation, EPA considered the benefits of the use of thiamethoxam to determine whether any risks present unreasonable adverse effects. For many uses, the benefits are very high. In contrast, significant risks of concern were noted for certain crops. Due to the potential impact to growers' ability to address certain critical pest issues, in accordance with FIFRA's requirement to EPA to take into account the benefits of the use of pesticides in its decision-making, there are cases where the EPA is not proposing risk mitigation. An example of a crop in which the benefits of thiamethoxam were weighed against potential impacts of mitigation was citrus crops, where neonicotinoids, including thiamethoxam, are a key element in programs to control the ACP, an invasive pest that transmits HLB, a devastating and incurable disease. Additionally, EPA considered the overall extent and likelihood of exposure of certain risks of concern. For example, tree injections showed significant risk extending into the following growing season. However, they are an expensive and relatively infrequently used method to prevent tree loss. Due to the low amount of overall usage and strong benefits of the tree injection use, the agency is not proposing risk mitigation. The proposed mitigation does not eliminate all potential risks of concern from the use of thiamethoxam, however, the proposed mitigation reduces the overall potential of risk and/or exposure. The agency finds the remaining risks to be reasonable under FIFRA, given the

benefits of using thiamethoxam. The EPA is also proposing label changes to address general labeling improvements for all thiamethoxam products and uses.

The EPA will issue a final decision on thiamethoxam and the other neonicotinoid registration review cases after all comments are reviewed and determinations in accordance with the Endocrine Disruptor Screening Program and the Endangered Species Act are performed. Once the Interim Registration Review Decision is issued, registrants must submit amended labels that include required labels changes to the EPA for review within 60 days. The Interim Decision is anticipated to be issued around July to September 2022.