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 Imidacloprid 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 imidacloprid products registered in New York State.

The United States Environmental Protection Agency (U.S. EPA) recently released a Proposed Interim Registration Review Decision for imidacloprid which outlines numerous concerns (https://www.epa.gov/sites/default/files/2020-01/documents/imidacloprid_pid_signed_1.22.2020.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 imidacloprid products labeled for widespread outdoor and foliar application, and 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 imidacloprid products which are currently registered as "general use" in New York State and used by the general public.

Products labeled for limited directed application to tree trunks and the ground at the base of trees, shrubs and plants are not included in the reclassification. Such products provide cost-effective and unique pest control for residential applications with few available alternatives.

The following products have been identified with widespread outdoor uses and/or seed treatment:

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 imidacloprid.

The EPA released the PID for imidacloprid in January 2020. Comments for imidacloprid and the other neonicotinoids were due to be submitted by May 4, 2020. The EPA will issue a final decision on imidacloprid 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.

Imidacloprid is an N-nitroguanidine neonicotinoid insecticide, which causes irreversible blockage of the postsynaptic nicotinic acetylcholine receptors. It is a xylem and phloem-mobile systemic compound that is readily taken up by the roots of the plants and translocated through the plant via transpiration. Imidacloprid products are used on a variety of agricultural crops as well as non-agricultural use sites, including but not limited to, turf and ornamentals, forestry, Christmas tree plantations, pet spot-on and collar products, baits and pellets, and in farm/residential/commercial areas. Products can be formulated as granules, ready-to-use solutions, emulsifiable concentrates, flowable concentrates, water soluble packages (WSP), dust, impregnated materials, etc., and can be applied via liquid spray or drench, broadcast granules, baits, and as seed treatment.

Humans may be exposed to imidacloprid in food and drinking water from crop uses, residential applications, in occupational settings, and from exposures to spray drift. The primary target system for mammals via the oral route is the nervous system. No signs of toxicity were observed through the dermal and inhalation routes in the available studies and there was no evidence of carcinogenic potential in the database. Imidacloprid is classified as a Group E chemical (“Evidence of non-carcinogenicity for humans”), oral Toxicity Category II (high oral lethality), and dermal Toxicity Category IV (low lethality by the dermal and inhalation routes). Because the toxicology database is sufficient to support risk assessment, the assessments are unlikely to underestimate exposure, and the observed neurotoxic and fetal and offspring effects are well characterized and protected for, and the FQPA Safety Factor was reduced to 1X. Therefore, the level of concern (LOC) for all assessments is 100 based on the interspecies (10X) and intraspecies (10X) extrapolation. The toxic effects used by EPA to estimate risk in the human health assessment are based on evidence of neurotoxicity in the 90-day rat study. As a result of information received as part of public comments, EPA has drafted an updated assessment, *Imidacloprid: Updated Residential Exposure Assessment in Response to Draft Risk Assessment (DRA) Comments*, which is available in the public docket. EPA’s updated assessment indicates that while post-application residential margins of error (MOE’s) for foliar spray and granular irrigated turf are not of concern, foliar and granular non-irrigated plots did result in risks of concern. Most occupational handler risk estimates were not of concern with current baseline attire or personal protective equipment (PPE). The exception was for workers performing activities related to on-farm seed treatment to barley, canola, cotton, millet, and wheat; the handgun application to citrus; and seed planter exposure for flax.

EPA identified significant risks of concern for application to ornamental plants. Potential risks from use on ornamentals was assigned the category, strongest evidence of potential

pollinator risk, in the agency's bee risk assessment. Risk to aquatic invertebrates was also identified, with risk quotients (RQs) ranging up to 1020. Benefits were considered high for this use, as 75% of neonicotinoid usage on ornamentals is with imidacloprid. However, other than the available 2014 AgInfomatics report and review, usage data was limited. EPA is proposing adding language to residential labels advising that ornamental products are, "Intended for use by professional applicators". This is due to the high risks of concern, the potential extent of exposure, particularly to bees, and to decrease the likelihood of misapplication or overapplication where significant risks of concern have been identified for these uses.

Due to the persistence of neonicotinoids in the environment, potential risks of concern to honeybees were also identified for imidacloprid from use on poultry litter in broiler houses at the maximum annual application rate. Once applied, the litter can be applied as a fertilizer on agricultural fields, contributing to ecological exposure. EPA is proposing to reduce risk from this use by reducing the number of whole house applications and limiting the square footage of allowable poultry house treatments per year for imidacloprid.

Imidacloprid is applied through aerial and ground application methods, which includes sprayers, chemigation and soil drenching, and seed treatment. For terrestrial wildlife, EPA modeled potential dietary exposure based on consumption of imidacloprid residues on food items following spray (foliar or soil) applications as well as from ingestion of residues on treated seeds. For treated seeds, different seed sizes and planting rates could result in a range of exposures. EPA also considered potential bird and mammal dietary exposure from fields where applied manure from poultry house operations may contain imidacloprid residues resulting in contamination of food items (*e.g.*, insects) and/or incidental ingestion of contaminated soil particles.

Overall, acute risks to avian and mammalian species from foliar and soil treatments of imidacloprid appear to be low. Soil incorporation following soil treatments, including incorporation of treated poultry litter, decreases potential risks from this use pattern considerably. Exposures from treated seed results in the highest acute and chronic risks to terrestrial organisms. However, the risks vary considerably. A low number of small treated seeds (*e.g.* lettuce and sugar beets) are required to be consumed in order to reach levels of concern for smaller birds and mammals because the surface of these seeds have higher concentrations of active ingredient (a.i.) applied. Also, these smaller seeds are easier for small birds and mammals to consume because of their small size. However, larger seeds (*e.g*. corn and soybean) pose far lower risks to birds and mammals because lower concentrations of a.i. are applied to the seed surface. Also, the larger size of these seeds prevents smaller birds and mammals from consuming them.

Acute and chronic risks of concern to freshwater invertebrates for imidacloprid were identified for both agricultural and non-agricultural soil, foliar, and combined application method uses. All uses associated with foliar spray and combination application methods showed the potential for acute and chronic risks to freshwater invertebrates.

For terrestrial invertebrates, the primary routes of exposure assessed include contact of bees with spray droplets and oral ingestion via pollen and nectar. Additionally, exposure can

occur from seed treatment dust. Exposure can vary based on use patterns and the attractiveness of a treated crop.

For terrestrial plants, available data indicate they are not sensitive to imidacloprid up to 2X its maximum single foliar application rate of 0.25 lb a.i./A. Therefore, exposure modeling (and risk estimation) for terrestrial plants was not conducted.

The EPA conducted a number of use site-specific benefits assessments for the neonicotinoids as a pesticide class. Each assessment considered the advantages of the individual neonicotinoid active ingredients, including their use in targeting particular pests, average application rates, acres treated, and potential alternatives.

The EPA found benefits of usage of imidacloprid includes selective activity, a unique mode of action for resistance management, systemic and translaminar activity, minimal toxicity to most predatory or parasitoid insects, and the capacity to target hard-to-control pests. Imidacloprid usage suggests it provides superior control of aphids and whitefly. Alternatives to imidacloprid, depending on the crop or use site and target pest, include organophosphates, pyrethroids, and carbamates, as well as alternative nitroguanidine and chloropyridinyl neonicotinoids such as thiamethoxam and acetamiprid, respectively.

EPA recognizes that the neonicotinoids, including imidacloprid, are a key tool for growers that provide unique and effective pest control. However, EPA 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. Various risk mitigation measures are being proposed to address human health risks of concern from imidacloprid to occupational handler and residential post-application scenarios; and ecological risks of concern identified for pollinators, birds, mammals, and to aquatic invertebrates.

Overall, EPA is proposing addressing risk posed by current registered uses of imidacloprid uses through the following risk mitigation measures:

- Cancel residential spray applications to turf, on-farm seed treatment (of canola, millet, and wheat), and use on bulb vegetables;
- Require additional PPE;
- Reduce maximum application rates or restricting applications during pre-bloom and/or bloom, targeting certain uses with potentially higher pollinator risks and lower benefits;
- Preserve the current restrictions for application at-bloom;
- Require advisory language for residential ornamental uses;
- Apply targeted application rate reductions for higher risk uses;
- Require additional spray drift and runoff reduction label language; and,
- Promote voluntary stewardship efforts to encourage employment of best management practices, education, and outreach to applicators and beekeepers.

The EPA will issue a final decision on imidacloprid 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.