

THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS



Department of Agricultural Resources

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TO: Senate and House Clerks and the Joint Committee on Natural Resources and Agriculture
FROM: Taryn LaScola, Director of Crop and Pest Services
DATE: August 29, 2023
REGARDING: Federal Fiscal Year 2022 (October 1st, 2021, through September 30th, 2022) End of Year Report

INTRODUCTION

The Massachusetts Department Agricultural Resources ("MDAR") is the lead state agency for pesticide oversight and regulation in the Commonwealth under the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA") as well as the Massachusetts Pesticide Control Act ([M.G.L. c. 132B](#)) ("[Act](#)") and its regulations promulgated at [333 CMR](#) ("[Regulations](#)"). Pursuant to M.G.L. c. 132B, § 5A, MDAR is required to submit an annual report to Clerks of the Senate and the House of Representatives and the Joint Committee on Natural Resources and Agriculture describing the efforts taken and the progress made toward reducing pesticide use.

The Pesticide Program, which falls under the Division of Crop and Pest Services within MDAR, carries out the day-to-day responsibilities of regulating pesticides in the Commonwealth, including the licensing of pesticide applicators, the registration of pesticide products, and the enforcement of the Act and Regulations. In addition, the Pesticide Program carries out other pesticide related activities in support of the regulatory mandate, such as education, outreach, and water monitoring. The Pesticide Program also acts as support staff for the Pesticide Board, Pesticide Board Subcommittee, Pesticide Applicator Advisory Council, and Conservationist Advisory Council.

While MDAR enforces the Act and Regulations, the following groups are established by law to help support its work:

- **Pesticide Board ("Board"):** Thirteen-member board that is made up of state agencies and members of the public. The Board's role is to advise MDAR on the implementation of the Act and Regulations. It is also the authority on approving any regulatory change. See M.G.L. c. 132B, § 3.
- **Pesticide Board Subcommittee ("Subcommittee"):** Five-member board that is made up of state agencies and members of the public. The Subcommittee registers products for use in the state. See M.G.L. c. 132B, § 3A.
- **Pesticide Applicator Advisory Council:** Five-member advisory board established by the Board and comprised of individuals in the pesticide industry. Its role is to advise the Board relative to the development of policy or the adoption, amendment, or repeal of regulation. See 333 CMR 4.00.
- **Conservationist Advisory Council:** Five-member board established by the Board and comprised of individuals who are experienced in the conservation and protection of the environment. Its role is to advise the Board relative to the development of policy or the adoption, amendment, or repeal of regulation. See 333 CMR 4.00 *et seq.*

Each year, MDAR staff must prioritize where MDAR's efforts should be made. Considerations taken when prioritizing include, but are not limited to, the following:

- Resources (staff and funds);
- Federal Responsibilities;
- Legislative Mandates (state and federal);
- Changes in Regulation;
- Enforcement Trends;
- Complaints (take precedent over routine inspections); and
- Stakeholder/Public Requests and Needs.

COMPLIANCE AND ENFORCEMENT

Enforcement Program

The enforcement program is charged with ensuring that the use—which includes, but is not limited to, the application of pesticides—is performed within the confines of the Act and Regulations as well as FIFRA. In the federal Fiscal Year of 2022 (October 1, 2021, through September 30, 2022), MDAR had the following staff in the enforcement program:

- Pesticide Inspector (3)
- Rights of Way Inspector (1)
- Chief Inspector (1)

Inspectors conduct inspections that include, but are not limited to, the following:

- Record Inspections
- Worker Protection Standard Inspections
- Marketplace Inspections
- Producer Establishment Inspections
- School Inspections
- Use Observations
- Rights of Way Inspections
- Investigations
- License checks
- Dealer Inspections

If violations are found, enforcement actions are issued. Enforcement actions include, but are not limited to, the following:

- Letter of Warning
- Administrative Order
- Notice of Assessments (Fine)
- License Revocation
- License Suspension

Inspections Completed

MDAR continued to monitor pesticide use, storage, sales, and labeling throughout the Commonwealth. Overall, a total of 313 pesticide inspections covering a wide range of pesticide use in the Commonwealth were completed in FY22 (See Tables 1 and 2).

Table 1. FY22 Inspections Projected and Completed

* Worker Protection Standard ("WPS") inspections are reported as a subset of Agricultural Use Inspections.

Inspection Type	Inspections Completed	Physical Samples Collected	Documentary Samples Collected
Agricultural Use	7	0	3
*WPS Tier I	7	0	0
*WPS Tier II	6	0	0
Agricultural Use Follow-up	11	31	0
Non-Ag Use	84	40	5
Non-Ag Use Follow-up	49	43	0
Producer Establishment	4	3	2
Marketplace	69	0	0
Applicator Records	63	0	1
Restricted Use Pesticide Dealer	13	0	0
Total	306	117	11

Table 2. FY22 Enforcement Actions

Inspection Type	Warning Letter	Fine	Licensing Action	Criminal Action	SSURO	Admin. Hearings	Referrals to EPA	Other
Agricultural Use	0	0	0	0	0	0	0	0
Agricultural Use Follow-up	0	1	0	0	0	0	0	3
Non-Ag Use	4	2	0	0	0	0	0	0
Non-Ag Use Follow-up	34	3	0	0	0	0	1	2
Producer Establishment	0	0	0	0	0	0	0	0
Marketplace	0	0	0	0	0	0	0	0
Applicator Records	9	0	0	0	0	0	0	0
Restricted Use Pesticide Dealer	0	0	0	0	0	0	0	2
Total	47	6	0	0	0	0	1	7

Compliance Verification was documented by three methods:

1. First, a re-inspection of the violating firm within time constraints set forth in the specific Letter of Warning or Administrative Order issued;

2. Next, the Pesticide Program sends a written document describing any and all documented violations to a firm which has been found to be out of compliance. This document contains a statement that describes how and when compliance was attained and is signed by the respondent and notarized; and
3. Finally, the receipt of payment for case assessed fines. There were 6 case assessed fines during FY22.

Rights of Way (ROW) Program

333 CMR 11.00 provides requirements relative to applications of herbicides to manage ROW. It requires that Vegetation Management Plans (“VMP”) and Yearly Operational Plans (“YOP”) be developed and submitted to the MDAR for review and approval.

The ROW Program received forty YOPs. YOPs consist of the product name(s), rates and use amounts of pesticides to be applied along a specific Right of Way. It also identifies the individual areas to be applied to, and as applicable, the identification of “sensitive areas” (as defined in 333 CMR 11.00) where limits or prohibitions in application practices are warranted. The plans are reviewed and, if needed, comments and/or edits are made by the ROW Coordinator. This process closed with the acceptance of forty finalized YOPs.

Vegetation Management Plans (“VMP”) provide a comprehensive overview of vegetation control for a given Right of Way. VMPs describe potential methods of vegetation control which may include the following: herbicides; mechanical and biological methods; or a combination of the three. Integrated Pest Management (“IPM”) and—in the case of ROWs—Integrated Vegetation Management (“IVM”) play a prominent role in the MDAR ROW Program. As such, the IPM-IVM approach for the specific ROW is outlined in the VMP and the YOP. The VMPs are valid for five years, and then the plan process must start over again. A proposed VMP is part of the public record for the Commonwealth, and comments are sought in written format as well as at public hearings held in areas traversed by the Right of Way. For FY22, 11 VMPs were reviewed by the ROW Advisory Panel and MDAR staff and approved by the Commissioner in accordance with 333 CMR 11.00.

Pesticides and Bees/Pollinators

The Pesticide Inspectors work closely with the Apiary Inspectors when following up on allegations of pesticide related bee kills. The Apiary Program will vet the call first to determine if a pesticide may be the cause of the issue. If they believe it is, then they will reach out to the Pesticide Inspectors and begin following up on the complaint together.

The Apiary Program received 20 alleged pesticide complaints. After initial vetting, five were followed up on. Samples were collected, and pesticides showed positive in three instances. Of the three positives, the cause of the bee kill was determined to be due to pesticides in two. The origin of the pesticide was not able to be determined.

Pesticide application pollinator outreach was conducted during FY22. Approximately five trainings either had pollinator topics in the presentation or consisted solely of a pollinator presentation. MDAR will continue to provide this outreach to applicators across the use spectrum.

PRODUCT REGISTRATION AND PESTICIDE LICENSING

Pesticide Product Registration

Any person who has obtained a pesticide product registration from the EPA must then apply for a registration with MDAR. The registrant, or an agent acting on behalf of the registrant, is required to submit an “Application for New Pesticide Registration,” a Material Safety Data Sheet (“MSDS”), and a product label. New products are usually registered by the Subcommittee on a monthly basis. Every product label is thoroughly reviewed for compliance with state and federal laws and then brought to the Subcommittee for consideration.

- **State Restricted Use Pesticide (“SRUP”) classification:** A Federal General Use pesticide product registered by the Commonwealth may be classified as either general use or reclassified as State Restricted Use based upon its use pattern or the potential to become a groundwater contaminant.
- **Special Local Needs (“SLN”) registration:** When a particular agricultural problem exists that can only be mitigated through the use of a pesticide that is not federally registered for that specific purpose, a Special Local Need registration may be issued by the state under Section 24c of FIFRA.
- **Experimental Use Permits (“EUP”):** EUPs are required to control potential hazards of pesticide with experimentation under outdoors, greenhouse, and domestic animal trial conditions. To obtain such a permit, a state application must be filed with the Subcommittee along with a product label, and a copy of the EPA EUP.

During FY22 there were 736 new products registered, with ten of those containing new active ingredients.

On July 1, 2022, all products containing neonicotinoids that are labeled for lawn/turf, tree/shrub, or vegetable gardens were classified as SRUPs. This is a result from the Subcommittee’s review of neonicotinoids in accordance with a legislative mandate.

Groundwater

As part of its pesticide registration process, MDAR has an on-going program to assess the potential for pesticides to impact groundwater. Pesticides, which are considered to potentially impact water resources, are restricted. The use of these chemicals in recharge areas to public water supplies is greatly limited. During FY22, MDAR staff conducted groundwater exposure assessments for three new active ingredients (“NAIs”) that were registered by the Subcommittee. The new active ingredients registered were assessed for ground water exposure and included the chemicals tetraniliprole, fluindapyr, natamycin, 1-aminocyclo-propanecarboxylic acid, picarbutrazox, and flasulfuron. New biopesticide pesticide active ingredients were *Bacillus subtilis* strain RTI477 / *Bacillus velezensis* strain RTI301, *Bacillus licheniformis* strain FMCH001 / *Bacillus subtilis* strain FMCH002, and *Bacillus amyloliquefaciens*, strain PTA-4838.

The evaluation of new active ingredients and re-evaluation of registered active ingredients include the assessment of their potential to cause groundwater contamination based on criteria for “Toxicological Concern” and “Leaching Potential” as defined in 333 CMR 12.02.¹ None of these new active ingredients were classified as a “potential groundwater contaminant.”

¹ 333 CMR 12.00 Protection of Groundwater Sources of Public Drinking Water from Non-Point Source Pesticide Contamination. 12.02 Definitions:

Leaching Potential refers to a pesticide which meets or exceeds the following criteria based upon the most conservative data and information published in the US EPA Environmental Fate and Groundwater Branch Pesticide Fate One-Line Summaries:

- (a) Water solubility greater than or equal to 3 ppm, or;
- (b) K_{oc} less than or equal to 1900, or;
- (c) K_D less than or equal to 20 in the absence of a reported K_{oc} value, and;
- (d) Soil half-life greater than or equal to seven days.

An absent or missing reported criterion will be considered as meeting or exceeding the criteria value.

Potential Groundwater Contaminant refers to a pesticide which meets the definitions of "Toxicological Concern" and "Leaching Potential".

Toxicological Concern refers to a pesticide which meets or exceeds of the following criteria:

- (a) Lifetime Maximum Contaminant Level (MCL), Proposed Maximum Contaminant Level (pMCL), MassDEP Office of Research and Standards (ORS) Guidelines, or Health Advisory Level (HAL) less than or equal to 20 ppb; or
- (b) US EPA classification as a known or probable human carcinogen, categories A, B1 or B2.

PESTICIDE LICENSING

If an individual is going to use a pesticide on property that is not their own, a Massachusetts Pesticide License is required. MDAR offers the following applicator licenses:

- Commercial Applicator License, allowing the licensee to:
 - Apply a general use pesticide; and
 - Apply a restricted use pesticide under the direct supervision of an individual with the appropriate Commercial Certification;
- Commercial Certification License, allowing the licensee to:
 - Apply general and restricted use pesticides; and
 - Supervise the use of a SRUP.

To obtain a pesticide license from MDAR, an individual must take and pass an exam, provide proof of insurance, renew every year, and obtain Continuing Education Units (“CEUs”) within a three-year period.

Out of these 2,672 exams taken, 1,738 received a passing score and were offered the opportunity to apply for a license or certification to be issued by MDAR. Overall, during FY22, there were approximately 10,000 licensed applicators in the state.

MDAR has begun to update the licensing regulations in 333 CMR 10.00 to obtain compliance with the Federal Certification and Training Rule set forth in FIFRA. MDAR also is updating the Dealer regulation at 333 CMR 9.00 and the Protection of Children and Families (i.e., school) regulation at 333 CMR 14.00. Public hearings for the regulations will be held in FY23.

EDUCATION AND OUTREACH

While continuing education is part of the requirement for an individual to hold and maintain their pesticide license, MDAR does not provide the education. Outside entities such as academia and industry provide trainings that offer the CEUs. For a training to qualify for a CEU, the training provider must fill out a form and request a CEU. The training is reviewed by MDAR staff to ensure that it meets the requirements set forth in 333 CMR 10.00. These trainings are audited by staff to ensure that the training information that was submitted was the training that was provided.

In FY22 there were approximately 640 programs approved or reapproved for Massachusetts Pesticide Applicator Continuing Education (“PACE”) credit hours by MDAR. The types of programs approved for PACE credit hours include the following:

- Approximately 180 livestreaming interactive / virtual classroom online trainings—approved and/or reapproved;
- Approximately 300 “on-demand” or continuously available online trainings—approved and/or reapproved; and
- Approximately 160 traditional, in-person workshop / classroom trainings—approved and/or re-approved.

Many times, the entities providing the training will contact MDAR staff to present on various items such as laws/regulation, pollinator concerns, and chemistry/toxicology, and so on. When this occurs, MDAR takes every measure to ensure that an individual is able to present. MDAR attended/presented eight events during FY22.

It should be noted that the request for MDAR to provide presentations continues to be much lower than pre-COVID years and is expected to rise for FY23.

CONCLUSION

As an agency responsible for both state and federal law oversight and enforcement throughout the Commonwealth, MDAR utilizes its resources as efficiently and effectively as possible while recognizing the challenges that may impact what can be accomplished each year. MDAR is pleased to meet its charge of ensuring compliance with the Act and Regulations and will continue to prioritize its efforts and focuses based on the resources it has, the mandates it must enforce through state authority, and the direction from EPA.