

Memorandum

To: Glyphosate Commission

From: MDAR and MassDEP Staff¹

Re: Potential Review of DAR's Pesticide Use Reports

Date: December 8, 2022

Background

During the September 15, 2022, meeting of the Glyphosate Commission, the Commission recommended that the Massachusetts Department of Agricultural Resources ("MDAR") and Massachusetts Department of Environmental Protection ("MassDEP") meet to discuss MDAR's Pesticide Use Reports ("Use Reports"). This stemmed from a discussion regarding the fact that in Phase II of the scientific review, ERG is trying to determine how much glyphosate is being used in the state, and extrapolating data from the Pesticide Use Reports ("Use Reports") could be a source of usage information.

MDAR Use Reports are required to be submitted by all licensed applicators. The Use Reports indicate which and how much pesticides were used for the previous year by the individual/company. The reports are submitted by either the individual licensed applicator or the company which used pesticides. The reports include the following information:

- Name of company
- Name of licensed individuals and license numbers
- Product name and EPA registration number
- Method of application
- Site treated (ie: crop, turf, structural)
- Amount used

Use Reports forms are sent out hard copy to individual licensed applicators during March and are required to be submitted by the end of May. MDAR receives approximately 1500-2000 hard copy Use Reports every year. The Use Reports are then filed. Due to lack of resources, they are not entered into a database.

In order for ERG to evaluate the amount of glyphosate usage in the state using MDAR Use Reports, each Use Report would need to be reviewed in hardcopy. When reviewing the Use Reports, the reviewer would need to determine which products reported (if any) contained the active ingredient glyphosate and its concentration. With hundreds of registered products with glyphosate as the active ingredient, this would be time consuming and costly. ERG estimated at the September 15, 2022 Commission meeting that if each Report was reviewed for an hour to compile this information the effort would require 2000 hours of time and exceed the project budget. The Commission asked the staff from MDAR

¹ Staff from MDAR and MassDEP that participated in the discussion included Taryn LaScola, Hotze Wijnja, C. Mark Smith and Ann Lowery.

and MassDEP to meet and consider if there was a method of analyzing a subset of Reports, or somehow to efficiently garner useful information from these Reports.

Alternative Options

MDAR and MassDEP met to discuss the possibilities of obtaining information from the Use Reports in their current format. The following possibilities and methods were discussed:

- Separating the Use Reports by industry
- Reviewing a subset of the Use Reports
- Entering the data in an excel spreadsheet

Separating the Use Reports by Industry

Generally speaking, the Use Reports may be able to be broken down by five major industries/uses: Lawn care, Turf/Shade Tree/Ornamental, Municipal, Agriculture, and Structural Pest Control. MDAR could go through the Use Reports to separate out the reports by determining which industry the company falls within based on name, products used and uses listed on the report. This would still leave a large number of reports for ERG to review. Given the fact that four out of the five industries may use herbicides and it would still take a large number of resources to go through all of the reports, this option does not seem viable, given available MDAR staff time and the available budget for ERG.

Reviewing a Subset of Use Reports

It was suggested that a percentage of the Use Reports be reviewed. For example, a subset of Reports could be selected and analyzed with the goal of extrapolating general conclusions to the entire registered user community. However, given the fact that not all industries or registered applicators use herbicides and, in many cases, "No Use" is reported, it was determined that identifying appropriate subsets that would yield generalizable data across the whole groups was not realistic without considerable additional statistical analyses.

Entering Data into an Excel Spreadsheet

Given the fact that MDAR does not have staff that can devote a significant amount of time to developing a spreadsheet and entering all Use Report data as well as the timeline in which the review needs to be completed for consideration in the Phase II Report, this is not an option.

Conclusion

While MDAR and MassDEP recognize that the information from the Use Reports might be helpful for the scientific review, the agencies do not believe that there is a feasible way to extract the data in a way that would be scientifically meaningful, significant, and helpful to the review. Additionally, it should be noted that although it is not state specific, ERG has found general use data that will be evaluated, and this data is likely to be indicative of overall use in MA.