



MARYLAND PESTICIDE NEWS

(March 2023)



Welcome to the second Maryland Pesticide Newsletter! The express purpose of the newsletter is to share proposed and upcoming changes to pesticide regulations; the information provided does not supersede existing pesticide labels and regulations. If you would like to receive this newsletter or have any questions about it, please email Niranjana Krishnan nkrish@umd.edu

1. Accelerated action on four organophosphate pesticides

In March 2023, the Environmental Protection Agency (EPA) announced they are expediting protection for handlers, applicators, and bystanders who are likely to be exposed to four organophosphates (OPs)—diazinon, ethoprop, tribufos, and phosmet—several years ahead of their registration review schedule (see glossary for definition).

- The four OPs are primarily used in agricultural settings (e.g., fruit and nut trees, vegetables and herbs, cotton). In Maryland, ~3400 lbs of diazinon and ~640 lbs of phosmet were used in 2020.
- For all four OPs, potential health risks were identified for workers who mix, load, and apply the pesticide, and to bystanders (including farmworkers) who could be exposed to spray drift. Additionally, for phosmet, risk was also identified for workers conducting certain post-application activities (e.g., weeding, hand harvesting, workers reentering treated areas).
- The EPA is currently meeting with the pesticide registrants to identify ways to mitigate risks. This could include cancellation of uses and formulation types, prohibition of application methods, increased use of personal protective equipment (gloves, respirators, coveralls, etc.), spray drift reductions, and restrictions on reentry into treated fields and performance of post-application activities.
- The EPA is asking registrants to amend the pesticide labels to reflect the new mitigation measures and is preparing to expedite review of the labels to implement protections as quickly as possible. The EPA is not seeking public comments.

Reference: <https://www.epa.gov/newsreleases/epa-announces-accelerated-action-four-organophosphate-pesticides-based-updated>

2. Draft biological opinion published for carbaryl and methomyl insecticides

In March 2023, the National Marine Fisheries Service issued a draft biological opinion (see glossary for definition) for pesticide products containing carbaryl and methomyl and determined that they are likely to jeopardize 37 and 30 listed (endangered/threatened) species, respectively, and adversely modify 36 and 29 critical habitats (specific areas essential to the conservation of listed species), respectively.

- The biological opinion describes measures to avoid jeopardy to the listed species and their critical habitats. These measures include:
 - a) providing a flexible list of chemical-specific measures to reduce pesticide loading into aquatic habitats,

- b) reporting of label compliance monitoring (i.e., reporting of inspections on pesticide use, Worker Protection Standard compliance, etc.),
 - c) incorporating information in the label on reporting ecological incidents.
- While both carbaryl and methomyl are used in Maryland, the measures are unlikely to have huge impacts in the state. This is because only two listed species –the Chesapeake Bay and New York Bight population segments of the Atlantic Sturgeon– have ranges in Maryland. They originate from rivers that drain into the Chesapeake Bay and coastal waters at the Delaware-Maryland border at Fenwick Island.
- Public comments are being sought until May 15, 2023.

Reference: <https://www.epa.gov/pesticides/epa-posts-draft-biological-opinion-carbaryl-and-methomyl-public-comment>

3. Potential pesticide testing requirements for PFAS (Maryland-specific)

In January and February 2023, two bills (SB0158 and HB0319) were introduced in the Maryland Senate and House prohibiting pesticide products from being registered in the state unless the pesticide distributor submits a) test results indicating the product passed a PFAS test and b) an affidavit attesting to the legitimacy of the PFAS test results (see glossary for definition of PFAS). The bills are being heard in both chambers and state:

- A pesticide product has passed the PFAS test if the sum of the concentration of PFAS analytes are less than 100 parts per trillion (or 100 ng/L) and the total organic fluorine concentration is less than 10 parts per billion (or 10 µg/L).
- The testing must be conducted using conventional and validated methods by a laboratory that has either been identified by the Maryland Department of Environment as capable of PFAS testing or is used by the EPA for PFAS testing.
- All pesticide products used against mosquitoes must comply with the new regulations beginning January 1, 2024; all remaining pesticide products must comply with these regulations beginning January 1, 2026.

References:

<https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/sb0158?ys=2023RS>

<https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/HB0319?ys=2023RS>

Glossary:

- 1) Registration review – A process that requires the Environmental Protection Agency to reevaluate the risk of pesticides every 15 years to ensure they continue causing no unreasonable adverse effects to human health or the environment.
- 2) Biological opinion – These are prepared by the Fish and Wildlife Service and National Marine Fisheries Service to analyze the effects of proposed actions by federal agencies to listed species and/or critical habitat. It also includes conservation recommendations and risk mitigation measures to further the recovery of listed species.
- 3) PFAS (perfluoroalkyl and polyfluoroalkyl substances) – They are a class of fluorinated compounds that do not degrade easily and are found in many products and matrices. Exposure to certain PFAS compounds can adversely affect human health.