



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF AGRICULTURE  
AND RURAL DEVELOPMENT

GARY MCDOWELL  
DIRECTOR

## **Proposed Administrative Order Classifying Methomyl as a Restricted Use Pesticide**

This **PROPOSED** action is being taken under authority granted by the Natural Resources and Environmental Protection Act, Part 83 Pesticide Control, Public Act 451 of 1994, Section 8322(2)(a), (MCL 324.8322(2)(a)), as amended, which states:

In addition to any other authority provided by this part, the director, by administrative order, may classify a pesticide as a restricted use pesticide in accordance with any 1 of the restrictive criteria in 40C.F.R. 152.170.

The Michigan Department of Agriculture and Rural Development (MDARD) is charged under Part 83 with many functions, including oversight on the registration and licensing of pesticides and those who apply them in order to protect the public health and environment.

### **BACKGROUND ON METHOMYL**

Methomyl is a carbamate insecticide first registered for use in the United States in 1968. Because of its high acute toxicity, the US Environmental Protection Agency (EPA) classifies all methomyl products as restricted use pesticides, except for fly bait products containing 1% or less methomyl, which are classified as general use. Restricted use pesticides are those pesticides classified for restricted use by the EPA or the director because of their toxicity or other safety reasons and may only be sold or applied by those with specialized training.

The following methomyl products are currently registered with MDARD:

- Dupont Lannate SP Insecticide (EPA Reg. No. 352-342)
- Dupont Lannate LV Insecticide (EPA Reg. No. 352-384)
- M1 LV Insecticide (EPA Reg. No. 352-384-85588)
- M1 SP Insecticide (EPA Reg. No. 352-342-85588)
- Annihilate LV (EPA Reg. No. 400-597),
- Annihilate LV (EPA Reg. No. 400-597)
- Corrida 90 WSP (EPA Reg. No. 82557-3)
- Nudrin LV (EPA Reg. No. 83100-27-83979)
- Nudrin SP (EPA Reg. No. 83100-28-83979)
- Starbar Golden Malrin Fly Bait (EPA Reg. No. 2724-274).

Starbar Golden Malrin Fly Bait (EPA Reg. No. 2724-274), is the only methomyl product currently registered by MDARD that is not already classified as restricted use.

## HISTORY OF MISUSE

In 2015, after being presented with evidence of widespread misuse of methomyl-based fly baits, EPA required packaging and labeling changes to methomyl fly bait products. The changes were intended to reduce the misuse of the products against wildlife and domestic animals.

Despite the packaging and label updates required by EPA in 2015, MDARD continues to receive complaints and find evidence of widespread misuse of methomyl fly bait products.

Because general use pesticides such as Starbar Golden Malrin Fly Bait may be purchased and used by the general public, there is no mechanism in place to identify who purchases these chemicals. As such, MDARD is often unable to solve cases or take enforcement action against individuals who misuse methomyl fly baits.

Restricted use pesticides may only be purchased by certified pesticide applicators and may only be sold by individuals holding a restricted use pesticide dealer license. Additionally, all sales of restricted use pesticides are reported to MDARD.

In 2010, a bald eagle in the Upper Peninsula was poisoned to death after feeding on a deer carcass that was treated with methomyl fly bait. MDARD's investigation was not able to positively identify the person that misused the fly bait. Investigators suspect the treated deer carcass was intended to kill wolves.

In 2010, MDARD conducted an undercover investigation at more than 40 agricultural pesticide retailers. MDARD found more than 25% of the stores recommended the misuse of methomyl fly bait to control nuisance animals such as opossums and raccoons.

In 2016, the Michigan Department of Natural Resources (MDNR) lab confirmed an opossum from Ingham County was poisoned to death by a mixture of methomyl fly bait and soda. MDARD investigated the matter but was unable to positively identify the source of the methomyl.

In 2017, a dog in Alcona County was poisoned to death after consuming methomyl fly bait. MDARD investigated the matter but was unable to positively identify the source of the methomyl. Investigators strongly suspect the dog owner's husband accidentally killed the dog while using methomyl fly bait to control raccoons.

In 2017, MDNR took enforcement action against a farmer that misused methomyl fly bait to poison raccoons.

In 2018, a large food distribution company misused methomyl fly bait and soda to control raccoons in their warehouse. An MDARD investigation identified methomyl residue application on food packages/containers destined for human consumption, resulting in a seizure and destruction of those products.

In 2020, a dog in Alpena County was poisoned to death by methomyl. MDARD investigated the matter but was unable to positively identify the source of the methomyl. Investigators believe the dog consumed methomyl fly bait a neighbor was illegally using to control raccoons.

In 2021, a dog in Monroe County was poisoned to death by methomyl fly bait. Both MDARD and the County Sheriff investigated the matter but were unable to positively identify the source of the methomyl. Investigators strongly believe a neighbor purposely poisoned the dog with methomyl fly bait.

## CONCLUSION and ORDER

MDARD believes classifying all formulations of methomyl pesticides as restricted use will: maintain the availability of the chemical for those who wish to properly use it; protect human health and the environment by ensuring only those individuals knowledgeable about proper pesticide use can purchase the chemical; help MDARD more effectively investigate misuse of methomyl fly bait products.

There are several effective alternative fly bait products that are less toxic to non-target species and are not classified as restricted use.

Therefore, by the authority granted to Director McDowell in MCL 324.8322(2)(a) and in accordance with 40 CFR 152.170,

- (a) **General criteria.** *An end-use product will be restricted to use by certified applicators (or persons under their direct supervision) if the Agency determines that:*
- (1) Its toxicity exceeds one or more of the specific hazard criteria in paragraph (b) or (c) of this section, or evidence described in paragraph (d) of this section substantiates that the product or use poses a serious hazard that may be mitigated by restricting its use;*
  - (2) Its labeling, when considered according to the factors in paragraph (e)(2) of this section, is not adequate to mitigate these hazard(s);*
  - (3) Restriction of the product would decrease the risk of adverse effects; and*
  - (4) The decrease in risks of the pesticide as a result of restriction would exceed the decrease in benefits.*

**(c) Criteria for hazard to non-target species -**

*(1) (iv) Under conditions of label use or widespread and commonly recognized practice, the pesticide may cause discernible adverse effects on non-target organisms, such as significant mortality or effects on the physiology, growth, population levels or reproduction rates of such organisms, resulting from direct or indirect exposure to the pesticide, its metabolites or its degradation products.*

**(d) Other evidence.** *The Agency may also consider evidence such as field studies, use history, accident data, monitoring data, or other pertinent evidence in deciding whether the product or use may pose a serious hazard to man or the environment that can reasonably be mitigated by restricted use classification.*

**(e) Alternative labeling language.**

*(1) If the Agency determines that a product meets one or more of the criteria of paragraphs (b) or (c) of this section, or if other evidence identified in paragraph (d) of this section leads the Agency to conclude that the product should be considered for restricted use classification, the Agency will then determine if additional labeling language would be adequate to mitigate the identified hazard(s) without restricted use classification. If the labeling language meets all the criteria specified in paragraph (e)(2) of this section, the product will not be classified for restricted use.*

*(2) (v) Widespread and commonly recognized practices of use would not nullify or detract from label directions such that unreasonable adverse effects on the environment might occur.*

All formulations of methomyl should be classified as restricted use in the state of Michigan.

Based on evidence of widespread misuse and to protect human health and the environment, MDARD Director McDowell intends to issue an order classifying all methomyl pesticides as restricted use. Under MCL 324.8322(3), this proposed order must be available for a 30-day public comment and review period. This period shall begin on December 14, 2021 and run through January 14, 2022. Those wishing to comment on this proposed administrative order should send comments to [MDARD-Pesticide@michigan.gov](mailto:MDARD-Pesticide@michigan.gov). The deadline for comments is January 14, 2022.