

Appendix A: Definitions and Acronyms (25-PE)

a. Definitions

Action Threshold - the point at which pest populations or environmental conditions can no longer be tolerated necessitating that pest control action be taken based on economic, human health, aesthetic, or other effects. Sighting a single pest does not always mean control is needed. Action thresholds help determine both the need for control actions and the proper timing of such actions. Action thresholds are site specific and part of the pest management practices decisions.

Active Ingredient - any substance (or group of structurally similar substances if specified by the Department) that will prevent, destroy, repel or mitigate any pest, or that functions as a plant regulator, desiccant, or defoliant within the meaning of FIFRA sec. 2(a). [40 CFR 152.3] Active ingredient also means a pesticidal substance that is intended to be produced and used in a living plant, or in the produce thereof, and the genetic material necessary for the production of such a pesticidal substance. [40 CFR 174.3].

Adverse Incident - an incident that the operator has observed upon inspection or of which otherwise becomes aware, in which there is evidence that:

1. A person or non-target organism may have been exposed to a pesticide residue, and
2. The person or non-target organism suffered a toxic or adverse effect.

The phrase “toxic or adverse effects” includes effects that occur within waters of this State on non-target plants, fish or wildlife that are unusual or unexpected (e.g., effects are to organisms not otherwise described on the pesticide product label or otherwise not expected to be present) as a result of exposure to a pesticide residue, and may include:

- a. Distressed or dead juvenile and small fishes
- b. Washed up or floating fish
- c. Fish swimming abnormally or erratically
- d. Fish lying lethargically at water surface or in shallow water
- e. Fish that are listless or nonresponsive to disturbance
- f. Stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants
- g. Other dead or visibly distressed non-target aquatic organisms (amphibians, turtles, invertebrates, etc.)

The phrase, “toxic or adverse effects,” also includes any adverse effects to humans (e.g., skin rashes) or domesticated animals or wildlife (e.g., vomiting, lethargy) that occur either directly or indirectly from a discharge to waters of this State that are temporally and spatially related to exposure to a pesticide residue.

Annual Treatment Area Threshold – an area (in acres) in a calendar year to which a Decision-maker is authorizing and/or performing pesticide applications in that area for activities covered under this permit.

- For calculating annual treatment areas for Mosquitoes and Other Flying Insect Pest Control and Forest Canopy Pest for comparing with any threshold in Table 1, count each pesticide application activity to a treatment area (i.e., that area where a pesticide application is intended to provide pesticidal benefits within the pest management area) as a separate area treated. For example, applying pesticides three times a year to the same 3,000 acre site should be counted as 9,000 acres of treatment area for purposes of determining if such an application exceeds an annual treatment area threshold. The treatment area for these two pesticide use patterns is additive over the calendar year.

- For calculating annual treatment areas for Weed and Algae Control and Animal Pest Control for comparing with any threshold in Table 1, calculations should include either the linear extent times 10 feet buffer for shoreline applications or the surface area of waters for applications made to waters of this State or at water's edge adjacent to waters of this State. For calculating the annual treatment area, count each treatment area only once, regardless of the number of pesticide application activities performed on that area in a given year.

Applicator – any entity who performs the application of a pesticide or who has day-to-day control of the application (i.e., they are authorized to direct workers to carry out those activities) that results in a discharge to waters of this State. *[there is a relationship to Operator and Decision-maker in this Appendix]*

Biological Control Agents - organisms that can be introduced to sites, such as herbivores, predators, parasites, and hyperparasites.

Biological Pesticides (also called biopesticides) - include microbial pesticides, biochemical pesticides and plant-incorporated protectants (PIP). Microbial pesticide means a microbial agent intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or dessicant, that (1) is a eucaryotic microorganism including, but not limited to, protozoa, algae, and fungi; (2) is a procaryotic microorganism, including, but not limited to, Eubacteria and Archaeobacteria; or (3) is a parasitically replicating microscopic element, including but not limited to, viruses. [40 CFR 158.2100(b)] Biochemical pesticide mean a pesticide that (1) is a naturally-occurring substance or structurally-similar and functionally identical to a naturally-occurring substance; (2) has a history of exposure to humans and the environment demonstrating minimal toxicity, or in the case of a synthetically-derived biochemical pesticides, is equivalent to a naturally-occurring substance that has such a history; and (3) Has a non-toxic mode of action to the target pest(s). [40 CFR 158.2000(a)(1)] Plant-incorporated protectant means a pesticidal substance that is intended to be produced and used in a living plant, or in the produce thereof, and the genetic material necessary for production of such a pesticidal substance. It also includes any inert ingredient contained in the plant, or produce thereof.

Buffer Management Plan - a required document, which must be approved through the offices of the Critical Area Commission, for work with-in the Critical Area [COMAR 27.01.09.01-3].

Chemical Pesticides - all pesticides not otherwise classified as biological pesticides.

Colorant - dyes, often considered non-toxic, which have an effect of shading waters to reduce the growth of algae or other plants requiring sun for photosynthesis.

Consultation - is the process required under Section 7 of the Endangered Species Act (ESA) in which federal agencies must ensure that their actions do not jeopardize the continued existence of federally listed threatened or endangered species or result in the destruction or adverse modification of designated critical habitat. The process may be conducted through informal or formal consultation depending on the potential impacts of the proposed action.

- Informal consultation is an early stage process that may involve using available tools such as state databases or mapping applications to identify Sensitive Species Project Review Areas, to determine whether the proposed action is likely to have no effect or may affect listed species or habitats.

- Formal consultation is required if the proposed action is likely to adversely affect listed species or designated critical habitat, and will require a biological opinion from the agency.

Cultural Methods - manipulation of the habitat to increase pest mortality by making the habitat less suitable to the pest.

Critical Area - a defined buffer defined under the Critical Area Act, passed in 1984, created to address the impacts of land development on habitat and aquatic resources. The act also created a "Critical Area Commission" responsible to:

- Review and approve State projects on State-owned land in the Critical Area;
- Review and approve State or local agency actions resulting in major development on private lands or lands owned by local jurisdictions; and
- Review and approve all changes to a jurisdiction's Critical Area Program, including changes to ordinances, regulations, and maps. (refer to Md. Code Ann., Natural Resources § 8–18)

Decision-maker - any entity with control over the decision to perform pesticide applications including the ability to modify those decisions that result in a discharge to waters of this State. *[there is a relationship to Operator and Applicator in this Appendix]*

Decision-maker Who is or Will be Required to Submit an NOI – any Decision-maker covered under this permit who knows or should have known that an NOI will be required for those discharges beginning on the effective date of the permit.

Declared Pest Emergency Situation - an event defined by a public declaration by a federal agency, state, or local government of a pest problem determined to require control through application of a pesticide beginning less than ten days after identification of the need for pest control. This public declaration may be based on:

3. Significant risk to human health;
4. Significant economic loss; or
5. Significant risk to:
 - a. Endangered species,
 - b. Threatened species,
 - c. Beneficial organisms, or
 - d. the environment.

Degradate - to cause, or to undergo degradation. For example, application of the pesticide copper sulfate to a waterbody impaired for either copper or sulfates would not be eligible for coverage under this permit, because copper sulfate can degrade into these two substances. Copper and sulfate are degradates of copper sulfate.

Desirable Species - the rare or important species to Maryland as determined by MD DNR, which includes "threatened species", "endangered species", "species in need of conservation", species of management concern, and the "critical habitat" required by these species.

Discharge - the (a) addition, introduction, leaking, spilling, or emitting of a Pollutant into the waters of this State; or (b) placing of a Pollutant in a location where the Pollutant is likely to pollute. Md. Code Ann., Envir. §§ 9-101(b), 9-322.

Discharges to waters of this State from: pesticide application, the use of toxic substances for aquatic life management, and the use of colorants - means the discharges from point sources to waters of this State that result from: the application of biological pesticides, the application of chemical pesticides that leave a residue, the use of toxic substances for aquatic life management, and from the use of colorants. In the context of this definition of discharges does not include agricultural storm water discharges and return flows from irrigated agriculture, which are excluded by law (33 U.S.C. 1342(l); 33 U.S.C. 1362(14)). [40 CFR 122.2]

EJ Score – for purposes of this permit, this environmental justice score is obtained by using the EJ Screen Tool Map found on MDE’s website, and obtaining the “Final EJ Score Percentile” for a facility’s location. Md. Code Ann., Envir. § 1–602(a)(2).

Endangered species - a species whose continued existence as a viable component of the State's flora or fauna is determined to be in jeopardy, in accordance with the federal Endangered Species Act of 1973, 16 U.S.C. §§1531—1543, Natural Resources Article, §4-2A-01 or 10-2A-01 through 10-2A-09, Annotated Code of Maryland, and COMAR 08.03.08.

Facility or Activity - any NPDES “point source” (including land or appurtenances thereto) that is subject to regulation under the NPDES program (See 40 CFR § 122.2) or TMP state regulation (see COMAR 26.08.03.02).

For-Hire Applicator - persons who make contractual pesticide applications for which they or their employer receives compensation (e.g., lawn care firms, pest control companies).

General permit - a discharge permit issued for a class of dischargers.

Impaired Water – a body of water identified by the Department or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called “water quality limited segments” under 40 CFR § 30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established. Impaired waters compilations are included in Maryland’s most current list of impaired surface waters as category 4a, 4b, 4c or 5 waterbodies.

Includes or including - includes or including by way of illustration and not by way of limitation.

Inert Ingredient - any substance (or group of structurally similar substances if designated by the Agency), other than an active ingredient, that is intentionally included in a pesticide product, [40 CFR 152.3] Inert ingredient also means any substance, such as a selectable marker, other than the active ingredient, where the substance is used to confirm or ensure the presence of the active ingredient, and includes the genetic material necessary for the production of the substance, provided that genetic material is intentionally introduced into a living plant in addition to the active ingredient.

Large Entity - any entity that is not a “small entity.”

Mechanical/Physical Methods - mechanical tools or physical alterations of the environment, for pest prevention or removal.

Minimize - to reduce and/or eliminate pesticide discharges to waters of this State through the use of Pesticide Management Measures to the extent technologically available and economically practicable and achievable.

Natural heritage area - any natural community of species designated in Regulation 08.03.08.10. NOTE: These contain one or more threatened or endangered species or wildlife species

Non-target Organisms - the plant and animal hosts of the target species, the natural enemies of the target species living in the community, and other plants and animals, including vertebrates, living in or near the community that are not the target of the pesticide.

Operator –any entity associated with the application of pesticides which results in a discharge to waters of this State that meets either of the following two criteria:

- (i) any entity who performs the application of a pesticide or who has day-to-day control of the application (*i.e.*, they are authorized to direct workers to carry out those activities); or
- (ii) any entity with control over the decision to perform pesticide applications including the ability to modify those decisions.

[there is a relationship to Applicator and Decision-maker in this Appendix]

Permittee - the person holding a permit issued by the Department, or authorized for coverage under a general permit by the Department.

Person - an individual, receiver, trustee, guardian, personal representative, fiduciary, or representative of any kind, and any partnership, firm, association, corporation or other entity. Person includes the federal government, this State, any county, municipal corporation, or other political subdivision of this State or any of their units. See COMAR 26.08.01.01.

Pest - consistent with 40 CFR 152.5, any organism under circumstances that make it deleterious to man or the environment, if it is:

1. Any vertebrate animal other than man;
2. Any invertebrate animal, including but not limited to, any insect, other arthropod, nematode, or mollusk such as a slug and snail, but excluding any internal parasite of living man or other living animals;
3. Any plant growing where not wanted, including any moss, alga, liverwort, or other plant of any higher order, and any plant part such as a root; or
4. Any fungus, bacterium, virus, or other microorganism, except for those on or in living man or other living animals and those on or in processed food or processed animal feed, beverages, drugs (as defined in FFDCA sec. 201(g)(1)) and cosmetics (as defined in FFDCA sec. 201(i)).

Any organism classified as endangered, threatened, or otherwise protected under federal or state laws is excluded from this definition.

Pest Management Area - the area of land, including any water, for which an Operator has responsibility and is authorized to conduct pest management activities as covered by this permit (e.g., for an Operator who is a mosquito control district, the pest management area is the total area of the district).

Pest Management Measure - any practice used to meet the effluent limitations that comply with manufacturer specifications, industry standards and recommended industry practices related to

the application of pesticides, relevant legal requirements and other provisions that a prudent Operator would implement to reduce and/or eliminate pesticide discharges to waters of this State.

Pesticide - (1) any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, (2) any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant, and (3) any nitrogen stabilizer, except that the term "pesticide" shall not include any article that is a "new animal drug" within the meaning of section 201(w) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(w)), that has been determined by the Secretary of Health and Human Services not to be a new animal drug by a regulation establishing conditions of use for the article, or that is an animal feed within the meaning of section 201(x) of such Act (21 U.S.C. 321(x)) bearing or containing a new animal drug. The term "pesticide" does not include liquid chemical sterilant products (including any sterilant or subordinate disinfectant claims on such products) for use on a critical or semi-critical device, as defined in section 201 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321). For purposes of the preceding sentence, the term "critical device" includes any device that introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body and the term "semi-critical device" includes any device that contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. [FIFRA Section 2(u)]

The term "pesticide" applies to insecticides, herbicides, fungicides, rodenticides, and various other substances used to control pests. The definition encompasses all uses of pesticides authorized under FIFRA including uses authorized under sections 3 (registration), 5 (experimental use permits), 18 (emergency exemptions), 24(c) (special local needs registrations), and 25(b) (exemptions from FIFRA).

Note: drugs used to control diseases of humans or animals (such as livestock and pets) are not considered pesticides; such drugs are regulated by the Food and Drug Administration. Fertilizers, nutrients, and other substances used to promote plant survival and health are not considered plant growth regulators and thus are not pesticides. Biological control agents, except for certain microorganisms, are exempted from regulation under FIFRA. (Biological control agents include beneficial predators such as birds or ladybugs that eat insect pests, parasitic wasps, fish, etc).

This permit uses the term "pesticide" when referring to the "pesticide, as applied." When referring to the chemical in the pesticide product with pesticidal qualities, the permit uses the term "active ingredient."

Pesticide Product - a pesticide in the particular form (including composition, packaging, and labeling) in which the pesticide is, or is intended to be, distributed or sold. The term includes any physical apparatus used to deliver or apply the pesticide if distributed or sold with the pesticide.

Pesticide research and development - activities undertaken on a systematic basis to gain new knowledge (research) and/or the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes (experimental development). These types of activities are generally categorized under the four-digit code of 5417 under the 2007 NAICS.

Pesticide Residue - that portion of a pesticide application that is discharged from a point source to waters of this State and no longer provides pesticidal benefits. It also includes any degradates of the pesticide.

PFAS – Per- and polyfluoroalkyl substances. For this permit, PFAS means the sum of the 40 congeners of PFAS which are included in EPA Test Method 1633 for testing (PFAS).

Point source - any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. [40 CFR 122.2]

Pollutant - dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water. For purposes of this definition, a “biological pesticide” is considered a “biological material,” and any “pesticide residue” resulting from use of a “chemical pesticide” is considered a “chemical waste.” [Excerpted from 40 CFR 122.2].

Small Entity - any (1) private enterprise that does not exceed the Small Business Administration size standard as identified at 13 CFR 121.201, or (2) local government that serves a population of 10,000 or less.

Species in need of conservation - any species determined by the Secretary to be in need of conservation measures for its continued ability to sustain itself successfully.

State discharge permit - a discharge permit issued under the Environment Article, Title 9, Subtitle 3, Annotated Code of Maryland.

Take - to harass, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. See Section 3 of the Endangered Species Act, 16 U.S.C. § 1532 (19).

Target pest - the organism toward which pest control measures are being directed.

Threatened species - a species of flora or fauna which appears likely, within the foreseeable future, to become endangered in accordance with the federal Endangered Species Act of 1973, 16 U.S.C. §§1531—1543, Natural Resources Article, §4-2A-01 or 10-2A-01 through 10-2A-09, Annotated Code of Maryland, and COMAR 08.03.08.

Tier 3 waters - for antidegradation purposes, pursuant to 40 CFR 131.12(a)(3), Tier 3 waters are identified by states or tribes as having high quality waters constituting an Outstanding National Resource Water (ONRW), which may include waters of National Parks and State Parks, wildlife refuges, and waters of exceptional recreational or ecological significance.

Total Maximum Daily Loads (TMDLs) A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. These that are

developed by the State and approved by EPA, or those that are developed by EPA. (See section 303(d) of the Clean Water Act and 40 CFR §§ 130.2 and 130.7).

Toxics Material Permit or TMP - a state issued general or individual permit under COMAR 26.08.03.02, which provide for certain restrictions for “Use of Toxic Substances for Aquatic Life Management Purposes”.

Treatment Area - the entire area, whether over land or water, where a pesticide application is intended to provide pesticidal benefits within the pest management area. In some instances, the treatment area will be larger than the area where pesticides are actually applied. For example, the treatment area for a stationary drip treatment into a canal includes the entire width and length of the canal over which the pesticide is intended to control weeds. Similarly, the treatment area for a lake or marine area is the water surface area where the application is intended to provide pesticidal benefits.

Waters of this State (or State Waters) includes:

- (a) Both surface and underground waters within the boundaries of this State subject to its jurisdiction, including that part of the Atlantic Ocean within the boundaries of this State, the Chesapeake Bay and its tributaries, and all ponds, lakes, rivers, streams, tidal and nontidal wetlands, public ditches, tax ditches, and public drainage systems within this State, other those (than) designed and used to collect, convey, or dispose of sanitary sewage;
- (b) The flood plain of free-flowing waters determined by the Department of Natural Resources on the basis of the 100-year flood frequency. Environment Article § 9-101(l)

b. Acronyms

CERCLA - Comprehensive Environmental Response, Compensation and Liability Act

CFR - Code of Federal Regulations.

COMAR - Code of Maryland Regulations.

CWA - Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)

eNOI - electronic NOI system.

EPA - U. S. Environmental Protection Agency

FIFRA - Federal Insecticide, Fungicide, and Rodenticide Act, 7 USC 136 et seq.

IPM - Integrated Pest Management

MD DNR - Maryland Department of Natural Resources.

NOI - Notice of Intent

NOT - Notice of Termination.

NPDES - National Pollutant Discharge Elimination System.

NRC - National Response Center.

ONRW - Outstanding National Resource Water.

PDMP - Pesticide Discharge Management Plan

PFAS – Per- and polyfluoroalkyl substances.