

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 08 WATER POLLUTION

Chapter 01 General

Authority: Environment Article, §§9-313—9-316, 9-319, 9-320, 9-325, 9-327, and 9-328, Annotated Code of Maryland

.01 Definitions

A. General.

(1) The following definitions describe the meaning of terms used in the water quality and water pollution control regulations of the Department of the Environment (COMAR 26.08.01—26.08.04).

(2) The terms "discharge", "discharge permit", "disposal system", "effluent limitation", "industrial user", "national pollutant discharge elimination system", "person", "pollutant", "pollution", "publicly owned treatment works", and "waters of this State" are defined in the Environment Article, §§1-101, 9-101, and 9-301, Annotated Code of Maryland. The definitions for these terms are provided below as a convenience, but persons affected by the Department's water quality and water pollution control regulations should be aware that these definitions are subject to amendment by the General Assembly.

B. Terms Defined.

(1) – (11) (text unchanged)

(12) *Biochemical Oxygen Demand (BOD₅ or CBOD₅)* means the quantity of oxygen utilized in the biochemical oxidation of organic matter present in water or wastewater, reported as a five-day value

[(11-1)] (13) "Certification of conformance" means a certification by a dry manure chicken (other than laying hens) AFO that:

(a) The AFO has, and is implementing:

(i) A current nutrient management plan; and

(ii) A current soil conservation and water quality plan (conservation plan);

(b) The AFO's NMP and conservation plan are consistent with the requirements of COMAR 26.08.03.09C(5)(b) and incorporates all buffers, setbacks, and storage requirements otherwise applicable to MAFOs as required in the general permit for animal feeding operations issued under COMAR 26.08.04.09N in effect at the time of the certification;

(c) The AFO agrees to allow the Department the access necessary to confirm conformance; and

(d) The AFO agrees to provide researchers authorized by the Maryland Department of Agriculture (MDA) and the Department the same access otherwise applicable to MAFOs as required in the general permit for animal feeding operations issued under COMAR 26.08.04.09N in effect at the time of the certification.

[(11-2)] (14) "Chesapeake Bay" means all tidally-influenced waters within the Chesapeake Bay watershed.

[(11-3)] (15) "Chesapeake Bay program segment" means a segment or segments of the Chesapeake Bay mainstem or its tidal tributaries the boundaries of which are defined by a set of georeferenced points.

[(11-4)] (16) "Chlorophyll a" means one of three green pigments in plant cells, used as a measure of productivity in aquatic environments. Elevated levels of nutrients are usually reflected in corresponding elevations in chlorophyll a.

[(12)] (17) "Chronic toxicity" means the capacity or potential of a substance to cause deleterious effects in living organisms over a long-term exposure as determined by the Department.

[(12-1)] (18) "Coal remining" means a coal mining operation which begins after January 2, 1995 at a site on which coal mining was conducted before August 3, 1977, the effective date of the federal Surface Mining Control and Reclamation Act of 1977.

[(13)] (19) "Coliform organisms" means all of the aerobic and facultative anaerobic, gram-negative, non-spore-forming, rod-shaped bacteria that ferment lactose broth with gas formation within 48 hours at 35°C.

[(13-1)] (20) "Comprehensive nutrient management plan (CNMP)" means a nutrient management and conservation plan that is developed in accordance with the Natural Resources Conservation Service (NRCS) planning policy and meets NRCS technical standards.

[(13-2)] (21) "Concentrated animal feeding operation (CAFO)" means:

(a) A medium AFO or large AFO, based upon the size categories established in Table 1 of COMAR 26.08.03.09A, that discharges or proposes to discharge, as defined by the Federal Act, to surface waters of this State;

(b) A small AFO designated a CAFO by the Department in accordance with COMAR 26.08.03.09B; or

(c) An AFO designated as a CAFO by the Regional Administrator (RA) of the EPA in accordance with the Federal Act.

[(14)] (22) "Control" means the possession of the power to direct or cause the direction of the management policies of a person.

(23) "Corrective Action Threshold (CAT)" is the reuse water quality at which the owner/operator must implement measures to correct any operational problem(s) causing pollutant concentrations in excess of the threshold.

[(15)] (24) "Criteria" means elements of State water quality standards expressed as constituent concentrations, levels, or narrative statements representing a quality of water that supports a particular use.

[(16)] (25) "Critical periods" means that time of the year during which sensitive life stages or densities of representative important species (RIS) are present in the plant intake or receiving waters.

[(17)] (26) "Department" means the Department of the Environment.

[(18)] (27) "Design stream flow" means the minimum 7 consecutive day average stream discharge having a recurrence interval of 10 years.

[(19)] (28) "Designated use" means those uses specified in the State's water quality standards for each water body or segment whether or not the uses are being attained.

[(20)] (29) "Discharge" means:

(a) The addition, introduction, leaking, spilling, or emitting of any pollutant to waters of this State; or

(b) The placing of a pollutant in a location where the pollutant is likely to pollute.

[(21)] (30) "Discharge permit" means a permit issued by the Department for the discharge of any pollutant or combination of pollutants into the waters of this State.

[(22)] (31) "Disposal system" means a system for disposing of wastes by surface, above surface, or underground methods. Disposal system includes a treatment works and a disposal well.

[(22-1)] (32) "Dissolved oxygen" means gaseous oxygen that is dissolved in the water.

[(23)] (33) "Effluent" means the outflow of treated or untreated waste from an industrial process, holding tank, pond, sewer, or other point source into the waters of this State.

[(24)] (34) "Effluent limitation" means any restriction or prohibition that:

(a) Is established under federal law or a law of this State;

(b) Specifies quantities, rates or concentrations of chemical, physical, biological, or other constituents that are discharged into the waters of this State;

(c) Includes:

(i) Parameters for the discharge of toxic and nontoxic substances, and

(ii) Standards of performance for new sources.

[(25)] (35) "Effluent limited waters" means waters of this State which the Department has identified as those in which BAT for industrial discharges and secondary treatment for sewage discharges is sufficiently stringent to maintain applicable water quality standards.

[(26)] (36) "Emergency conditions" means those circumstances resulting from a permittee's actions, or lack of actions, which the Department determines constitute a present or imminent danger to the public health, welfare, or the environment.

[(27)] (37) "Entrainment" means the incorporation of organisms into the cooling water flow.

[(28)] (38) "EPA" means the United States Environmental Protection Agency, or its successor.

[(28-1)] (39) "Epifauna" means organisms that live upon aquatic substrates.

[(29)] (40) "Estuary" means a semi-enclosed coastal body of water having a free connection with the open sea and within which the seawater is measurably diluted with fresh water deriving from land drainage.

[(30)] (41) "Eutrophication" or "eutrophic" means:

(a) The excessive enrichment of the waters of this State by the discharge to or addition of nutrients; or

(b) The degradation of water quality or undesirable ecological changes as indicated by excessive rooted or dispersed plant growth, loss of water clarity, or nuisance conditions.

[(31)] (42) "Existing use" means those uses actually attained in the water body after November 27, 1975, whether or not the uses are included in the water quality standards.

[(32)] (43) "Fecal coliform" means the portion of the coliform bacteria group which is present in the gut or the feces of warm-blooded animals. It generally includes organisms which are capable of producing gas from lactose broth in a suitable culture medium within 24 hours at 44.5° +/-0.5°C.

[(33)] (44) "Federal Act" means the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), its amendments, and all regulations and rules adopted under the Act.

[(34)] (45) "Fish" means any of numerous cold-blooded aquatic vertebrates of the Superclass Pisces, characteristically having fins, gills and a streamlined body. Fish includes:

(a) Any of the Class Osteichthyes having a bony skeleton;

(b) Any of the Class Chondrichthyes, having a cartilaginous skeleton (sharks, rays, and skates); and

(c) Any of the Class Agnatha which lack jaws (lampreys and hagfishes).

(46) "Food crops commercially processed" means food crops that have undergone chemical or physical processing prior to sale to sufficiently remove or destroy pathogens.

[(35)] (47) "General permit" is a discharge permit issued to a class of dischargers.

[(36)] (48) "Ground water" means underground water in a zone of saturation.

[(36-1)] (49) "Hydrodemolition" means a concrete removal technique which utilizes high-pressure water to remove deteriorated and sound concrete as well as asphalt and grout.

[(37)] (50) "Impingement" means the blocking of larger organisms by a structure in the cooling water intake system.

[(38)] (51) "Includes" or "including" means includes or including by way of illustration and not by way of limitation.

[(39)] (52) "Industrial user" means:

- (a) A person who is engaged in manufacturing, fabricating, or assembling goods; or
- (b) A member of any class of significant producers of pollutants identified under regulations adopted by:
 - (i) The Department, or
 - (ii) The Administrator of the United States Environmental Protection Agency.

[(40)] (53) "Industrial waste" means any liquid, gaseous, solid, or other waste substance, or combination thereof, resulting from:

- (a) Any process of industry, manufacturing, trade or business; or
- (b) The development of any natural resource, including agriculture.

[(40-1)] (54) "Infauna" means organisms that live within the sediment in aquatic substrates.

[(41)] (55) "Interference" means:

(a) An inhibition or disruption of a POTW, its treatment processes or operations, or its sludge generation processes or utilization which causes a violation of any requirement of the POTW's discharge permit or which prevents sewage sludge utilization by the POTW in accordance with the following statutory provisions and regulations or permits issued under them:

- (i) Section 405 of the Clean Water Act;
- (ii) The Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA) and any State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA);
- (iii) The Clean Air Act; and
- (iv) The Toxic Substances Control Act.

(b) Damage to sewer systems and threats to POTW worker and public health, safety, and comfort.

[(42)] (56) "Intermittent stream" means a stream that does not have flowing surface water during dry periods of the year, but may have groundwater-based surface flow at other times.

[(42-1)] (57) "Maryland animal feeding operation (MAFO)" means an AFO that is not a CAFO and is:

- (a) A large AFO according to Table 1 of COMAR 26.08.03.09A;
- (b) A medium AFO according to Table 1 of COMAR 26.08.03.09A, designated a MAFO in accordance with COMAR 26.08.03.09C(2); or
- (c) A chicken (other than laying hens) AFO with dry manure handling and at least 75,000 square feet total house capacity:

(i) That has not submitted to the Department a certification of conformance required under COMAR 26.08.03.09F; or

(ii) For which the certification of conformance has been rejected in accordance with that regulation.

[(43)] (58) "Material balance" means an inventory accounting system for determining quantities of materials on hand, used in process, converted to product, lost to the environment, or contained in waste matter generated, stored, discharged, or otherwise processed.

[(43-1)] (59) "Mean low water" means the average of all the low water heights observed over the National Tidal Datum Epoch.

[(43-2)] (60) "Mesohaline" means tidal waters with salinities from 5 to less than 18 parts per thousand.

[(43-3)] (61) "Minimum level" means the lowest concentration of a substance as determined by the Department that generally can be quantified within specified limits of interlaboratory precision and accuracy under routine laboratory operating conditions in the matrix of concern.

[(44)] (62) "Mixing zone" means an area contiguous to a discharge where surface water quality or ground water quality does not have to meet:

- (a) All water quality criteria; or
- (b) All requirements otherwise applicable to the natural water.

(63) "Most Probable Number or MPN" is a statistical value representing the viable bacterial population in a sample identified through the use of dilution and multiple tube inoculations.

[(45)] (64) "National Pollutant Discharge Elimination System (NPDES)" means the national system for issuing permits as designated by the Federal Act.

[(46)] (65) "National pretreatment requirements" means any general pretreatment regulation established by EPA in accordance with the Federal Act.

[(47)] (66) "National pretreatment standard" means a pollutant discharge limit that:

- (a) Applies to industrial users of publicly owned treatment works; and
- (b) Is promulgated by EPA under the Federal Act.

[(48)] (67) "NPDES application" means the current revised EPA standard national forms for applying for an NPDES permit.

[(49)] (68) "NPDES permit" means the permit issued under the Federal Act.

[(50)] (69) "Natural" or "naturally occurring", when used to describe water quality, means:

- (a) Those water quality values which exist unaffected by, or unaffected as a consequence of, any water use;

(b) Those water quality values which exist unaffected by the discharge, or direct or indirect deposit, of any solid, liquid, or gaseous substance; or

(c) Any other water quality values which represent conditions which the Department by its regulations defines as natural. For the purposes of this definition, the following conditions shall be considered as natural:

- (i) Infestations of water milfoil, *Myriophyllum spicatum*,
- (ii) Infestations of water chestnut, *Trapa natans*,
- (iii) The presence of sea lettuce, *Ulva lactuca*, and
- (iv) The presence of sea nettles, *Aurelia* sp.

[(51)] (70) "Natural trout waters" means waters capable of supporting self-sustaining trout populations, including propagation, and their associated food organisms.

(71) "*Nephelometric Turbidity Unit or NTU*" is a ratio of the intensity of light scattered by the sample to the intensity of incident light, as determined using approved laboratory methods specified in 40 CFR Part 136, or the latest edition of *Standard Methods for the Examination of Water and Wastewater* (American Public Health Association et al, 2012).

[(52)] (72) "New source" means any source, the construction of which is commenced after the publication by the EPA of proposed regulations prescribing a standard of performance which will be applicable to the source if the standard is promulgated.

[(53)] (73) "Nontidal water" means water not subject to regular and periodic tidal action (generally freshwater).

[(53-1)] (74) "Nutrient management plan (NMP)" means a plan written by a nutrient management planner certified by the Maryland Department of Agriculture (MDA) that meets all requirements of COMAR 15.20.07 and 15.20.08 and any other requirements specified by the Department in a discharge permit issued pursuant to this subtitle.

(75) "*pH*" means the negative common logarithm of hydrogen ion activity determined using approved laboratory methods specified in 40 CFR Part 136 or the latest edition of *Standard Methods for the Examination of Water and Wastewater* (American Public Health Association et al, 2012).

[(53-2)] (76) Offal.

(a) "Offal" means the refuse from slaughtered or salvageable dead animals, crustaceans, or any other animal form.

(b) "Offal" includes heads, feet, viscera, hair, blood, feathers, bones, scales, or oils.

[(54)] (77) "Oil" means any of a number of unctuous combustible substances which are liquid at ambient temperature and atmospheric pressure, or easily liquefiable on warming and soluble in ether, and which include fuel oil, gasoline, kerosene, lubricating oil, other petroleum products, oil bearing sludge, oil refuse, oil mixed with ballast or bilge water, and oil mixed with wastes.

[(54-1)] (78) "Oligohaline" means tidal waters with salinities from 0.5 to less than 5 parts per thousand.

[(55)] (79) "Operator" means that person or those persons with responsibility for the management and performance of each facility.

[(55-1)] (80) "Opportunistic species" means an organism that tolerates or thrives in a disturbed environment, or both, and has a competitive edge in some situations.

[(56)] (81) "Other aquatic life" means all organisms, other than fish, which grow in, live in, or frequent water.

[(57)] (82) "Other waste" means garbage, refuse, wood, sawdust, shavings, bark, sand, lime, cinders, ashes, offal, oil, tar, dyestuffs, acids, chemicals, and all discarded substances other than sewage or industrial waste.

[(58)] (83) "Pass through" means discharge of pollutants through the POTW into waters of the State in quantities or concentrations which cause a violation of any requirement of the POTW's discharge permit.

[(58-1)] (84) "Percent-light-through-water (PLW)" means the amount of light reaching just above the canopy of underwater bay grasses, expressed as a fraction of the light at the water surface.

[(59)] (85) "Permeability of an aquifer" means the volume of water at the prevailing kinematic viscosity that will move in unit time under a unit hydraulic gradient through a unit area measured at right angle to the direction of flow.

[(60)] (86) "Permit" means written authorization issued by the Department under pertinent law and regulations and describing required performance for specific activities and operations.

[(61)] (87) "Permittee" means the person holding a permit issued by the Department.

[(62)] (88) "Person" means 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.

[(63)] (89) "Person in charge" means the person designated by an operator or permittee as the one with direct supervisory responsibility for an activity or operation at a facility.

[(64)] (90) "Point of discharge" means that location in or adjacent to a body of water at which any liquid, solid, or gaseous substances are discharged or deposited.

[(65)] (91) "Point source" means any discernible, confined and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, large animal feeding operation, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are, or may be, discharged.

[(66)] (92) "Pollutant" means:

(a) Any waste or wastewater that is discharged from:

- (i) Any publicly owned treatment works, or
- (ii) An industrial source; or

(b) Any other liquid, gaseous, solid, or other substances which will pollute any waters of this State.

[(67)] (93) "Pollution" means any contamination or other alteration of the physical, chemical, or biological properties of any waters of this State, including a change in temperature, taste, color, turbidity, or odor of the waters or the discharge or deposit of any organic matter, harmful organism, or liquid, gaseous, solid, radioactive, or other substance into any waters of this State that will render the waters harmful, or detrimental, to:

- (a) Public health, safety, or welfare;
- (b) Domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses;
- (c) Livestock, wild animals, birds; or
- (d) Fish or other aquatic life.

[(67-1)] (94) "Polyhaline" means tidal waters with salinities from 18 to 30 parts per thousand. These areas are typically in the lower portion of an estuary, where the ocean and estuary meet.

[(67-2)] (95) "Preexisting discharge" means any discharge which existed at the time of application for a coal remining discharge permit.

[(68)] (96) "Pretreatment" means a reduction in the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in a wastewater before discharging to or otherwise introducing pollutants into a POTW.

[(69)] (97) "Pretreatment requirements" means any:

- (a) Federal pretreatment requirements and federal pretreatment standards;
- (b) Pretreatment regulations developed in accordance with Environment Article, §9-319(a), Annotated Code of Maryland;
- (c) Pretreatment requirements listed within the delegation document issued by the Department approving a pretreatment program developed by owners of a POTW;
- (d) Pretreatment requirements developed by owners of POTWs in accordance with approved pretreatment programs; or
- (e) Pretreatment requirements established in a permit or agreement between a POTW and an industrial user issued in accordance with an approved pretreatment program.

[(70)] (98) "Propagation" means the continuance of species by generation of successive production in the natural environment, as opposed to the maintenance of species by artificial culture and stocking.

[(71)] (99) "Publicly owned treatment works (POTW)" means a facility that is:

- (a) Owned by this State or a political subdivision, municipal corporation, or other public entity; and
- (b) Used for the treatment of pollutants.

[(72)] (100) "Public water supply" means any water of this State with the designated use of public water supply and which is suitable for human consumption when treated to meet the requirements of COMAR 26.04.01.

[(72-1)] (101) "Pycnocline" means the portion of the water column where density changes rapidly because of salinity, temperature, or both. In an estuary the pycnocline is the zone separating deep, cooler, more saline waters from the less saline, warmer, surface waters. The upper and lower boundaries of a pycnocline are defined by a change in density per unit of depth. The upper pycnocline is the shallowest occurrence of a density gradient of 0.1 kg/m⁴ or greater and the lower pycnocline depth is the deepest occurrence of a density gradient of 0.2 kg/m⁴.

[(73)] (102) "Receiving water" means the surface waters of this State into which waters or wastewaters are or may be discharged.

(103) "Reclaimed Water" means wastewater from a municipal treatment facility that has been treated to be suitable for beneficial use and has a concentration of less than 3 fecal coliform colonies per 100 milliliters; 10 milligrams per liter of 5-day biochemical oxygen demand; and 10 milligrams per liter of total suspended solids.

[(74)] (104) "Recreational trout waters" means cold or warm waters capable of holding or supporting adult trout for put-and-take fishing, usually seasonal.

[(75)] (105) "Refuse Act" means §13 of the River and Harbor Act of March 3, 1899.

[(76)] (106) "Refuse Act application" means the application for a permit under the Refuse Act.

[(77)] (107) "Refuse Act permit" means any permit issued under the Refuse Act.

[(78)] (108) "Regular or periodic tidal action" means the rise and fall of the sea produced by the gravitational attraction of the sun and moon unaffected by wind or any other circumstances.

[(78-1)] (109) "Remined area" means only that area of any coal remining operation on which coal mining was conducted before August 3, 1977.

[(78-2)] (110) "Restoration variance" means a temporary exception to the water quality standards allowing nonattainment of designated uses granted in situations where no enforcement action will be taken if the nonattainment

is due to the existence of one or more of the justifications in 40 CFR §131.10(g). Restoration variances will be reviewed every 3 years at a minimum as required by the Clean Water Act and EPA regulations.

[(79)] (111) "Schedule of compliance" means a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with effluent limitations or water quality standards as specified by an order or permit requirement of the Department.

[(79-1)] (112) "Secchi disk" means a device for measuring water clarity that consists of a circular weighted disk painted in flat black and white in alternating quarters that is suspended on an incremented rope or line.

[(79-2)] (113) "Secchi depth" means the depth at which a Secchi disk is just visible when viewed vertically from a shaded perspective. The measure is taken by lowering the device to a depth below which it can be seen and then raising it until it is just visible.

[(80)] (114) "Secondary treatment" means the treatment of sewage to produce effluent equal to or better than the following quality:

- (a) Five-day biochemical oxygen demand:
 - (i) 30 milligrams/liter—average for a 30-day period;
 - (ii) 45 milligrams/liter—average for a 7-day period;
- (b) Total suspended solids:
 - (i) 30 milligrams/liter—average for a 30-day period;
 - (ii) 45 milligrams/liter—average for a 7-day period;
- (c) Bacterial control: As required to meet water quality standards.

[(81)] (115) "Sewage" means the water-carried domestic waste from residences, buildings, industrial establishments, or other places.

[(81-1)] (116) Sewerage System.

- (a) "Sewerage system" means:
 - (i) The channels used or intended to be used to collect and dispose of sewage; and
 - (ii) A structure or appurtenance used or intended to be used to collect or prepare sewage for discharge into a treatment works or the waters of the State.
 - (b) "Sewerage system" includes a sewer of any size.
 - (c) "Sewerage system" does not include the plumbing system inside a building served by the sewerage system.
- [(82)] (117) "Shellfish harvesting waters" means waters that are actual or potential areas for the harvesting of shellfish including oysters, softshell clams, and brackish water clams.

[(83)] (118) "Sludge" means the settleable solids that are:

- (a) Naturally present in waters and wastewaters; or
- (b) Derived from nonsettleable matter by chemical coagulation and precipitation or by biological flocculation and precipitation.

[(83-1)] (119) "Soil conservation and water quality plan (conservation plan)" means a plan that is developed by a soil conservation district, MDA, a Natural Resources Conservation Service (NRCS) planner, or a technical service provider certified by the NRCS that addresses the following minimum elements:

- (a) Storage for animal manure and litter, including any need for additional storage or manure transfer;
- (b) Stabilized surfaces in heavy use areas;
- (c) Diversion of storm water away from the production area;
- (d) Maintenance of vegetation around the production area;
- (e) Construction and maintenance of filter strip or strips or water control structures between the production area and surface water; and
- (f) Mortality management.

[(84)] (120) "Source" means any building, structure, facility, or installation from which there is, or may be, a discharge of pollutants.

[(85)] (121) "Spill (spilling)" means any loss of control or release of oil or other hazardous substance that moves or is capable of moving into the aquatic environment.

[(86)] (122) "Standard of performance" means a standard for the control of the discharge of pollutants which reflects the greatest degree of effluent reduction achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives as established by the State or the Environmental Protection Agency.

[(87)] (123) "State" means the State of Maryland.

[(88)] (124) "Stream flow" means the nontidal water movement that occurs in a natural channel.

[(89)] (125) "Sub-basin" means one of the 20 watershed areas delineated by the Department and comprising, in sum total, the surface waters of the State.

[(89-1)] (126) "Submerged aquatic vegetation (SAV; underwater bay grass)" means rooted vascular plants that generally grow beneath the water surface, but may have leaves that extend to, and grow on, the surface of the water.

[(89-2)] (127) "Subpycnocline" means waters that occur below the lower level of the pycnocline.

[(90)] (128) "Surface waters" means all waters of this State which are not ground waters.

[(91)] (129) "Thermal barrier" means a pattern of artificially created temperature change and distribution.

[(91-1)] (130) "Tidal fresh" means tidal waters with salinities from 0 to less than 0.5 parts per thousand.

[(92)] (131) "Tidal water" means water subject to regular or periodic tidal action.

[(93)] (132) "Toxic substance" means any liquid, gaseous, or solid substance in a concentration which, when applied to, discharged to, or deposited in the waters of this State, may, in the judgment of the Department, exert a detrimental effect on humans or on the propagation, cultivation, or conservation of terrestrial or aquatic life.

[(94)] (133) "Transmissivity of an aquifer" means the rate at which water of the prevailing kinematic viscosity is transmitted through a unit width of the aquifer under a unit hydraulic gradient.

[(95)] (134) "Treatment works" means any plant or other works used for the purpose of treating, or stabilizing, wastes.

[(95-1)] (135) "Use Class" means the combination of waterbody type (e.g. non-tidal) and designated uses given to each waterbody.

[(96)] (136) "Vessel" means every watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on the waters of this State.

[(97)] (137) "Waste load allocation" means the identification and allotment by the Department of quantities of residual wastes which may be discharged from point sources. This allotment shall include:

- (a) Limits on the quantities of wastes which may be discharged;
- (b) Consideration of seasonal variations;
- (c) A margin of safety; and
- (d) The contribution of non-point sources.

[(98)] (138) "Waste" means industrial waste and all other liquid, gaseous, solid, or other substances which will pollute any waters of this State.

[(99)] (139) "Wastewater" means any:

- (a) Liquid waste substance derived from industrial, commercial, municipal, residential, agricultural, recreational, or other operations or establishments; and
- (b) Other liquid waste substance containing liquid, gaseous, or solid matter and having characteristics which will pollute any waters of the State.

[(100)] (140) "Water" means the liquid substance which is derived from a ground water source, a surface source, or any combination of these sources, and which will be discharged, without change in quality, into the waters of this State, with the exception of storm water runoff.

[(100-1)] (141) "Water clarity" means a relative measure of the ability of water to transmit light, expressed as a percentage of light penetrating the water in terms of expected Secchi depth for the defined waterbody.

[(100-2)] (142) "Water quality criteria" means the numeric threshold or narrative description of a water quality parameter that would be expected to support and protect a particular designated use.

[(101)] (143) "Water quality limited waters" means shellfish waters and other waters of this State for which BAT for industrial discharges and secondary treatment for sewage discharges is not sufficiently stringent to maintain applicable water quality standards.

[(102)] (144) "Watercourse" means a specific body or channel of water which is part of the waters of this State.

[(103)] (145) "Waters of this State" 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, lake, rivers, streams, tidal and nontidal wetlands, public ditches, tax ditches, and public drainage systems within this State, other those 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.

Chapter 04 Permits

Authority: Environment Article, §§1-601—1-606, 9-313, 9-315, 9-323—9-328, and 9-330, Annotated Code of Maryland

.01 Discharge Permits Required.

A. Issuance of Discharge Permits. The Department shall issue State discharge permits or NPDES permits in accordance with provisions and conditions of COMAR 26.08.01—26.08.04 and 26.08.08, to satisfy the regulatory requirements of the National Pollutant Discharge Elimination System (NPDES), established under the Federal Act.

B. Activities for Which Discharge Permits Are Required. A person may not commit any of the following acts except as authorized by a discharge permit issued by the Department:

(1) Except as provided in COMAR 26.08.02.09A(3) and Regulation .08 of this chapter, discharge into the waters of this State any waste or wastewater regardless of volume.

(2) Construct, install, modify, extend, alter, or operate any system for the disposal of waste or wastewater into the waters of the State, or a system which may result in a discharge into these waters, regardless of quality or volume, with the exception of storm water runoff that is not regulated under the Federal Act.

(3) Increase or otherwise modify in volume, temperature, or concentration, any existing waste or wastewater in excess of the discharges authorized by any existing discharge permit. To the extent that the modification is in excess of limits specified in a discharge permit, the permittee shall report the change to the Department within 1 week of the

commencement of the modification. This report shall include information on what, how, and why modifications were made and whether they will be temporary or permanent.

(4) Construct, install, or operate any industrial, commercial, or other establishment or any extension or modification or addition to them, including the construction or use of any new discharge outlet, the construction, installation, or operation of which would cause an increase in the discharge of waste or wastewater into the waters of the State or otherwise alter the physical, chemical, or biological properties of any waters of the State in any manner not lawfully authorized.

(5) *Production or distribution of Reclaimed Water.*

(a) *Production or distribution of Class IV reclaimed water for beneficial uses shall be authorized under a state discharge permit to ensure protection of waters of the state and public health consistent with the Department of the Environment's "Guidelines for Use of Class IV Reclaimed Water: High Potential for Human Contact," MDE-WMA-002-07/16 , which is incorporated by reference.*

(b) *Treated municipal wastewater that meets the Class IV reclaimed water treatment standards shown in Table 1 is acceptable for the types of beneficial uses described in Table 2.*

*Table 1 –Treatment Standards and Corrective Action Thresholds (CAT)
for Production of Class IV Reclaimed Water*

<i>Parameter</i>	<i>Class IV Treatment Standards*</i>
<i>Biochemical Oxygen Demand</i>	<i>10 mg/l (monthly average)</i>
<i>Turbidity</i>	<i>2 NTU (daily average)</i>
	<i>CAT >5 NTU (at any time)</i>
<i>E. coli</i>	<i>1 MPN/100 ml (monthly median) Or meeting the fecal coliform limit below</i>
	<i>CAT >23 MPN/100 ml (for any sample)</i>
<i>Fecal Coliform</i>	<i>2,2 MPN/100 ml (monthly median)</i>
	<i>CAT >23 MPN/100 ml (for any sample)</i>
<i>pH</i>	<i>6.5-8.5 s.u** (at any time)</i>
<i>Total Nitrogen</i>	<i>10 mg/l (monthly average)</i>
<i>Total Residual Chlorine (measured at the treatment system outlet)</i>	<i>1.5 – 4.0 mg/l (at any time)</i>
	<i>CAT < 1.5 mg/l or >4.0 mg/l (at any time)</i>
<i>Total Residual Chlorine (measured at sampling locations in the distribution system or alternative locations approved by the Department)</i>	<i>0.5 – 4.0 mg/l (at any time)</i>
	<i>CAT < 0.5 mg/l or >4.0 mg/l (at any time)</i>

* Treatment levels for Class I reused water, Class II reclaimed water, and Class III reclaimed water are described in "Guidelines for Land Application/Reuse of Treated Municipal Wastewaters" as set forth in COMAR 26.08.02.09D. Use of Class IV reclaimed water for building, industrial cooling towers, centralized air cooling systems or other usage causing concern for potential Legionellosis shall be consistent with the ANSI/ASHRAE Standard 188 - 2018 or the latest edition entitled "Legionellosis: Risk Management for Building Water Systems" in minimizing or eliminating the transmission of Legionella

** Standard unit

**Table 2 – Class IV Reclaimed Water
Acceptable Types of Reuse ^{a)}**

<i>Aesthetic Fountains</i>	<i>Manufacturing Processing Water ^{c)}</i>
<i>Aggregate Washing</i>	<i>Ornamental Nurseries Irrigation</i>
<i>Car Washing</i>	<i>Park Irrigation</i>
<i>Cemetery Irrigation</i>	<i>Parts Cleaning</i>
<i>Closed Loop Cooling</i>	<i>Pasture Irrigation For Foraging Livestock</i>
<i>Concrete Mixing</i>	<i>Play Ground Irrigation</i>
<i>Cooling Water System</i>	<i>Pressure Cleaning</i>
<i>Crops Irrigation ^{b)}</i>	<i>Lawns Irrigation (residential and non-residential)</i>
<i>Dust Control and Soil Compaction</i>	<i>School Yards Irrigation</i>
<i>Equipment Washing</i>	<i>Silviculture irrigation</i>
<i>Fiber and Seed Crops Irrigation</i>	<i>Snow Making</i>
<i>Fire Protection</i>	<i>Sod Farm Irrigation</i>
<i>Forested Land Irrigation</i>	<i>Toilet and Urinal Flushing ^{d)}</i>
<i>Golf Course Irrigation</i>	<i>Turf (including Fodder) Irrigation</i>
<i>Green Open Spaces Irrigation</i>	<i>Water for Filling Ponds and Lagoons</i>
<i>Highway Landscape Irrigation</i>	<i>Window Washing</i>
<i>Laundry Water</i>	

- a) This list of acceptable type of reuse is not exhaustive. Other reuse activities may be approved by the Department via a permit on a case by case basis depending on the potential for human contact.
- b) Class IV reclaimed water used for food crop irrigation, where the reclaimed water contacts the edible portion of the food crops, must be produced with a minimum treatment technology comparable to advanced waste treatment that includes filtration and disinfection, or their equivalent, to achieve the Class IV water quality standards shown on Table 1.
- c) Uses of reclaimed water for an industry shall adhere to Occupational Safety & Health Administration (OSHA) regulations found in 29 CFR 1926.51(b) to prevent inadvertent and inappropriate use of reclaimed water.
- d) Only applicable to commercial buildings, apartments, condominiums or multi-family residences managed by a property management company or other similar corporate entity acceptable to the Department.