

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
DIVISION OF WATER RESOURCES
Statutory Authority: 7 Delaware Code, Chapter 60 & 74A (7 Del.C. Ch. 60 & 74A)

REGISTER NOTICE

PROPOSED

1. Title of the Regulations:

Regulations Governing the Control of Water Pollution

2. Brief Synopsis of the Subject, Substance and Issues:

When the Delaware Regulations Governing Aboveground Storage Tanks became effective on June 11, 2004 an overlap between the Regulations Governing Aboveground Storage Tanks and the Regulations Governing the Control of Water Pollution was created.

The definition of "Aboveground Storage Tank" as stated in Title 7, **Del.C.** Ch. 74A and the Regulations Governing Aboveground Storage Tanks and the definition of "Bulk storage facility" in the Delaware Regulations Governing the Control of Water Pollution encompass the same set of aboveground storage tanks. The definition of "Bulk storage facility" is being amended to remove from the Regulations Governing the Control of Water Pollution those aboveground storage tanks that are included by definition in the Regulations Governing Aboveground Storage Tanks.

3. Possible Terms of the Agency Action:

4. Statutory Basis or Legal Authority to Act:

Title 7, Chapter 74A and Title 7, Chapter 60

5. Other Regulations that may be Affected by the Proposal:

The Regulations Governing Aboveground Storage Tanks.

6. Notice of Public Comment:

A Public Hearing will be held November 22, 2004 at 6:00pm at the DNREC, 391 Lukens Drive, New Castle, DE office.

7. Prepared by:

Jill Williams Hall, 302-395-2500, Date October 7, 2004

Regulations Governing the Control of Water Pollution

2.0 Definitions

As used in these regulations, the following terms shall be defined as outlined herein.

2.01 **"Act"** means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act Amendments of 1972); Pub. L. 92-500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, Pub. L. 97-117, Pub. L. 100-4 (Water Quality Act of 1987), Pub. L. 100-688, Pub. L. 100-581, Pub. L. 102-580, Pub. L. 102-240; 33 U.S.C. 1251 et seq.

2.02 **"Activity"** means construction, or operation, or use of any facility, property, or device.

2.03 **"Agricultural commodity"** means any agricultural product, including but not limited to plants and animals and plant and animal products grown, raised or produced within the State for use as food, feed, seed, or any aesthetic, industrial or chemurgic purpose.

2.04 **"Animal feeding operation"** means a lot or facility, together with any associated treatment works or waste management systems, where both of the following conditions are met: 1. Animals have been, are, or will be stabled or confined or kept and fed or maintained for a total of 45 days or more in any 12-month period; and 2. Crops, vegetation, forage growth, or post-harvest residues are not sustained over any portion of the lot or facility. Two or more animal feeding operations under common ownership are a single animal feeding operation if they adjoin each other, or if they use a common area or system for the disposal of wastes.

2.05 **"Animal waste management system"** means a combination of conservation practices and management measures for the handling, storage, treatment and management of any or all of the following for use on

cropland and pastureland: animal wastes, manures, composted dead animals or process wastewater from any animal feeding operation.

2.06 **"Agricultural wastes"** means any waste material generated from any agricultural practice including, but not limited to, farming, irrigation, manure or fertilizer spreading, aquaculture, aquatic animal production, livestock and dairy operations. Agricultural wastes may include animal manure, crop residues, dead animals and any agricultural chemicals, fertilizers and pesticides which may find their way into surface and subsurface water.

2.07 **"Antidegradation Statement"** means any provision or policy that has as its basis the prevention of deterioration of water quality or designated uses.

2.08 **"Applicable effluent standards and limitations"** means all State, interstate and Federal standards and limitations to which a discharge or related activity, including the use or disposal of sludge, is subject under the Law or the Act including effluent limitations, water quality standards, standards of performance, toxic effluent standards and prohibitions, best management practices, and pretreatment standards under Sections 301, 302, 303, 304, 306, 307, 308, 403 and 405 of the Act.

2.09 **"Aquaculture facility"** means any water system and associated infrastructure constructed or utilized to contain, hold and/or produce cultured aquatic stock.

2.10 **"Aquaculture project"** means a defined area of State waters which is managed for the maintenance or production of harvestable freshwater, estuarine or marine plants or animals, using discharges of pollutants into such defined area.

2.11 **"Aquatic animal production facility"** means any hatchery, fish farm, or similar system or facility and any associated infrastructure constructed or utilized to contain, hold and/or produce cultured aquatic animal stock.

2.12 **"Approved POTW Pretreatment Program"** or "Program" or "POTW Pretreatment Program" means a program administered by a POTW which has been approved by the United States Environmental Protection Agency.

2.13 **"As-built plans"** means any set of engineering drawings delineating the specific permitted facility as actually installed or constructed.

2.14 **"Average daily loading"** means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made.

2.15 **"Average monthly discharge"** or "daily average discharge" is the arithmetic mean of all daily discharges during a calendar month, calculated as the sum of all daily discharges sampled and/or measured during the month divided by the number of daily discharges sampled or measured during such month.

2.16 **"Average monthly effluent limitation"** or **"daily average effluent limitation"** means the highest allowable average of daily discharges over a calendar month.

2.17 **"Best management practices"** or **"BMP's"** means schedules of activities, prohibitions of practices, maintenance procedures and other management practices or measures to prevent or reduce the discharge of pollutants. BMP's include but are not limited to: structural and nonstructural controls; treatment requirements; operating procedures and practices or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs can be applied before, during and after pollution generating activities to reduce or eliminate the introduction of pollutants into receiving waters.

2.18 **"Biological toxicity testing"** refers to the measurement of physiological responses of organisms and/or their systems to environmentally induced conditions.

2.19 **"Biosolids"** refers to the biomass or biological sludge generated or produced by biological wastewater treatment processes.

2.20 **"Board"** means the Environmental Appeals Board.

2.21 **"Bulk storage facility"** means any facility used for the express purpose of storage of 40,000 or more gallons of any hazardous material, petroleum product or liquid waste but shall not include Aboveground Storage Tanks as defined in 7 Del.C., Chapter 74A and the Delaware Regulations Governing Aboveground Storage Tanks.

2.22 **"Bulk transfer facility"** means any facility used for the express purpose of transfer of 20,000 gallons per day or more of any hazardous material, petroleum product, or liquid waste to or from any carrier such as, but not limited to, ships, barges, trains or trucks.

2.23 **"Bypass"** means the intentional diversion of wastes from any portion of a treatment facility.

2.24 **"Certification"** means the issuance of a written statement or document as required under §401 of the Act that any discharge into State waters will comply with the applicable provisions of §§301, 302, 303, 306 and 307

of the Act.

2.25 **"Cold water aquatic animals"** include, but are not limited to, the Salmonidae family of fish, e.g., trout and salmon.

2.26 **"Composite sample"** means a combination of individual samples obtained at specified intervals over a given time period, generally 24 hours.

In collecting a composite sample of a discharge other than a discharge of storm water or storm runoff (a non-storm water discharge), either: a) the volume of each individual sample is proportional to the discharge flow rate or b) the sampling interval is proportional to the discharge flow rate and the volume of each individual sample is constant. For a continuous non-storm water discharge, a minimum of 24 individual grab samples shall be collected and combined to constitute a 24 hour composite sample. For intermittent non-storm water discharges 4 hours or more in duration, the number of individual grab samples collected and combined to constitute a composite sample shall at a minimum be equal to the duration of the discharge in hours but not less than 12. For intermittent non-storm water discharges of less than 4 hours, the minimum number of individual grab samples collected and combined to constitute a composite sample shall be equal to the duration of the discharge in hours times 3 but not less than 3 samples.

2.27 **"Concentrated animal feeding operation"** or "CAFO" means an animal feeding operation, feedlot or animal production facility that meets the criteria in Appendix B to 40 CFR Part 122 or which is designated as such by the Secretary in accordance with 40 CFR 122.23(c).

2.28 **"Concentrated aquatic animal production facility"** means a hatchery, fish farm, or other facility which contains, grows, or holds:

(1) Cold water fish species or other cold water aquatic animals in ponds, raceways, or other similar structures which discharge at least 30 days per year, but does not include:

(i) Facilities which produce less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year; and

(ii) Facilities which feed less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding.

(2) Warm water fish species or other warm water aquatic animals in ponds, raceways or other similar structures which discharge at least 30 days per year, but does not include:

(i) Closed ponds which discharge only during periods of excess runoff; or

(ii) Facilities which produce less than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.

2.29 **"Conservation practices and management measures"** means the basic components of a conservation waste management plan which apply the principles of agricultural engineering, economics, research, animal science and crop and soil sciences, as appropriate, to maximize the economic value of wastes, to minimize discharges of pollutants associated with and to minimize any environmental damage resulting from the activity.

2.30 **"Conservation waste management plan"** means a written document that outlines the site-specific conservation and management measures to be implemented and followed on the farm.

2.31 **"Construction"** means any placement, assembly, building or installation of equipment or facilities.

2.32 **"Continuous discharge"** means a discharge which occurs without interruption, except for infrequent shutdowns for maintenance, process changes, or other similar activities throughout the operating hours of the facility.

2.33 **"Daily discharge"** means the total discharge measured during a calendar day or any 24-hour period that reasonably represents the calendar day for sampling purposes. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of a pollutant discharged over a calendar day or the equivalent 24-hour period. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over a calendar day or the equivalent 24-hour period.

2.34 **"Daily maximum effluent limitation"** is the highest total mass of a pollutant allowed to be discharged during a calendar day or, in the case of a pollutant limited in terms other than mass, the highest average concentration or other measurement of the pollutant specified during the calendar day, or any 24-hour period that reasonably represents the calendar day for sampling purposes.

2.35 **"Degradation"** means any adverse change in water quality or designated uses.

2.36 **"Department"** means the State of Delaware Department of Natural Resources and Environmental Control.

2.37 **"Designated project area"** means the portion of State waters within which an owner plans to confine the cultivated species using a method or plan or operation which is expected to ensure that the aquaculture crop will enjoy increased growth attributable to the discharge of pollutants and be harvested within a defined geographic area.

2.38 **"Designated uses"** means the categories of surface water uses as defined in the water quality standards.

2.39 **"Direct discharge"** means the "discharge of a pollutant".

2.40 **"Direct Responsible Charge"** or "DRC" means on-location accountability for, and on-location performance of, active daily operation (including Technical Supervision, Administrative Supervision, or Maintenance Supervision) for a wastewater facility, an operating shift of a system or a facility, or a major segment of a system or facility.

2.41 **"Discharge"** for the purposes of these regulations when used without qualification means the discharge of a pollutant.

2.42 **"Discharge of a pollutant"** means any addition of any pollutant, or combination of pollutants, to state waters or the contiguous zone, or the ocean, from any source or activity other than a vessel or other floating craft when being used as a means of transportation and in compliance with Section 312 of the Act.

This definition includes additions of pollutants into State waters from:

- (i) Surface runoff that is collected or channeled by man;
- (ii) Discharges through pipes, sewers, or other conveyances which do not lead to a treatment works; and
- (iii) Discharges through pipes, sewers, or other conveyances, leading into a treatment works other than a publicly owned treatment works (POTW).

2.43 **"Domestic wastewater"** means the liquid and water-borne human and/or household type wastes derived from residential, industrial, institutional or commercial sources.

2.44 **"Draft permit"** means the document prepared under Section 6.12 of these regulations which incorporates the Secretary's tentative determinations with respect to any NPDES permit application or any request to modify, revoke and reissue or terminate a NPDES permit. The term, "draft permit", includes a notice of intent to deny a permit and a notice of intent to terminate a permit, as outlined in Section 6.52 of these regulations. The denial of a request to modify, to revoke and reissue or to terminate a permit is not a "draft permit", however.

2.45 **"Effluent limitations"** means any restriction imposed by the Secretary on the quantity, discharge rate and concentration of a pollutant discharged from a point source to State waters. Effluent limitations include, but are not limited to, standards of performance for new sources, best management practices or BMPs, effluent standards, discharge prohibitions, "zero discharge" standards and ocean discharge criteria.

2.46 **"Environmental Protection Agency"** ("EPA") means the United States Environmental Protection Agency.

2.47 **"Existing source"** means any source which is not a new source or a new discharger.

2.48 **"Existing uses"** means any use of State waters which has occurred, or which likely has occurred, or which the water quality at any time has been satisfactory to support, on or after November 28, 1975.

2.49 **"Facility"** means any building, any structure, any complex of buildings or structures, or any process, production equipment or machinery, which makes it possible for an activity to be conducted.

2.50 **"Facility plan"** means a report which the owner of a treatment works submits to the Department that consists of those necessary plans and studies directly relating to the construction of proposed sewage treatment facilities or additions to existing sewage treatment facilities where additional treatment capacity is proposed.

2.51 **"Feasible alternatives"** are those alternatives that are available and capable of being carried out after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

2.52 **"Feedlot"** means a confined animal feeding operation or a poultry growing operation for meat, milk or egg production, or for stabling, in pens or houses wherein the animals or poultry are fed at the place of confinement and crop or forage growth is not sustained in the area of confinement.

2.53 **"Filtration"** means a mechanical or physical straining process whose principal action is the removal of undissolved matter and shall include, but not be limited to, the following: diatomaceous earth filter, microstrainer, sand, dual and multi-media beds, or other processes capable of equivalent treatment.

2.54 **"General NPDES permit"** means an authorization granted to a category of point source discharges pursuant to Section 9 of these regulations.

2.55 **"Grab sample"** is an individual sample collected in less than 15 minutes.

2.56 **"Groundwater"** means any water naturally found under the surface of the earth.

2.57 **"Hazardous material"** means any element or compound which when discharged onto land or into surface or groundwater, presents an imminent and substantial danger to public health and welfare, aquatic organisms, including but not limited to, fish, shellfish, terrestrial life, shorelines and beaches.

2.58 **"Indirect discharge"** means the discharge or introduction of pollutants from any nondomestic source into a municipal or publicly-owned treatment works.

2.59 **"Industrial User"** - means any industry, manufacturer or business whose liquid waste is discharged to a municipal or publicly owned treatment works; an industrial user is also an indirect discharger.

2.60 **"Industrial wastes"** means any liquid, gaseous, solid or other wastes or a combination thereof resulting from any process of industry, manufacture, trade or business, or from the development of any natural resource.

2.61 **"Intake pollutant"** means an amount of a pollutant that is present in State waters (including groundwater) at the time it is withdrawn from such waters by the discharger or other facility supplying the discharger with intake water. "Intake water" means the water used by a facility generally for cooling or process-related purposes from any source: surface water, groundwater, commercial purveyor or other sources.

2.62 **"Interstate agency"** means an agency of two or more States established by or pursuant to an agreement or compact approved by the Congress, or any other agency of two or more States, having substantial powers or duties pertaining to the control of pollution as determined and approved by EPA under the Act.

2.63 **"Law"** means Title 7, Delaware Code Chapter 60.

2.64 **"Liquid waste"** means any sewage, industrial waste or other wastes or any combination thereof which may potentially alter the chemical, physical, biological or radiological integrity of surface and/or groundwater from its natural state. The term, "liquid waste", does not mean storm runoff or storm water.

2.65 **"Load" or "loading"** means an amount of matter or thermal energy that is introduced into a receiving water; as a verb, "load or loading" means to introduce matter or thermal energy into a receiving water. Loading may be either man-caused (pollutant loading) or natural (natural background loading).

2.66 **"Load allocation" or "LA"** means the portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources. Load allocations are best estimates of the loading, which may range from reasonably accurate estimates to gross allotments, depending upon the availability of data and appropriate techniques for predicting the loading. Wherever possible, natural and nonpoint source loads should be distinguished.

2.67 **"Loading capacity"** means the greatest amount of loading that a water can receive without violating water quality standards.

2.68 **"Log sorting and log storage facilities"** means facilities whose discharges result from the holding of unprocessed wood, i.e., logs or roundwood with bark or after removal of bark in self-contained bodies of water (mill ponds or log ponds) or stored on land where water is applied intentionally on the logs (wet decking).

2.69 **"Maximum instantaneous concentration" or "MIC"** is the highest allowable measured concentration of a pollutant, obtained by analyzing a grab sample of the discharge.

2.70 **"Medical wastes"** means isolation wastes; infectious agents; human blood and blood products; pathological wastes; sharps; body parts; contaminated bedding; surgical wastes and potentially contaminated laboratory wastes; dialysis wastes and other disposable medical equipment and material.

2.71 **"Method Detection Limit" or "MDL"** means the lowest concentration of a substance which can be measured with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

2.72 **"Minimum analytical level" or "MAL"** means the lowest concentration of a substance that can be quantified within specified limits of interlaboratory precision and accuracy under routine laboratory operating conditions in the matrix of concern. When there is insufficient interlaboratory study data, the "MAL" may be determined through the use of a multiplier of 5 to 10 times the method detection level or "MDL".

2.73 **"Mitigation"** means the following sequence: (a) avoiding the impact altogether by not taking a certain action or part of an action, (b) minimizing impacts by limiting the magnitude of the action to the minimum necessary to effectuate the project need, and (c) in those cases where impacts cannot be avoided or where minimization has occurred, compensating for the affected resource.

2.74 **"Municipality"** means a city, town, county, district, association, or other political subdivision created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or a designated and approved management agency under Section 208 of the Act.

2.75 **"NPDES"** ("National Pollutant Discharge Elimination System") means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits for the discharge of any pollutant or combination of pollutants and imposing and enforcing pretreatment and sludge requirements pursuant to Sections 307, 402, 318, and 405 of the Act.

2.76 **"NPDES application"** means the forms recognized nationally, duly promulgated by EPA pursuant to the Act, including any modifications to such forms required by the Secretary, for application for a NPDES permit.

2.77 **"NPDES Discharge Monitoring Report" ("DMR")** means any EPA approved form, used to summarize and report the results of the permittee's self-monitoring activities.

2.78 **"NPDES form"** means any issued NPDES permit and any uniform national form developed for use in the NPDES program, including any addition to such form required by the Secretary, and prescribed in regulations promulgated by EPA including the NPDES application and the NPDES Discharge Monitoring Report (DMR) forms.

2.79 **"NPDES permit"** means any permit authorizing the potential or actual point source discharge of pollutants to State waters, under prescribed conditions, pursuant to Section 6 of these regulations.

2.80 **"National Pretreatment Standard"** or **"Pretreatment Standard"** means any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307 (b) and (c) of the Act, which applies to industrial users.

2.81 **"New discharger"** means any building, structure, facility or installation:

- (i) Which prior to August 13, 1979, had not discharged pollutants;
- (ii) Which had never received a final effective NPDES permit for discharges at that site;
- (iii) From which there is or may be a new or additional discharge of pollutants;
- (iv) Which is an indirect discharger that commences a discharge to State waters; and
- (v) Which does not fall within the definition of "new source".

2.82 **"New source"** means any building, structure, facility or installation from which there is or may be a discharge of pollutants, the construction of which commences:

(i) After promulgation of standards of performance under Section 306 of the Act which are applicable to such source; or

(ii) After proposal of standards of performance under Section 306 of the Act which are applicable to such source, but only if the standards are promulgated within 120 days of their proposal.

2.83 **"Non-contact cooling water"** is that which is contained within a leak-free system, i.e. has no contact with any gas, liquid or solid other than the container used for transport.

2.84 **"Normal corrosion"** refers to the electrochemical reaction that results in the dissolution or removal of metal from a solid metal surface. For specific applications considered by the Department, normal corrosion rates shall be as published by the National Association of Corrosion Engineers (Reference: *Corrosion Data Survey - Metals Section*, National Association of Corrosion Engineers, 1985, as updated through August 29, 2000, or, for applications not specifically addressed in the above reference, such other reliable data.

2.85 **"Normal erosion"** is the progressive loss of original material from a solid surface due to mechanical interaction between that surface and a fluid, a multi-component fluid or an impinging liquid or solid particle. (Reference: *Standard Practice for Liquid Impingement Erosion Testing*, ASTM Designation G73-82, 1987; or other authoritative source for materials or conditions not covered by the referenced standard.)

2.86 **"Nuisance condition"** is any condition that, as a result of pollutant addition to a surface water, causes unreasonable interference with the designated uses of the waters or the uses of the adjoining land areas.

2.87 **"Nutrient management plan"** means a plan or program to manage the amount, placement, timing and application of nutrients in order to reduce nutrient loss or runoff and to maintain the productivity of soil when growing agricultural commodities and turfgrass.

2.88 **"Nutrient removal"** means any method of treatment specifically designed to remove nutrients including, but not limited to, phosphorus, nitrogen or carbon.

2.89 **"Nutrients"** means nitrogen, nitrate, phosphorus, organic matter, and any other elements necessary for or helpful to plant growth.

2.90 **"Operations and Maintenance Manual"** means a written document setting forth a step by step procedure for operating and maintaining the treatment facility.

2.91 **"Operator"** means any person employed or appointed by any owner, and who is designated by such owner to be the person controlling the operations of the treatment works, including direct actions, decisions or evaluations which affect the quality of the discharge, and whose duties include testing or evaluation to control treatment works operations.

2.92 **"Other wastes"** means decayed wood, sawdust, shavings, bark, sand, lime, garbage, refuse, cinders, ashes, offal, tar, oil, chemicals, and all other substances, except industrial wastes and sewage, which may cause pollution in any State waters.

2.93 **"Owner"** means the State or any of its political subdivisions, including, but not limited to, sewer or sanitation district commissioners and authorities; any public or private institution, corporation, association, firm or company organized or existing under the laws of this or any other state or country; or any person or group of persons acting individually or as a group, and shall include any permittee under a NPDES permit. For the purposes of this regulation, "owner" shall also mean any responsible corporate officer so designated in the permit application. "Owner" may also mean an industrial user as identified or controlled by the requirements of Section 6, Part VII.

2.94 **"Permit"** means the authorization, license or equivalent control document issued by the Secretary or his duly authorized representative to implement the requirements of these regulations.

2.95 **"Permittee"** means any person to whom a permit has been issued by the Secretary.

2.96 **"Person"** means any individual, trust, firm, corporation (including a government corporation), partnership, association, institution, enterprise, federal agency, state, municipality, commission, agency, political subdivision of a state or any interstate body, or an agent or employee thereof.

2.97 **"Pipeline"** means any pipe or system of pipes including, but not limited to, pump stations and other appurtenances utilized for the conveyance of any liquid, gas or solid.

2.98 **"Point source"** means 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.

2.99 **"Pollutant"** means any substance, radioactive material, or waste heat which causes or contributes to, or may cause or contribute to, pollution. The term includes dredged spoil and other dredged materials, fill material, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, hydrocarbons, oil, product chemicals, and industrial, municipal, agricultural and other wastes discharged into water.

The term, "pollutant", does not mean: "sewage from vessels" within the meaning of Section 312 of the Act; or water, gas, or other material that is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by the Secretary, and if the Secretary determines that such injection or disposal will not result in the degradation of ground or surface water resources. This definition encompasses drinking water contaminants that are regulated under Section 1412 of the Safe Drinking Water Act and may be discharged to State waters that are source waters of one or more public water systems. For public water systems served by surface water, source water is any water reaching the intake.

2.100 **"Pollution" or "Water Pollution"** means man-made or human-induced alteration of the physical, chemical, biological or radiological properties of any state waters as will create or is likely to create a nuisance or render such waters:

(i) Harmful or detrimental or injurious to the public health, safety, or welfare, or to the health of animals, fish, or aquatic life;

(ii) Unsuitable, with reasonable treatment, for use as present or possible future sources of public water supply; or

(iii) Unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses;

For the purposes of these regulations, the following are "water pollution":

(A) An alteration of the physical, chemical, or biological properties of State waters or a discharge of sewage, industrial wastes, other wastes or materials to State waters by any person which by itself is not sufficient to cause water pollution but which in combination with such alteration or discharge to State waters by other persons is sufficient to cause water pollution,

(B) The discharge of untreated sewage by any person into State waters, and

(C) The discharge of any pollutant, contaminant or substance that causes or contributes to the contravention of water quality standards duly established by the Secretary.

2.101 **"Pollution Control Strategy" or "PCS"** means a plan that specifies the necessary pollutant load reductions and actions that must be taken through voluntary and regulatory means to ensure the resultant pollutant loadings are less than or equal to the "total maximum daily load" or "TMDL" for a given waterbody. Pollution trading between different sources of pollution, geographic targeting and pollution prevention may all be considered as part of a "Pollution Control Strategy" or "PCS".

2.102 **"Pollution prevention"** means any practice which results in a lesser quantity of emissions released or discharged prior to out-of-process recycling, treatment or control, as measured on a per-unit-of-production basis.

2.103 **"Ponds"** means all natural and/or man-made lakes or other bodies of water fed directly by springs, groundwater, tidal or non-tidal streams.

2.104 **"Pretreatment"** means the reduction or elimination of pollutants, or altering the nature of the pollutants prior to discharging or otherwise introducing such pollutants to a treatment works. The reduction or alteration can be obtained by physical, chemical or biological processes, process changes or by other means.

2.105 **"Pretreatment program"** means the legal, technical and administrative framework for effectively controlling the introduction of pollutants into a publicly owned treatment works (POTW).

2.106 **"Pretreatment requirement"** means any substantive or procedural condition, obligation or requirement related to pretreatment, other than a national pretreatment standard, imposed on any industrial user.

2.107 **"Pretreatment standard"** means any pollutant discharge limitation promulgated by the EPA in accordance with §307(b) and (c) of the Act, or by the Secretary, which applies to industrial users. This term includes

the prohibitions and discharge limitations outlined in Section 6.71 of these regulations.

2.108 **"Process wastewater"** means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

2.109 **"Professional engineer"** means a person who has been duly registered as a Professional Engineer by the Council of the Delaware Association of Professional Engineers.

2.110 **"Public Hearing"** means any fact-finding proceeding pursuant to §6006 of the Law, held by the Secretary to afford interested persons an opportunity to submit factual data or evidence, views, and arguments to the Secretary.

2.111 **"Publicly owned treatment works" ("POTW")** means a treatment works as defined herein, which is owned by the State or a municipality, city, town, county, district or other public body created by or pursuant to the laws of the State, including any sewers, pipes or other conveyances that connect to such treatment works.

2.112 **"Radioactive Material"** means those radioactive materials not encompassed in the definitions of source, byproduct or special nuclear materials in the Atomic Energy Act of 1954, as amended through August 29, 2000.

2.113 **"Residues" or "residuals"** means the solids, sludges, and precipitates separated from or created by the unit processes of a treatment works.

2.114 **"Rock crushing and gravel washing facilities"** means facilities which process crushed and broken stone, gravel and riprap.

2.115 **"Schedule of compliance"** means a listing of necessary measures with target dates, including an enforceable sequence of interim requirements, actions or operations, leading to compliance with an effluent limitation, other limitation or requirement, prohibition, regulation, performance standard, or water quality standard.

2.116 **"Secondary treatment"** means any combination of unit processes that will consistently remove 85% or more of the organic and suspended material in domestic sewage and produce an effluent of sufficient quality to satisfy the requirements of Section 7 of these regulations.

2.117 **"Secretary"** means the Secretary of the Department of Natural Resources and Environmental Control or his duly authorized designee.

2.118 **"Severe property damage"** means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

2.119 **"Sewage"** means the water-carried human or animal wastes from septic tanks, water closets, residences, buildings, industrial establishments or other places together with such groundwater infiltration, subsurface water, storm inflow, admixture of industrial wastes, or other wastes as may be present.

2.120 **"Sewage from vessels"** means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under Section 312 of the Act.

2.121 **"Sewage sludge"** means any solid, semi-solid or liquid residue removed during the treatment of municipal wastewater or domestic sewage, including but not limited to, solids removed during primary, secondary or advanced wastewater treatment, scum, septage, portable toilet pumpings and sewage sludge products.

2.122 **"Significant industrial user"** means that (industrial user) which reasonably has the potential to adversely affect a POTW's operation; that which reasonably has the potential for violating any pretreatment standard or requirement; that which discharges an average of 25,000 gallons per day or more of process wastewater to a POTW; that which discharges process wastewater in such an amount or strength that constitutes 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW; that which is designated as such by the POTW; that which is subject to federal categorical pretreatment standards as outlined in 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N.

2.123 **"Silvicultural point source"** means any discernible, confined, and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into State waters.

2.124 **"Site"** means the land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

2.125 **"Sludge"** means the accumulated semi-liquid suspension, settled solids, or dried residue of these solids removed by any surface water or groundwater treatment facility or any liquid waste treatment facility or works, whether or not such solids have undergone treatment.

2.126 **"Source"** means any building, structure, facility, installation or establishment from which there is or may be a discharge of pollutants.

2.127 **"State"** means the State of Delaware.

2.128 **"State waters"** or **"Waters of the State"** means all water, on the surface and under the ground, wholly or partially within, or bordering the State, or within its jurisdiction including but not limited to:

(a) Waters which are subject to the ebb and flow of the tide including, but not limited to, estuaries, bays and the Atlantic Ocean;

(b) All interstate waters, including interstate wetlands;

(c) All other waters of the State, such as lakes, rivers, streams (including intermittent and ephemeral streams), drainage ditches, tax ditches, creeks, mudflats, sandflats, wetlands, sloughs, or natural or impounded ponds;

(d) All impoundments of waters otherwise defined as waters of the State under this definition;

(e) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in (a)-(d).

Waste and stormwater treatment systems including, but not limited to, treatment ponds or lagoons designed to meet the requirements of the Act (other than cooling ponds which otherwise meet the requirements of subsection (1) of this definition) are not "State waters" or "Waters of the State".

2.129 **"Stream"** means the natural watercourse flowing in a defined bed or channel with bank and sides having permanent sources of supply, uniform or interrupted, temporarily diminished or suspended, but usually containing running water.

2.130 **"Surface water"** means water occurring generally on the surface of the earth.

2.131 **"Technology-based"** generally refers to those requirements or limitations, established by these regulations or in accordance with §301 of the Act, that reflect the achievable performance or pollutant removal capability of the technology, treatment process or equipment employed.

2.132 **"Total maximum daily load"** or **"TMDL"** means the amount of a given pollutant that may be discharged to a waterbody from point, nonpoint and natural background sources and still allow attainment or maintenance of the applicable narrative and numerical water quality standards. A "TMDL" is the sum of the individual wasteload allocations or WLAs for point sources and load allocations or LAs for nonpoint sources of pollution and natural background. A "TMDL" may include a reasonable margin of safety (MOS) to account for uncertainties regarding the relationship between mass loading and resulting water quality. In simplistic terms, a "TMDL" attempts to match the strength, location and timing of pollution sources within a watershed with the inherent ability of the receiving water to assimilate the pollutant without adverse impact.

2.133 **"Toxic Pollutant"** means any pollutant listed as toxic in Delaware's Surface Water Quality Standards.

2.134 **"Treatment works"** means any devices and systems used in the storage, treatment, recycling, and/or reclamation of sewage or industrial wastes, or necessary to recycle or reuse water, including intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof; and any works, including land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment; however, "treatment facilities" shall include only those mechanical devices necessary for the transmission and treatment of wastes (e.g., unit treatment processes and pump stations).

2.135 **"Upset"** means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. The basis for specific effluent limitations can be found in the fact sheet, as provided for in Section 6.18. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2.136 **"Variance"** means a permitted deviation from an established rule, regulation, plan, standard or procedure. With respect to the NPDES program, it means any mechanism or provision under Sections 301 or 316 of the Act, or in the applicable effluent limitation guidelines which allow modification to or waivers of the effluent limitation requirements or time deadlines of the Act. This includes provisions which allow the establishment of alternative limitations based on fundamentally different factors, the establishment of alternative discharge limitations, treatment requirements or control measures pursuant to Sections 301(c), 301(g), 301(h) or 316(a) of the Act, or extensions of compliance deadlines pursuant to Sections 301(i) or 301(k) of the Act, where appropriate.

2.137 **"Warm water aquatic animals"** include, but are not limited to, the Ameiuride, Centrarchidae, and Cyprinidae families of fish, e.g., respectively catfish, sunfish, and minnows.

2.138 **"Wasteload allocation"** or **"WLA"** means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.

2.139 **"Water quality"** means the physical, chemical and biological characteristics of water with respect to its suitability for a particular use.

2.140 **"Water quality-based"** generally refers to those requirements or limitations designed to achieve a given water quality objective, e.g. compliance with any applicable water quality standard, without regard to treatment technology.

2.141 **"Water quality criterion"** is an element of water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular designated use.

2.142 **"Water quality standard"** means any rule or limit established by the Secretary which consists of a designated use or uses for waters of the State and the water quality criteria for such waters based upon such designated uses.

2.143 **"Wetlands"** are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetland areas are as delineated under and through 7 Del.C. Chapter 66 and the "Corps of Engineers Wetlands Delineation Manual", dated January, 1987.

2.144 **"Wetlands creation"** means the establishment, through human intervention, of wetlands at a site where wetlands did not historically exist.

2.145 **"Wetlands enhancement"** means the net increase, through human intervention, of wetland function or value within an existing wetland.

2.146 **"Wetlands restoration"** means the reestablishment, through human intervention, of wetlands at a site where wetlands historically existed but were subsequently lost.

2.147 **"Whole effluent toxicity"** means the aggregate toxic effect of an effluent or discharge measured directly by a toxicity test.

2.148 **"Work plan"** means a list of all necessary actions and corresponding time schedule which is included in the facility plan or operations and needs review to ensure that an owner's sewage system maintains effluent limits.