9 VAC 25-31-10. Definitions.

"Act" means Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et seq.

"Administrator" means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

"Animal feeding operation" or "AFO" means a lot or facility (other than an aquatic animal production facility) where the following conditions are met: (i) animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and (ii) crops, vegetation forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

"Applicable standards and limitations" means all state, interstate, and federal standards and limitations to which a discharge, a sewage sludge use or disposal practice, or a related activity is subject under the Clean Water Act (CWA) (33 USC § 1251 et seq.) and the law, including effluent limitations, water quality standards, standards of performance, toxic effluent standards or prohibitions, best management practices, pretreatment standards, and standards for sewage sludge use or disposal under §§ 301, 302, 303, 304, 306, 307, 308, 403 and 405 of CWA.

"Approval authority" means the Director of the Department of Environmental Quality.

"Approved POTW Pretreatment Program" or "Program" or "POTW Pretreatment Program" means a program administered by a POTW that meets the criteria established in Part VII (9 VAC 25-31-730 et seq.) of this chapter and which has been approved by the director or by the administrator in accordance with 9 VAC 25-31-830.

"Approved program" or "approved state" means a state or interstate program which has been approved or authorized by EPA under 40 CFR Part 123 (2005).

"Aquaculture project" means a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals.

"Average monthly discharge limitation" means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

"Average weekly discharge limitation" means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

"Best management practices (BMPs)" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in 9VAC 25-31-770 and to prevent or reduce the pollution of surface waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site run-off, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Board" means the Virginia State Water Control Board or State Water Control Board.

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

"Class I sludge management facility" means any POTW identified under Part VII (9 VAC 25-31-730 et seq.) of this chapter as being required to have an approved pretreatment program and any other treatment works treating domestic sewage classified as a Class I sludge management facility by the regional administrator, in conjunction with the director, because of the potential for its sludge use or disposal practices to adversely affect public health and the environment.

"Concentrated animal feeding operation" or "CAFO" means an AFO that is defined as a Large CAFO or as a Medium CAFO, or that is designated as a Medium CAFO or a Small CAFO. Any AFO may be designated as a CAFO by the director in accordance with the provisions of 9 VAC 25-31-130 B.

- 1. "Large CAFO." An AFO is defined as a Large CAFO if it stables or confines as many or more than the numbers of animals specified in any of the following categories:
 - a. 700 mature dairy cows, whether milked or dry;
 - b. 1,000 veal calves;
 - c. 1,000 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;

- d. 2,500 swine each weighing 55 pounds or more;
- e. 10,000 swine each weighing less than 55 pounds;
- f. 500 horses;
- g. 10,000 sheep or lambs;
- h. 55,000 turkeys;
- i. 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;
- j. 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
- k. 82,000 laying hens, if the AFO uses other than a liquid manure handling system;
- I. 30,000 ducks, if the AFO uses other than a liquid manure handling system; or
- m. 5,000 ducks if the AFO uses a liquid manure handling system.
- 2. "Medium CAFO." The term Medium CAFO includes any AFO with the type and number of animals that fall within any of the ranges below that has been defined or designated as a CAFO. An AFO is defined as a Medium CAFO if:
 - a. The type and number of animals that it stables or confines falls within any of the following ranges:
 - (1) 200 to 699 mature dairy cattle, whether milked or dry;
 - (2) 300 to 999 veal calves;
 - (3) 300 to 999 cattle other than mature dairy cows or veal calves. Cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;
 - (4) 750 to 2,499 swine each weighing 55 pounds or more;
 - (5) 3,000 to 9,999 swine each weighing less than 55 pounds;
 - (6) 150 to 499 horses;
 - (7) 3,000 to 9,999 sheep or lambs;
 - (8) 16,500 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;

- (9) 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
- (10) 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;
- (11) 10,000 to 29,999 ducks, if the AFO uses other than a liquid manure handling system;
- (12) 1,500 to 4,999 ducks, if the AFO uses a liquid manure handling system; and
- b. Either one of the following conditions are met:
 - (1) Pollutants are discharged into surface waters of the state through a manmade ditch, flushing system, or other similar manmade device; or
 - (2) Pollutants are discharged directly into surface waters of the state that originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.
- 3. "Small CAFO." An AFO that is designated as a CAFO and is not a Medium CAFO.
- "Concentrated aquatic animal production facility" means a hatchery, fish farm, or other facility which meets the criteria of this definition, or which the board designates under 9 VAC 25-31-140. A hatchery, fish farm, or other facility is a concentrated aquatic animal production facility if it contains, grows, or holds aquatic animals in either of the following categories:
 - 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:
 - a. Facilities which produce less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year; and
 - b. Facilities which feed less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding; or
 - 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:
 - a. Closed ponds which discharge only during periods of excess run-off; or

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

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

Warm water aquatic animals include, but are not limited to, the Ictaluridae, Centrarchidae and Cyprinidae families of fish (e.g., respectively, catfish, sunfish and minnows).

"Contiguous zone" means the entire zone established by the United States under Article 24 of the Convention on the Territorial Sea and the Contiguous Zone (37 FR 11906).

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

"Control Authority" refers to the POTW if the POTW's Pretreatment Program Submission has been approved in accordance with the requirements of VAC 25-31-830; or the Approval Authority if the Submission has not been approved.

"Co-permittee" means a permittee to a VPDES permit that is only responsible for permit conditions relating to the discharge for which it is the operator.

"CWA" means the Clean Water Act (33 USC § 1251 et seq.) (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, and Public Law 97-117.

"CWA and regulations" means the Clean Water Act (CWA) and applicable regulations promulgated thereunder. For the purposes of this chapter, it includes state program requirements.

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

"Department" means the Virginia Department of Environmental Quality.

"Designated project area" means the portions of surface within which the permittee or permit applicant plans to confine the cultivated species, using a method or plan or operation (including, but not limited to, physical confinement) which, on the basis of reliable scientific evidence, is expected to ensure that specific individual organisms comprising an aquaculture crop will enjoy increased growth attributable to the discharge of pollutants, and be harvested within a defined geographic area.

"Direct discharge" means the discharge of a pollutant.

"Director" means the Director of the Department of Environmental Quality or an authorized representative.

"Discharge," when used without qualification, means the discharge of a pollutant.

"Discharge," when used in Part VII (9 VAC 25-31-730 et seq.) of this chapter, means "indirect discharge" as defined in this section.

"Discharge of a pollutant" means:

- 1. Any addition of any pollutant or combination of pollutants to surface waters from any point source; or
- 2. Any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes additions of pollutants into surface waters from: surface run-off which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any indirect discharger.

"Discharge Monitoring Report (DMR)" means the form supplied by the department or an equivalent form developed by the permittee and approved by the board, for the reporting of self-monitoring results by permittees.

"Draft permit" means a document indicating the board's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a permit. A notice of intent to terminate a permit, and a notice of intent to deny a permit are types of draft permits. A denial of a request for modification, revocation and reissuance, or termination is not a draft permit. A proposed permit is not a draft permit.

STATE WATER CONTROL BOARD

VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES) PERMIT REGULATION 9 VAC 25-31-10, 30, 80, 100, 165, 220, 290, 770, 780, 790, 800, 840 and 870

"Effluent limitation" means any restriction imposed by the board on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into surface waters, the waters of the contiguous zone, or the ocean.

"Effluent limitations guidelines" means a regulation published by the administrator under § 304(b) of the CWA to adopt or revise effluent limitations.

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

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

"Facilities or equipment" means buildings, structures, process or production equipment or machinery which form a permanent part of a new source and which will be used in its operation, if these facilities or equipment are of such value as to represent a substantial commitment to construct. It excludes facilities or equipment used in connection with feasibility, engineering, and design studies regarding the new source or water pollution treatment for the new source.

"Facility or activity" means any VPDES point source or treatment works treating domestic sewage or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the VPDES program.

"General permit" means a VPDES permit authorizing a category of discharges under the CWA and the law within a geographical area.

"Hazardous substance" means any substance designated under the Code of Virginia and 40 CFR Part 116 (2005) pursuant to § 311 of the CWA.

"Incorporated place" means a city, town, township, or village that is incorporated under the Code of Virginia.

"Indian country" means (i) all land within the limits of any Indian reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (ii) all dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and (iii) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

"Indirect discharge" means the introduction of pollutants into a POTW from any nondomestic source regulated under § 307(b), (c) or (d) of the CWA and the law.

"Indirect discharger" means a nondomestic discharger introducing pollutants to a POTW.

"Individual control strategy" means a final VPDES permit with supporting documentation showing that effluent limits are consistent with an approved wasteload allocation or other documentation that shows that applicable water quality standards will be met not later than three years after the individual control strategy is established.

"Industrial user" or "user" means a source of indirect discharge.

"Interference" means an indirect discharge which, alone or in conjunction with an indirect discharge or discharges from other sources, both: (i) inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and therefore (ii) is a cause of a violation of any requirement of the POTW's VPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA) (42 USC § 6901 et seq.), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the SWDA) the Clean Air Act (42 USC § 701 et seq.), the Toxic Substances Control Act (15 USC § 2601 et seq.), and the Marine Protection, Research and Sanctuaries Act (33 USC § 1401 et seq.).

"Interstate agency" means an agency of two or more states established by or under an agreement or compact approved by 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 the administrator under the CWA and regulations.

"Land application area" means land under the control of an AFO owner or operator, that is owned, rented, or leased to which manure, litter or process wastewater from the production area may be applied.

"Log sorting" and "log storage facilities" means facilities whose discharges result from the holding of unprocessed wood, for example, logs or roundwood with bark or after removal of bark held 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).

"Major facility" means any VPDES facility or activity classified as such by the regional administrator in conjunction with the board.

"Manmade" means constructed by man and used for the purpose of transporting wastes.

"Manure" means manure, bedding, compost and raw materials or other materials commingled with manure or set aside for disposal.

"Maximum daily discharge limitation" means the highest allowable daily discharge.

"Municipality" means a city, town, county, district, association, or other public body created by or under state law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under § 208 of the CWA.

"National Pollutant Discharge Elimination System (NPDES)" means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements under §§ 307, 402, 318, and 405 of the CWA. The term includes an approved program.

"National pretreatment standard," "pretreatment standard," or "standard," when used in Part VII (9 VAC 25-31-730 et seq.) of this chapter, means any regulation containing pollutant discharge limits promulgated by the EPA in accordance with § 307(b) and (c) of the CWA, which applies to industrial users. This term includes prohibitive discharge limits established pursuant to 9 VAC 25-31-770.

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

- 1. From which there is or may be a discharge of pollutants;
- 2. That did not commence the discharge of pollutants at a particular site prior to August 13, 1979;
- 3. Which is not a new source; and
- 4. Which has never received a finally effective VPDES permit for discharges at that site.

This definition includes an indirect discharger which commences discharging into surface waters after August 13, 1979. It also includes any existing mobile point source (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and gas developmental drilling rig) such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a site for which it does not have a permit; and any offshore or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas developmental drilling rig that commences the discharge of pollutants after August 13, 1979.

"New source," except when used in Part VII of this chapter, means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

- (a) After promulgation of standards of performance under § 306 of the CWA which are applicable to such source; or
- (b) After proposal of standards of performance in accordance with § 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with § 306 of the CWA within 120 days of their proposal.

"New source," when used in Part VII of this chapter, means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under § 307(c) of the CWA which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:

- 1. a. The building, structure, facility or installation is constructed at a site at which no other source is located;
 - b. The building, structure, facility, or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
 - c. The production of wastewater generating processes of the building, structure, facility, or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.
- 2. Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the

criteria of subdivision 1 b or c of this definition but otherwise alters, replaces, or adds to existing process or production equipment.

- 3. Construction of a new source as defined under this subdivision has commenced if the owner or operator has:
 - a. Begun, or caused to begin, as part of a continuous on-site construction program:
 - (1) Any placement, assembly, or installation of facilities or equipment; or
 - (2) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - b. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this subdivision.

"Overburden" means any material of any nature, consolidated or unconsolidated, that overlies a mineral deposit, excluding topsoil or similar naturally occurring surface materials that are not disturbed by mining operations.

"Owner" means the Commonwealth or any of its political subdivisions including, but not limited to, sanitation district commissions and authorities, and 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 officer or agency of the United States, or any person or group of persons acting individually or as a group that owns, operates, charters, rents, or otherwise exercises control over or is responsible for any actual or potential discharge of sewage, industrial wastes, or other wastes to state waters, or any facility or operation that has the capability to alter the physical, chemical, or biological properties of state waters in contravention of § 62.1-44.5 of the Code of Virginia.

"Owner" or "operator" means the owner or operator of any facility or activity subject to regulation under the VPDES program.

"Pass through" means a discharge which exits the POTW into state waters in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's VPDES permit (including an increase in the magnitude or duration of a violation).

"Permit" means an authorization, certificate, license, or equivalent control document issued by the board to implement the requirements of this chapter. Permit includes a VPDES general permit. Permit does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit.

"Person" means an individual, corporation, partnership, association, a governmental body, a municipal corporation, or any other legal entity.

"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 run-off.

"Pollutant" means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 USC § 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

- 1. Sewage from vessels; or
- 2. Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well if the well used either to facilitate production or for disposal purposes is approved by the board, and if the board determines that the injection or disposal will not result in the degradation of ground or surface water resources.

"Publicly Owned Treatment Works" or "POTW" means a treatment works as defined by section 212 of the Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal

sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the Act, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works.

"POTW treatment plant" means that portion of the POTW which is designed to provide treatment (including recycling and reclamation) of municipal sewage and industrial waste.

"Pretreatment" means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration may be obtained by physical, chemical or biological processes, process changes or by other means, except as prohibited in Part VII of this chapter. Appropriate pretreatment technology includes control equipment, such as equalization tanks or facilities, for protection against surges or slug loadings that might interfere with or otherwise be incompatible with the POTW. However, where wastewater from a regulated process is mixed in an equalization facility with unregulated wastewater or with wastewater from another regulated process, the effluent from the equalization facility must meet an adjusted pretreatment limit calculated in accordance with Part VII of this chapter.

"Pretreatment requirements" means any requirements arising under Part VII of this chapter including the duty to allow or carry out inspections, entry or monitoring activities; any rules, regulations, or orders issued by the owner of a publicly owned treatment works; or any reporting requirements imposed by the owner of a publicly owned treatment works or by the regulations of the board. Pretreatment requirements do not include the requirements of a national pretreatment standard.

"Primary industry category" means any industry category listed in the NRDC settlement agreement (Natural Resources Defense Council et al. v. Train, 8 E.R.C. 2120 (D.D.C. 1976), modified 12 E.R.C. 1833 (D.D.C. 1979)); also listed in 40 CFR Part 122 Appendix A (2005).

"Privately owned treatment works (PVOTW)" means any device or system which is (i) used to treat wastes from any facility whose operator is not the operator of the treatment works and (ii) not a POTW.

"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. Process wastewater from an AFO means water directly or indirectly used in the operation of the AFO for any of the following: spillage or overflow from animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other AFO facilities; direct contact swimming, washing, or spray cooling of the animals; or dust control. Process wastewater from an AFO also includes any water that comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs or bedding.

"Production area" means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes but is not limited to lagoons, run-off ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage areas includes but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions that separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

"Proposed permit" means a VPDES permit prepared after the close of the public comment period (and, when applicable, any public hearing and administrative appeals) which is sent to EPA for review before final issuance. A proposed permit is not a draft permit.

"Publicly owned treatment works (POTW)" means a treatment works as defined by § 212 of the CWA, which is owned by a state or municipality (as defined by § 502(4) of the CWA). This definition includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW treatment plant. The term also means the municipality as defined in § 502(4) of the CWA, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

"Recommencing discharger" means a source which recommences discharge after terminating operations.

"Regional administrator" means the Regional Administrator of Region III of the Environmental Protection Agency or the authorized representative of the regional administrator.

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

"Schedule of compliance" means a schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (for example, actions, operations, or milestone events) leading to compliance with the law, the CWA and regulations.

"Secondary industry category" means any industry category which is not a primary industry category.

"Secretary" means the Secretary of the Army, acting through the Chief of Engineers.

"Septage" means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes 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.

"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 § 312 of CWA.

"Sewage sludge" means any solid, semisolid, or liquid residue removed during the treatment of municipal waste water or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced waste water treatment, scum, domestic septage, portable toilet pumpings, type III marine sanitation device pumpings, and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.

"Sewage sludge use" or "disposal practice" means the collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge.

"Significant industrial user" means:

- 1. Except as provided in subdivision 3 subdivisions 2. and 3. of this definition, the term Significant Industrial User (SIU) means:
- <u>a.</u> All industrial users subject to Categorical Pretreatment Standards under 9 VAC 25-31-780 and incorporated by reference in 9 VAC 25-31-30; and
- <u>b.</u> Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process wastestream which makes up 5.0% or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority, as defined in 9 VAC 25-31-840 A, on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.
- 2. The Control Authority may determine that an Industrial User subject to categorical Pretreatment Standards under 9 VAC 25-31-780 and 40 CFR chapter I, subchapter N is a Non-Significant Categorical Industrial User rather than a Significant Industrial User on a finding that the Industrial User never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the following conditions are met:
- a. the Industrial User, prior to Control Authority's finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements;
- b. the Industrial User annually submits the certification statement required in 9 VAC 25-31-840 together with any additional information necessary to support the certification statement; and
 - c. the Industrial User never discharges any untreated concentrated wastewater.
- 3. Upon a finding that an industrial user meeting the criteria in subdivision 2.<u>b.</u> of this definition has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the control authority may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with Part VII (9 VAC 25-31-730 et seq.) of this chapter, determine that such industrial user is not a significant industrial user.
- "Significant materials" means, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food

processing or production; hazardous substances designated under § 101(14) of CERCLA (42 USC § 9601(14)); any chemical the facility is required to report pursuant to§ 313 of Title III of SARA (42 USC § 11023); fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

"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 surface waters. The term does not include nonpoint source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural run-off. However, some of these activities (such as stream crossing for roads) may involve point source discharges of dredged or fill material which may require a CWA § 404 permit.

"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.

"Sludge-only facility" means any treatment works treating domestic sewage whose methods of sewage sludge use or disposal are subject to regulations promulgated pursuant to the law and § 405(d) of the CWA, and is required to obtain a VPDES permit.

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

"Standards for sewage sludge use or disposal" means the regulations promulgated pursuant to the law and § 405(d) of the CWA which govern minimum requirements for sludge quality, management practices, and monitoring and reporting applicable to sewage sludge or the use or disposal of sewage sludge by any person.

"State" means the Commonwealth of Virginia.

"State/EPA agreement" means an agreement between the regional administrator and the state which coordinates EPA and state activities, responsibilities and programs including those under the CWA and the law.

"State Water Control Law" or "Law" means Chapter 3.1 (§ 62.1-44.2 et seq.) of Title 62.1 of the Code of Virginia.

"Storm water" means storm water run-off, snow melt run-off, and surface run-off and drainage.

"Storm water discharge associated with industrial activity" means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the VPDES program. For the categories of industries identified in this definition, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this definition, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product, or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are federally, state, or municipally owned or operated that meet the description of the facilities listed in subdivisions 1 through 10 of this definition) include those facilities designated under the provisions of 9 VAC 25-31-120 A 1 c. The following categories of facilities are considered to be engaging in industrial activity for purposes of this subsection:

- 1. Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards (except facilities with toxic pollutant effluent standards which are exempted under category 10);
- 2. Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283), 29, 311, 32 (except 323), 33, 3441, 373;

- 3. Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) (2005) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable state or federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, by-products, or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim);
- 4. Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA (42 USC § 6901 et seq.);
- 5. Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA (42 USC § 6901 et seq.);
- 6. Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;
- 7. Steam electric power generating facilities, including coal handling sites;
- 8. Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under subdivisions 1 through 7 or 9 and 10 of this definition are associated with industrial activity;

- 9. Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with § 405 of the CWA; and
- 10. Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, and 4221-25.

"Submission" means: (i) a request by a POTW for approval of a pretreatment program to the regional administrator or the director; (ii) a request by POTW to the regional administrator or the director for authority to revise the discharge limits in categorical pretreatment standards to reflect POTW pollutant removals; or (iii) a request to the EPA by the director for approval of the Virginia pretreatment program.

"Surface waters" means:

- 1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- 2. All interstate waters, including interstate wetlands;
- 3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c. Which are used or could be used for industrial purposes by industries in interstate commerce.
- 4. All impoundments of waters otherwise defined as surface waters under this definition;
- 5. Tributaries of waters identified in subdivisions 1 through 4 of this definition;

- 6. The territorial sea; and
- 7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in subdivisions 1 through 6 of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA and the law, are not surface waters. Surface waters do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other agency, for the purposes of the Clean Water Act, the final authority regarding the Clean Water Act jurisdiction remains with the EPA.

"Total dissolved solids" means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR Part 136 (2005).

"Toxic pollutant" means any pollutant listed as toxic under § 307(a)(1) of the CWA or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing § 405(d) of the CWA.

"Treatment facility" means only those mechanical power driven devices necessary for the transmission and treatment of pollutants (e.g., pump stations, unit treatment processes).

"Treatment works" means any devices and systems used for the storage, treatment, recycling or reclamation of sewage or liquid industrial waste, or other waste or necessary to recycle or reuse water, including intercepting sewers, outfall sewers, sewage collection systems, individual systems, pumping, power and other equipment and their appurtenances; extensions, improvements, remodeling, additions, or 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; or any other method or system used for preventing, abating, reducing, storing, treating, separating, or disposing of municipal waste or industrial waste, including waste in combined sewer water and sanitary sewer systems.

"Treatment works treating domestic sewage" means a POTW or any other sewage sludge or waste water treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices. For purposes of this definition, domestic sewage includes waste and waste water from humans or household operations that are discharged to or otherwise enter a treatment works.

"TWTDS" means treatment works treating domestic sewage.

"Uncontrolled sanitary landfill" means a landfill or open dump, whether in operation or closed, that does not meet the requirements for run-on or run-off controls established pursuant to subtitle D of the Solid Waste Disposal Act (42 USC § 6901 et seq.).

"Upset," except when used in Part VII of this chapter, 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. 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.

"Variance" means any mechanism or provision under § 301 or § 316 of the CWA or under 40 CFR Part 125 (2005), or in the applicable effluent limitations guidelines which allows modification to or waiver of the generally applicable effluent limitation requirements or time deadlines of the CWA. This includes provisions which allow the establishment of alternative limitations based on fundamentally different factors or on §§ 301(c), 301(g), 301(h), 301(i), or 316(a) of the CWA.

"Virginia Pollutant Discharge Elimination System (VPDES) permit" means a document issued by the board pursuant to this chapter authorizing, under prescribed conditions, the potential or actual discharge of pollutants from a point source to surface waters and the use or disposal of sewage sludge. Under the approved state program, a VPDES permit is equivalent to an NPDES permit.

"VPDES application" or "application" means the standard form or forms, including any additions, revisions or modifications to the forms, approved by the administrator and the board for applying for a VPDES permit.

"Wastewater," when used in Part VII of this chapter, means liquid and water carried industrial wastes and domestic sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities and institutions, whether treated or untreated, which are contributed to the POTW.

"Wastewater works operator" means any individual employed or appointed by any owner, and who is designated by such owner to be the person in responsible charge, such as a supervisor, a shift operator, or a substitute in charge, and whose duties include testing or evaluation to control wastewater works operations. Not included in this definition are superintendents or directors of public works, city engineers, or

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other municipal or industrial officials whose duties do not include the actual operation or direct supervision of

wastewater works.

"Water Management Division Director" means the director of the Region III Water Management Division of

the Environmental Protection Agency or this person's delegated representative.

"Wetlands" means 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.

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

9 VAC 25-31-30. Federal effluent guidelines.

A. The following federal regulations are hereby incorporated by reference:

Aluminum Forming 40 CFR Part 467 (2005)

Asbestos Manufacturing 40 CFR Part 427 (2005)

Battery Manufacturing 40 CFR Part 461 (2005)

Canned and Preserved Fruits and Vegetables 40 CFR Part 407 (2005)

Canned and Preserved Seafood 40 CFR Part 408 (2005)

Carbon Black Manufacturing 40 CFR Part 458 (2005)

Cement Manufacturing 40 CFR Part 411 (2005)

Centralized Waste Treatment 40 CFR Part 437 (2005)

Coal Mining 40 CFR Part 434 (2005)

Coil Coating 40 CFR Part 465 (2005)

Copper Forming 40 CFR Part 468 (2005)

Dairy Products 40 CFR Part 405 (2005)

Electrical and Electronic Components 40 CFR Part 469 (2005)

Electroplating 40 CFR Part 413 (2005)

Explosives Manufacturing 40 CFR Part 457 (2005)

Feedlots 40 CFR Part 412 (2005)

Ferroalloy Manufacturing 40 CFR Part 424 (2005)

Fertilizer Manufacturing 40 CFR Part 418 (2005)

Glass Manufacturing 40 CFR Part 426 (2005)

Grain Mills 40 CFR Part 406 (2005)

Gum and Wood Chemicals Manufacturing 40 CFR Part 454 (2005)

Hospitals 40 CFR Part 460 (2005)

Ink Formulating 40 CFR Part 447 (2005)

Inorganic Chemicals Manufacturing 40 CFR Part 415 (2005)

Iron and Steel Manufacturing 40 CFR Part 420 (2005)

Landfills 40 CFR Part 445 (2005)

Leather Tanning and Finishing 40 CFR Part 425 (2005)

Meat Products 40 CFR Part 432 (2005)

Metal Finishing 40 CFR Part 433 (2005)

Metal Molding and Casting 40 CFR Part 464 (2005)

Metal Products and Machinery 40 CFR Part 438 (2005)

Mineral Mining and Processing 40 CFR Part 436 (2005)

Nonferrous Metals 40 CFR Part 421 (2005)

Nonferrous Metal Forming 40 CFR Part 471 (2005)

Oil and Gas Extraction 40 CFR Part 435 (2005)

Ore Mining and Dressing 40 CFR Part 440 (2005)

Organic Chemicals, Plastics and Synthetic Fibers 40 CFR Part 414 (2005)

Paint Formulating 40 CFR Part 446 (2005)

Paving and Roofing Materials 40 CFR Part 443 (2005)

Pesticide Chemicals 40 CFR Part 455 (2005)

Petroleum Refining 40 CFR Part 419 (2005)

Pharmaceutical Manufacturing 40 CFR Part 439 (2005)

Phosphate Manufacturing 40 CFR Part 422 (2005)

Photographic Processing 40 CFR Part 459 (2005)

Plastics Molding and Forming 40 CFR Part 463 (2005)

Porcelain Enameling 40 CFR Part 466 (2005)

Pulp, Paper and Paperboard 40 CFR Part 430 (2005)

Rubber Processing 40 CFR Part 428 (2005)

Secondary Treatment 40 CFR Part 133 (2005)

Soaps and Detergents 40 CFR Part 417 (2005)

Steam Electric Power Generation 40 CFR Part 423 (2005)

Sugar Processing 40 CFR Part 409 (2005)

Textile Mills 40 CFR Part 410 (2005)

Timber Products 40 CFR Part 429 (2005)

Toxic Pollutant Effluent Standards 40 CFR Part 129 (2005)

Transportation Equipment Cleaning 40 CFR Part 442 (2005)

Waste Combustors 40 CFR Part 444 (2005)

B. The director shall be responsible for identifying any subsequent changes in the regulations incorporated in the previous subsection or the adoption or the modification of any new national standard. Upon

identifying any such federal change or adoption, the director shall initiate a regulation adopting proceedings by preparing and filing with the Registrar of Regulations the notice required by § 2.2-4006 A 4 c of the Code of Virginia or a notice of a public hearing pursuant to § 2.2-4007 C of the Code of Virginia.

9 VAC 25-31-80. Confidentiality of information.

A. Any secret formulae, secret processes, or secret methods other than effluent data submitted to the Department pursuant to this regulation may be claimed as confidential by the submitter pursuant to § 62.1-44.21 of the Law. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "secret formulae, secret processes or secret methods" on each page containing such information. If no claim is made at the time of submission, the Department may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in the Virginia Freedom of Information Act (§§ 2.1-340 et seq. §§ 2.2-3700) and 62.1-44.21 of the Code of Virginia).

- B. Claims of confidentiality for the following information will be denied:
 - 1. The name and address of any permit applicant or permittee;
 - 2. Permit applications, permits, and effluent data.
- C. Information required by VPDES application forms provided by the Department may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

9 VAC 25-31-100. Application for a permit.

A. Duty to apply. Any person who discharges or proposes to discharge pollutants or who owns or operates a sludge-only facility whose sewage sludge use or disposal practice is regulated by 9 VAC 25-31-420 through 9 VAC 25-31-720 and who does not have an effective permit, except persons covered by general permits, excluded from the requirement for a permit by this chapter, or a user of a privately owned treatment works unless the board requires otherwise, shall submit a complete application to the department in

accordance with this section. All concentrated animal feeding operations have a duty to seek coverage under a VPDES permit.

- B. Who applies. When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit.
- C. Time to apply.
 - 1. Any person proposing a new discharge, shall submit an application at least 180 days before the date on which the discharge is to commence, unless permission for a later date has been granted by the board. Facilities proposing a new discharge of storm water associated with industrial activity shall submit an application 180 days before that facility commences industrial activity which may result in a discharge of storm water associated with that industrial activity. Different submittal dates may be required under the terms of applicable general permits. Persons proposing a new discharge are encouraged to submit their applications well in advance of the 90 or 180 day requirements to avoid delay. New discharges composed entirely of storm water, other than those dischargers identified in 9 VAC 25-31-120 A 1, shall apply for and obtain a permit according to the application requirements in 9 VAC 25-31-120 B.
 - 2. All TWTDS whose sewage sludge use or disposal practices are regulated by 9 VAC 25-31-420 through 9 VAC 25-31-720 must submit permit applications according to the applicable schedule in subdivision 2 a or b of this subsection.
 - a. A TWTDS with a currently effective VPDES permit must submit a permit application at the time of its next VPDES permit renewal application. Such information must be submitted in accordance with subsection D of this section.
 - b. Any other TWTDS not addressed under subdivision 2 a of this subsection must submit the information listed in subdivisions 2 b (1) through (5) of this subsection to the department within one year after publication of a standard applicable to its sewage sludge use or disposal practice(s), using a form provided by the department. The board will determine when such TWTDS must submit a full permit application.
 - (1) The TWTDS's name, mailing address, location, and status as federal, state, private, public or other entity;
 - (2) The applicant's name, address, telephone number, and ownership status;

- (3) A description of the sewage sludge use or disposal practices. Unless the sewage sludge meets the requirements of subdivision P 8 d of this section, the description must include the name and address of any facility where sewage sludge is sent for treatment or disposal and the location of any land application sites;
- (4) Annual amount of sewage sludge generated, treated, used or disposed (estimated dry weight basis); and
- (5) The most recent data the TWTDS may have on the quality of the sewage sludge.
- c. Notwithstanding subdivision 2 a or b of this subsection, the board may require permit applications from any TWTDS at any time if the board determines that a permit is necessary to protect public health and the environment from any potential adverse effects that may occur from toxic pollutants in sewage sludge.
- d. Any TWTDS that commences operations after promulgation of an applicable standard for sewage sludge use or disposal shall submit an application to the department at least 180 days prior to the date proposed for commencing operations.
- D. Duty to reapply. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the board. The board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

E. Completeness.

- 1. The board shall not issue a permit before receiving a complete application for a permit except for VPDES general permits. An application for a permit is complete when the board receives an application form and any supplemental information which are completed to its satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility or activity.
- 2. No application for a VPDES permit to discharge sewage into or adjacent to state waters from a privately owned treatment works serving, or designed to serve, 50 or more residences shall be considered complete unless the applicant has provided the department with notification from the State Corporation

Commission that the applicant is incorporated in the Commonwealth and is in compliance with all regulations and relevant orders of the State Corporation Commission.

- 3. No application for a new individual VPDES permit authorizing a new discharge of sewage, industrial wastes, or other wastes shall be considered complete unless it contains notification from the county, city, or town in which the discharge is to take place that the location and operation of the discharging facility are consistent with applicable ordinances adopted pursuant to Chapter 22 (§ 15.2-2200 et seq.) of Title 15.2 of the Code of Virginia. The county, city or town shall inform in writing the applicant and the board of the discharging facility's compliance or noncompliance not more than 30 days from receipt by the chief administrative officer, or his agent, of a request from the applicant. Should the county, city or town fail to provide such written notification within 30 days, the requirement for such notification is waived. The provisions of this subsection shall not apply to any discharge for which a valid VPDES permit had been issued prior to March 10, 2000.
- 4. A permit application shall not be considered complete if the board has waived application requirements under subsection J or P of this section and the EPA has disapproved the waiver application. If a waiver request has been submitted to the EPA more than 210 days prior to permit expiration and the EPA has not disapproved the waiver application 181 days prior to permit expiration, the permit application lacking the information subject to the waiver application shall be considered complete.
- F. Information requirements. All applicants for VPDES permits, other than POTWs and other TWTDS, shall provide the following information to the department, using the application form provided by the department (additional information required of applicants is set forth in subsections G through K of this section).
 - 1. The activities conducted by the applicant which require it to obtain a VPDES permit;
 - 2. Name, mailing address, and location of the facility for which the application is submitted;
 - 3. Up to four SIC codes which best reflect the principal products or services provided by the facility;
 - 4. The operator's name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity;
 - 5. Whether the facility is located on Indian lands;

- 6. A listing of all permits or construction approvals received or applied for under any of the following programs:
 - a. Hazardous Waste Management program under RCRA (42 USC § 6921);
 - b. UIC program under SDWA (42 USC § 300h);
 - c. VPDES program under the CWA and the law;
 - d. Prevention of Significant Deterioration (PSD) program under the Clean Air Act (42 USC § 4701 et seq.);
 - e. Nonattainment program under the Clean Air Act (42 USC § 4701 et seq.);
 - f. National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act (42 USC § 4701 et seq.);
 - g. Ocean dumping permits under the Marine Protection Research and Sanctuaries Act (33 USC § 14 et seq.);
 - h. Dredge or fill permits under § 404 of the CWA; and
 - i. Other relevant environmental permits, including state permits.
- 7. A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant in the map area; and
- 8. A brief description of the nature of the business.
- G. Application requirements for existing manufacturing, commercial, mining, and silvicultural dischargers. Existing manufacturing, commercial mining, and silvicultural dischargers applying for VPDES permits, except for those facilities subject to the requirements of 9 VAC 25-31-100 H, shall provide the following information to the department, using application forms provided by the department.
 - 1. The latitude and longitude of each outfall to the nearest 15 seconds and the name of the receiving water.

- 2. A line drawing of the water flow through the facility with a water balance, showing operations contributing wastewater to the effluent and treatment units. Similar processes, operations, or production areas may be indicated as a single unit, labeled to correspond to the more detailed identification under subdivision 3 of this subsection. The water balance must show approximate average flows at intake and discharge points and between units, including treatment units. If a water balance cannot be determined (for example, for certain mining activities), the applicant may provide instead a pictorial description of the nature and amount of any sources of water and any collection and treatment measures.
- 3. A narrative identification of each type of process, operation, or production area which contributes wastewater to the effluent for each outfall, including process wastewater, cooling water, and storm water run-off; the average flow which each process contributes; and a description of the treatment the wastewater receives, including the ultimate disposal of any solid or fluid wastes other than by discharge. Processes, operations, or production areas may be described in general terms (for example, dye-making reactor, distillation tower). For a privately owned treatment works, this information shall include the identity of each user of the treatment works. The average flow of point sources composed of storm water may be estimated. The basis for the rainfall event and the method of estimation must be indicated.
- 4. If any of the discharges described in subdivision 3 of this subsection are intermittent or seasonal, a description of the frequency, duration and flow rate of each discharge occurrence (except for storm water run-off, spillage or leaks).
- 5. If an effluent guideline promulgated under § 304 of the CWA applies to the applicant and is expressed in terms of production (or other measure of operation), a reasonable measure of the applicant's actual production reported in the units used in the applicable effluent guideline. The reported measure must reflect the actual production of the facility.
- 6. If the applicant is subject to any present requirements or compliance schedules for construction, upgrading or operation of waste treatment equipment, an identification of the abatement requirement, a description of the abatement project, and a listing of the required and projected final compliance dates.
- 7. a. Information on the discharge of pollutants specified in this subdivision (except information on storm water discharges

which is to be provided as specified in 9 VAC 25-31-120). When quantitative data for a pollutant are required, the applicant must collect a sample of effluent and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR Part 136 (2005). When no analytical method is approved the applicant may use any suitable method but must provide a description of the method. When an applicant has two or more outfalls with substantially identical effluents, the board may allow the applicant to test only one outfall and report that the quantitative data also apply to the substantially identical outfalls. The requirements in e and f of this subdivision that an applicant must provide quantitative data for certain pollutants known or believed to be present do not apply to pollutants present in a discharge solely as the result of their presence in intake water; however, an applicant must report such pollutants as present. Grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform, and fecal streptococcus. For all other pollutants, 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than 24 hours. In addition, for discharges other than storm water discharges, the board may waive composite sampling for any outfall for which the applicant demonstrates that the use of an automatic sampler is infeasible and that the minimum of four grab samples will be a representative sample of the effluent being discharged.

b. For storm water discharges, all samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50% from the average or median rainfall event in that area. For all applicants, a flow-weighted composite shall be taken for either the entire discharge or for the first three hours of the discharge. The flow-weighted composite sample for a storm water discharge may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of 15 minutes (applicants submitting permit applications for storm water discharges under 9 VAC 25-31-120 C may collect flow-weighted composite samples using different protocols with respect to the time duration between the collection of sample aliquots, subject to the approval of the board). However, a minimum of one grab sample may be taken for storm water discharges from holding ponds or other impoundments with a retention period greater than 24

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hours. For a flow-weighted composite sample, only one analysis of the composite of aliquots is required. For storm water discharge samples taken from discharges associated with industrial activities, quantitative data must be reported for the grab sample taken during the first 30 minutes (or as soon thereafter as practicable) of the discharge for all pollutants specified in 9 VAC 25-31-120 B 1. For all storm water permit applicants taking flow-weighted composites, quantitative data must be reported for all pollutants specified in 9 VAC 25-31-120 except pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform, and fecal streptococcus. The board may allow or establish appropriate site-specific sampling procedures or requirements, including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rain fall), protocols for collecting samples under 40 CFR Part 136 (2005), and additional time for submitting data on a case-bycase basis. An applicant is expected to know or have reason to believe that a pollutant is present in an effluent based on an evaluation of the expected use, production, or storage of the pollutant, or on any previous analyses for the pollutant. (For example, any pesticide manufactured by a facility may be expected to be present in contaminated storm water run-off from the facility.)

c. Every applicant must report quantitative data for every outfall for the following pollutants:

Biochemical oxygen demand (BOD₅)

Chemical oxygen demand

Total organic carbon

Total suspended solids

Ammonia (as N)

Temperature (both winter and summer)

рΗ

d. The board may waive the reporting requirements for individual point sources or for a particular industry category for one or more of the pollutants listed in subdivision 7 c of this subsection if the applicant has demonstrated that such a waiver is appropriate because information adequate to support issuance of a permit can be obtained with less stringent requirements.

- e. Each applicant with processes in one or more primary industry category (see 40 CFR Part 122 Appendix A (2005)) contributing to a discharge must report quantitative data for the following pollutants in each outfall containing process wastewater:
 - (1) The organic toxic pollutants in the fractions designated in Table I of 40 CFR Part 122 Appendix D (2005) for the applicant's industrial category or categories unless the applicant qualifies as a small business under subdivision 8 of this subsection. Table II of 40 CFR Part 122 Appendix D (2005) lists the organic toxic pollutants in each fraction. The fractions result from the sample preparation required by the analytical procedure which uses gas chromatography/mass spectrometry. A determination that an applicant falls within a particular industrial category for the purposes of selecting fractions for testing is not conclusive as to the applicant's inclusion in that category for any other purposes; and
 - (2) The pollutants listed in Table III of 40 CFR Part 122 Appendix D (2005) (the toxic metals, cyanide, and total phenols).
- f. (1) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants in Table IV of 40 CFR Part 122 Appendix D (2005) (certain conventional and nonconventional pollutants) is discharged from each outfall. If an applicable effluent limitations guideline either directly limits the pollutant or, by its express terms, indirectly limits the pollutant through limitations on an indicator, the applicant must report quantitative data. For every pollutant discharged which is not so limited in an effluent limitations guideline, the applicant must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.
 - (2) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants listed in Table III or Table III of 40 CFR Part 122 Appendix D (2005) (the toxic pollutants and total phenols) for which quantitative data are not otherwise required under subdivision 7 e of this subsection, is discharged from each outfall. For every pollutant expected to be discharged in concentrations of 10 ppb or greater the applicant must report quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, where any of these four pollutants are expected to be discharged in concentrations of 100 ppb or greater the applicant must report quantitative data. For every pollutant expected to be discharged in concentrations less than 10 ppb, or in the case of acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, in

concentrations less than 100 ppb, the applicant must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged. An applicant qualifying as a small business under subdivision 8 of this subsection is not required to analyze for pollutants listed in Table II of 40 CFR Part 122 Appendix D (2005) (the organic toxic pollutants).

- g. Each applicant must indicate whether it knows or has reason to believe that any of the pollutants in Table V of 40 CFR Part 122 Appendix D (2005) (certain hazardous substances and asbestos) are discharged from each outfall. For every pollutant expected to be discharged, the applicant must briefly describe the reasons the pollutant is expected to be discharged, and report any quantitative data it has for any pollutant.
- h. Each applicant must report qualitative data, generated using a screening procedure not calibrated with analytical standards, for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) if it:
 - (1) Uses or manufactures 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); or
 - (2) Knows or has reason to believe that TCDD is or may be present in an effluent.
- 8. An applicant which qualifies as a small business under one of the following criteria is exempt from the requirements in subdivision 7 e (1) or 7 f (1) of this subsection to submit quantitative data for the pollutants listed in Table II of 40 CFR Part 122 Appendix D (2005) (the organic toxic pollutants):
 - a. For coal mines, a probable total annual production of less than 100,000 tons per year; or
 - b. For all other applicants, gross total annual sales averaging less than \$100,000 per year (in second quarter 1980 dollars).
- 9. A listing of any toxic pollutant which the applicant currently uses or manufactures as an intermediate or final product or by-product. The board may waive or modify this requirement for any applicant if the applicant demonstrates that it would be unduly burdensome to identify each toxic pollutant and the board has adequate information to issue the permit.
- 10. Reserved.

- 11. An identification of any biological toxicity tests which the applicant knows or has reason to believe have been made within the last three years on any of the applicant's discharges or on a receiving water in relation to a discharge.
- 12. If a contract laboratory or consulting firm performed any of the analyses required by subdivision 7 of this subsection, the identity of each laboratory or firm and the analyses performed.
- 13. In addition to the information reported on the application form, applicants shall provide to the board, at its request, such other information, including pertinent plans, specifications, maps and such other relevant information as may be required, in scope and details satisfactory to the board, as the board may reasonably require to assess the discharges of the facility and to determine whether to issue a VPDES permit. The additional information may include additional quantitative data and bioassays to assess the relative toxicity of discharges to aquatic life and requirements to determine the cause of the toxicity.
- H. Application requirements for manufacturing, commercial, mining and silvicultural facilities which discharge only nonprocess wastewater. Except for storm water discharges, all manufacturing, commercial, mining and silvicultural dischargers applying for VPDES permits which discharge only nonprocess wastewater not regulated by an effluent limitations guideline or new source performance standard shall provide the following information to the department using application forms provided by the department:
 - 1. Outfall number, latitude and longitude to the nearest 15 seconds, and the name of the receiving water;
 - 2. Date of expected commencement of discharge;
 - 3. An identification of the general type of waste discharged, or expected to be discharged upon commencement of operations, including sanitary wastes, restaurant or cafeteria wastes, or noncontact cooling water. An identification of cooling water additives (if any) that are used or expected to be used upon commencement of operations, along with their composition if existing composition is available;
 - 4. a. Quantitative data for the pollutants or parameters listed below, unless testing is waived by the board. The quantitative data may be data collected over the past 365 days, if they remain representative of current operations, and must include maximum daily value, average daily value, and number of measurements taken. The applicant must collect and analyze samples in accordance with 40 CFR Part 136 (2005). Grab samples must be used for pH, temperature, oil and grease, total residual chlorine, and fecal coliform. For all other pollutants, 24-hour composite samples must be used. New dischargers must

include estimates for the pollutants or parameters listed below instead of actual sampling data, along with the source of each estimate. All levels must be reported or estimated as concentration and as total mass, except for flow, pH, and temperature.

- (1) Biochemical oxygen demand (BOD₅).
- (2) Total suspended solids (TSS).
- (3) Fecal coliform (if believed present or if sanitary waste is or will be discharged).
- (4) Total residual chlorine (if chlorine is used).
- (5) Oil and grease.
- (6) Chemical oxygen demand (COD) (if noncontact cooling water is or will be discharged).
- (7) Total organic carbon (TOC) (if noncontact cooling water is or will be discharged).
- (8) Ammonia (as N).
- (9) Discharge flow.
- (10) pH.
- (11) Temperature (winter and summer).
- b. The board may waive the testing and reporting requirements for any of the pollutants or flow listed in subdivision 4 a of this subsection if the applicant submits a request for such a waiver before or with his application which demonstrates that information adequate to support issuance of a permit can be obtained through less stringent requirements.
- c. If the applicant is a new discharger, he must submit the information required in subdivision 4 a of this subsection by providing quantitative data in accordance with that section no later than two years after commencement of discharge. However, the applicant need not submit testing results which he has already performed and reported under the discharge monitoring requirements of his VPDES permit.
- d. The requirements of subdivisions 4 a and 4 c of this subsection that an applicant must provide quantitative data or estimates of certain pollutants do not apply to pollutants present in a discharge solely as a result of their presence in intake water. However, an applicant must report such pollutants

as present. Net credit may be provided for the presence of pollutants in intake water if the requirements of 9 VAC 25-31-230 G are met;

- 5. A description of the frequency of flow and duration of any seasonal or intermittent discharge (except for storm water run-off, leaks, or spills);
- 6. A brief description of any treatment system used or to be used;
- 7. Any additional information the applicant wishes to be considered, such as influent data for the purpose of obtaining net credits pursuant to 9 VAC 25-31-230 G;
- 8. Signature of certifying official under 9 VAC 25-31-110; and
- 9. Pertinent plans, specifications, maps and such other relevant information as may be required, in scope and details satisfactory to the board.
- I. Application requirements for new and existing concentrated animal feeding operations and aquatic animal production facilities. New and existing concentrated animal feeding operations and concentrated aquatic animal production facilities shall provide the following information to the department, using the application form provided by the department:
 - 1. For concentrated animal feeding operations:
 - a. The name of the owner or operator;
 - b. The facility location and mailing address;
 - c. Latitude and longitude of the production area (entrance to the production area);
 - d. A topographic map of the geographic area in which the CAFO is located showing the specific location of the production area, in lieu of the requirements of subdivision F 7 of this section;
 - e. Specific information about the number and type of animals, whether in open confinement or housed under roof (beef cattle, broilers, layers, swine weighing 55 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers, veal calves, sheep and lambs, horses, ducks, turkeys, other);
 - f. The type of containment and storage (anaerobic lagoon, roofed storage shed, storage ponds, underfloor pits, above ground storage tanks, below ground storage tanks, concrete pad, impervious soil pad, other) and total capacity for manure, litter, and process wastewater storage (tons/gallons);

- g. The total number of acres under control of the applicant available for land application of manure, litter, or process wastewater;
- h. Estimated amounts of manure, litter, and process wastewater generated per year (tons/gallons); and
- i. For CAFOs that must seek coverage under a permit after December 31, 2006, certification that a nutrient management plan has been completed and will be implemented upon the date of coverage.
- 2. For concentrated aquatic animal production facilities:
 - a. The maximum daily and average monthly flow from each outfall;
 - b. The number of ponds, raceways, and similar structures;
 - c. The name of the receiving water and the source of intake water;
 - d. For each species of aquatic animals, the total yearly and maximum harvestable weight;
 - e. The calendar month of maximum feeding and the total mass of food fed during that month; and
 - f. Pertinent plans, specifications, maps and such other relevant information as may be required, in scope and details satisfactory to the board.
- J. Application requirements for new and existing POTWs and treatment works treating domestic sewage. Unless otherwise indicated, all POTWs and other dischargers designated by the board must provide to the department, at a minimum, the information in this subsection using an application form provided by the department. Permit applicants must submit all information available at the time of permit application. The information may be provided by referencing information previously submitted to the department. The board may waive any requirement of this subsection if it has access to substantially identical information. The board may also waive any requirement of this subsection that is not of material concern for a specific permit, if approved by the regional administrator. The waiver request to the regional administrator must include the board's justification for the waiver. A regional administrator's disapproval of the board's proposed waiver does not constitute final agency action but does provide notice to the board and permit applicant(s) that the EPA may object to any board-issued permit issued in the absence of the required information.
 - 1. All applicants must provide the following information:
 - a. Name, mailing address, and location of the facility for which the application is submitted;

- b. Name, mailing address, and telephone number of the applicant and indication as to whether the applicant is the facility's owner, operator, or both;
- c. Identification of all environmental permits or construction approvals received or applied for (including dates) under any of the following programs:
 - (1) Hazardous Waste Management program under the Resource Conservation and Recovery Act (RCRA), Subpart C;
 - (2) Underground Injection Control program under the Safe Drinking Water Act (SDWA);
 - (3) NPDES program under the Clean Water Act (CWA);
 - (4) Prevention of Significant Deterioration (PSD) program under the Clean Air Act;
 - (5) Nonattainment program under the Clean Air Act;
 - (6) National Emission Standards for Hazardous Air Pollutants (NESHAPS) preconstruction approval under the Clean Air Act;
 - (7) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act;
 - (8) Dredge or fill permits under § 404 of the CWA; and
 - (9) Other relevant environmental permits, including state permits;
- d. The name and population of each municipal entity served by the facility, including unincorporated connector districts. Indicate whether each municipal entity owns or maintains the collection system and whether the collection system is separate sanitary or combined storm and sanitary, if known;
- e. Information concerning whether the facility is located in Indian country and whether the facility discharges to a receiving stream that flows through Indian country;
- f. The facility's design flow rate (the wastewater flow rate the plant was built to handle), annual average daily flow rate, and maximum daily flow rate for each of the previous three years;
- g. Identification of type(s) of collection system(s) used by the treatment works (i.e., separate sanitary sewers or combined storm and sanitary sewers) and an estimate of the percent of sewer line that each type comprises; and
- h. The following information for outfalls to surface waters and other discharge or disposal methods:

- (1) For effluent discharges to surface waters, the total number and types of outfalls (e.g., treated effluent, combined sewer overflows, bypasses, constructed emergency overflows);
- (2) For wastewater discharged to surface impoundments:
 - (a) The location of each surface impoundment;
 - (b) The average daily volume discharged to each surface impoundment; and
 - (c) Whether the discharge is continuous or intermittent;
- (3) For wastewater applied to the land:
 - (a) The location of each land application site;
 - (b) The size of each land application site, in acres;
 - (c) The average daily volume applied to each land application site, in gallons per day; and
 - (d) Whether land application is continuous or intermittent;
- (4) For effluent sent to another facility for treatment prior to discharge:
 - (a) The means by which the effluent is transported;
 - (b) The name, mailing address, contact person, and phone number of the organization transporting the discharge, if the transport is provided by a party other than the applicant;
 - (c) The name, mailing address, contact person, phone number, and VPDES permit number (if any) of the receiving facility; and
 - (d) The average daily flow rate from this facility into the receiving facility, in millions of gallons per day; and
- (5) For wastewater disposed of in a manner not included in subdivisions 1 h (1) through (4) of this subsection (e.g., underground percolation, underground injection):
 - (a) A description of the disposal method, including the location and size of each disposal site, if applicable;
 - (b) The annual average daily volume disposed of by this method, in gallons per day; and
 - (c) Whether disposal through this method is continuous or intermittent;

- 2. All applicants with a design flow greater than or equal to 0.1 mgd must provide the following information:
 - a. The current average daily volume of inflow and infiltration, in gallons per day, and steps the facility is taking to minimize inflow and infiltration;
 - b. A topographic map (or other map if a topographic map is unavailable) extending at least one mile beyond property boundaries of the treatment plant, including all unit processes, and showing:
 - (1) Treatment plant area and unit processes;
 - (2) The major pipes or other structures through which wastewater enters the treatment plant and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable;
 - (3) Each well where fluids from the treatment plant are injected underground;
 - (4) Wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the treatment works' property boundaries;
 - (5) Sewage sludge management facilities (including on-site treatment, storage, and disposal sites); and
 - (6) Location at which waste classified as hazardous under RCRA enters the treatment plant by truck, rail, or dedicated pipe;
 - c. Process flow diagram or schematic.
 - (1) A diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. This includes a water balance showing all treatment units, including disinfection, and showing daily average flow rates at influent and discharge points, and approximate daily flow rates between treatment units; and
 - (2) A narrative description of the diagram; and
 - d. The following information regarding scheduled improvements:
 - (1) The outfall number of each outfall affected;
 - (2) A narrative description of each required improvement;

(3) Scheduled or actual dates of completion for the following:
(a) Commencement of construction;
(b) Completion of construction;
(c) Commencement of discharge; and
(d) Attainment of operational level; and
(4) A description of permits and clearances concerning other federal or state requirements;
3. Each applicant must provide the following information for each outfall, including bypass points, through
which effluent is discharged, as applicable:
a. The following information about each outfall:
(1) Outfall number;
(2) State, county, and city or town in which outfall is located;
(3) Latitude and longitude, to the nearest second;
(4) Distance from shore and depth below surface;
(5) Average daily flow rate, in million gallons per day;
(6) The following information for each outfall with a seasonal or periodic discharge:
(a) Number of times per year the discharge occurs;
(b) Duration of each discharge;
(c) Flow of each discharge; and
(d) Months in which discharge occurs; and
(7) Whether the outfall is equipped with a diffuser and the type (e.g., high-rate) of diffuser used.
b. The following information, if known, for each outfall through which effluent is discharged to surface waters:
(1) Name of receiving water;

- (2) Name of watershed/river/stream system and United States Soil Conservation Service 14-digit watershed code;
- (3) Name of State Management/River Basin and United States Geological Survey 8-digit hydrologic cataloging unit code; and
- (4) Critical flow of receiving stream and total hardness of receiving stream at critical low flow (if applicable).
- c. The following information describing the treatment provided for discharges from each outfall to surface waters:
 - (1) The highest level of treatment (e.g., primary, equivalent to secondary, secondary, advanced, other) that is provided for the discharge for each outfall and:
 - (a) Design biochemical oxygen demand (BOD₅ or CBOD₅) removal (percent);
 - (b) Design suspended solids (SS) removal (percent); and, where applicable,
 - (c) Design phosphorus (P) removal (percent);
 - (d) Design nitrogen (N) removal (percent); and
 - (e) Any other removals that an advanced treatment system is designed to achieve.
 - (2) A description of the type of disinfection used, and whether the treatment plant dechlorinates (if disinfection is accomplished through chlorination).
- 4. Effluent monitoring for specific parameters.
 - a. As provided in subdivisions 4 b through j of this subsection, all applicants must submit to the department effluent monitoring information for samples taken from each outfall through which effluent is discharged to surface waters, except for CSOs. The board may allow applicants to submit sampling data for only one outfall on a case-by-case basis, where the applicant has two or more outfalls with substantially identical effluent. The board may also allow applicants to composite samples from one or more outfalls that discharge into the same mixing zone.
 - b. All applicants must sample and analyze for the following pollutants:
 - (1) Biochemical oxygen demand (BOD₅ or CBOD₅);

(8) Total dissolved solids.

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	(2) Fecal coliform;
	(3) Design flow rate;
	(4) pH;
	(5) Temperature; and
	(6) Total suspended solids.
c.	All applicants with a design flow greater than or equal to 0.1 mgd must sample and analyze for the
fc	ollowing pollutants:
	(1) Ammonia (as N);
	(2) Chlorine (total residual, TRC);
	(3) Dissolved oxygen;
	(4) Nitrate/Nitrite;
	(5) Kjeldahl nitrogen;
	(6) Oil and grease;
	(7) Phosphorus; and

Facilities that do not use chlorine for disinfection, do not use chlorine elsewhere in the treatment process, and have no reasonable potential to discharge chlorine in their effluent may delete chlorine.

- d. All POTWs with a design flow rate equal to or greater than one million gallons per day, all POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program, and other POTWs, as required by the board must sample and analyze for the pollutants listed in Table 2 of 40 CFR Part 122 Appendix J (2005), and for any other pollutants for which the board or EPA have established water quality standards applicable to the receiving waters.
- e. The board may require sampling for additional pollutants, as appropriate, on a case-by-case basis.
- f. Applicants must provide data from a minimum of three samples taken within 4-1/2 years prior to the date of the permit application. Samples must be representative of the seasonal variation in the

discharge from each outfall. Existing data may be used, if available, in lieu of sampling done solely for the purpose of this application. The board may require additional samples, as appropriate, on a caseby-case basis.

- g. All existing data for pollutants specified in subdivisions 4 b through e of this subsection that is collected within 4-1/2 years of the application must be included in the pollutant data summary submitted by the applicant. If, however, the applicant samples for a specific pollutant on a monthly or more frequent basis, it is only necessary, for such pollutant, to summarize all data collected within one year of the application.
- h. Applicants must collect samples of effluent and analyze such samples for pollutants in accordance with analytical methods approved under 40 CFR Part 136 (2005) unless an alternative is specified in the existing VPDES permit. Grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform. For all other pollutants, 24-hour composite samples must be used. For a composite sample, only one analysis of the composite of aliquots is required.
- i. The effluent monitoring data provided must include at least the following information for each parameter:
 - (1) Maximum daily discharge, expressed as concentration or mass, based upon actual sample values;
 - (2) Average daily discharge for all samples, expressed as concentration or mass, and the number of samples used to obtain this value;
 - (3) The analytical method used; and
 - (4) The threshold level (i.e., method detection limit, minimum level, or other designated method endpoints) for the analytical method used.
- j. Unless otherwise required by the board, metals must be reported as total recoverable.
- 5. Effluent monitoring for whole effluent toxicity.

- a. All applicants must provide an identification of any whole effluent toxicity tests conducted during the
 4-1/2 years prior to the date of the application on any of the applicant's discharges or on any receiving water near the discharge.
- b. As provided in subdivisions 5 c through i of this subsection, the following applicants must submit to the department the results of valid whole effluent toxicity tests for acute or chronic toxicity for samples taken from each outfall through which effluent is discharged to surface waters, except for combined sewer overflows:
 - (1) All POTWs with design flow rates greater than or equal to one million gallons per day;
 - (2) All POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program;
 - (3) Other POTWs, as required by the board, based on consideration of the following factors:
 - (a) The variability of the pollutants or pollutant parameters in the POTW effluent (based on chemical-specific information, the type of treatment plant, and types of industrial contributors);
 - (b) The ratio of effluent flow to receiving stream flow;
 - (c) Existing controls on point or nonpoint sources, including total maximum daily load calculations for the receiving stream segment and the relative contribution of the POTW;
 - (d) Receiving stream characteristics, including possible or known water quality impairment, and whether the POTW discharges to a coastal water, or a water designated as an outstanding natural resource water; or
 - (e) Other considerations (including, but not limited to, the history of toxic impacts and compliance problems at the POTW) that the board determines could cause or contribute to adverse water quality impacts.
- c. Where the POTW has two or more outfalls with substantially identical effluent discharging to the same receiving stream segment, the board may allow applicants to submit whole effluent toxicity data for only one outfall on a case-by-case basis. The board may also allow applicants to composite samples from one or more outfalls that discharge into the same mixing zone.

- d. Each applicant required to perform whole effluent toxicity testing pursuant to subdivision 5 b of this subsection must provide:
 - (1) Results of a minimum of four quarterly tests for a year, from the year preceding the permit application; or
 - (2) Results from four tests performed at least annually in the 4-1/2 year period prior to the application, provided the results show no appreciable toxicity using a safety factor determined by the board.
- e. Applicants must conduct tests with multiple species (no less than two species, e.g., fish, invertebrate, plant) and test for acute or chronic toxicity, depending on the range of receiving water dilution. The board recommends that applicants conduct acute or chronic testing based on the following dilutions: (i) acute toxicity testing if the dilution of the effluent is greater than 100:1 at the edge of the mixing zone or (ii) chronic toxicity testing if the dilution of the effluent is less than or equal to 100:1 at the edge of the mixing zone.
- f. Each applicant required to perform whole effluent toxicity testing pursuant to subdivision 5 b of this subsection must provide the number of chronic or acute whole effluent toxicity tests that have been conducted since the last permit reissuance.
- g. Applicants must provide the results using the form provided by the department, or test summaries if available and comprehensive, for each whole effluent toxicity test conducted pursuant to subdivision 5 b of this subsection for which such information has not been reported previously to the department.
- h. Whole effluent toxicity testing conducted pursuant to subdivision 5 b of this subsection must be conducted using methods approved under 40 CFR Part 136 (2005), as directed by the board.
- i. For whole effluent toxicity data submitted to the department within 4-1/2 years prior to the date of the application, applicants must provide the dates on which the data were submitted and a summary of the results.
- j. Each POTW required to perform whole effluent toxicity testing pursuant to subdivision 5 b of this subsection must provide any information on the cause of toxicity and written details of any toxicity reduction evaluation conducted, if any whole effluent toxicity test conducted within the past 4-1/2 years revealed toxicity.

- 6. Applicants must submit the following information about industrial discharges to the POTW:
 - a. Number of significant industrial users (SIUs) and categorical industrial users (CIUs) discharging to the POTW; and
 - b. POTWs with one or more SIUs shall provide the following information for each SIU, as defined in 9 VAC 25-31-10, that discharges to the POTW:
 - (1) Name and mailing address;
 - (2) Description of all industrial processes that affect or contribute to the SIU's discharge;
 - (3) Principal products and raw materials of the SIU that affect or contribute to the SIU's discharge;
 - (4) Average daily volume of wastewater discharged, indicating the amount attributable to process flow and nonprocess flow;
 - (5) Whether the SIU is subject to local limits;
 - (6) Whether the SIU is subject to categorical standards and, if so, under which category and subcategory; and
 - (7) Whether any problems at the POTW (e.g., upsets, pass through, interference) have been attributed to the SIU in the past 4-1/2 years.
 - c. The information required in subdivisions 6 a and b of this subsection may be waived by the board for POTWs with pretreatment programs if the applicant has submitted either of the following that contain information substantially identical to that required in subdivisions 6 a and b of this subsection:
 - (1) An annual report submitted within one year of the application; or
 - (2) A pretreatment program.
- 7. Discharges from hazardous waste generators and from waste cleanup or remediation sites. POTWs receiving Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or RCRA Corrective Action wastes or wastes generated at another type of cleanup or remediation site must provide the following information:

- a. If the POTW receives, or has been notified that it will receive, by truck, rail, or dedicated pipe any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR Part 261 (2005), the applicant must report the following:
 - (1) The method by which the waste is received (i.e., whether by truck, rail, or dedicated pipe); and
 - (2) The hazardous waste number and amount received annually of each hazardous waste.
- b. If the POTW receives, or has been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to CERCLA and § 3004(u) or 3008(h) of RCRA, the applicant must report the following:
 - (1) The identity and description of the site or facility at which the wastewater originates;
 - (2) The identities of the wastewater's hazardous constituents, as listed in Appendix VIII of 40 CFR Part 261 (2005), if known; and
 - (3) The extent of treatment, if any, the wastewater receives or will receive before entering the POTW.
- c. Applicants are exempt from the requirements of subdivision 7 b of this subsection if they receive no more than 15 kilograms per month of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e) (2005).
- 8. Each applicant with combined sewer systems must provide the following information:
 - a. The following information regarding the combined sewer system:
 - (1) A map indicating the location of the following:
 - (a) All CSO discharge points;
 - (b) Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding national resource waters); and
 - (c) Waters supporting threatened and endangered species potentially affected by CSOs; and
 - (2) A diagram of the combined sewer collection system that includes the following information:
 - (a) The location of major sewer trunk lines, both combined and separate sanitary;
 - (b) The locations of points where separate sanitary sewers feed into the combined sewer system;

- (c) In-line and off-line storage structures;
- (d) The locations of flow-regulating devices; and
- (e) The locations of pump stations.
- b. The following information for each CSO discharge point covered by the permit application:
 - (1) The following information on each outfall:
 - (a) Outfall number;
 - (b) State, county, and city or town in which outfall is located;
 - (c) Latitude and longitude, to the nearest second;
 - (d) Distance from shore and depth below surface;
 - (e) Whether the applicant monitored any of the following in the past year for this CSO: (i) rainfall,
 - (ii) CSO flow volume, (iii) CSO pollutant concentrations, (iv) receiving water quality, or (v) CSO frequency; and
 - (f) The number of storm events monitored in the past year;
 - (2) The following information about CSO overflows from each outfall:
 - (a) The number of events in the past year;
 - (b) The average duration per event, if available;
 - (c) The average volume per CSO event, if available; and
 - (d) The minimum rainfall that caused a CSO event, if available, in the last year;
 - (3) The following information about receiving waters:
 - (a) Name of receiving water;
 - (b) Name of watershed/stream system and the United States Soil Conservation Service watershed (14-digit) code, if known; and
 - (c) Name of State Management/River Basin and the United States Geological Survey hydrologic cataloging unit (8-digit) code, if known; and

- (4) A description of any known water quality impacts on the receiving water caused by the CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shellfish bed closings, fish kills, fish advisories, other recreational loss, or exceedance of any applicable state water quality standard).
- 9. All applicants must provide the name, mailing address, telephone number, and responsibilities of all contractors responsible for any operational or maintenance aspects of the facility.
- 10. All applications must be signed by a certifying official in compliance with 9 VAC 25-31-110.
- 11. Pertinent plans, specifications, maps and such other relevant information as may be required, in scope and details satisfactory to the board.
- K. Application requirements for new sources and new discharges. New manufacturing, commercial, mining and silvicultural dischargers applying for VPDES permits (except for new discharges of facilities subject to the requirements of subsection H of this section or new discharges of storm water associated with industrial activity which are subject to the requirements of 9 VAC 25-31-120 B 1 and this subsection) shall provide the following information to the department, using the application forms provided by the department:
 - 1. The expected outfall location in latitude and longitude to the nearest 15 seconds and the name of the receiving water;
 - 2. The expected date of commencement of discharge;
 - 3. a. Description of the treatment that the wastewater will receive, along with all operations contributing wastewater to the
 - effluent, average flow contributed by each operation, and the ultimate disposal of any solid or liquid wastes not discharged;
 - b. A line drawing of the water flow through the facility with a water balance as described in subdivision
 G 2;
 - c. If any of the expected discharges will be intermittent or seasonal, a description of the frequency, duration and maximum daily flow rate of each discharge occurrence (except for storm water run-off, spillage, or leaks); and
 - 4. If a new source performance standard promulgated under § 306 of the CWA or an effluent limitation guideline applies to the applicant and is expressed in terms of production (or other measure of operation),

Alternative estimates may also be submitted if production is likely to vary;

a reasonable measure of the applicant's expected actual production reported in the units used in the applicable effluent guideline or new source performance standard for each of the first three years.

- 5. The requirements in subdivisions H 4 a, b, and c of this section that an applicant must provide estimates of certain pollutants expected to be present do not apply to pollutants present in a discharge solely as a result of their presence in intake water; however, an applicant must report such pollutants as present. Net credits may be provided for the presence of pollutants in intake water if the requirements of 9 VAC 25-31-230 G are met. All levels (except for discharge flow, temperature, and pH) must be estimated as concentration and as total mass.
 - a. Each applicant must report estimated daily maximum, daily average, and source of information for each outfall for the following pollutants or parameters. The board may waive the reporting requirements for any of these pollutants and parameters if the applicant submits a request for such a waiver before or with his application which demonstrates that information adequate to support issuance of the permit can be obtained through less stringent reporting requirements.
 - (1) Biochemical oxygen demand (BOD).
 - (2) Chemical oxygen demand (COD).
 - (3) Total organic carbon (TOC).
 - (4) Total suspended solids (TSS).
 - (5) Flow.
 - (6) Ammonia (as N).
 - (7) Temperature (winter and summer).
 - (8) pH.
 - b. Each applicant must report estimated daily maximum, daily average, and source of information for each outfall for the following pollutants, if the applicant knows or has reason to believe they will be present or if they are limited by an effluent limitation guideline or new source performance standard either directly or indirectly through limitations on an indicator pollutant: all pollutants in Table IV of 40 CFR Part 122 Appendix D (2005) (certain conventional and nonconventional pollutants).

- c. Each applicant must report estimated daily maximum, daily average and source of information for the following pollutants if he knows or has reason to believe that they will be present in the discharges from any outfall:
 - (1) The pollutants listed in Table III of 40 CFR Part 122 Appendix D (2005) (the toxic metals, in the discharge from any outfall, Total cyanide, and total phenols);
 - (2) The organic toxic pollutants in Table II of 40 CFR Part 122 Appendix D (2005) (except bis (chloromethyl) ether, dichlorofluoromethane and trichlorofluoromethane). This requirement is waived for applicants with expected gross sales of less than \$100,000 per year for the next three years, and for coal mines with expected average production of less than 100,000 tons of coal per year.
- d. The applicant is required to report that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) may be discharged if he uses or manufactures one of the following compounds, or if he knows or has reason to believe that TCDD will or may be present in an effluent:
 - (1) 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) (CAS #93-76-5);
 - (2) (2) 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) (CAS #93-72-1);
 - (3) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) (CAS #136-25-4);
 - (4) 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) (CAS #299-84-3);
 - (5) 2,4,5-trichlorophenol (TCP) (CAS #95-95-4); or
 - (6) Hexachlorophene (HCP) (CAS #70-30-4);
- e. Each applicant must report any pollutants listed in Table V of 40 CFR Part 122 Appendix D (2005) (certain hazardous substances) if he believes they will be present in any outfall (no quantitative estimates are required unless they are already available).
- f. No later than two years after the commencement of discharge from the proposed facility, the applicant is required to submit the information required in subsection G of this section. However, the applicant need not complete those portions of subsection G of this section requiring tests which he has already performed and reported under the discharge monitoring requirements of his VPDES permit;

- 6. Each applicant must report the existence of any technical evaluation concerning his wastewater treatment, along with the name and location of similar plants of which he has knowledge;
- 7. Any optional information the permittee wishes to have considered;
- 8. Signature of certifying official under 9 VAC 25-31-110; and
- 9. Pertinent plans, specifications, maps and such other relevant information as may be required, in scope and details satisfactory to the board.
- L. Variance requests by non-POTWs. A discharger which is not a publicly owned treatment works (POTW) may request a variance from otherwise applicable effluent limitations under any of the following statutory or regulatory provisions within the times specified in this subsection:
 - 1. Fundamentally different factors.
 - a. A request for a variance based on the presence of fundamentally different factors from those on which the effluent limitations guideline was based shall be filed as follows:
 - (1) For a request from best practicable control technology currently available (BPT), by the close of the public comment period for the draft permit; or
 - (2) For a request from best available technology economically achievable (BAT) and/or best conventional pollutant control technology (BCT), by no later than:
 - (a) July 3, 1989, for a request based on an effluent limitation guideline promulgated before February 4, 1987, to the extent July 3, 1989, is not later than that provided under previously promulgated regulations; or
 - (b) 180 days after the date on which an effluent limitation guideline is published in the Federal Register for a request based on an effluent limitation guideline promulgated on or after February 4, 1987.
 - b. The request shall explain how the requirements of the applicable regulatory or statutory criteria have been met.
 - 2. A request for a variance from the BAT requirements for CWA § 301(b)(2)(F) pollutants (commonly called nonconventional pollutants) pursuant to § 301(c) of the CWA because of the economic capability of

the owner or operator, or pursuant to § 301(g) of the CWA (provided however that a § 301(g) variance may only be requested for ammonia; chlorine; color; iron; total phenols (when determined by the Administrator to be a pollutant covered by § 301(b)(2)(F) of the CWA) and any other pollutant which the administrator lists under § 301(g)(4) of the CWA) must be made as follows:

- a. For those requests for a variance from an effluent limitation based upon an effluent limitation guideline by:
 - (1) Submitting an initial request to the regional administrator, as well as to the department, stating the name of the discharger, the permit number, the outfall number(s), the applicable effluent guideline, and whether the discharger is requesting a §§ 301(c) or 301(g) of the CWA modification, or both. This request must have been filed not later than 270 days after promulgation of an applicable effluent limitation guideline; and
 - (2) Submitting a completed request no later than the close of the public comment period for the draft permit demonstrating that: (i) all reasonable ascertainable issues have been raised and all reasonably available arguments and materials supporting their position have been submitted; and (ii) that the applicable requirements of 40 CFR Part 125 (2005) have been met. Notwithstanding this provision, the complete application for a request under§ 301(g) of the CWA shall be filed 180 days before EPA must make a decision (unless the Regional Division Director establishes a shorter or longer period); or
- b. For those requests for a variance from effluent limitations not based on effluent limitation guidelines, the request need only comply with subdivision 2 a (2) of this subsection and need not be preceded by an initial request under subdivision 2 a (1) of this subsection.
- 3. A modification under § 302(b)(2) of the CWA of requirements under § 302(a) of the CWA for achieving water quality related effluent limitations may be requested no later than the close of the public comment period for the draft permit on the permit from which the modification is sought.
- 4. A variance for alternate effluent limitations for the thermal component of any discharge must be filed with a timely application for a permit under this section, except that if thermal effluent limitations are established on a case-by-case basis or are based on water quality standards the request for a variance

may be filed by the close of the public comment period for the draft permit. A copy of the request shall be sent simultaneously to the department.

- M. Variance requests by POTWs. A discharger which is a publicly owned treatment works (POTW) may request a variance from otherwise applicable effluent limitations under any of the following statutory provisions as specified in this paragraph:
 - 1. A request for a modification under § 301(h) of the CWA of requirements of § 301(b)(1)(B) of the CWA for discharges into marine waters must be filed in accordance with the requirements of 40 CFR Part 125, Subpart G (2005).
 - 2. A modification under § 302(b)(2) of the CWA of the requirements under § 302(a) of the CWA for achieving water quality based effluent limitations shall be requested no later than the close of the public comment period for the draft permit on the permit from which the modification is sought.
- N. Expedited variance procedures and time extensions.
 - 1. Notwithstanding the time requirements in subsections L and M of this section, the board may notify a permit applicant before a draft permit is issued that the draft permit will likely contain limitations which are eligible for variances. In the notice the board may require the applicant as a condition of consideration of any potential variance request to submit a request explaining how the requirements of 40 CFR Part 125 (2005) applicable to the variance have been met and may require its submission within a specified reasonable time after receipt of the notice. The notice may be sent before the permit application has been submitted. The draft or final permit may contain the alternative limitations which may become effective upon final grant of the variance.
 - 2. A discharger who cannot file a timely complete request required under subdivisions L 2 a (2) or L 2 b of this section may request an extension. The extension may be granted or denied at the discretion of the board. Extensions shall be no more than six months in duration.
- O. Recordkeeping. Except for information required by subdivision C 2 of this section, which shall be retained for a period of at least five years from the date the application is signed (or longer as required by Part VI (9 VAC 25-31-420 et seq.) of this chapter), applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under this section for a period of at least three years from the date the application is signed.

- P. Sewage sludge management. All TWTDS subject to subdivision C 2 a of this section must provide the information in this subsection to the department using an application form approved by the department. New applicants must submit all information available at the time of permit application. The information may be provided by referencing information previously submitted to the department. The board may waive any requirement of this subsection if it has access to substantially identical information. The board may also waive any requirement of this subsection that is not of material concern for a specific permit, if approved by the regional administrator. The waiver request to the regional administrator must include the board's justification for the waiver. A regional administrator's disapproval of the board's proposed waiver does not constitute final agency action, but does provide notice to the board and the permit applicant that the EPA may object to any board issued permit issued in the absence of the required information.
 - 1. All applicants must submit the following information:
 - a. The name, mailing address, and location of the TWTDS for which the application is submitted;
 - b. Whether the facility is a Class I Sludge Management Facility;
 - c. The design flow rate (in million gallons per day);
 - d. The total population served;
 - e. The TWTDS's status as federal, state, private, public, or other entity;
 - f. The name, mailing address, and telephone number of the applicant; and
 - g. Indication whether the applicant is the owner, operator, or both.
 - 2. All applicants must submit the facility's VPDES permit number, if applicable, and a listing of all other federal, state, and local permits or construction approvals received or applied for under any of the following programs:
 - a. Hazardous Waste Management program under the Resource Conservation and Recovery Act (RCRA);
 - b. UIC program under the Safe Drinking Water Act (SDWA);
 - c. NPDES program under the Clean Water Act (CWA);
 - d. Prevention of Significant Deterioration (PSD) program under the Clean Air Act;

- e. Nonattainment program under the Clean Air Act;
- f. National Emission Standards for Hazardous Air Pollutants (NESHAPS) preconstruction approval under the Clean Air Act;
- g. Dredge or fill permits under § 404 of the CWA;
- h. Other relevant environmental permits, including state or local permits.
- All applicants must identify any generation, treatment, storage, land application, or disposal of sewage sludge that occurs in Indian country.
- 4. All applicants must submit a topographic map (or other map if a topographic map is unavailable) extending one mile beyond property boundaries of the facility and showing the following information:
 - a. All sewage sludge management facilities, including on-site treatment, storage, and disposal sites; and
 - b. Wells, springs, and other surface water bodies that are within 1/4 mile of the property boundaries and listed in public records or otherwise known to the applicant.
- 5. All applicants must submit a line drawing and/or a narrative description that identifies all sewage sludge management practices employed during the term of the permit, including all units used for collecting, dewatering, storing, or treating sewage sludge; the destination(s) of all liquids and solids leaving each such unit; and all processes used for pathogen reduction and vector attraction reduction.
- 6. The applicant must submit sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in Part VI (9 VAC 25-31-420 et seq.) of this chapter for the applicant's use or disposal practices on the date of permit application with the following conditions:
 - a. The board may require sampling for additional pollutants, as appropriate, on a case-by-case basis.
 - b. Applicants must provide data from a minimum of three samples taken within 4-1/2 years prior to the date of the permit application. Samples must be representative of the sewage sludge and should be taken at least one month apart. Existing data may be used in lieu of sampling done solely for the purpose of this application.

- c. Applicants must collect and analyze samples in accordance with analytical methods specified in 9 VAC 25-31-490 unless an alternative has been specified in an existing sewage sludge permit.
- d. The monitoring data provided must include at least the following information for each parameter:
 - (1) Average monthly concentration for all samples (mg/kg dry weight), based upon actual sample values:
 - (2) The analytical method used; and
 - (3) The method detection level.
- 7. If the applicant is a person who prepares sewage sludge, as defined in 9 VAC 25-31-500, the applicant must provide the following information:
 - a. If the applicant's facility generates sewage sludge, the total dry metric tons per 365-day period generated at the facility.
 - b. If the applicant's facility receives sewage sludge from another facility, the following information for each facility from which sewage sludge is received:
 - (1) The name, mailing address, and location of the other facility;
 - (2) The total dry metric tons per 365-day period received from the other facility; and
 - (3) A description of any treatment processes occurring at the other facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics.
 - c. If the applicant's facility changes the quality of sewage sludge through blending, treatment, or other activities, the following information:
 - (1) Whether the Class A pathogen reduction requirements in 9 VAC 25-31-710 A or the Class B pathogen reduction requirements in 9 VAC 25-31-710 B are met, and a description of any treatment processes used to reduce pathogens in sewage sludge;
 - (2) Whether any of the vector attraction reduction options of 9 VAC 25-31-720 B 1 through 8 are met, and a description of any treatment processes used to reduce vector attraction properties in sewage sludge; and

- (3) A description of any other blending, treatment, or other activities that change the quality of sewage sludge.
- d. If sewage sludge from the applicant's facility meets the ceiling concentrations in 9 VAC 25-31-540 B
- 1, the pollutant concentrations in 9 VAC 25-31-540 B 3, the Class A pathogen requirements in 9 VAC
- 25-31-710 A, and one of the vector attraction reduction requirements in 9 VAC 25-31-720 B 1 through 8,
- and if the sewage sludge is applied to the land, the applicant must provide the total dry metric tons per
- 365-day period of sewage sludge subject to this subsection that is applied to the land.
- e. If sewage sludge from the applicant's facility is sold or given away in a bag or other container for application to the land, and the sewage sludge is not subject to subdivision 7 d of this subsection, the
- applicant must provide the following information:
 - (1) The total dry metric tons per 365-day period of sewage sludge subject to this subsection that is sold or given away in a bag or other container for application to the land; and
 - (2) A copy of all labels or notices that accompany the sewage sludge being sold or given away.
- f. If sewage sludge from the applicant's facility is provided to another person who prepares sewage sludge, as defined in 9 VAC 25-31-500, and the sewage sludge is not subject to subdivision 7 d of this subsection, the applicant must provide the following information for each facility receiving the sewage sludge:
 - (1) The name and mailing address of the receiving facility;
 - (2) The total dry metric tons per 365-day period of sewage sludge subject to this subsection that the applicant provides to the receiving facility;
 - (3) A description of any treatment processes occurring at the receiving facility, including blending activities and treatment to reduce pathogens or vector attraction characteristic;
 - (4) A copy of the notice and necessary information that the applicant is required to provide the receiving facility under 9 VAC 25-31-530 G; and
 - (5) If the receiving facility places sewage sludge in bags or containers for sale or give-away to application to the land, a copy of any labels or notices that accompany the sewage sludge.

- 8. If sewage sludge from the applicant's facility is applied to the land in bulk form and is not subject to subdivision 7 d, e or f of this subsection, the applicant must provide the following information:
 - a. The total dry metric tons per 365-day period of sewage sludge subject to this subsection that is applied to the land.
 - b. If any land application sites are located in states other than the state where the sewage sludge is prepared, a description of how the applicant will notify the permitting authority for the state(s) where the land application sites are located.
 - c. The following information for each land application site that has been identified at the time of permit application:
 - (1) The name (if any), and location for the land application site;
 - (2) The site's latitude and longitude to the nearest second, and method of determination;
 - (3) A topographic map (or other map if a topographic map is unavailable) that shows the site's location;
 - (4) The name, mailing address, and telephone number of the site owner, if different from the applicant;
 - (5) The name, mailing address, and telephone number of the person who applies sewage sludge to the site, if different from the applicant;
 - (6) Whether the site is agricultural land, forest, a public contact site, or a reclamation site, as such site types are defined in 9 VAC 25-31-500;
 - (7) The type of vegetation grown on the site, if known, and the nitrogen requirement for this vegetation;
 - (8) Whether either of the vector attraction reduction options of 9 VAC 25-31-720 B 9 or 10 is met at the site, and a description of any procedures employed at the time of use to reduce vector attraction properties in sewage sludge; and
 - (9) Other information that describes how the site will be managed, as specified by the board.

- d. The following information for each land application site that has been identified at the time of permit application, if the applicant intends to apply bulk sewage sludge subject to the cumulative pollutant loading rates in 9 VAC 25-31-540 B 2 to the site:
 - (1) Whether the applicant has contacted the permitting authority in the state where the bulk sewage sludge subject to 9 VAC 25-31-540 B 2 will be applied, to ascertain whether bulk sewage sludge subject to 9 VAC 25-31-540 B 2 has been applied to the site on or since July 20, 1993, and if so, the name of the permitting authority and the name and phone number of a contact person at the permitting authority;
 - (2) Identification of facilities other than the applicant's facility that have sent, or are sending, sewage sludge subject to the cumulative pollutant loading rates in 9 VAC 25-31-540 B 2 to the site since July 20, 1993, if, based on the inquiry in subdivision 8 d (1) of this subsection, bulk sewage sludge subject to cumulative pollutant loading rates in 9 VAC 25-31-540 B 2 has been applied to the site since July 20, 1993.
- e. If not all land application sites have been identified at the time of permit application, the applicant must submit a land application plan that, at a minimum:
 - (1) Describes the geographical area covered by the plan;
 - (2) Identifies the site selection criteria;
 - (3) Describes how the site(s) will be managed;
 - (4) Provides for advance notice to the board of specific land application sites and reasonable time for the board to object prior to land application of the sewage sludge; and
 - (5) Provides for advance public notice of land application sites in a newspaper of general circulation in the area of the land application site.
- 9. If sewage sludge from the applicant's facility is placed on a surface disposal site, the applicant must provide the following information:
 - a. The total dry metric tons of sewage sludge from the applicant's facility that is placed on surface disposal sites per 365-day period.

- b. The following information for each surface disposal site receiving sewage sludge from the applicant's facility that the applicant does not own or operate:
 - (1) The site name or number, contact person, mailing address, and telephone number for the surface disposal site; and
 - (2) The total dry metric tons from the applicant's facility per 365-day period placed on the surface disposal site.
- c. The following information for each active sewage sludge unit at each surface disposal site that the applicant owns or operates:
 - (1) The name or number and the location of the active sewage sludge unit;
 - (2) The unit's latitude and longitude to the nearest second, and method of determination;
 - (3) If not already provided, a topographic map (or other map if a topographic map is unavailable) that shows the unit's location;
 - (4) The total dry metric tons placed on the active sewage sludge unit per 365-day period;
 - (5) The total dry metric tons placed on the active sewage sludge unit over the life of the unit;
 - (6) A description of any liner for the active sewage sludge unit, including whether it has a maximum permeability of 1 X 10-7cm/sec;
 - (7) A description of any leachate collection system for the active sewage sludge unit, including the method used for leachate disposal, and any federal, state, and local permit number(s) for leachate disposal;
 - (8) If the active sewage sludge unit is less than 150 meters from the property line of the surface disposal site, the actual distance from the unit boundary to the site property line;
 - (9) The remaining capacity (dry metric tons) for the active sewage sludge unit;
 - (10) The date on which the active sewage sludge unit is expected to close, if such a date has been identified:
 - (11) The following information for any other facility that sends sewage sludge to the active sewage sludge unit:

- (a) The name, contact person, and mailing address of the facility; and
- (b) Available information regarding the quality of the sewage sludge received from the facility, including any treatment at the facility to reduce pathogens or vector attraction characteristics;
- (12) Whether any of the vector attraction reduction options of 9 VAC 25-31-720 B 9 through 11 is met at the active sewage sludge unit, and a description of any procedures employed at the time of disposal to reduce vector attraction properties in sewage sludge;
- (13) The following information, as applicable to any groundwater monitoring occurring at the active sewage sludge unit:
 - (a) A description of any groundwater monitoring occurring at the active sewage sludge unit;
 - (b) Any available groundwater monitoring data, with a description of the well locations and approximate depth to groundwater;
 - (c) A copy of any groundwater monitoring plan that has been prepared for the active sewage sludge unit;
 - (d) A copy of any certification that has been obtained from a qualified groundwater scientist that the aquifer has not been contaminated; and
- (14) If site-specific pollutant limits are being sought for the sewage sludge placed on this active sewage sludge unit, information to support such a request.
- 10. If sewage sludge from the applicant's facility is fired in a sewage sludge incinerator, the applicant must provide the following information:
 - a. The total dry metric tons of sewage sludge from the applicant's facility that is fired in sewage sludge incinerators per 365-day period.
- b. The following information for each sewage sludge incinerator firing the applicant's sewage sludge that the applicant does not own or operate:
 - (1) The name and/or number, contact person, mailing address, and telephone number of the sewage sludge incinerator; and

- (2) The total dry metric tons from the applicant's facility per 365-day period fired in the sewage sludge incinerator.
- 11. If sewage sludge from the applicant's facility is sent to a municipal solid waste landfill (MSWLF), the applicant must provide the following information for each MSWLF to which sewage sludge is sent:
 - a. The name, contact person, mailing address, location, and all applicable permit numbers of the MSWLF;
 - b. The total dry metric tons per 365-day period sent from this facility to the MSWLF;
 - c. A determination of whether the sewage sludge meets applicable requirements for disposal of sewage sludge in a MSWLF, including the results of the paint filter liquids test and any additional requirements that apply on a site-specific basis; and
 - d. Information, if known, indicating whether the MSWLF complies with criteria set forth in the Virginia Solid Waste Management Regulations, 9 VAC 20-80-10 et seq.
- 12. All applicants must provide the name, mailing address, telephone number, and responsibilities of all contractors responsible for any operational or maintenance aspects of the facility related to sewage sludge generation, treatment, use, or disposal.
- 13. At the request of the board, the applicant must provide any other information necessary to determine the appropriate standards for permitting under Part VI (9 VAC 25-31-420 et seq.) of this chapter, and must provide any other information necessary to assess the sewage sludge use and disposal practices, determine whether to issue a permit, or identify appropriate permit requirements; and pertinent plans, specifications, maps and such other relevant information as may be required, in scope and details satisfactory to the board.
- 14. All applications must be signed by a certifying official in compliance with 9 VAC 25-31-110.
- Q. Applications for facilities with cooling water intake structures.
- 1. Application Requirements.
 - a. New facilities with new or modified cooling water intake structures. New facilities with cooling water intake structures as defined in 9 VAC 25-31-165 must report the information required under paragraphs

- Q. 2, Q. 3, and Q. 4 of this section and under 9 VAC 25-31-165. Requests for alternative requirements under 9 VAC 25-31-165 must be submitted with the permit application.
- b. Phase II existing facilities. Phase II existing facilities as defined in 9 VAC 25-31-165 must submit to the board for review the information required under paragraphs Q. 2, Q. 3, and Q. 5 of this section and all applicable provisions of 9 VAC 25-31-165 as part of their application except for the Proposal for Information Collection which must be provided in accordance with 9 VAC 25-31-165 C.3.b(1).

2. Source water physical data. These include:

- a. A narrative description and scaled drawings showing the physical configuration of all source water bodies used by the facility, including area dimensions, depths, salinity and temperature regimes, and other documentation that supports the determination of the water body type where each cooling water intake structure is located;
- b. Identification and characterization of the source water body's hydrological and geomorphologic features, as well as the methods used to conduct any physical studies to determine the intake's area of influence within the water body and the results of such studies; and
- c. Location maps.
- 3. Cooling water intake structure data. These include:
 - a. A narrative description of the configuration of each cooling water intake structure and where it is located in the water body and in the water column;
 - b. Latitude and longitude in degrees, minutes, and seconds for each cooling water intake structure;
 - c. A narrative description of the operation of each cooling water intake structure, including design intake flow, daily hours of operation, number of days of the year in operation and seasonal changes, if applicable;
 - d. A flow distribution and water balance diagram that includes all sources of water to the facility, recirculation flows and discharges; and
 - e. Engineering drawings of the cooling water intake structure.

- 4. Source water baseline biological characterization data. This information is required to characterize the biological community in the vicinity of the cooling water intake structure and to characterize the operation of the cooling water intake structures. The department may also use this information in subsequent permit renewal proceedings to determine if the Design and Construction Technology Plan as required in 9 VAC 25-31-165 should be revised. This supporting information must include existing data if available. Existing data may be supplemented with data from newly conducted field studies. The information must include:
 - a. A list of the data in paragraphs Q.4.b through Q.4.f of this section that is not available and efforts made to identify sources of the data;
 - b. A list of species (or relevant taxa) for all life stages and their relative abundance in the vicinity of the cooling water intake structure:
 - c. Identification of the species and life stages that would be most susceptible to impingement and entrainment. Species evaluated should include the forage base as well as those most important in terms of significance to commercial and recreational fisheries;
 - d. Identification and evaluation of the primary period of reproduction, larval recruitment, and period of peak abundance for relevant taxa:
 - e. Data representative of the seasonal and daily activities (e.g., feeding and water column migration) of biological organisms in the vicinity of the cooling water intake structure;
 - f. Identification of all threatened, endangered, and other protected species that might be susceptible to impingement and entrainment at the cooling water intake structures;
 - g. Documentation of any public participation or consultation with federal or state agencies undertaken in development of the plan; and
 - h. If information requested in paragraph Q.4 of this section is supplemented with data collected using field studies, supporting documentation for the Source Water Baseline Biological Characterization must include a description of all methods and quality assurance procedures for sampling, and data analysis including a description of the study area; taxonomic identification of sampled and evaluated biological assemblages (including all life stages of fish and shellfish); and sampling and data analysis methods.

 The sampling and/or data analysis methods used must be appropriate for a quantitative survey and

based on consideration of methods used in other biological studies performed within the same source water body. The study area should include, at a minimum, the area of influence of the cooling water intake structure.

- 5. Cooling water system data. Phase II existing facilities as defined in 9 VAC 25-31-165 must provide the following information for each cooling water intake structure they use:
 - a. A narrative description of the operation of the cooling water system, its relationship to cooling water intake structures, the proportion of the design intake flow that is used in the system, the number of days of the year the cooling water system is in operation and seasonal changes in the operation of the system, if applicable; and
 - b. Design and engineering calculations prepared by a qualified professional and supporting data to support the description required by paragraph Q. 5. a of this section.
- Note 1: Until further notice subdivision G 7 e (1) of this section and the corresponding portions of the VPDES application Form 2C are suspended as they apply to coal mines.
- Note 2: Until further notice subdivision G 7 e (1) of this section and the corresponding portions of Item V-C of the VPDES application Form 2C are suspended as they apply to:
 - a. Testing and reporting for all four organic fractions in the Greige Mills Subcategory of the Textile Mills industry (subpart C-Low water use processing of 40 CFR Part 410 (2005)), and testing and reporting for the pesticide fraction in all other subcategories of this industrial category.
 - b. Testing and reporting for the volatile, base/neutral and pesticide fractions in the Base and Precious Metals Subcategory of the Ore Mining and Dressing industry (subpart B of 40 CFR Part 440 (2005)), and testing and reporting for all four fractions in all other subcategories of this industrial category.
 - c. Testing and reporting for all four GC/MS fractions in the Porcelain Enameling industry.
- Note 3: Until further notice subdivision G 7 e (1) of this section and the corresponding portions of Item V-C of the VPDES application Form 2C are suspended as they apply to:
 - a. Testing and reporting for the pesticide fraction in the Tall Oil Rosin Subcategory (subpart D) and Rosin-Based Derivatives Subcategory (subpart F) of the Gum and Wood Chemicals industry (40 CFR

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9 VAC 25-31-10, 30, 80, 100, 165, 220, 290, 770, 780, 790, 800, 840 and 870

Part 454 (2005)), and testing and reporting for the pesticide and base-neutral fractions in all other

subcategories of this industrial category.

b. Testing and reporting for the pesticide fraction in the leather tanning and finishing, paint and ink

formulation, and photographic supplies industrial categories.

c. Testing and reporting for the acid, base/neutral and pesticide fractions in the petroleum refining

industrial category.

d. Testing and reporting for the pesticide fraction in the Papergrade Sulfite Subcategories (subparts J

and U) of the Pulp and Paper industry (40 CFR Part 430 (2005)); testing and reporting for the

base/neutral and pesticide fractions in the following subcategories: Deink (subpart Q), Dissolving Kraft

(subpart F), and Paperboard from Waste Paper (subpart E); testing and reporting for the volatile,

base/neutral and pesticide fractions in the following subcategories: BCT Bleached Kraft (subpart H),

Semi-Chemical (subparts B and C), and Nonintegrated-Fine Papers (subpart R); and testing and

reporting for the acid, base/neutral, and pesticide fractions in the following subcategories: Fine

Bleached Kraft (subpart I), Dissolving Sulfite Pulp (subpart K), Groundwood-Fine Papers (subpart O),

Market Bleached Kraft (subpart G), Tissue from Wastepaper (subpart T), and Nonintegrated-Tissue

Papers (subpart S).

e. Testing and reporting for the base/neutral fraction in the Once-Through Cooling Water, Fly Ash and

Bottom Ash Transport Water process wastestreams of the Steam Electric Power Plant industrial

category.

9 VAC 25-31-165. Requirements Applicable to Cooling Water Intake Structures.

A. Definitions.

The following definitions apply specifically to this section:

"Adaptive management method" is a type of project management method where a facility chooses an

approach to meeting the project goal, monitors the effectiveness of that approach, and then based on

monitoring and any other relevant information, makes any adjustments necessary to ensure continued

progress toward the project's goal. This cycle of activity is repeated as necessary to reach the project's goal.

"All life stages" means eggs, larvae, juveniles, and adults.

"Annual mean flow" means the average of daily flows over a calendar year.

"Calculation baseline" means an estimate of impingement mortality and entrainment that would occur at a site assuming that: the cooling water system has been designed as a once-through system; the opening of the cooling water intake structure is located at, and the face of the standard 3/8-inch mesh traveling screen is oriented parallel to, the shoreline near the surface of the source water body; and the baseline practices, procedures, and structural configuration are those that a facility would maintain in the absence of any structural or operational controls, including flow or velocity reductions, implemented in whole or in part for the purposes of reducing impingement mortality and entrainment. The current level of impingement mortality and entrainment may be used as the calculation baseline. The calculation baseline may be estimated using: historical impingement mortality and entrainment data from a facility with comparable design, operational, and environmental conditions; current biological data collected in the water body in the vicinity of the cooling water intake structure; or current impingement mortality and entrainment data collected at the facility. The calculation baseline may be modified to be based on a location of the opening of the cooling water intake structure at a depth other than at or near the surface if it can be demonstrated to the Department that the other depth would correspond to a higher baseline level of impingement mortality and/or entrainment.

"Capacity utilization rate" means the ratio between the average annual net generation of power by the facility (in MWh) and the total net capability of the facility to generate power (in MW) multiplied by the number of hours during a year. In cases where a facility has more than one intake structure, and each intake structure provides cooling water exclusively to one or more generating units, the capacity utilization rate may be calculated separately for each intake structure, based on the capacity utilization of the units it services. Applicable requirements under this section would then be determined separately for each intake structure. The average annual net generation should be measured over a five year period (if available) of representative operating conditions, unless the facility makes a binding commitment to maintain capacity utilization below 15 percent for the life of the permit, in which case the rate may be based on this commitment. For purposes of this section, the capacity utilization rate applies to only that portion of the facility that generates electricity for transmission or sale using a thermal cycle employing the steam water system as the thermodynamic medium.

"Closed-cycle recirculating system" means a system designed, using minimized makeup and blowdown flows, to withdraw water from a natural or other water source to support contact and/or noncontact cooling uses within a facility. The water is usually sent to a cooling canal or channel, lake, pond, or tower to allow waste heat to be dissipated to the atmosphere and then is returned to the system. (Some facilities divert the waste heat to other process operations.) New source water (make-up water) is added to the system to replenish losses that have occurred due to blowdown, drift, and evaporation.

"Cooling water" means water used for contact or noncontact cooling, including water used for equipment cooling, evaporative cooling tower makeup, and dilution of effluent heat content. The intended use of the cooling water is to absorb waste heat rejected from the process or processes used, or from auxiliary operations on the facility's premises. Cooling water that is used in a manufacturing process either before or after it is used for cooling is considered process water for the purposes of calculating the percentage of a new facility's intake flow that is used for cooling purposes.

"Cooling water intake structure" means the total physical structure and any associated constructed waterways used to withdraw cooling water from state waters. The cooling water intake structure extends from the point at which water is withdrawn from the surface water source up to, and including, the intake pumps.

"Design and construction technology" means any physical configuration of the cooling water intake structure, or a technology that is placed in the water body in front of the cooling water intake structure, to reduce impingement mortality and/or entrainment. Design and construction technologies include, but are not limited to, location of the intake structure, intake screen systems, passive intake systems, fish diversion and/or avoidance systems, and fish handling and return systems. Restoration measures are not design and construction technologies for purposes of this definition.

"Design intake flow" means the value assigned (during the facility's design) to the total volume of water withdrawn from a source water body over a specific time period.

"Design intake velocity" means the value assigned (during the design of a cooling water intake structure) to the average speed at which intake water passes through the open area of the intake screen (or other device) against which organisms might be impinged or through which they might be entrained.

"Diel" means daily and refers to variation in organism abundance and density over a 24-hour period due to the influence of water movement, physical or chemical changes, and changes in light intensity.

"Entrainment" means the incorporation of all life stages of fish and shellfish with intake water flow entering and passing through a cooling water intake structure and into a cooling water system.

"Estuary" means a semi-enclosed body of water that has a free connection with open seas and within which the seawater is measurably diluted with fresh water derived from land drainage. The salinity of an estuary exceeds 0.5 parts per thousand (by mass) but is typically less than 30 parts per thousand (by mass).

"Existing facility" means any facility that commenced construction as described on or before January 17, 2002; and any modification of, or any addition of a unit at such a facility that does not meet the definition of a new facility.

"Freshwater river or stream" means a lotic (free-flowing) system that does not receive significant inflows of water from oceans or bays due to tidal action. For the purposes of this section, a flow-through reservoir with a retention time of 7 days or less will be considered a freshwater river or stream.

"Hydraulic zone of influence" means that portion of the source water body hydraulically affected by the cooling water intake structure withdrawal of water.

"Impingement" means the entrapment of all life stages of fish and shellfish on the outer part of an intake structure or against a screening device during periods of intake water withdrawal.

"Lake or reservoir" means any inland body of open water with some minimum surface area free of rooted vegetation and with an average hydraulic retention time of more than 7 days. Lakes or reservoirs might be natural water bodies or impounded streams, usually fresh, surrounded by land or by land and a man-made retainer (e.g., a dam). Lakes or reservoirs might be fed by rivers, streams, springs, and/or local precipitation. Flow-through reservoirs with an average hydraulic retention time of 7 days or less should be considered a freshwater river or stream.

"Maximize" means to increase to the greatest amount, extent, or degree reasonably possible.

"Minimize" means to reduce to the smallest amount, extent, or degree reasonably possible.

"Moribund" means dying; close to death.

"Natural thermal stratification" means the naturally-occurring division of a water body into horizontal layers of differing densities as a result of variations in temperature at different depths.

"New facility" means any building, structure, facility, or installation that meets the definition of a ``new source" or ``new discharger" and is a greenfield or stand-alone facility that commences construction after January 17, 2002 and uses either a newly constructed cooling water intake structure, or an existing cooling water intake structure whose design capacity is increased to accommodate the intake of additional cooling water. A greenfield facility is a facility that is constructed at a site at which no other source is located, or that totally replaces the process or production equipment at an existing facility. A stand-alone facility is a new, separate facility that is constructed on property where an existing facility is located and whose processes are substantially independent of the existing facility at the same site. New facility does not include new units that are added to a facility for purposes of the same general industrial operation (for example, a new peaking unit at an electrical generating station).

"Ocean" means marine open coastal waters with a salinity greater than or equal to 30 parts per thousand (by mass).

"Once-through cooling water system" means a system designed to withdraw water from a natural or other water source, use it at the facility to support contact and/or noncontact cooling uses, and then discharge it to a water body without recirculation. Once-through cooling systems sometimes employ canals/channels, ponds, or non-recirculating cooling towers to dissipate waste heat from the water before it is discharged.

"Operational measure" means a modification to any operation at a facility that serves to minimize impact to fish and shellfish from the cooling water intake structure. Examples of operational measures include, but are not limited to: reductions in cooling water intake flow through the use of variable speed pumps and seasonal flow reductions or shutdowns; and more frequent rotation of traveling screens.

"Phase II existing facility" means any existing facility that meets the criteria specified in 9 VAC 25-31-165 C.

"Source water" means the water body from which the cooling water is withdrawn.

"Supplier" means an entity, other than the regulated facility, that owns and operates its own cooling water intake structure and directly withdraws water from state waters. The supplier sells the cooling water to other facilities for their use, but may also use a portion of the water itself. An entity that provides potable water to residential populations (e.g., public water system) is not a supplier for purposes of this subpart.

"Thermocline" means the middle layer of a thermally stratified lake or reservoir. In this layer, there is a rapid decrease in temperatures.

"Tidal excursion" means the horizontal distance along the estuary or tidal river that a particle moves during one tidal cycle of ebb and flow.

"Tidal river" means the most seaward reach of a river or stream where the salinity is typically less than or equal to 0.5 parts per thousand (by mass) at a time of annual low flow and whose surface elevation responds to the effects of coastal lunar tides.

B. Cooling Water Intake Structures for New Facilities.

1. Applicability.

- a. This section applies to a new facility if it:
 - (1) Is a point source that uses or proposes to use a cooling water intake structure;
 - (2) Has at least one cooling water intake structure that uses at least 25 percent of the water it withdraws for cooling purposes as specified in paragraph c. of this section; and
 - (3) Has a design intake flow greater than two (2) million gallons per day (MGD).
- b. Use of a cooling water intake structure includes obtaining cooling water by any sort of contract or arrangement with an independent supplier (or multiple suppliers) of cooling water if the supplier or suppliers withdraw(s) water from waters of the United States. Use of cooling water does not include obtaining cooling water from a public water system or the use of treated effluent that otherwise would be discharged to state waters. This provision is intended to prevent circumvention of these requirements by creating arrangements to receive cooling water from an entity that is not itself a point source.
- c. The threshold requirement that at least 25 percent of water withdrawn be used for cooling purposes must be measured on an average monthly basis. A new facility meets the 25 percent cooling water threshold if, based on the new facility's design, any monthly average over a year for the percentage of cooling water withdrawn is expected to equal or exceed 25 percent of the total water withdrawn.
- d. This subpart does not apply to facilities that employ cooling water intake structures in the offshore and coastal subcategories of the oil and gas extraction point source category as defined under 40 CFR 435.10 and 40 CFR 435.40.

2. Compliance.

- a. The owner or operator of a new facility must comply with either Track I in paragraph b or c of this section or Track II in paragraph d of this section. In addition to meeting the requirements in paragraph b, c, or d of this section, the owner or operator of a new facility may be required to comply with paragraph e of this section.
- b. Track I requirements for new facilities that withdraw equal to or greater than 10 MGD. Facilities must comply with all of the following requirements:
 - (1) Reduce intake flow, at a minimum, to a level commensurate with that which can be attained by a closed-cycle recirculating cooling water system;
 - (2) Design and construct each cooling water intake structure to a maximum through-screen design intake velocity of 0.5 ft/s;
 - (3) Design and construct the cooling water intake structure such that the total design intake flow from all cooling water intake structures meets the following requirements:
 - (a) For cooling water intake structures located in a freshwater river or stream, the total design intake flow must be no greater than five (5) percent of the source water annual mean flow;
 - (b) For cooling water intake structures located in a lake or reservoir, the total design intake flow must not disrupt the natural thermal stratification or turnover pattern (where present) of the source water except in cases where the disruption is determined to be beneficial to the management of fisheries for fish and shellfish by any fishery management agency(ies);
 - (c) For cooling water intake structures located in an estuary or tidal river, the total design intake flow over one tidal cycle of ebb and flow must be no greater than one (1) percent of the volume of the water column within the area centered about the opening of the intake with a diameter defined by the distance of one tidal excursion at the mean low water level;
 - (4) Select and implement design and construction technologies or operational measures for minimizing impingement mortality of fish and shellfish if:

- (a) There are threatened or endangered or otherwise protected federal, state, or tribal species, or critical habitat for these species, within the hydraulic zone of influence of the cooling water intake structure; or
- (b) Based on information submitted by any fishery management agency(ies) or other relevant information, there are migratory and/or sport or commercial species of impingement concern to the board that pass through the hydraulic zone of influence of the cooling water intake structure; or
- (c) It is determined by the board, based on information submitted by any fishery management agency(ies) or other relevant information that the proposed facility, after meeting the technology-based performance requirements in paragraphs b(1), (2), and (3) of this section, would still contribute unacceptable stress to the protected species, critical habitat of those species, or species of concern;
- (5) Select and implement design and construction technologies or operational measures for minimizing entrainment of entrainable life stages of fish and shellfish if:
 - (a) There are threatened or endangered or otherwise protected federal, state, or tribal species, or critical habitat for these species, within the hydraulic zone of influence of the cooling water intake structure; or
 - (b) Based on information submitted by any fishery management agency(ies) or other relevant information, there are or would be undesirable cumulative stressors affecting entrainable life stages of species of concern to the board, and the board determines that the proposed facility, after meeting the technology-based performance requirements in paragraphs b(1), (2), and (3) of this section, would contribute unacceptable stress to these species of concern;
- (6) Submit the application information required in 9 VAC 25-31-100.Q. and 9 VAC 25-31-165 B.4.b:
- (7) Implement the monitoring requirements specified in 9 VAC 25-31-165 B.5;
- (8) Implement the record-keeping requirements specified in 9 VAC 25-31-165 B.6.
- c. Track I requirements for new facilities that withdraw equal to or greater than 2 MGD and less than 10 MGD and that choose not to comply with paragraph b of this section. Facilities must comply with all of the following requirements:

- (1) Design and construct each cooling water intake structure at the facility to a maximum throughscreen design intake velocity of 0.5 ft/s:
- (2) Design and construct the cooling water intake structure such that the total design intake flow from all cooling water intake structures at the facility meets the following requirements:
 - (a) For cooling water intake structures located in a freshwater river or stream, the total design intake flow must be no greater than five (5) percent of the source water annual mean flow;
 - (b) For cooling water intake structures located in a lake or reservoir, the total design intake flow must not disrupt the natural thermal stratification or turnover pattern (where present) of the source water except in cases where the disruption is determined to be beneficial to the management of fisheries for fish and shellfish by any fishery management agency(ies);
 - (c) For cooling water intake structures located in an estuary or tidal river, the total design intake flow over one tidal cycle of ebb and flow must be no greater than one (1) percent of the volume of the water column within the area centered about the opening of the intake with a diameter defined by the distance of one tidal excursion at the mean low water level;
- (3) Select and implement design and construction technologies or operational measures for minimizing impingement mortality of fish and shellfish if:
 - (a) There are threatened or endangered or otherwise protected federal, state, or tribal species, or critical habitat for these species, within the hydraulic zone of influence of the cooling water intake structure; or
 - (b) Based on information submitted by any fishery management agency(ies) or other relevant information there are migratory and/or sport or commercial species of impingement concern to the board that pass through the hydraulic zone of influence of the cooling water intake structure; or
 - (c) It is determined by the board, based on information submitted by any fishery management agency(ies) or other relevant information that the proposed facility, after meeting the technology-based performance requirements in paragraphs c(1) and (2) of this section, would still contribute unacceptable stress to the protected species, critical habitat of those species, or species of concern;

- (4) Select and implement design and construction technologies or operational measures for minimizing entrainment of entrainable life stages of fish and shellfish;
- (5) Submit the application information required in 9 VAC 25-31-100.Q. and 9 VAC 25-31-165 B.4;
- (6) Implement the monitoring requirements specified in 9 VAC 25-31-165 B.5;
- (7) Implement the recordkeeping requirements specified in 9 VAC 25-31-165 B.6.
- d. Track II. The owner or operator of a new facility that chooses to comply under Track II must comply with the following requirements:
 - (1) Demonstrate to the board that the technologies employed will reduce the level of adverse environmental impact from cooling water intake structures to a comparable level to that which would be achieved using the requirements of paragraphs b(1) and (2) of this section. This demonstration must include a showing that the impacts to fish and shellfish, including important forage and predator species, within the watershed will be comparable to those which would result implementing the requirements of paragraphs b(1) and (2) of this section. This showing may include consideration of impacts other than impingement mortality and entrainment, including measures that will result in increases in fish and shellfish, but it must demonstrate comparable performance for species that the board identifies as species of concern. In identifying such species the board may consider information provided by fishery management agencies with responsibility for fisheries potentially affected by the cooling water intake structure along with data and information from other sources.
 - (2) Design and construct the cooling water intake structure such that the total design intake flow from all cooling water intake structures at the facility meet the following requirements:
 - (a) For cooling water intake structures located in a freshwater river or stream, the total design intake flow must be no greater than five (5) percent of the source water annual mean flow;
 - (b) For cooling water intake structures located in a lake or reservoir, the total design intake flow must not disrupt the natural thermal stratification or turnover pattern (where present) of the source water except in cases where the disruption is determined to be beneficial to the management of fisheries for fish and shellfish by any fishery management agency(ies);

- (c) For cooling water intake structures located in an estuary or tidal river, the total design intake flow over one tidal cycle of ebb and flow must be no greater than one (1) percent of the volume of the water column within the area centered about the opening of the intake with a diameter defined by the distance of one tidal excursion at the mean low water level.
- (3) Submit the application information required in 9 VAC 25-31-100.Q. and 9 VAC 25-31-165 B.4.c.
- (4) Implement the monitoring requirements specified in 9 VAC 25-31-165 B.5.
- (5) Implement the record-keeping requirements specified in 9 VAC 25-31-165 B.6.
- e. The owner or operator of a new facility must comply with any more stringent requirements relating to the location, design, construction, and capacity of a cooling water intake structure or monitoring requirements at a new facility that the board deems are reasonably necessary to comply with any provision of state law, including compliance with state water quality standards (including designated uses, criteria, and antidegradation requirements).

3. Alternative Requirements.

- a. Any interested person may request that alternative requirements less stringent than those specified in 9 VAC 25-31-165 B.2. a through e be imposed in the permit. The board may establish alternative requirements less stringent than the requirements of 9 VAC 25-31-165 B.2. a through e only if:
 - (1) There is an applicable requirement under 9 VAC 25-31-165 B.2. a through e;
 - (2) The board determines that data specific to the facility indicate that compliance with the requirement at issue would result in compliance costs wholly out of proportion to those EPA considered in establishing the requirement at issue or would result in significant adverse impacts on local air quality, significant adverse impacts on local water resources other than impingement or entrainment, or significant adverse impacts on local energy markets;
 - (3) The alternative requirement requested is no less stringent than justified by the wholly out of proportion cost or the significant adverse impacts on local air quality, significant adverse impacts on local water resources other than impingement or entrainment, or significant adverse impacts on local energy markets; and

- (4) The alternative requirement will ensure compliance with other applicable provisions of the Clean Water Act and state law.
- b. The burden is on the person requesting the alternative requirement to demonstrate that alternative requirements should be authorized.
- 4. Application Information Requirements.
 - a. The owner or operator of a new facility must submit to the department:
 - (1) a statement of intention to comply with either:
 - (a) The Track I requirements for new facilities that withdraw equal to or greater than 10 MGD in 9 VAC 25-31-165 B.2.b;
 - (b) The Track I requirements for new facilities that withdraw equal to or greater than 2 MGD and less than 10 MGD in 9 VAC 25-31-165 B.2.c or:
 - (c) The requirements for Track II in 9 VAC 25-31-165 B.2.d.
 - (2) The owner or operator must also submit the application information required by 9 VAC 25-31-100 Q. and the information required in either paragraph b of this section for Track I or paragraph c of this section for Track II when application is made for a new or reissued VPDES permit.
 - b. Track I application requirements. To demonstrate compliance with Track I requirements in 9 VAC 25-31-165 B.2.b or c, collect and submit to the Department the information in paragraphs b(1) through (4) of this section.
 - (1) Flow reduction information. To comply with the flow reduction requirements in 9 VAC 25-31-165 B.2.b(1), submit the following information to demonstrate reduction of flow to a level commensurate with that which can be attained by a closed-cycle recirculating cooling water system:
 - (a) A narrative description of the system that has been designed to reduce intake flow to a level commensurate with that which can be attained by a closed-cycle recirculating cooling water system and any engineering calculations, including documentation demonstrating that make-up and blowdown flows have been minimized; and

- (b) If the flow reduction requirement is met entirely, or in part, by reusing or recycling water withdrawn for cooling purposes in subsequent industrial processes, provide documentation that the amount of cooling water that is not reused or recycled has been minimized.
- (2) Velocity information. Submit the following information to demonstrate compliance with the requirement to meet a maximum through-screen design intake velocity of no more than 0.5 ft/s at each cooling water intake structure:
 - (a) A narrative description of the design, structure, equipment, and operation used to meet the velocity requirement; and
 - (b) Design calculations showing that the velocity requirement will be met at minimum ambient source water surface elevations (based on best professional judgment using available hydrological data) and maximum head loss across the screens or other device.
- (3) Source water body flow information. Submit the following information to demonstrate that the cooling water intake structure meets the flow requirements in 9 VAC 25-31-165 B.2.b(3) and c(2):
 - (a) If the cooling water intake structure is located in a freshwater river or stream, provide the annual mean flow and any supporting documentation and engineering calculations to show that the cooling water intake structure meets the flow requirements;
 - (b) If the cooling water intake structure is located in an estuary or tidal river, provide the mean low water tidal excursion distance and any supporting documentation and engineering calculations to show that the cooling water intake structure facility meets the flow requirements; and
 - (c) If the cooling water intake structure is located in a lake or reservoir, provide a narrative description of the water body thermal stratification, and any supporting documentation and engineering calculations to show that the natural thermal stratification and turnover pattern will not be disrupted by the total design intake flow. In cases where the disruption is determined to be beneficial to the management of fisheries for fish and shellfish provide supporting documentation and include a written concurrence from any fisheries management agency(ies) with responsibility for fisheries potentially affected by the cooling water intake structure(s).
- (4) Design and Construction Technology Plan. To comply with 9 VAC 25-31-165 B.2.b(4) and (5), or c(3) and (4), submit the following information in a Design and Construction Technology Plan:

- (a) Information to demonstrate whether or not the criteria in 9 VAC 25-31-165 B.2.b(4) and b(5), or c(3) and c(4) are met;
- (b) Delineation of the hydraulic zone of influence for the cooling water intake structure;
- (c) New facilities required to install design and construction technologies and/or operational measures must develop a plan explaining the technologies and measures selected based on information collected for the Source Water Biological Baseline Characterization required by 9 VAC 25-31-100.Q. (Examples of appropriate technologies include, but are not limited to, wedgewire screens, fine mesh screens, fish handling and return systems, barrier nets, aquatic filter barrier systems, etc. Examples of appropriate operational measures include, but are not limited to, seasonal shutdowns or reductions in flow, continuous operations of screens, etc.) The plan must contain the following information:
 - (i) A narrative description of the design and operation of the design and construction technologies, including fish-handling and return systems, that will be used to maximize the survival of those species expected to be most susceptible to impingement. Provide species-specific information that demonstrates the efficacy of the technology;
 - (ii) A narrative description of the design and operation of the design and construction technologies that will be used to minimize entrainment of those species expected to be the most susceptible to entrainment. Provide species-specific information that demonstrates the efficacy of the technology; and
 - (iii) Design calculations, drawings, and estimates to support the descriptions provided in paragraphs b.(4)(c)(i) and (ii) of this section.
- c. Application requirements for Track II. In order to with the requirements of Track II in 9 VAC 25-31-165

 B.2.d. collect and submit the following information:
 - (1) Source water body flow information. Submit to the Department the following information to demonstrate that the cooling water intake structure meets the source water body requirements in 9 VAC 25-31-165 B.2.d.(2):

- (a) If the cooling water intake structure is located in a freshwater river or stream, provide the annual mean flow and any supporting documentation and engineering calculations to show that the cooling water intake structure meets the flow requirements;
- (b) If the cooling water intake structure is located in an estuary or tidal river, provide the mean low water tidal excursion distance and any supporting documentation and engineering calculations to show that the cooling water intake structure facility meets the flow requirements; and
- (c) If the cooling water intake structure is located in a lake or reservoir, provide a narrative description of the water body thermal stratification, and any supporting documentation and engineering calculations to show that the natural thermal stratification and thermal or turnover pattern will not be disrupted by the total design intake flow. In cases where the disruption is determined to be beneficial to the management of fisheries for fish and shellfish provide supporting documentation and include a written concurrence from any fisheries management agency(ies) with responsibility for fisheries potentially affected by the cooling water intake structure(s).
- (2) Track II Comprehensive Demonstration Study. Perform and submit the results of a Comprehensive Demonstration Study (Study). This information is required to characterize the source water baseline in the vicinity of the cooling water intake structure(s), characterize operation of the cooling water intake(s), and to confirm that the technology(ies) proposed and/or implemented at the cooling water intake structure reduce the impacts to fish and shellfish to levels comparable to those achieved by implementation of the requirements in 9 VAC 25-31-165 B.2.b (1) and (2) of Track I. To demonstrate the ``comparable level" requirement, include information showing that:
 - (a) Both impingement mortality and entrainment of all life stages of fish and shellfish are reduced by 90 percent or greater of the reduction that would be achieved through 9 VAC 25-31-165 B.2.b (1) and (2); or
 - (b) If the demonstration includes consideration of impacts other than impingement mortality and entrainment, that the measures taken will maintain the fish and shellfish in the water body at a substantially similar level to that which would be achieved through 9 VAC 25-31-165 B.2.b (1) and (2); and

- (c) Develop and submit a plan to the Department containing a proposal for how information will be collected to support the study. The plan must include:
 - (i) A description of the proposed and/or implemented technology(ies) to be evaluated in the Study;
 - (ii) A list and description of any historical studies characterizing the physical and biological conditions in the vicinity of the proposed or actual intakes and their relevancy to the proposed Study. If existing source water body data is used, it must be no more than 5 years old, demonstrated sufficient to develop a scientifically valid estimate of potential impingement and entrainment impacts, and include documentation that the data were collected using appropriate quality assurance/quality control procedures;
 - (iii) Any public participation or consultation with Federal or State agencies undertaken in developing the plan; and
 - (iv) A sampling plan for data that will be collected using actual field studies in the source water body. The sampling plan must document all methods and quality assurance procedures for sampling, and data analysis. The sampling and data analysis methods proposed must be appropriate for a quantitative survey and based on consideration of methods used in other studies performed in the source water body. The sampling plan must include a description of the study area (including the area of influence of the cooling water intake structure and at least 100 meters beyond); taxonomic identification of the sampled or evaluated biological assemblages (including all life stages of fish and shellfish); and sampling and data analysis methods; and
- (d) Submit documentation of the results of the Study to the Director. Documentation of the results of the Study must include:
 - (i) Source Water Biological Study. The Source Water Biological Study must include a taxonomic identification and characterization of aquatic biological resources including: a summary of historical and contemporary aquatic biological resources; determination and description of the target populations of concern (those species of fish and shellfish and all life stages that are most susceptible to impingement and entrainment); and a description

of the abundance and temporal/spatial characterization of the target populations based on the collection of multiple years of data to capture the seasonal and daily activities (e.g., spawning, feeding and water column migration) of all life stages of fish and shellfish found in the vicinity of the cooling water intake structure; an identification of all threatened or endangered species that might be susceptible to impingement and entrainment by the proposed cooling water intake structure(s); and a description of additional chemical, water quality, and other anthropogenic stresses on the source water body.

- (ii) Evaluation of potential cooling water intake structure effects. This evaluation will include calculations of the reduction in impingement mortality and entrainment of all life stages of fish and shellfish that would need to be achieved by the technologies selected to implement requirements under Track II and an engineering estimate of efficacy for the proposed and/or implemented technologies used to minimize impingement mortality and entrainment of all life stages of fish and shellfish and maximize survival of impinged life stages of fish and shellfish, demonstrating that the technologies reduce impingement mortality and entrainment of all life stages of fish and shellfish to a comparable level to that which would be achieved implementing the requirements in 9 VAC 25-31-165 B.2.b (1) and (2) of Track I. The efficacy projection must include a site-specific evaluation of technology(ies) suitability for reducing impingement mortality and entrainment based on the results of the Source Water Biological Study. Efficacy estimates may be determined based on case studies that have been conducted in the vicinity of the cooling water intake structure and/or site-specific technology prototype studies.
- (iii) Evaluation of proposed restoration measures. If restoration measures are proposed to maintain the fish and shellfish provide information and data to show coordination with the appropriate fishery management agency(ies) and a plan that provides a list of the measures to implement to demonstrate and continue to ensure that restoration measures will maintain the fish and shellfish in the water body to a substantially similar level to that which would be achieved through 9 VAC 25-31-165 B.2.b (1) and (2).
- (iv) Verification monitoring plan. Include in the Study a plan to conduct, at a minimum, two years of monitoring to verify the full-scale performance of the proposed or implemented

technologies or operational measures. The verification study must begin at the start of operations of the cooling water intake structure and continue for a sufficient period of time to demonstrate that the facility is reducing the level of impingement and entrainment to the level documented in paragraph c.(2)(d)(ii) of this section. The plan must describe the frequency of monitoring and the parameters to be monitored. The Department will use the verification monitoring to confirm that the level of impingement mortality and entrainment reduction required in is met and that the operation of the technology has been optimized. Include a plan to conduct monitoring to verify that restoration measures will maintain the fish and shellfish in the water body to a substantially similar level as that which would be achieved through 9 VAC 25-31-165 B.2.b (1) and (2).

5. Monitoring.

The owner or operator of a new facility will be required to perform monitoring to demonstrate compliance with the requirements specified in 9 VAC 25-31-165 B.2.

- a. Biological monitoring. Monitor both impingement and entrainment of the commercial, recreational, and forage base fish and shellfish species identified in either the Source Water Baseline Biological Characterization data or the Comprehensive Demonstration Study, depending on whether compliance with Track I or Track II was chosen. The monitoring methods used must be consistent with those used for the Source Water Baseline Biological Characterization or the Comprehensive Demonstration Study. Follow the monitoring frequencies identified below for at least two (2) years after the initial permit issuance.
 - (1) Impingement sampling. Collect samples to monitor impingement rates (simple enumeration) for each species over a 24-hour period and no less than once per month when the cooling water intake structure is in operation.
 - (2) Entrainment sampling. Collect samples to monitor entrainment rates (simple enumeration) for each species over a 24-hour period and no less than biweekly during the primary period of reproduction, larval recruitment, and peak abundance identified during the Source Water Baseline Biological Characterization or the Comprehensive Demonstration Study. Collect samples only when the cooling water intake structure is in operation.

b. Velocity monitoring. If the facility uses surface intake screen systems, monitor head loss across the screens and correlate the measured value with the design intake velocity. The head loss across the intake screen must be measured at the minimum ambient source water surface elevation (best professional judgment based on available hydrological data). The maximum head loss across the screen for each cooling water intake structure must be used to determine compliance with the velocity requirement in 9 VAC 25-31-165 B.2.b (2) or c(1). If the facility uses devices other than surface intake screens, monitor velocity at the point of entry through the device. Monitor head loss or velocity during initial facility startup, and thereafter, at the frequency specified in the VPDES permit.

c. Visual or remote inspections. Conduct visual inspections or employ remote monitoring devices during the period the cooling water intake structure is in operation. Conduct visual inspections at least weekly to ensure that any design and construction technologies are maintained and operated to ensure that they will continue to function as designed. Alternatively, inspect via remote monitoring devices to ensure that the impingement and entrainment technologies are functioning as designed.

6. Records and Reporting.

The owner or operator of a new facility is required to keep records and report information and data to the Department as follows:

- a. Keep records of all the data used to complete the permit application and show compliance with the requirements, any supplemental information developed under 9 VAC 25-31-165 B.4, and any compliance monitoring data submitted under 9 VAC 25-31-165 B.5, for a period of at least three (3) years from the date of permit issuance. The Department may require that these records be kept for a longer period.
- b. Provide the following to the Department in a yearly status report:
 - (1) Biological monitoring records for each cooling water intake structure as required by 9 VAC 25-31-165 B.5.a;
 - (2) Velocity and head loss monitoring records for each cooling water intake structure as required by 9

 VAC 25-31-165 B.5.b; and
 - (3) Records of visual or remote inspections as required in 9 VAC 25-31-165 B.5.c.

- C. Cooling Water Intake Structures for Phase II Existing Facilities.
 - 1. Applicability.
 - a. An existing facility, as defined in 9 VAC 25-31-165 A., is a Phase II existing facility subject to this section if it meets each of the following criteria:
 - (1) It is a point source.
 - (2) It uses or proposes to use cooling water intake structures with a total design intake flow of 50 million gallons per day (MGD) or more to withdraw cooling water from state waters;
 - (3) As its primary activity, the facility both generates and transmits electric power, or generates electric power but sells it to another entity for transmission; and
 - (4) It uses at least 25 percent of water withdrawn exclusively for cooling purposes, measured on an average annual basis.
 - b. In the case of a Phase II existing facility that is co-located with a manufacturing facility, only that portion of the combined cooling water intake flow that is used by the Phase II facility to generate electricity for sale to another entity will be considered for purposes of determining whether the 50 MGD and 25 percent criteria in paragraphs a. (2) and (4) of this section have been exceeded.
 - c. Use of a cooling water intake structure includes obtaining cooling water by any sort of contract or arrangement with one or more independent suppliers of cooling water if the supplier withdraws water from state waters but is not itself a Phase II existing facility, except as provided in paragraph d. of this section.
 - d. Notwithstanding paragraph c. of this section, obtaining cooling water from a public water system or using treated effluent as cooling water does not constitute use of a cooling water intake structure for purposes of this section.
 - 2. Establishing Best Technology Available Requirements for Phase II Existing Facilities.
 - a. Compliance alternatives. Phase II existing facilities must select and implement one of the following five alternatives for establishing best technology available for minimizing adverse environmental impact at the facility:

- (1) Flow and Velocity Reduction.
 - (a) Demonstrate to the Department a reduction, or planned reduction in flow commensurate with a closed-cycle recirculating system. In this case, the applicable performance standards are deemed to be met and the facility will not be required to demonstrate further that it meets the impingement mortality and entrainment performance standards specified in paragraph b. of this section. In addition, the facility is not subject to the requirements in 9 VAC 25-31-165 C.3, C.4, or C.5. However, the facility may still be subject to more stringent requirements established under paragraph e. of this section; or
 - (b) Demonstrate to the Department that a reduction, or planned reduction in the maximum through-screen design intake velocity to 0.5 ft/s or less. In this case, the facility is deemed to have met the impingement mortality performance standards and will not be required to demonstrate further that it meets the performance standards for impingement mortality specified in paragraph b. of this section, and the facility is not subject to the requirements in Sec. Sec. 9 VAC 25-31-165 C.3, C.4, or C.5 as they apply to impingement mortality. However, the facility may still be subject to applicable requirements for entrainment reduction and may still be subject to more stringent requirements established under paragraph e. of this section.
- (2) Demonstrate to the Department that the existing design and construction technologies, operational measures, and/or restoration measures meet the performance standards specified in paragraph b. of this section and/or the restoration requirements in paragraph c. of this section.
- (3) Demonstrate to the Department that the facility has selected, and will install and properly operate and maintain, design and construction technologies, operational measures, and/or restoration measures that will, in combination with any existing design and construction technologies, operational measures, and/or restoration measures, meet the performance standards specified in paragraph b. of this section and/or the restoration requirements in paragraph c. of this section;
- (4) Demonstrate to the Department that the facility has installed, or will install, and properly operate and maintain an approved design and construction technology in accordance with 9 VAC 25-31-165

 C.6; or

(5) Demonstrate to the Department that the facility has selected, installed, and is properly operating and maintaining, or will install and properly operate and maintain design and construction technologies, operational measures, and/or restoration measures that the Department has determined to be the best technology available to minimize adverse environmental impact for the facility in accordance with paragraphs a.(5)(a) or (b) of this section.

(a) If the Department determines that data specific to the facility demonstrate that the costs of compliance under alternatives in paragraphs a.(2) through (4) of this section would be significantly greater than the costs considered by the EPA Administrator for similar facilities in establishing the applicable performance standards in paragraph b. of this section, the Department must make a site-specific determination of the best technology available for minimizing adverse environmental impact. This determination must be based on reliable, scientifically valid cost and performance data submitted by the facility and any other information that the Department deems appropriate. The Department must establish site-specific alternative requirements based on new and/or existing design and construction technologies, operational measures, and/or restoration measures that achieve an efficacy that is, in the judgment of the Department, as close as practicable to the applicable performance standards in paragraph b. of this section, without resulting in costs that are significantly greater than the costs considered by the EPA Administrator for similar facilities in establishing the applicable performance standards. The site-specific determination may conclude that design and construction technologies, operational measures, and/or restoration measures in addition to those already in place are not justified because of the significantly greater costs. To calculate the costs considered by the EPA Administrator for a similar facility in establishing the applicable performance standards:

- (i) Determine which technology the EPA Administrator modeled as the most appropriate compliance technology for the facility;
- (ii) Using the EPA Administrator's costing equations, calculate the annualized capital and net operation and maintenance (O&M) costs for a facility with the same design intake flow using this technology;
- (iii) Determine the annualized net revenue loss associated with net construction downtime that the EPA Administrator modeled for the facility to install this technology;

- (iv) Determine the annualized pilot study costs that the EPA Administrator modeled for the facility to test and optimize this technology;
- (v) Sum the cost items in paragraphs a.(5)(a)(ii), (iii), and (iv) of this section; and
- (vi) Determine if the performance standards that form the basis of these estimates (i.e., impingement mortality reduction only or impingement mortality and entrainment reduction) are applicable to the facility, and if necessary, adjust the estimates to correspond to the applicable performance standards.
- (b) If the Department determines that data specific to the facility demonstrate that the costs of compliance under alternatives in paragraphs a.(2) through (4) of this section would be significantly greater than the benefits of complying with the applicable performance standards at the facility, the Department must make a site-specific determination of best technology available for minimizing adverse environmental impact. This determination must be based on reliable, scientifically valid cost and performance data submitted by the facility and any other information the Department deems appropriate. The Department must establish site-specific alternative requirements based on new and/or existing design and construction technologies, operational measures, and/or restoration measures that achieve an efficacy that, in the judgment of the Department, is as close as practicable to the applicable performance standards in paragraph b. of this section without resulting in costs that are significantly greater than the benefits at the facility. The Director's site-specific determination may conclude that design and construction technologies, operational measures, and/or restoration measures in addition to those already in place are not justified because the costs would be significantly greater than the benefits at the facility.

b. Performance standards.

(1) Impingement mortality performance standards. If compliance alternatives in paragraphs a.(2), a.(3), or a.(4) of this section are chosen, the standard for impingement mortality is to reduce impingement mortality for all life stages of fish and shellfish by 80 to 95 percent from the calculation baseline.

- (2) Entrainment performance standards. If compliance alternatives in paragraphs a.(1)(b), a.(2), a.(3), or a.(4) of this section are chosen, the standard for entrainment is to reduce entrainment of all life stages of fish and shellfish by 60 to 90 percent from the calculation baseline if:
 - (a) The facility has a capacity utilization rate of 15 percent or greater, and
 - (b) The Facility uses:
 - (i) Cooling water withdrawn from a tidal river, estuary or ocean; or
 - (ii) The facility uses cooling water withdrawn from a freshwater river or stream and the design intake flow of the cooling water intake structures is greater than five percent of the mean annual flow.
- (3) Additional performance standards for facilities withdrawing from a lake or a reservoir. If the facility withdraws cooling water from a lake or a reservoir and the facility proposes to increase the design intake flow of cooling water intake structures it uses, the increased design intake flow must not disrupt the natural thermal stratification or turnover pattern (where present) of the source water, except in cases where the disruption does not adversely affect the management of fisheries. In determining whether any such disruption does not adversely affect the management of fisheries, the facility must consult with state fish and wildlife management agencies.
- (4) Use of performance standards for site-specific determinations of best technology available. The performance standards in paragraphs b.(1) through (3) of this section must also be used for determining eligibility for site-specific determinations of best technology available for minimizing adverse environmental impact and establishing site specific requirements that achieve an efficacy as close as practicable to the applicable performance standards without resulting in costs that are significantly greater than those considered by the EPA Administrator for a similar facility in establishing the performance standards or costs that are significantly greater than the benefits at the facility.
- c. Requirements for restoration measures. With the approval of the Department, the facility may implement and adaptively manage restoration measures that produce and result in increases of fish and shellfish in the facility's watershed in place of or as a supplement to installing design and control

technologies and/or adopting operational measures that reduce impingement mortality and entrainment.

Demonstration must be made to the Department that:

- (1) The facility has evaluated the use of design and construction technologies and operational measures and determined that the use of restoration measures is appropriate because meeting the applicable performance standards or site-specific requirements through the use of design and construction technologies and/or operational measures alone is less feasible, less cost-effective, or less environmentally desirable than meeting the standards or requirements in whole or in part through the use of restoration measures; and
- (2) The restoration measures to be implemented, alone or in combination with design and construction technologies and/or operational measures, will produce ecological benefits (fish and shellfish), including maintenance or protection of community structure and function in the facility's water body or watershed, at a level that is substantially similar to the level achieved by meeting the applicable performance standards under paragraph b. of this section, or that satisfies alternative site-specific requirements established pursuant to paragraph a.(5) of this section.
- d. Compliance using a technology installation and operation plan or restoration plan.

(1) If the facility chooses one of the compliance alternatives in paragraphs a.(2), (3), (4), or (5) of this section, it may request that compliance with the requirements of 9 VAC 25-31-165 C.2.b. during the first permit containing requirements consistent with this section be determined based on whether the facility has complied with the construction, operational, maintenance, monitoring, and adaptive management requirements of a Technology Installation and Operation Plan developed in accordance with Sec. 9 VAC 25-31-165 C.3.b.(4)(b) (for any design and construction technologies and/or operational measures) and/or a Restoration Plan developed in accordance with Sec. 9 VAC 25-31-165 C.3.b.(5) (for any restoration measures). The Technology Installation and Operation Plan must be designed to meet applicable performance standards in paragraph b. of this section or alternative site-specific requirements developed pursuant to paragraph a.(5) of this section. The Restoration Plan must be designed to achieve compliance with the applicable requirements in paragraph c. of this section.

- (2) During subsequent permit terms, if the facility selected and installed design and construction technologies and/or operational measures and has been in compliance with the construction, operational, maintenance, monitoring, and adaptive management requirements of the Technology Installation and Operation Plan during the preceding permit term, it may request that compliance with the requirements of 9 VAC 25-31-165 C.2 during the following permit term be determined based on whether the facility remains in compliance with the Technology Installation and Operation Plan, revised in accordance with the adaptive management plan in Sec. 9 VAC 25-31-165 C.3.b.(4)(b)(iii) if applicable performance standards are not met. Each request and approval of a Technology Installation and Operation Plan shall be limited to one permit term.
- (3) During subsequent permit terms, if the facility selected and installed restoration measures and has been in compliance with the construction, operational, maintenance, monitoring, and adaptive management requirements in the Restoration Plan during the preceding permit term, it may request that compliance with the requirements of this section during the following permit term be determined based on whether the facility remains in compliance with the Restoration Plan, revised in accordance with the adaptive management plan in Sec. 9 VAC 25-31-165 C.3.b.(5)(e) if applicable performance standards are not met. Each request and approval of a Restoration Plan shall be limited to one permit term.
- e. More stringent standards. The Department may establish more stringent requirements as best technology available for minimizing adverse environmental impact if the Department determines that compliance with the applicable requirements of this section would not meet the requirements of applicable state law.
- f. Nuclear facilities. If it is demonstrated to the Department based on consultation with the Nuclear Regulatory Commission that compliance with this subpart would result in a conflict with a safety requirement established by the Commission, the Department must make a site-specific determination of best technology available for minimizing adverse environmental impact that would not result in a conflict with the Nuclear Regulatory Commission's safety requirement.
- 3. Application Information Requirements.
 - a. Items to be submitted to the Department are:

- (1) The Proposal for Information Collection required in paragraph b.(1) of this section prior to the start of information collection activities;
- (2) The information required in 9 VAC 25-31-100 Q and any applicable portions of the Comprehensive Demonstration Study, except for the Proposal for Information Collection required by paragraph b.(1) of this section; and
 - (a) The VPDES permit application in accordance with the time frames specified in 9 VAC 25-31-100.
 - (b) If the existing permit expires before July 9, 2008 the facility may request that the Department establish a schedule for submission of the information required by this section as expeditiously as practicable, but not later than January 7, 2008. Between the time the existing permit expires and the time a VPDES permit containing requirements consistent with this section is issued to the facility, the best technology available to minimize adverse environmental impact will continue to be determined based on the Department's best professional judgment.
- (3) In subsequent permit terms, the Department may approve a request to reduce the information required to be submitted in the permit application on the cooling water intake structure(s) and the source water body, if conditions at the facility and in the water body remain substantially unchanged since the previous application. The request for reduced cooling water intake structure and water body application information must be submitted to the Department at least one year prior to the expiration of the permit. The request must identify each required information item in 9 VAC 25-31-100 Q and this section that has not substantially changed since the previous permit application and the basis for the determination.
- b. Comprehensive Demonstration Study. The purpose of the Comprehensive Demonstration Study is to characterize impingement mortality and entrainment, to describe the operation of the cooling water intake structures, and to confirm that the technologies, operational measures, and/or restoration measures selected and installed, or to be installed, at the facility meet the applicable requirements of 9 VAC 25-31-165 C.2. All facilities except those that have met the applicable requirements in accordance with 9 VAC 25-31-165 C.2.a.(1)(a), 9 VAC 25-31-165 C.2.a.(1)(b), and 9 VAC 25-31-165 C.2.a.(4) must submit all applicable portions of the Comprehensive Demonstration Study to the Department in

accordance with paragraph a. of this section. Facilities that meet the requirements in 9 VAC 25-31-165 C.2.a.(1)(a) by reducing their flow commensurate with a closed-cycle, recirculating system are not required to submit a Comprehensive Demonstration Study. Facilities that meet the requirements in 9 VAC 25-31-165 C.2.a.(1)(b) by reducing their design intake velocity to 0.5 ft/sec or less are required to submit a Study only for the entrainment requirements, if applicable. Facilities that meet the requirements in 9 VAC 25-31-165 C.2a.(4) and have installed and properly operate and maintain an approved design and construction technology are required to submit only the Technology Installation and Operation Plan in paragraph b.(4) of this section and the Verification Monitoring Plan in paragraph b.(7) of this section. Facilities that are required to meet only impingement mortality performance standards in 9 VAC 25-31-165 C.2b.(1) are required to submit only a Study for the impingement mortality reduction requirements. The Comprehensive Demonstration Study must include:

- (1) Proposal For Information Collection. Submit to the Department for review and comment a description of the information to be used to support the Study. The Proposal for Information must be submitted prior to the start of information collection activities, such activities may be initiated prior to receiving comment from the Department. The proposal must include:
 - (a) A description of the proposed and/or implemented technologies, operational measures, and/or restoration measures to be evaluated in the Study;
 - (b) A list and description of any historical studies characterizing impingement mortality and entrainment and/or the physical and biological conditions in the vicinity of the cooling water intake structures and their relevance to this proposed Study. If existing data is to be used, demonstrate the extent to which the data are representative of current conditions and that the data were collected using appropriate quality assurance/quality control procedures;
 - (c) A summary of any past or ongoing consultations with appropriate fish and wildlife agencies that are relevant to this Study and a copy of written comments received as a result of such consultations; and
 - (d) A sampling plan for any new field studies proposed in order to ensure sufficient data to develop a scientifically valid estimate of impingement mortality and entrainment at the site is provided. The sampling plan must document all methods and quality assurance/quality control procedures for

sampling and data analysis. The sampling and data analysis methods must be appropriate for a quantitative survey and include consideration of the methods used in other studies performed in the source water body. The sampling plan must include a description of the study area (including the area of influence of the cooling water intake structure(s)), and provide a taxonomic identification of the sampled or evaluated biological assemblages (including all life stages of fish and shellfish).

- (2) Source water body flow information. Submit to the Department the following source water body flow information:
 - (a) If the cooling water intake structure is located in a freshwater river or stream, provide the annual mean flow of the water body and any supporting documentation and engineering calculations to support the analysis of whether the design intake flow is greater than five percent of the mean annual flow of the river or stream for purposes of determining applicable performance standards under paragraph b. of this section. Representative historical data (from a period of time up to 10 years, if available) must be used; and
 - (b) If the cooling water intake structure is located in a lake or a reservoir and an increase in design intake flow is proposed, provide a description of the thermal stratification in the water body, and any supporting documentation and engineering calculations to show that the total design intake flow after the increase will not disrupt the natural thermal stratification and turnover pattern in a way that adversely impacts fisheries, including the results of any consultations with fish and wildlife management agencies.
- (3) Impingement Mortality and/or Entrainment Characterization Study. Submit to the Department an Impingement Mortality and/or Entrainment Characterization Study for the purpose of providing information to support the development of a calculation baseline for evaluating impingement mortality and entrainment and to characterize current impingement mortality and entrainment. The Impingement Mortality and/or Entrainment Characterization Study must include the following, in sufficient detail to support development of the other elements of the Comprehensive Demonstration Study:

- (a) Taxonomic identifications of all life stages of fish, shellfish, and any species protected under federal or state law (including threatened or endangered species) that are in the vicinity of the cooling water intake structure(s) and are susceptible to impingement and entrainment;
- (b) A characterization of all life stages of fish, shellfish, and any species protected under federal or state law (including threatened or endangered species) identified pursuant to paragraph b.(3)(a) of this section, including a description of the abundance and temporal and spatial characteristics in the vicinity of the cooling water intake structure(s), based on sufficient data to characterize annual, seasonal, and diel variations in impingement mortality and entrainment (e.g., related to climate and weather differences, spawning, feeding and water column migration). These may include historical data that are representative of the current operation of the facility and of biological conditions at the site;
- (c) Documentation of the current impingement mortality and entrainment of all life stages of fish, shellfish, and any species protected under federal or state law (including threatened or endangered species) identified pursuant to paragraph b.(3)(a) of this section and an estimate of impingement mortality and entrainment to be used as the calculation baseline. The documentation may include historical data that are representative of the current operation of the facility and of biological conditions at the site. Impingement mortality and entrainment samples to support the calculations required in paragraphs b.(4)(a)(iii) and b.(5)(c) of this section must be collected during periods of representative operational flows for the cooling water intake structure and the flows associated with the samples must be documented;

(4) Technology and compliance assessment information

(a) Design and Construction Technology Plan. If design and construction technologies and/or operational measures are proposed, in whole or in part, to meet the requirements of Sec. 9 VAC 25-31-165 C.2.a.(2) or (3), submit a Design and Construction Technology Plan to the Department for review and approval. In the plan, provide the capacity utilization rate for the facility or for individual intake structures where applicable, and provide supporting data (including the average annual net generation of the facility in MWh measured over a five year period if available) of representative operating conditions and the total net capacity of the facility in MW and underlying calculations. The plan must explain the technologies and/or operational measures in place and/or

selected to meet the requirements in Sec. 9 VAC 25-31-165 C.2. (Examples of potentially appropriate technologies may include, but are not limited to, wedgewire screens, fine mesh screens, fish handling and return systems, barrier nets, aquatic filter barrier systems, vertical and/or lateral relocation of the cooling water intake structure, and enlargement of the cooling water intake structure opening to reduce velocity. Examples of potentially appropriate operational measures may include, but are not limited to, seasonal shutdowns, reductions in flow, and continuous or more frequent rotation of traveling screens.) The plan must contain the following information:

- (i) A narrative description of the design and operation of all design and construction technologies and/or operational measures (existing and proposed), including fish handling and return systems, that are in place or will be used to meet the requirements to reduce impingement mortality of those species expected to be most susceptible to impingement, and information that demonstrates the efficacy of the technologies and/or operational measures for those species;
- (ii) A narrative description of the design and operation of all design and construction technologies and/or operational measures (existing and proposed) that are in place or will be used to meet the requirements to reduce entrainment of those species expected to be the most susceptible to entrainment, if applicable, and information that demonstrates the efficacy of the technologies and/or operational measures for those species;
- (iii) Calculations of the reduction in impingement mortality and entrainment of all life stages of fish and shellfish that would be achieved by the technologies and/or operational measures selected based on the Impingement Mortality and/or Entrainment Characterization Study in paragraph b.(3) of this section. In determining compliance with any requirements to reduce impingement mortality or entrainment, assess the total reduction in impingement mortality and entrainment against the calculation baseline determined in accordance with paragraph b.(3) of this section. Reductions in impingement mortality and entrainment from this calculation baseline as a result of any design and construction technologies and/or operational measures already implemented at the facility should be added to the reductions expected to be achieved by any additional design and/or construction technologies and operational measures that will be implemented, and

any increases in fish and shellfish within the water body attributable to the restoration measures. Facilities that recirculate a portion of their flow, but do not reduce flow sufficiently to satisfy the compliance option in 9 VAC 25-31-165 C.2.a.(1)(a) may take into account the reduction in impingement mortality and entrainment associated with the reduction in flow when determining the net reduction associated with existing design and construction technologies and/or operational measures. This estimate must include a site-specific evaluation of the suitability of the technologies and/or operational measures based on the species that are found at the site, and may be determined based on representative studies (i.e., studies that have been conducted at a similar facility's cooling water intake structures located in the same water body type with similar biological characteristics) and/or site-specific technology prototype or pilot studies; and

- (iv) Design and engineering calculations, drawings, and estimates prepared by a qualified professional to support the descriptions required by paragraphs b.(4)(a)(i) and (ii) of this section.
- (b) Technology Installation and Operation Plan. If the compliance alternative in 9 VAC 25-31-165 C.2.a.(2), (3), (4), or (5) is chosen and design and construction technologies and/or operational measures are to be used in whole or in part to comply with the applicable requirements of Sec. 9 VAC 25-31-165 C.2, submit the following information with the application for review and approval by the Department:
 - (i) A schedule for the installation and maintenance of any new design and construction technologies. Any downtime of generating units to accommodate installation and/or maintenance of these technologies should be scheduled to coincide with otherwise necessary downtime (e.g., for repair, overhaul, or routine maintenance of the generating units) to the extent practicable. Where additional downtime is required, coordinate scheduling of this downtime with the North American Electric Reliability Council and/or other generators in the area to ensure that impacts to reliability and supply are minimized;
 - (ii) A list of operational and other parameters to be monitored, and the location and frequency of monitoring;

- (iii) A list of activities to be undertaken to ensure to the degree practicable the efficacy of installed design and construction technologies and operational measures, and the schedule for implementing them;
- (iv) A schedule and methodology for assessing the efficacy of any installed design and construction technologies and operational measures in meeting applicable performance standards or site-specific requirements, including an adaptive management plan for revising design and construction technologies, operational measures, operation and maintenance requirements, and/or monitoring requirements if the assessment indicates that applicable performance standards or site-specific requirements are not being met; and
- (v) If the compliance alternative in 9 VAC 25-31-165 C.2.a.(4) is chosen, documentation that the appropriate site conditions exist at the facility.
- (5) Restoration Plan. If restoration measures are proposed, in whole or in part, to meet the applicable requirements in 9 VAC 25-31-165 C.2, submit the following information with the application for review and approval by the Department. Address species of concern identified in consultation with federal and state fish and wildlife management agencies with responsibility for fisheries and wildlife potentially affected by the cooling water intake structure(s).
 - (a) A demonstration to the Department that evaluation has been made of the use of design and construction technologies and/or operational measures for the facility and an explanation of how it was determined that restoration would be more feasible, cost-effective, or environmentally desirable;
 - (b) A narrative description of the design and operation of all restoration measures (existing and proposed) that are in place or will be used to produce fish and shellfish;
 - (c) Quantification of the ecological benefits of the proposed restoration measures. Use information from the Impingement Mortality and/or Entrainment Characterization Study required in paragraph b.(3) of this section, and any other available and appropriate information, to estimate the reduction in fish and shellfish impingement mortality and/or entrainment that would be necessary for the facility to comply with 9 VAC 25-31-165 C.2.c.(2). Then calculate the production of fish and shellfish

that will be achieved with the restoration measures installed. Include a discussion of the nature and magnitude of uncertainty associated with the performance of these restoration measures. Also include a discussion of the time frame within which these ecological benefits are expected to accrue;

- (d) Design calculations, drawings, and estimates to document that the proposed restoration measures in combination with design and construction technologies and/or operational measures, or alone, will meet the requirements of 9 VAC 25-31-165 C.2.c.(2). If the restoration measures address the same fish and shellfish species identified in the Impingement Mortality and/or Entrainment Characterization Study (in-kind restoration), demonstrate that the restoration measures will produce a level of these fish and shellfish substantially similar to that which would result from meeting applicable performance standards in 9 VAC 25-31-165 C.2.b., or that they will satisfy site-specific requirements established pursuant to 9 VAC 25-31-165 C.2.a.(5). If the restoration measures address fish and shellfish species different from those identified in the Impingement Mortality and/or Entrainment Characterization Study (out-of-kind restoration), demonstrate that the restoration measures produce ecological benefits substantially similar to or greater than those that would be realized through in-kind restoration. Such a demonstration should be based on a watershed approach to restoration planning and consider applicable multi-agency watershed restoration plans, site-specific peer-reviewed ecological studies, and/or consultation with appropriate federal and state fish and wildlife management agencies.
- (e) A plan utilizing an adaptive management method for implementing, maintaining, and demonstrating the efficacy of the restoration measures selected and for determining the extent to which the restoration measures, or the restoration measures in combination with design and construction technologies and operational measures, have met the applicable requirements of 9 VAC 25-31-165 C.2.c.(2). The plan must include:
 - (i) A monitoring plan that includes a list of the restoration parameters that will be monitored, the frequency of monitoring, and success criteria for each parameter;
 - (ii) A list of activities to be undertaken to ensure the efficacy of the restoration measures, a description of the linkages between these activities and the items in paragraph b.(5)(e)(i) of this section, and an implementation schedule; and

(iii) A process for revising the Restoration Plan as new information, including monitoring data, becomes available, if the applicable requirements under 9 VAC 25-31-165 C.2.c.(2) are not being met.

- (f) A summary of any past or ongoing consultation with appropriate federal or state fish and wildlife management agencies on the use of restoration measures including a copy of any written comments received as a result of such consultations;
- (g) If requested by the Department, a peer review of the items submitted for the Restoration Plan. Choose the peer reviewers in consultation with the Department which may consult with EPA and federal and state fish and wildlife management agencies with responsibility for fish and wildlife potentially affected by the cooling water intake structure(s). Peer reviewers must have appropriate qualifications (e.g., in the fields of geology, engineering, and/or biology, etc.) depending upon the materials to be reviewed; and
- (h) A description of the information to be included in a bi-annual status report to the Department.
- (6) Information to support site-specific determination of best technology available for minimizing adverse environmental impact. If a site-specific determination of best technology available for minimizing adverse environmental impact pursuant to 9 VAC 25-31-165 C.2.a.(5)(a) is requested because of costs significantly greater than those considered by the EPA Administrator for a similar facility in establishing the applicable performance standards of 9 VAC 25-31-165 C.2.b., the facility is required to provide to the Department the information specified in paragraphs b.(6)(a) and b.(6)(c) of this section. If a site-specific determination of best technology available for minimizing adverse environmental impact pursuant to 9 VAC 25-31-165 C.2.a.(5)(b) is requested because of costs significantly greater than the benefits of meeting the applicable performance standards of 9 VAC 25-31-165 C.2.b. at the facility, provide the information specified in paragraphs b.(6)(a), b.(6)(b), and b.(6)(c) of this section:
 - (a) Comprehensive Cost Evaluation Study. Perform and submit the results of a Comprehensive Cost Evaluation Study, that includes:
 - (i) Engineering cost estimates in sufficient detail to document the costs of implementing design and construction technologies, operational measures, and/or restoration measures

at the facility that would be needed to meet the applicable performance standards of 9 VAC 25-31-165 C.2.b.;

- (ii) A demonstration that the costs documented in paragraph b.(6)(a)(i) of this section significantly exceed either those considered by the EPA Administrator for a similar facility in establishing the applicable performance standards or the benefits of meeting the applicable performance standards at the facility; and
- (iii) Engineering cost estimates in sufficient detail to document the costs of implementing the design and construction technologies, operational measures, and/or restoration measures in the Site-Specific Technology Plan developed in accordance with paragraph b.(6)(c) of this section.
- (b) Benefits Valuation Study. If the facility is seeking a site-specific determination of best technology available for minimizing adverse environmental impact because of costs significantly greater than the benefits of meeting the applicable performance standards of 9 VAC 25-31-165 C.2.b., use a comprehensive methodology to fully value the impacts of impingement mortality and entrainment at the site and the benefits achievable by meeting the applicable performance standards. In addition to the valuation estimates, the benefit study must include the following:
 - (i) A description of the methodology(ies) used to value commercial, recreational, and ecological benefits (including any non-use benefits, if applicable):
 - (ii) Documentation of the basis for any assumptions and quantitative estimates. If use of an entrainment survival rate other than zero is planned, submit a determination of entrainment survival at the facility based on a study approved by the Department;
 - (iii) An analysis of the effects of significant sources of uncertainty on the results of the study; and
 - (iv) If requested by the Department, a peer review of the items submitted in the Benefits Valuation Study. Choose the peer reviewers in consultation with the Department which may consult with EPA and federal and state fish and wildlife management agencies with responsibility for fish and wildlife potentially affected by the cooling water intake structure.

Peer reviewers must have appropriate qualifications depending upon the materials to be reviewed.

- (v) A narrative description of any non-monetized benefits that would be realized at the site if the applicable performance standards were met and a qualitative assessment of their magnitude and significance.
- (c) Site-Specific Technology Plan. Based on the results of the Comprehensive Cost Evaluation Study required by paragraph b.(6)(a) of this section, and the Benefits Valuation Study required by paragraph b.(6)(b) of this section, if applicable, submit a Site-Specific Technology Plan to the Department for review and approval. The plan must contain the following information:
 - (i) A narrative description of the design and operation of all existing and proposed design and construction technologies, operational measures, and/or restoration measures selected in accordance with 9 VAC 25-31-165 C.2.a.(5):
 - (ii) An engineering estimate of the efficacy of the proposed and/or implemented design and construction technologies or operational measures, and/or restoration measures. This estimate must include a site-specific evaluation of the suitability of the technologies or operational measures for reducing impingement mortality and/or entrainment (as applicable) of all life stages of fish and shellfish based on representative studies (e.g., studies that have been conducted at cooling water intake structures located in the same water body type with similar biological characteristics) and, if applicable, site-specific technology prototype or pilot studies. If restoration measures will be used, provide a Restoration Plan that includes the elements described in paragraph b.(5) of this section.
 - (iii) A demonstration that the proposed and/or implemented design and construction technologies, operational measures, and/or restoration measures achieve an efficacy that is as close as practicable to the applicable performance standards of 9 VAC 25-31-165 C.2.b. without resulting in costs significantly greater than either the costs considered by the EPA Administrator for a similar facility in establishing the applicable performance standards, or as appropriate, the benefits of complying with the applicable performance standards at the facility:

(iv) Design and engineering calculations, drawings, and estimates prepared by a qualified professional to support the elements of the Plan.

(7) Verification Monitoring Plan. If using compliance alternatives in 9 VAC 25-31-165 C.2.a.(2), (3), (4), or (5) with design and construction technologies and/or operational measures, submit a plan to conduct, at a minimum, two years of monitoring to verify the full-scale performance of the proposed or already implemented technologies and/or operational measures. The verification study must begin once the design and construction technologies and/or operational measures are installed and continue for a period of time that is sufficient to demonstrate to the Department whether the facility is meeting the applicable performance standards in 9 VAC 25-31-165 C.2.b. or site-specific requirements developed pursuant to 9 VAC 25-31-165 C.2.a.(5). The plan must provide the following:

(a) A description of the frequency and duration of monitoring, the parameters to be monitored, and the basis for determining the parameters and the frequency and duration for monitoring. The parameters selected and duration and frequency of monitoring must be consistent with any methodology for assessing success in meeting applicable performance standards in the Technology Installation and Operation Plan as required by paragraph b.(4)(b) of this section.

(b) A proposal on how naturally moribund fish and shellfish that enter the cooling water intake structure would be identified and taken into account in assessing success in meeting the performance standards in 9 VAC 25-31-165 C.2.b.

(c) A description of the information to be included in a bi-annual status report to the Department.

4. Monitoring.

The owner or operator of a Phase II existing facility must perform monitoring, as applicable, in accordance with the Technology Installation and Operation Plan required by 9 VAC 25-31-165 C.3.b.(4)(b), the Restoration Plan required by 9 VAC 25-31-165 C.3.b.(5), the Verification Monitoring Plan required by 9 VAC 25-31-165 C.3.b.(7), and any additional monitoring specified by the Department to demonstrate compliance with the applicable requirements of 9 VAC 25-31-165 C.2.

5. Records and Reporting.

The owner or operator of a Phase II existing facility is required to keep records and report information and data to the Department as follows:

- a. Keep records of all the data used to complete the permit application and show compliance with the requirements of 9 VAC 25-31-165 C.2, any supplemental information developed under 9 VAC 25-31-165 C.3, and any compliance monitoring data submitted under 9 VAC 25-31-165 C.4, for a period of at least three (3) years from date of permit issuance. The Department may require that these records be kept for a longer period.
- b. Submit a status report to the Department for review every two years that includes appropriate monitoring data and other information as specified by the Department.
- 6. Approved Design and Construction Technologies
- a. The following technologies constitute approved design and construction technologies for purposes of9 VAC 25-31-165 C.2.a.(4):
 - (1) Submerged cylindrical wedge-wire screen technology, if the following conditions are met:
 - (a) The cooling water intake structure is located in a freshwater river or stream;
 - (b) The cooling water intake structure is situated such that sufficient ambient counter currents exist to promote cleaning of the screen face;
 - (c) The maximum through-screen design intake velocity is 0.5 ft/s or less;
 - (d) The slot size is appropriate for the size of eggs, larvae, and juveniles of all fish and shellfish to be protected at the site; and
 - (e) The entire main condenser cooling water flow is directed through the technology. Small flows totaling less than 2 MGD for auxiliary plant cooling uses are excluded from this provision.
- (2) A technology that has been approved in accordance with the process described in paragraph b. of this section.

9 VAC 25-31-220. Establishing limitations, standards, and other permit conditions.

In addition to the conditions established under 9 VAC 25-31-210 A, each VPDES permit shall include conditions meeting the following requirements when applicable.

A. Technology-based effluent limitations and standards.

- 1. Technology-based effluent limitations and standards based on effluent limitations and standards promulgated under section 301 of the CWA, on new source performance standards promulgated under section 306 of the CWA, on case-by-case effluent limitations determined under section 402(a) (1) of the CWA, or a combination of the three. For new sources or new dischargers, these technology-based limitations and standards are subject to the provisions of 9 VAC 25-31-180 B (protection period).
- 2. The Board may authorize a discharger subject to technology-based effluent limitations guidelines and standards in a VPDES permit to forego sampling of a pollutant found at 40 CFR Subchapter N (2005) if the discharger has demonstrated through sampling and other technical factors that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger. This waiver is good only for the term of the permit and is not available during the term of the first permit issued to a discharger. Any request for this waiver must be submitted when applying for a reissued permit or modification of a reissued permit. The request must demonstrate through sampling or other technical information, including information generated during an earlier permit term that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger. Any grant of the monitoring waiver must be included in the permit as an express permit condition and the reasons supporting the grant must be documented in the permit's fact sheet or statement of basis. This provision does not supersede certification processes and requirements already established in existing effluent limitations guidelines and standards.

B. Other effluent limitations and standards.

- 1. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318 and 405 of CWA. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in the permit, the Board shall institute proceedings under this chapter to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.
- 2. Standards for sewage sludge use or disposal under Section 405(d) of the CWA and Part VI of this chapter unless those standards have been included in a permit issued under the appropriate provisions of Subtitle C of the Solid Waste Disposal Act, Part C of Safe Drinking Water Act, the Marine Protection,

Research, and Sanctuaries Act of 1972, or the Clean Air Act, or in another permit issued by the Department of Environmental Quality, the Virginia Department of Health or any other appropriate state agency under another permit program approved by the Administrator. When there are no applicable standards for sewage sludge use or disposal, the permit may include requirements developed on a case-by-case basis to protect public health and the environment from any adverse effects which may occur from toxic pollutants in sewage sludge. If any applicable standard for sewage sludge use or disposal is promulgated under Section 405(d) of the CWA and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Board may initiate proceedings under this chapter to modify or revoke and reissue the permit to conform to the standard for sewage sludge use or disposal.

3. Requirements applicable to cooling water intake structures at new facilities under section 316(b) of the CWA, in accordance with 9 VAC 25-31-165.

C. Reopener clause.

For any permit issued to a treatment works treating domestic sewage (including sludge-only facilities), the Board shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the CWA. The Board may promptly modify or revoke and reissue any permit containing the reopener clause required by this subsection if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

D. Water quality standards and state requirements.

Any requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards under Sections 301, 304, 306, 307, 318 and 405 of CWA necessary to:

- 1. Achieve water quality standards established under the Law and Section 303 of the CWA, including state narrative criteria for water quality.
 - a. Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Board determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any Virginia water quality standard, including Virginia narrative criteria for water quality.

- b. When determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a Virginia water quality standard, the Board shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water.
- c. When the Board determines, using the procedures in subdivision 1 b of this subsection, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a Virginia numeric criteria within a Virginia water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant.
- d. Except as provided in this subdivision, when the Board determines, using the procedures in subdivision 1 b of this subsection, toxicity testing data, or other information, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative criterion within an applicable Virginia water quality standard, the permit must contain effluent limits for whole effluent toxicity. Limits on whole effluent toxicity are not necessary where the Board demonstrates in the fact sheet or statement of basis of the VPDES permit, using the procedures in subdivision 1 b of this subsection, that chemical-specific limits for the effluent are sufficient to attain and maintain applicable numeric and narrative Virginia water quality standards.
- e. Where Virginia has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable Virginia water quality standard, the Board must establish effluent limits using one or more of the following options:
 - (1) Establish effluent limits using a calculated numeric water quality criterion for the pollutant which the Board demonstrates will attain and maintain applicable narrative water quality criteria and will fully protect the designated use. Such a criterion may be derived using a proposed Virginia criterion, or an explicit policy or regulation interpreting Virginia's narrative water quality criterion, supplemented with other relevant information which may include: EPA's Water Quality Standards Handbook, August 1994, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current EPA criteria documents; or

- (2) Establish effluent limits on a case-by-case basis, using EPA's water quality criteria, published under Section 307(a) of the CWA, supplemented where necessary by other relevant information; or
- (3) Establish effluent limitations on an indicator parameter for the pollutant of concern, provided:
 - (a) The permit identifies which pollutants are intended to be controlled by the use of the effluent limitation:
 - (b) The fact sheet required by 9 VAC 25-31-280 sets forth the basis for the limit, including a finding that compliance with the effluent limit on the indicator parameter will result in controls on the pollutant of concern which are sufficient to attain and maintain applicable water quality standards;
 - (c) The permit requires all effluent and ambient monitoring necessary to show that during the term of the permit the limit on the indicator parameter continues to attain and maintain applicable water quality standards; and
 - (d) The permit contains a reopener clause allowing the Board to modify or revoke and reissue the permit if the limits on the indicator parameter no longer attain and maintain applicable water quality standards.
- f. When developing water quality-based effluent limits under this subsection, the Board shall ensure that:
 - (1) The level of water quality to be achieved by limits on point sources established under this subsection is derived from, and complies with all applicable water quality standards; and
 - (2) Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by Virginia and approved by EPA pursuant to 40 CFR Part 130.7 (2005);
- 2. Attain or maintain a specified water quality through water quality related effluent limits established under the Law and Section 302 of CWA;
- 3. Conform to the conditions of a Virginia Water Protection Permit (VWPP) issued under the Law and Section 401 of the CWA.;

- 4. Conform to applicable water quality requirements under Section 401(a) (2) of CWA when the discharge affects a state other than Virginia;
- 5. Incorporate any more stringent limitations, treatment standards, or schedule of compliance requirements established under the Law or regulations in accordance with Section 301(b) (1) (C) of CWA;
- 6. Ensure consistency with the requirements of a Water Quality Management plan approved by EPA under Section 208(b) of CWA;
- 7. Incorporate Section 403(c) criteria under 40 CFR Part 125, Subpart M (2005), for ocean discharges; or
- 8. Incorporate alternative effluent limitations or standards where warranted by fundamentally different factors, under 40 CFR Part 125, Subpart D (2005).
- E. Technology-based controls for toxic pollutants.

Limitations established under subsections A, B, or D of this section, to control pollutants meeting the criteria listed in subdivision 1 of this subsection. Limitations will be established in accordance with subdivision 2 of this subsection. An explanation of the development of these limitations shall be included in the fact sheet.

- 1. Limitations must control all toxic pollutants which the Board determines (based on information reported in a permit application or in a notification required by the permit or on other information) are or may be discharged at a level greater than the level which can be achieved by the technology-based treatment requirements appropriate to the permittee; or
- 2. The requirement that the limitations control the pollutants meeting the criteria of subdivision 1 of this subsection will be satisfied by:
 - a. Limitations on those pollutants; or
 - b. Limitations on other pollutants which, in the judgment of the Board, will provide treatment of the pollutants under subdivision 1 of this subsection to the levels required by the Law and 40 CFR Part 125, Subpart A (2005).
- F. Notification level.

A notification level which exceeds the notification level of 9 VAC 25-31-200 A 1 a, b, or c, upon a petition from the permittee or on the Board's initiative. This new notification level may not exceed the level which can be achieved by the technology-based treatment requirements appropriate to the permittee.

G. Twenty-four-hour reporting.

Pollutants for which the permittee must report violations of maximum daily discharge limitations under 9 VAC 25-31-190 L 7 b (3) (24-hour reporting) shall be listed in the permit. This list shall include any toxic pollutant or hazardous substance, or any pollutant specifically identified as the method to control a toxic pollutant or hazardous substance.

- H. Durations for permits, as set forth in 9 VAC 25-31-240.
- I. Monitoring requirements.

The following monitoring requirements:

- 1. Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate);
- 2. Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring;
- 3. Applicable reporting requirements based upon the impact of the regulated activity and as specified in 9 VAC 25-31-190 and in subdivisions 5 through 8 of this subsection. Reporting shall be no less frequent than specified in the above regulation;
- 4. To assure compliance with permit limitations, requirements to monitor:
 - a. The mass (or other measurement specified in the permit) for each pollutant limited in the permit;
 - b. The volume of effluent discharged from each outfall;
 - c. Other measurements as appropriate including pollutants in internal waste streams; pollutants in intake water for net limitations; frequency, rate of discharge, etc., for noncontinuous discharges; pollutants subject to notification requirements; and pollutants in sewage sludge or other monitoring as specified in Part VI of this chapter; or as determined to be necessary on a case-by-case basis pursuant to the Law and Section 405(d) (4) of the CWA; and

- d. According to test procedures approved under 40 CFR Part 136 (2005) for the analyses of pollutants having approved methods under that part, or alternative EPA approved methods, and according to a test procedure specified in the permit for pollutants with no approved methods;
- 5. Except as provided in subdivisions 7 and 8 of this subsection, requirements to report monitoring results shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the discharge, but in no case less that once a year. For sewage sludge use or disposal practices, requirements to monitor and report results shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the sewage sludge use or disposal practice; minimally this shall be as specified in Part VI of this chapter (where applicable), but in no case less than once a year;
- 6. Requirements to report monitoring results for storm water discharges associated with industrial activity which are subject to an effluent limitation guideline shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the discharge, but in no case less than once a year;
- 7. Requirements to report monitoring results for storm water discharges associated with industrial activity (other than those addressed in subdivision 6 of this subsection) shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the discharge. At a minimum, a permit for such a discharge must require:
 - a. The discharger to conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity and evaluate whether measures to reduce pollutant loading identified in a storm water pollution prevention plan are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed;
 - b. The discharger to maintain for a period of three years a record summarizing the results of the inspection and a certification that the facility is in compliance with the plan and the permit, and identifying any incidents of noncompliance;
 - c. Such report and certification be signed in accordance with 9 VAC 25-31-110; and
 - d. Permits for storm water discharges associated with industrial activity from inactive mining operations may, where annual inspections are impracticable, require certification once every three years by a

Registered Professional Engineer that the facility is in compliance with the permit, or alternative requirements; and

- 8. Permits which do not require the submittal of monitoring result reports at least annually shall require that the permittee report all instances of noncompliance not reported under 9 VAC 25-31-190 L 1, 4, 5, 6, and 7 at least annually.
- J. Pretreatment program for POTWs.

Requirements for POTWs to:

- 1. Identify, in terms of character and volume of pollutants, any significant indirect dischargers into the POTW subject to pretreatment standards under Section 307(b) of CWA and Part VII (9 VAC 25-31-730 et seq.) of this chapter:
- 2. Submit a local program when required by and in accordance with Part VII (9 VAC 25-31-730 et seq.) of this chapter to assure compliance with pretreatment standards to the extent applicable under Section 307(b) of the CWA. The local program shall be incorporated into the permit as described in Part VII (9 VAC 25-31-730 et seq.) of this chapter. The program shall require all indirect dischargers to the POTW to comply with the reporting requirements of Part VII (9 VAC 25-31-730 et seq.) of this chapter;
- 3. Provide a written technical evaluation of the need to revise local limits under Part VII (9 VAC 25-31-730 et seq.) of this chapter following permit issuance or reissuance; and
- 4. For POTWs which are sludge-only facilities, a requirement to develop a pretreatment program under Part VII (9 VAC 25-31-730 et seq.) of this chapter when the Board determines that a pretreatment program is necessary to assure compliance with Part VI (9 VAC 25-31-420 et seq.) of this chapter.
- K. Best management practices.

Best management practices to control or abate the discharge of pollutants when:

- 1. Authorized under Section 304(e) of CWA for the control of toxic pollutants and hazardous substances from ancillary industrial activities;
- 2. Authorized under Section 402(p) of CWA for the control of storm water discharges;
- 3. Numeric effluent limitations are infeasible; or

4. The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the Law and the CWA.

L. Reissued permits.

- 1. In the case of effluent limitations established on the basis of Section 402(a) (1) (B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under Section 304(b) of the CWA subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit. In the case of effluent limitations established on the basis of Sections 301(b) (1) (C) or 303(d) or (e) of the CWA, a permit may not be renewed, reissued, or modified to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit except in compliance with Section 303(d) (4) of the CWA.
- 2. Exceptions A permit with respect to which subdivision 1 of this subsection applies may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant, if:
 - a. Material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation;
 - b. (1) Information is available which was not available at the time of permit issuance (other than revised regulations,
 - guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance; or
 - (2) The Board determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under Section 402(a) (1) (B) of the CWA;
 - c. A less stringent effluent limitation is necessary because of events over which the permittee has no control and for which there is no reasonably available remedy;
 - d. The permittee has received a permit modification under the Law and Section 301(c), 301(g), 301(h), 301(i), 301(k), 301(n), or 316(a) of the CWA; or
 - e. The permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been

unable to achieve the previous effluent limitations, in which case the limitations in the reviewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).

Subdivision 2 b of this subsection shall not apply to any revised waste load allocations or any alternative grounds for translating water quality standards into effluent limitations, except where the cumulative effect of such revised allocations results in a decrease in the amount of pollutants discharged into the concerned waters, and such revised allocations are not the result of a discharger eliminating or substantially reducing its discharge of pollutants due to complying with the requirements of the Law or the CWA or for reasons otherwise unrelated to water quality.

3. In no event may a permit with respect to which subdivision 2 of this subsection applies be renewed, reissued, or modified to contain an effluent limitation which is less stringent than required by effluent guidelines in effect at the time the permit is renewed, reissued, or modified. In no event may such a permit to discharge into waters be renewed, issued, or modified to contain a less stringent effluent limitation if the implementation of such limitation would result in a violation of a Virginia water quality standard applicable to such waters.

M. Privately owned treatment works.

For a privately owned treatment works, any conditions expressly applicable to any user, as a limited co-permittee, that may be necessary in the permit issued to the treatment works to ensure compliance with applicable requirements under this part. Alternatively, the Board may issue separate permits to the treatment works and to its users, or may require a separate permit application from any user. The Board's decision to issue a permit with no conditions applicable to any user, to impose conditions on one or more users, to issue separate permits, or to require separate applications, and the basis for that decision, shall be stated in the fact sheet for the draft permit for the treatment works.

N. Grants.

Any conditions imposed in grants made by the Board to POTWs under Sections 201 and 204 of CWA which are reasonably necessary for the achievement of effluent limitations under Section 301 of CWA and the Law.

O. Sewage sludge.

Requirements governing the disposal of sewage sludge from publicly owned treatment works or any other treatment works treating domestic sewage for any use regulated by Part VI of this chapter.

P. Coast Guard.

When a permit is issued to a facility that may operate at certain times as a means of transportation over water, a condition that the discharge shall comply with any applicable regulations promulgated by the Secretary of the department in which the Coast Guard is operating, that establish specifications for safe transportation, handling, carriage, and storage of pollutants.

Q. Navigation.

Any conditions that the Secretary of the Army considers necessary to ensure that navigation and anchorage will not be substantially impaired in accordance with 9 VAC 25-31-330.

9 VAC 25-31-290. Public notice of permit actions and public comment period.

A. Scope.

- 1. The Board shall give public notice that the following actions have occurred:
 - a. A draft permit has been prepared under 9 VAC 25-31-260 D;
 - b. A public hearing has been scheduled under 9 VAC 25-31-310; or
 - c. A VPDES new source determination has been made under 9 VAC 25-31-180.
- 2. No public notice is required when a request for permit modification, revocation and reissuance, or termination is denied under 9 VAC 25-31-370 B. Written notice of that denial shall be given to the requester and to the permittee. Public notice shall not be required for submission or approval of plans and specifications or conceptual engineering reports not required to be submitted as part of the application.
- 3. Public notices may describe more than one permit or permit actions.
- B. Timing.

- 1. Public notice of the preparation of a draft permit required under subsection A of this section shall allow at least 30 days for public comment.
- 2. Public notice of a public hearing shall be given at least 30 days before the hearing. (Public notice of the hearing may be given at the same time as public notice of the draft permit and the two notices may be combined.)

C. Methods.

Public notice of activities described in subdivision A 1 of this section shall be given by the following methods:

- 1. By mailing a copy of a notice to the following persons (any person otherwise entitled to receive notice under this subsection may waive his or her rights to receive notice for any classes and categories of permits):
 - a. The applicant (except for VPDES general permits when there is no applicant);
 - b. Any other agency which the Board knows has issued or is required to issue a VPDES, sludge management permit;
 - c. Federal and state agencies with jurisdiction over fish, shellfish, and wildlife resources and over coastal zone management plans, the Advisory Council on Historic Preservation, State Historic Preservation Officers, including any affected states (Indian Tribes);
 - d. Any state agency responsible for plan development under CWA Section 208(b) (2), 208(b) (4) or 303(e) and the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service;
 - e. Any user identified in the permit application of a privately owned treatment works;
 - f. Persons on a mailing list developed by:
 - (1) Including those who request in writing to be on the list;
 - (2) Soliciting persons for area lists from participants in past permit proceedings in that area; and
 - (3) Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in such publications as EPA Regional and state funded newsletters, environmental bulletins, or state law journals. (The Board may update the mailing list from time to

time by requesting written indication of continued interest from those listed. The Board may delete from the list the name of any person who fails to respond to such a request.); and

- g. (1) To any unit of local government having jurisdiction over the area where the facility is proposed to be located; and
 - (2) To each state agency having any authority under state law with respect to the construction or operation of such facility;
- 2. By publication once a week for two successive weeks in a newspaper of general circulation in the area affected by the discharge. The cost of public notice shall be paid by the owner; and
- 3. Any other method reasonably calculated to give actual notice of the action in question to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

D. Contents.

- 1. All public notices issued under this section shall contain the following minimum information:
 - a. Name and address of the office processing the permit action for which notice is being given;
 - b. Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit, except in the case of VPDES draft general permits;
 - c. A brief description of the business conducted at the facility or activity described in the permit application or the draft permit, for VPDES general permits when there is no application;
 - d. Name, address and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit or draft general permit, as the case may be, statement of basis or fact sheet, and the application;
 - e. A brief description of the procedures for submitting comments and the time and place of any public hearing that will be held, including a statement of procedures to request a public hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final permit decision;

- f. A general description of the location of each existing or proposed discharge point and the name of the receiving water and the sludge use and disposal practice(s) and the location of each treatment works treating domestic sewage and sewage sludge use or disposal sites known at the time of permit application. For draft general permits, this requirement will be satisfied by a map or description of the permit area; and
- g. Requirements applicable to cooling water intake structures under section 316(b) of the CWA, in accordance with 9 VAC 25-31-165; and
- g. h. Any additional information considered necessary or proper.
- 2. In addition to the general public notice described in subdivision 1 of this subsection, the public notice of a public hearing under 9 VAC 25-31-310 shall contain the following information:
 - a. Reference to the date of previous public notices relating to the permit;
 - b. Date, time, and place of the public hearing;
 - c. A brief description of the nature and purpose of the public hearing, including the applicable rules and procedures; and
 - d. A concise statement of the issues raised by the persons requesting the public hearing.
- 3. Public notice of an VPDES draft permit for a discharge where a request for alternate thermal effluent limitations has been filed shall include:
 - a. A statement that the thermal component of the discharge is subject to effluent limitations incorporated in 9 VAC 25-31-30 and a brief description, including a quantitative statement, of the thermal effluent limitations proposed under CWA Sections 301 or 306;
 - b. A statement that an alternate thermal effluent limitation request has been filed and that alternative less stringent effluent limitations may be imposed on the thermal component of the discharge under the Law and CWA Section 316(a) and a brief description, including a quantitative statement, of the alternative effluent limitations, if any, included in the request; and
 - c. If the applicant has filed an early screening request for a section 316(a) variance, a statement that the applicant has submitted such a plan.

E. In addition to the general public notice described in subdivision D 1 of this section, all persons identified in subdivisions C 1 a, b, c, and d of this section shall be mailed a copy of the fact sheet or statement of basis, the permit application (if any) and the draft permit (if any).

- F. Upon receipt of an application for the issuance of a new or modified permit other than those for agricultural production or aquacultural production activities, the Board shall notify, in writing, the locality wherein the discharge does or is proposed to take place of, at a minimum:
 - 1. The name of the applicant;
 - 2. The nature of the application and proposed discharge;
 - 3. The availability and timing of any comment period; and
 - 4. Upon request, any other information known to, or in the possession of, the Board or the Department regarding the applicant not required to be held confidential by this chapter.

The Board shall make a good faith effort to provide this same notice and information to (i) each locality and riparian property owner to a distance one-quarter mile downstream and one-quarter mile upstream or to the fall line whichever is closer on tidal waters, and (ii) each locality and riparian property owner to a distance one-half mile downstream on nontidal waters. Distances shall be measured from the point, or proposed point, of discharge. If the receiving river, at the point or proposed point of discharge, is two miles wide or greater, the riparian property owners on the opposite shore need not be notified. Notice to property owners shall be based on names and addresses taken from local tax rolls. Such names and addresses shall be provided by the Commissioners of the Revenue or the tax assessor's office of the affected jurisdictions upon request by the Board.

- G. Before issuing any permit, if the Board finds that there are localities particularly affected by the permit, the Board shall:
 - 1. Publish, or require the applicant to publish, a notice in a local paper of general circulation in the localities affected at least thirty days prior to the close of any public comment period. Such notice shall contain a statement of the estimated local impact of the proposed permit, which at a minimum shall include information on the specific pollutants involved and the total quantity of each which may be discharged; and

2. Mail the notice to the chief elected official and chief administrative officer and planning district commission for those localities.

Written comments shall be accepted by the Board for at least fifteen days after any public hearing on the permit, unless the Board votes to shorten the period. For the purposes of this subsection, the term "locality particularly affected" means any locality which bears any identified disproportionate material water quality impact which would not be experienced by other localities.

9 VAC 25-31-770. National Pretreatment Standards: Prohibited Discharges.

A. 1. General Prohibitions.

A user may not introduce into any POTW any pollutant(s) which cause Pass Through, Interference or violation of water quality standards. These general prohibitions and the specific prohibitions in subsection B of this section apply to each User introducing pollutants into a POTW whether or not the User is subject to other National Pretreatment Standards or any national, state, or local Pretreatment Requirements.

2. Affirmative Defenses.

A User shall have an affirmative defense in any action brought against it alleging a violation of the general prohibitions established in subdivision 1 of this subsection and the specific prohibitions in subdivisions B 3 through 7 of this section where the user can demonstrate that:

- a. It did not know or have reason to know that its Discharge, alone or in conjunction with a discharge or discharges from other sources, would cause Pass Through or Interference; and
- b. (1) A local limit designed to prevent Pass Through and/or Interference, as the case may be, was developed in

accordance with subsection C of this section for each pollutant in the User's Discharge that caused Pass Through or Interference, and the User was in compliance with each such local limit directly prior to and during the Pass Through or Interference; or

(2) If a local limit designed to prevent Pass Through and/or Interference, as the case may be, has not been developed in accordance with subsection C of this section for the pollutant(s) that caused the Pass Through or Interference, the User's Discharge directly prior to and during the Pass Through or

Interference did not change substantially in nature or constituents from the User's prior discharge activity when the POTW was regularly in compliance with the POTW's VPDES permit requirements and, in the case of Interference, applicable requirements for sewage sludge use or disposal.

B. Specific prohibitions.

In addition, the following pollutants shall not be introduced into a POTW:

- 1. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21 (2005);
- 2. Pollutants which will cause corrosive structural damage to the POTW, but in no case Discharges with pH lower that 5.0, unless the works is specifically designed to accommodate such Discharges;
- 3. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in Interference;
- 4. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a Discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;
- 5. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40°C (104°F) unless the Director, upon request of the POTW, approves alternate temperature limits;
- 6. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
- 7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; or
- 8. Any trucked or hauled pollutants, except at discharge points designated by the POTW.
- C. When specific limits must be developed by POTW.
 - 1. Each POTW developing a POTW Pretreatment Program pursuant to 9 VAC 25-31-800 shall develop and enforce specific limits to implement the prohibitions listed in subdivision A 1 and subsection B of this

section. Each POTW with an approved pretreatment program shall continue to develop these limits as necessary and effectively enforce such limits.

- 2. All other POTW's shall, in cases where pollutants contributed by User(s) result in Interference, Pass Through or water quality standards violations and such violation is likely to recur, develop and enforce specific effluent limits for Industrial User(s), and all other users, as appropriate, which, together with appropriate changes in the POTW Treatment Plant's facilities or operation, are necessary to ensure renewed and continued compliance with the POTW's VPDES permit or sludge use or disposal practices.
- 3. Specific effluent limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.
- 4. All POTWs with approved pretreatment programs shall provide a written technical evaluation of the need to revise their local limits within one year of reissuance of VPDES permits for applicable treatment works, or within one year of VPDES permit modifications resulting in significant changes in VPDES permit limitations, POTW pretreatment operations, or POTW sludge disposal methods.
- 5. POTWs may develop Best Management Practices (BMPs) to implement paragraphs 1. and 2. of this section. Such BMPs shall be considered local limits and Pretreatment Standards for the purposes of this Part and section 307(d) of the Act.

D. Local limits.

Where specific prohibitions or limits on pollutants or pollutant parameters are developed by a POTW in accordance with subsection C of this section, such limits shall be deemed Pretreatment Standards for the purposes of Section 307(d) of the CWA.

E. EPA and state enforcement actions under the Law and Section 309(f) of the CWA.

If, within 30 days after notice of an Interference or Pass Through violation has been sent by the Director or EPA to the POTW, and to persons or groups who have requested such notice, the POTW fails to commence appropriate enforcement action to correct the violation, the Director or EPA may take appropriate enforcement action under the authority provided by the Law and in Section 309(f) of the CWA.

9 VAC 25-31-780. National Pretreatment Standards: Categorical Standards.

National pretreatment standards included in the regulations incorporated by reference in 9 VAC 25-31-30, unless specifically noted otherwise, shall be in addition to all applicable pretreatment standards and requirements set forth in this part.

A. Category Determination Request.

- 1. Application deadline. Within 60 days after the effective date of a Pretreatment Standard for a subcategory under which an Industrial User may be included, the Industrial User or POTW may request that the Water Management Division Director or Director, as appropriate, provide written certification on whether the Industrial User falls within that particular subcategory. If an existing Industrial User adds or changes a process or operation which may be included in a subcategory, the existing Industrial User must request this certification prior to commencing discharge from the added or changed processes or operation. A New Source must request this certification prior to commencing discharge. Where a certification is submitted by a POTW, the POTW shall notify any affected Industrial User of such submission. The Industrial User may provide written comments on the POTW submission to the Water Management Division Director or Director, as appropriate, within 30 days of notification.
- 2. Contents of Application. Each request shall contain a statement:
 - a. Describing which subcategories might be applicable; and
 - b. Citing evidence and reasons why a particular subcategory is applicable and why others are not applicable. Any person signing the application statement submitted pursuant to this section shall make the following certification:
 - "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

3. Deficient requests. The Water Management Division Director or Director will only act on written requests for determinations that contain all of the information required. Persons who have made incomplete submissions will be notified by the Water Management Division Director or Director that their requests are deficient and, unless the time period is extended, will be given 30 days to correct the deficiency. If the deficiency is not corrected within 30 days or within an extended period allowed by the Water Management Division Director or the Director, the request for a determination shall be denied.

4. Final decision.

- a. When the Water Management Division Director or Director receives a submittal he or she will, after determining that it contains all of the information required by subdivision 2 of this subsection, consider the submission, any additional evidence that may have been requested, and any other available information relevant to the request. The Water Management Division Director or Director will then make a written determination of the applicable subcategory and state the reasons for the determination.
- b. Where the request is submitted to the Director, the Director shall forward the determination described in this subdivision to the Water Management Division Director who may make a final determination. If the Water Management Division Director does not modify the Director's decision within 60 days after receipt thereof, or if the Water Management Division Director waives receipt of the determination, the Director's decision is final.
- c. Where the request is submitted by the Industrial User or POTW to the Water Management Division Director or where the Water Management Division Director elects to modify the Director's decision, the Water Management Division Director's decision will be final.
- d. The Director shall send a copy of the determination to the affected Industrial User and the POTW.
- 5. Requests for public hearing and/or legal decision. Within 30 days following the date of receipt of notice of the final determination as provided for by subdivision 4 d of this subsection, the Requester may submit a petition to reconsider or contest the decision to the Regional Administrator who shall act on such petition expeditiously and state the reasons for his or her determination in writing.

B. Deadline for Compliance with Categorical Standards.

Compliance by existing sources with categorical Pretreatment Standards shall be within 3 years of the date the Standard is effective unless a shorter compliance time is specified in the regulations incorporated by

reference in 9 VAC 25-31-30. Direct dischargers with VPDES permits modified or reissued to provide a variance pursuant to Section 301(i) (2) of the CWA shall be required to meet compliance dates set in any applicable categorical Pretreatment Standard. Existing sources which become Industrial Users subsequent to promulgation of an applicable categorical Pretreatment Standard shall be considered existing Industrial Users except where such sources meet the definition of a New Source as defined in 9 VAC 25-31-10. New Sources shall install and have in operating condition, and shall "start up" all pollution control equipment required to meet applicable Pretreatment Standards before beginning to Discharge. Within the shortest feasible time (not to exceed 90 days), New Sources must meet all applicable Pretreatment Standards.

- C. 1. Concentration and mass limits. Pollutant discharge limits in categorical Pretreatment Standards will be expressed either
 - as concentration or mass limits. Wherever possible, where concentration limits are specified in standards, equivalent mass limits will be provided so that local, state or federal authorities responsible for enforcement may use either concentration or mass limits. Limits in categorical Pretreatment Standards shall apply to the effluent of the process regulated by the Standard, or as otherwise specified by the standard.
 - 2. When the limits in a categorical Pretreatment Standard are expressed only in terms of mass of pollutant per unit of production, the Control Authority may convert the limits to equivalent limitations expressed either as mass of pollutant discharged per day of or effluent concentration for purposes of calculating effluent limitations applicable to individual Industrial Users.
 - 3. A Control Authority calculating equivalent mass-per-day limitations under subdivision 2 of this subsection shall calculate such limitations by multiplying the limits in the Standard by the Industrial User's average rate of production. This average rate of production shall be based not upon the designed production capacity but rather upon a reasonable measure of the Industrial User's actual long-term daily production, such as the average daily production during a representative year. For new sources, actual production shall be estimated using projected production.
 - 4. A Control Authority calculating equivalent concentration limitations under subdivision 2 of this subsection shall calculate such limitations by dividing the mass limitations derived under subdivision 3 of this subsection by the average daily flow rate of the Industrial User's regulated process wastewater. This

average daily flow rate shall be based upon a reasonable measure of the Industrial User's actual longterm average flow rate, such as the average daily flow rate during the representative year.

- 5. When the limits in a categorical Pretreatment Standard are expressed only in terms of pollutant concentrations, an Industrial User may request that the Control Authority convert the limits to equivalent mass limits. The determination to convert concentration limits to mass limits is within the discretion of the Control Authority. The Control Authority may establish equivalent mass limits only if the Industrial User meets all the following conditions in paragraph a.(1) through (5) of this section.
 - a. To be eligible for equivalent mass limits, the Industrial User must:
- (1) Employ, or demonstrate that it will employ, water conservation methods and technologies that substantially reduce water use during the term of its control mechanism;
- (2) Currently use control and treatment technologies adequate to achieve compliance with the applicable categorical Pretreatment Standard, and not have used dilution as a substitute for treatment;
- (3) Provide sufficient information to establish the facility's actual average daily flow rate for all wastestreams, based on data from a continuous effluent flow monitoring device, as well as the facility's long-term average production rate. Both the actual average daily flow rate and the long-term average production rate must be representative of current operating conditions;
- (4) Not have daily flow rates, production levels, or pollutant levels that vary so significantly that equivalent mass limits are not appropriate to control the Discharge; and
- (5) Have consistently complied with all applicable categorical Pretreatment Standards during the period prior to the Industrial User's request for equivalent mass limits.
 - b. An Industrial User subject to equivalent mass limits must:
- (1) Maintain and effectively operate control and treatment technologies adequate to achieve compliance with the equivalent mass limits:
- (2) Continue to record the facility's flow rates through the use of a continuous effluent flow monitoring device;
- (3) Continue to record the facility's production rates and notify the Control Authority whenever production rates are expected to vary by more than 20 percent from its baseline production rates

determined in paragraph a.(3) of this section. Upon notification of a revised production rate, the Control Authority must reassess the equivalent mass limit and revise the limit as necessary to reflect changed conditions at the facility; and

- (4) Continue to employ the same or comparable water conservation methods and technologies as those implemented pursuant to paragraphs a.(1) of this section so long as it discharges under an equivalent mass limit.
 - c. A Control Authority which chooses to establish equivalent mass limits:
- (1) Must calculate the equivalent mass limit by multiplying the actual average daily flow rate of the regulated process(es) of the Industrial User by the concentration-based daily maximum and monthly average Standard for the applicable categorical Pretreatment Standard and the appropriate unit conversion factor;
- (2) Upon notification of a revised production rate, must reassess the equivalent mass limit and recalculate the limit as necessary to reflect changed conditions at the facility; and
- (3) May retain the same equivalent mass limit in subsequent control mechanism terms if the Industrial User's actual average daily flow rate was reduced solely as a result of the implementation of water conservation methods and technologies, and the actual average daily flow rates used in the original calculation of the equivalent mass limit were not based on the use of dilution as a substitute for treatment pursuant to paragraph (d) of this section. The Industrial User must also be in compliance with 9 VAC 25-31-890 (regarding the prohibition of bypass).
- d. The Control Authority may not express limits in terms of mass for pollutants such as pH, temperature, radiation, or other pollutants which cannot appropriately be expressed as mass.
- 6. The Control Authority may convert the mass limits of the categorical Pretreatment Standards at 40 CFR Parts 414, 419, and 455 to concentration limits for purposes of calculating limitations applicable to individual Industrial Users under the following conditions. When converting such limits to concentration limits, the Control Authority must use the concentrations listed in the applicable subparts of 40 CFR Parts 414, 419, and 455 and document that dilution is not being substituted for treatment as prohibited by paragraph (d) of this section.

- 6. 7. Equivalent limitations calculated in accordance with subdivisions 3, and 4, 5 and 6 of this subsection shall be are deemed Pretreatment Standards for the purposes of Section 307(d) of the CWA and this part. Industrial Users will be required to The Control Authority must document how the equivalent limits were derived and make this information publicly available. Once incorporated into its control mechanism, the Industrial User must comply with the equivalent limitations in lieu of the promulgated categorical standards from which the equivalent limitations were derived.
- 6. 8. Many categorical pretreatment standards specify one limit for calculating maximum daily discharge limitations and a second limit for calculating maximum monthly average, or 4-day average, limitations. Where such Standards are being applied, the same production of or flow figure shall be used in calculating both types of equivalent limitations the average and the maximum equivalent limitation.
- 7. 9. Any Industrial User operating under a control mechanism incorporating equivalent mass or concentration limits calculated from a production based standard shall notify the Control Authority within two (2) business days after the User has a reasonable basis to know that the production level will significantly change within the next calendar month. Any User not notifying the Control Authority of such anticipated change will be required to meet the mass or concentration limits in its control mechanism that were based on the original estimate of the long term average production rate.

D. Dilution Prohibited as Substitute for Treatment.

Except where expressly authorized to do so by an applicable Pretreatment Standard or Requirement, no Industrial User shall ever increase the use of process water, or in any other way attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a Pretreatment Standard or Requirement. The Control Authority (as defined in 9 VAC 25-31-840 A may impose mass limitations on Industrial Users which are using dilution to meet applicable Pretreatment Standards or Requirements, or in other cases where the imposition of mass limitations is appropriate.

E. Combined wastestream formula.

Where process effluent is mixed prior to treatment with wastewaters other than those generated by the regulated process, fixed alternative discharge limits may be derived by the Control Authority, as defined in 9 VAC 25-31-840 A, or by the Industrial User with the written concurrence of the Control Authority. These alternative limits shall be applied to the mixed effluent. When deriving alternative categorical limits, the

Control Authority or Industrial User shall calculate both an alternative daily maximum value using the daily maximum value(s) specified in the appropriate categorical Pretreatment Standard(s) and an alternative consecutive sampling day average value using the monthly average value(s) specified in the appropriate categorical Pretreatment Standard(s). The Industrial User shall comply with the alternative daily maximum and monthly average limits fixed by the Control Authority until the Control Authority modifies the limits or approves an Industrial User modification request. Modification is authorized whenever there is a material or significant change in the values used in the calculation to fix alternative limits for the regulated pollutant. An Industrial User must immediately report any such material or significant change to the Control Authority. Where appropriate new alternative categorical limits shall be calculated within 30 days.

- 1. Alternative limit calculation. For purposes of these formulas, the "average daily flow" means a reasonable measure of the average daily flow for a 30-day period. For new sources, flows shall be estimated using projected values. The alternative limit for a specified pollutant will be derived by the use of either of the following formulas:
 - a. Alternative concentration limit.

$$C_T = \left(\frac{\displaystyle\sum_{i=1}^N C_i F_i}{\displaystyle\sum_{i=1}^N F_i}\right) \left(\frac{F_T - F_D}{F_T}\right)$$

where:

 C_T = the alternative concentration limit for the combined wastestream.

 C_i = the categorical Pretreatment Standard concentration limit for a pollutant in the regulated stream i.

 F_i = the average daily flow (at least a 30-day average) of stream i to the extent that it is regulated for such pollutant.

 F_D = the average daily flow (at least a 30-day average) from: (i) Boiler blowdown streams, non-contact cooling streams, storm water streams, and demineralizer backwash streams; provided, however, that where such streams contain a significant amount of a pollutant, and the combination of such streams, prior to treatment, with an Industrial User's regulated process wastestream(s) will result in a substantial reduction of that pollutant, the Control Authority, upon application of the

Industrial User, may exercise its discretion to determine whether such stream(s) should be classified as diluted or unregulated. In its application to the Control Authority, the Industrial User must provide engineering, production, sampling and analysis and such other information so that the Control Authority can make its determination; or (ii) sanitary wastestreams where such streams are not regulated by a Categorical Pretreatment Standard; or (iii) from any process wastestreams which were or could have been entirely exempted from categorical Pretreatment Standards for one or more of the following reasons (see Appendix D of 40 CFR Part 403 (2005):

- (1) The pollutants of concern are not detectable in the effluent from the Industrial User;
- (2) The pollutants of concern are present only in trace amounts and are neither causing nor likely to cause toxic effects;
- (3) The pollutants of concern are present in amounts too small to be effectively reduced by technologies known to the Administrator; or
- (4) The wastestream contains only pollutants which are compatible with the POTW.

 F_T = The average daily flow (at least a 30-day average) through the combined treatment facility (includes F_i , F_D and unregulated streams).

N =The total number of regulated streams.

b. Alternative mass limit.

$$M_T = \left(\sum_{i=1}^N M_i\right) \left(\frac{F_T - F_D}{\sum_{i=1}^N F_i}\right)$$

where:

 M_T = the alternative mass limit for a pollutant in the combined wastestream.

M_i = the categorical Pretreatment Standard mass limit for a pollutant in the regulated stream i (the categorical pretreatment mass limit multiplied by the appropriate measure of production).

 F_i = the average flow (at least a 30-day average) of stream i to the extent that it is regulated for such pollutant.

 F_D = the average daily flow (at least a 30-day average) from: (i) boiler blowdown streams, non-contact cooling streams, storm water streams, and demineralizer backwash streams; provided, however, that where such streams contain a significant amount of a pollutant, and the combination

of such streams, prior to treatment, with an Industrial User's regulated process wastestream(s) will result in a substantial reduction of that pollutant, the Control Authority, upon application of the Industrial User, may exercise its discretion to determine whether such stream(s) should be classified as diluted or unregulated. In its application to the Control Authority, the Industrial User must provide engineering, production, sampling and analysis and such other information so that the Control Authority can make its determination; or (ii) sanitary wastestreams where such streams are not regulated by a categorical Pretreatment Standard; or (iii) from any process wastestreams which were or could have been entirely exempted from categorical Pretreatment Standards for one or more of the following reasons (see Appendix D of 40 CFR Part 403 (2005)):

- (1) The pollutants of concern are not detectable in the effluent from the Industrial User;
- (2) The pollutants of concern are present only in trace amounts and are neither causing nor likely to cause toxic effects;
- (3) The pollutants of concern are present in amounts too small to be effectively reduced by technologies known to the Administrator; or
- (4) The wastestream contains only pollutants which are compatible with the POTW.

 F_T = The average flow (at least a 30-day average) through the combined treatment facility (includes F_i , F_D and unregulated streams).

- N =The total number of regulated streams.
- 2. Alternate limits below detection limit. An alternative pretreatment limit may not be used if the alternative limit is below the analytical detection limit for any of the regulated pollutants.
- 3. Self-monitoring. Self-monitoring required to insure compliance with the alternative categorical limit shall be conducted in accordance with the requirements of 9 VAC 25-31-840 G.
- 4. Choice of monitoring location. Where a treated regulated process wastestream is combined prior to treatment with wastewaters other than those generated by the regulated process, the Industrial User may monitor either the segregated process wastestream or the combined wastestream for the purpose of determining compliance with applicable Pretreatment Standards. If the Industrial User chooses to monitor the segregated process wastestream, it shall apply the applicable categorical Pretreatment Standard. If the User chooses to monitor the combined wastestream, it shall apply an alternative discharge limit calculated using the combined wastestream formula as provided in this section. The Industrial User may

change monitoring points only after receiving approval from the Control Authority. The Control Authority shall ensure that any change in an Industrial User's monitoring point(s) will not allow the User to substitute

dilution for adequate treatment to achieve compliance with applicable Standards.

9 VAC 25-31-790, Removal Credits.

A. Introduction.

1. Definitions. For the purpose of this section:

a. "Removal" means a reduction in the amount of a pollutant in the POTW's effluent or alteration of the

nature of a pollutant during treatment at the POTW. The reduction or alteration can be obtained by

physical, chemical or biological means and may be the result of specifically designed POTW capabilities

or may be incidental to the operation of the treatment system. Removal as used in this section shall not

mean dilution of a pollutant in the POTW.

b. "Sludge Requirements" shall mean the following statutory provisions and regulations or permits

issued thereunder (or more stringent Virginia or local regulations): Section 405 of the CWA; the Solid

Waste Disposal Act (SWDA) (including Title II more commonly referred to as the Resource

Conservation Recovery Act (RCRA) and Virginia regulations contained in any Virginia sludge

management plan prepared pursuant to Subtitle D of SWDA); the Clean Air Act; the Toxic Substances

Control Act; and the Marine Protection, Research and Sanctuaries Act.

2. General. Any POTW receiving wastes from an Industrial User to which a categorical Pretreatment

Standard(s) applies may, at its discretion and subject to the conditions of this section, grant removal

credits to reflect removal by the POTW of pollutants specified in the categorical Pretreatment Standard(s).

The POTW may grant a removal credit equal to or, at its discretion, less than its consistent removal rate.

Upon being granted a removal credit, each affected Industrial User shall calculate its revised discharge

limits in accordance with subdivision 4 of this subsection. Removal credits may only be given for indicator

or surrogate pollutants regulated in a categorical Pretreatment Standard if the categorical Pretreatment

Statement so specifies.

3. Conditions for authorization to give removal credits. A POTW is authorized to give removal credits only

if the following conditions are met:

- a. Application. The POTW applies for, and receives, authorization from the Director to give a removal credit in accordance with the requirements and procedures specified in subsection E of this section;
- b. Consistent removal determination. The POTW demonstrates and continues to achieve consistent removal of the pollutant in accordance with subsection B of this section;
- c. POTW local pretreatment program. The POTW has an approved pretreatment program in accordance with and to the extent required by this part; provided, however, a POTW which does not have an approved pretreatment program may, pending approval of such a program, conditionally give credits as provided in subsection D of this section;
- d. Sludge requirements. The granting of removal credits will not cause the POTW to violate the local, state and federal Sludge Requirements which apply to the sludge management method chosen by the POTW. Alternatively, the POTW can demonstrate to the Director that even though it is not presently in compliance with applicable Sludge Requirements, it will be in compliance when the Industrial User(s) to whom the removal credit would apply is required to meet its categorical Pretreatment Standard(s) as modified by the removal credit. If granting removal credits forces a POTW to incur greater sludge management costs than would be incurred in the absence of granting removal costs, the additional sludge management costs will not be eligible for EPA grant assistance. Removal credits may be made available for the following pollutants:
 - (1) For any pollutant listed in Appendix G-I of the regulation incorporated by reference in 9 VAC 25-31-750 for the use or disposal practice employed by the POTW, when the requirements of Part VI for that practice are met;
 - (2) For any pollutant listed in Appendix G-II of the regulation incorporated by reference in 9 VAC 25-31-750 for the use or disposal practice employed by the POTW when the concentration for a pollutant listed in Appendix G-II of the regulation incorporated by reference in 9 VAC 25-31-750 in the sewage sludge that is used or disposed does not exceed the concentration for the pollutant in Appendix G-II of the regulation incorporated by reference in 9 VAC 25-31-750; and
 - (3) For any pollutant in sewage sludge when the POTW disposes all of its sewage sludge in a municipal solid waste landfill that meets the criteria in the Code of Virginia and the Solid Waste Management Regulation, VR 672-20-10;

- e. VPDES permit limitations. The granting of removal credits will not cause a violation of the POTW's permit limitations or conditions. Alternatively, the POTW can demonstrate to the Director that even though it is not presently in compliance with applicable limitations and conditions in its VPDES permit, it will be in compliance when the Industrial User(s) to whom the removal credit would apply is required to meet its categorical Pretreatment Standard(s), as modified by the removal credit provision.
- 4. Calculation of revised discharge limits. Revised discharge limits for a specific pollutant shall be derived by use of the following formula:

$$y = \frac{x}{1-r}$$

where:

- x = pollutant discharge limit specified in the applicable categorical Pretreatment Standard
- r = removal credit for that pollutant as established under subsection B of this section (percentage removal expressed as a proportion, i.e., a number between 0 and 1)
- y = revised discharge limit for the specified pollutant (expressed in same units as x)
- B. Establishment of Removal Credits; Demonstration of Consistent Removal.
 - 1. Definition of Consistent Removal. "Consistent Removal" shall mean the average of the lowest 50 percent of the removal measured according to subdivision 2 of this subsection. All sample data obtained for the measured pollutant during the time period prescribed in subdivision 2 of this subsection must be reported and used in computing Consistent Removal. If a substance is measurable in the influent but not in the effluent, the effluent level may be assumed to be the limit of measurement, and those data may be used by the POTW at its discretion and subject to approval by the Director. If the substance is not measurable in the influent, the data may not be used. Where the number of samples with concentrations equal to or above the limit of measurement is between 8 and 12, the average of the lowest 6 removals shall be used. If there are less than 8 samples with concentrations equal to or above the limit of measurement, the Director may approve alternate means for demonstrating Consistent Removal. The term "measurement" refers to the ability of the analytical method or protocol to quantify as well as identify the presence of the substance in question.

- 2. Consistent Removal Data. Influent and effluent operational data demonstrating Consistent Removal or other information, as provided for in subdivision 1 of this subsection, which demonstrates Consistent Removal of the pollutants for which discharge limit revisions are proposed. This data shall meet the following requirements:
 - a. Representative Data; Seasonal. The data shall be representative of yearly and seasonal conditions to which the POTW is subjected for each pollutant for which a discharge limit revision is proposed:
 - b. Representative Data; Quality and Quantity. The data shall be representative of the quality and quantity of normal effluent and influent flow if such data can be obtained. If such data are unobtainable, alternate data or information may be presented for approval to demonstrate Consistent Removal as provided for in subdivision 1 of this subsection;
 - c. Sampling Procedures: Composite.
 - (1) The influent and effluent operational data shall be obtained through 24-hour flow-proportional composite samples. Sampling may be done manually or automatically, and discretely or continuously. For discrete sampling, at least 12 aliquots shall be composited. Discrete sampling may be flow-proportioned either by varying the time interval between each aliquot or the volume of each aliquot. All composites must be flow-proportional to each stream flow at time of collection of influent aliquot or to the total influent flow since the previous influent aliquot. Volatile pollutant aliquots must be combined in the laboratory immediately before analysis.
 - (2) (a) Twelve samples shall be taken at approximately equal intervals throughout one full year. Sampling must be evenly
 - distributed over the days of the week so as to include no-workdays as well as workdays. If the Director determines that this schedule will not be most representative of the actual operation of the POTW Treatment Plant, an alternative sampling schedule will be approved.
 - (b) In addition, upon the Director's concurrence, a POTW may utilize an historical data base amassed prior to the effective date of this section provide that such data otherwise meet the requirements of this subdivision. In order for the historical data base to be approved it must present a statistically valid description of daily, weekly and seasonal sewage treatment plant loadings and performance for at least one year.

- (3) Effluent sample collection need not be delayed to compensate for hydraulic detention unless the POTW elects to include detention time compensation or unless the Director requires detention time compensation. The Director may require that each effluent sample be taken approximately one detention time later than the corresponding influent sample when failure to do so would result in an unrepresentative portrayal of actual POTW operation. The detention period is to be based on a 24-hour average daily flow value. The average daily flow used will be based upon the average of the daily flows during the same month of the previous year;
- d. Sampling Procedures: Grab. Where composite sampling is not an appropriate sampling technique, a grab sample(s) shall be taken to obtain influent and effluent operational data. Collection of influent grab samples should precede collection of effluent samples by approximately one detention period. The detention period is to be based on a 24-hour average daily flow value. The average daily flow used will be based upon the average of the daily flows during the same month of the previous year. Grab samples will be required, for example, where the parameters being evaluated are those, such as cyanide and phenol, which may not be held for any extended period because of biological, chemical or physical interactions which take place after sample collection and affect the results. A grab sample is an individual sample collected over a period of time not exceeding 15 minutes;
- e. Analytical methods. The sampling referred to in subdivisions 2 a through d of this subsection and an analysis of these samples shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 (2005) and amendments thereto. Where 40 CFR Part 136 (2005) does not contain sampling or analytical techniques for the pollutant in question, or where the Administrator determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the POTW or other parties, approved by the Administrator; and
- f. Calculation of removal. All data acquired under the provisions of this section must be submitted to the Department. Removal for a specific pollutant shall be determined either, for each sample, by measuring the difference between the concentrations of the pollutant in the influent and effluent of the POTW and expressing the difference as a percent of the influent concentration, or, where such data cannot be

obtained, Removal may be demonstrated using other data or procedures subject to concurrence by the Director as provided for in subdivision 1 of this subsection.

C. Provisional credits.

For pollutants which are not being discharged currently (i.e. new or modified facilities, or production changes) the POTW may apply for authorization to give removal credits prior to the initial discharge of the pollutant. Consistent removal shall be based provisionally on data from treatability studies or demonstrated removal at other treatment facilities where the quality and quantity of influent are similar. Within 18 months after the commencement of discharge of pollutants in question, consistent removal must be demonstrated pursuant to the requirements of subsection B of this section. If, within 18 months after the commencement of the discharge of the pollutant in question, the POTW cannot demonstrate consistent removal pursuant to the requirements of subsection B of this section, the authority to grant provisional removal credits shall be terminated by the Director and all Industrial Users to whom the revised discharge limits had been applied shall achieve compliance with the applicable categorical Pretreatment Standard(s) within a reasonable time, not to exceed the period of time prescribed in the applicable categorical Pretreatment Standard(s), as may be specified by the Director.

D. Exception to POTW Pretreatment Program Requirement.

A POTW required to develop a local pretreatment program by 9 VAC 25-31-800 may conditionally give removal credits pending approval of such a program in accordance with the following terms and conditions:

- 1. All Industrial Users who are currently subject to a categorical Pretreatment Standard and who wish conditionally to receive a removal credit must submit to the POTW the information required in 9 VAC 25-31-840 B 1 through 7 (except new or modified industrial users must only submit the information required by 9 VAC 25-31-840 B 1 through 6), pertaining to the categorical Pretreatment Standard as modified by the removal credit. The Industrial Users shall indicate what additional technology, if any, will be needed to comply with the categorical Pretreatment Standard(s) as modified by the removal credit;
- 2. The POTW must have submitted to the Department an application for pretreatment program approval meeting the requirements of 9 VAC 25-31-800 and 9 VAC 25-31-810 in a timely manner, not to exceed the time limitation set forth in a compliance schedule for development of a pretreatment program included in the POTW's VPDES permit, but in no case later than July 1, 1983, where no permit deadline exists;

- 3. The POTW must:
 - a. Compile and submit data demonstrating its consistent removal in accordance with subsection B of this section;
 - b. Comply with the conditions specified in subdivision A 3 of this section; and
 - c. Submit a complete application for removal credit authority in accordance with subsection E of this section;
- 4. If a POTW receives authority to grant conditional removal credits and the Director subsequently makes a final determination, after appropriate notice, that the POTW failed to comply with the conditions in subdivisions 2 and 3 of this subsection, the authority to grant conditional removal credits shall be terminated by the Director and all Industrial Users to whom the revised discharge limits had been applied shall achieve compliance with the applicable categorical Pretreatment Standard(s) within a reasonable time, not to exceed the period of time prescribed in the applicable categorical Pretreatment Standard(s), as may be specified by the Director;
- 5. If a POTW grants conditional removal credits and the POTW or the Director subsequently makes a final determination, after appropriate notice, that the Industrial User(s) failed to comply with the conditions in subdivision 1 of this subsection, the conditional credit shall be terminated by the POTW or the Director for the non-complying Industrial User(s) and the Industrial User(s) to whom the revised discharge limits had been applied shall achieve compliance with the applicable categorical Pretreatment Standard(s) within a reasonable time, not to exceed the period of time prescribed in the applicable categorical Pretreatment Standard(s), as may be specified by the Director. The conditional credit shall not be terminated where a violation of the provisions of this subsection results from causes entirely outside of the control of the Industrial User(s) or the Industrial User(s) had demonstrated subsequential compliance; and
- 6. The Director may elect not to review an application for conditional removal credit authority upon receipt of such application, in which case the conditionally revised discharge limits will remain in effect until reviewed by the Director. This review may occur at any time in accordance with the procedures of 9 VAC 25-31-830, but in no event later than the time of any pretreatment program approval or any VPDES permit reissuance thereunder.
- E. POTW application for authorization to give removal credits and Director review.

- 1. Who must apply. Any POTW that wants to give a removal credit must apply for authorization from the Director.
- 2. To whom application is made. An application for authorization to give removal credits (or modify existing ones) shall be submitted by the POTW to the Department.
- 3. When to apply. A POTW may apply for authorization to give or modify removal credits at any time.
- 4. Contents of the Application. An application for authorization to give removal credits must be supported by the following information:
 - a. List of pollutants. A list of pollutants for which removal credits are proposed;
 - b. Consistent Removal Data. The data required pursuant to subsection B of this section;
 - c. Calculation of revised discharge limits. Proposed revised discharge limits for each affected subcategory of Industrial Users calculated in accordance with subdivision A 4 of this section;
 - d. Local Pretreatment Program Certification. A certification that the POTW has an approved local pretreatment program or qualifies for the exception to this requirement found at subsection D of this section;
 - e. Sludge Management Certification. A specific description of the POTW's current methods of using or disposing of its sludge and a certification that the granting of removal credits will not cause a violation of the sludge requirements identified in subdivision A 3 d of this section; and
 - f. VPDES Permit Limit Certification. A certification that the granting of removal credits will not cause a violation of the POTW's VPDES permit limits and conditions as required in subdivision A 3 e of this section.
- 5. Director Review. The Director shall review the POTW's application for authorization to give or modify removal credits in accordance with the procedures of 9 VAC 25-31-830 and shall, in no event, have more that 180 days from public notice of an application to complete review.
- 6. Nothing in this part precludes an Industrial User or other interested party from assisting the POTW in preparing and presenting the information necessary to apply for authorization.
- F. Continuation and withdrawal of authorization.

- 1. Effect of authorization. Once a POTW has received authorization to grant removal credits for a particular pollutant regulated in a categorical Pretreatment Standard it may automatically extend that removal credit to the same pollutant when it is regulated in other categorical standards, unless granting the removal credit will cause the POTW to violate the sludge requirements identified in subdivision A.3.d. of this section or its VPDES permit limits and conditions as required by subdivision A.3.e of this section. If a POTW elects at a later time to extend removal credits to a certain categorical Pretreatment Standard, industrial subcategory or one or more Industrial Users that initially were not granted removal credits, it must notify the Department.
- 2. Inclusion in POTW permit. Once authority is granted, the removal credits shall be included in the POTW's VPDES Permit as soon as possible and shall become an enforceable requirement of the POTW's VPDES permit. The removal credits will remain in effect for the term of the POTW's VPDES permit, provided the POTW maintains compliance with the conditions specified in subdivision 4 of this subsection.
- 3. Compliance monitoring. Following authorization to give removal credits, a POTW shall continue to monitor and report on (at such intervals as may be specified by the Director, but in no case less than once per year) the POTW's removal capabilities. A minimum of one representative sample per month during the reporting period is required, and all sampling data must be included in the POTW's compliance report.
- 4. Modification or withdrawal of removal credits.
 - a. Notice of POTW. The Director shall notify the POTW if, on the basis of pollutant removal capability reports received pursuant to subdivision 3 of this subsection or other relevant information available to it, the Director determines:
 - (1) That one or more of the discharge limit revisions made by the POTW, of the POTW itself, no longer meets the requirements of this section, or
 - (2) That such discharge limit revisions are causing a violation of any conditions or limits contained in the POTW's VPDES Permit.
 - b. Corrective action. If appropriate corrective action is not taken within a reasonable time, not to exceed 60 days unless the POTW or the affected Industrial Users demonstrate that a longer time period is reasonably necessary to undertake the appropriate corrective action, the Director shall either withdraw such discharge limits or require modifications in the revised discharge limits.

c. Public notice of withdrawal or modification. The Director shall not withdraw or modify revised discharge limits unless it shall first have notified the POTW and all Industrial Users to whom revised discharge limits have been applied, and made public, in writing, the reasons for such withdrawal or modification, and an opportunity is provided for a public hearing. Following such notice and withdrawal or modification, all Industrial Users to whom revised discharge limits had been applied, shall be subject to the modified discharge limits or the discharge limits prescribed in the applicable categorical Pretreatment Standards, as appropriate, and shall achieve compliance with such limits within a reasonable time (not to exceed the period of time prescribed in the applicable categorical Pretreatment Standard(s) as may be specified by the Director.

G. Removal credits in state-run pretreatment programs.

Where the Director elects to implement a local pretreatment program in lieu or requiring the POTW to develop such a program the POTW will not be required to develop a pretreatment program as a precondition to obtaining authorization to give removal credits. The POTW will, however, be required to comply with the other conditions of subdivision A 3 of this section.

H. Compensation for overflow.

For the purpose of this section, "overflow" means the intentional or unintentional diversion of flow from the POTW before the POTW Treatment Plant. POTWs which at least once annually Overflow untreated wastewater to receiving waters may claim Consistent Removal of a pollutant only by complying with either subdivision 1 or 2 of this subsection. However, this subsection paragraph H. of this section shall not apply where Industrial User(s) can demonstrate that Overflow does not occur between the Industrial User(s) and the POTW Treatment Plant:

1. The Industrial User provides containment or otherwise ceases or reduces Discharges from the regulated processes which contain the pollutant for which an allowance is requested during all circumstances in which an Overflow event can reasonably be expected to occur at the POTW or at a sewer to which the Industrial User is connected. Discharges must cease or be reduced, or pretreatment must be increased, to the extent necessary to compensate for the removal not being provided by the POTW. Allowances under this provision will only be granted where the POTW submits to the Department evidence that:

a. All Industrial Users to which the POTW proposes to apply this provision have demonstrated the ability

to contain or otherwise cease or reduce, during circumstances in which an Overflow event can

reasonably be expected to occur, Discharges from the regulated processes which contain pollutants for

which an allowance is requested;

b. The POTW has identified circumstances in which an Overflow event can reasonably be expected to

occur, and has a notification or other viable plan to insure that Industrial Users will learn of an

impending Overflow in sufficient time to contain, cease or reduce Discharging to prevent untreated

Overflows from occurring. The POTW must also demonstrate that it will monitor and verify the data

required in subdivision 1 c of this subsection, to insure that Industrial Users are containing, ceasing or

reducing operations during POTW System Overflow; and

c. All Industrial Users to which the POTW proposes to apply this provision have demonstrated the ability

and commitment to collect and make available, upon request by the POTW, the Director or EPA

Regional Administrator, daily flow reports or other data sufficient to demonstrate that all Discharges

from regulated processes containing the pollutant for which the allowance is requested were contained,

reduced or otherwise ceased, as appropriate, during all circumstances in which an Overflow event was

reasonably expected to occur; or

2. a. The Consistent Removal claimed is reduced pursuant to the following equation:

$$r_c = r_m \ \frac{8760 - Z}{8760}$$

where:

 $r_m = POTW$'s Consistent Removal rate for that pollutant as established under subdivisions A 1 and

B 2 of this section

 r_c = removal corrected by the Overflow factor

Z = hours per year that Overflow occurred between the Industrial User(s) and the POTW

Treatment Plant, the hours either to be shown in the POTW's current VPDES permit application or

the hours, as demonstrated by verifiable techniques, that a particular Industrial User's Discharge Overflows between the Industrial User and the POTW Treatment Plant; and _.

b. After July 1, 1983, Consistent Removal may be claimed only where efforts to correct the conditions resulting in untreated Discharges by the POTW are underway in accordance with the policy and procedures set forth in "PRM 75-34" or "Program Guidance Memorandum-61" (same document) published on December 16, 1975, by EPA Office of Water Program Operations (WH-546). Revisions to discharge limits in categorical Pretreatment Standards may not be made where efforts have not been committed to by the POTW to minimize pollution from Overflows. At minimum, by July 1, 1983, the POTW must have completed the analysis required by PRM 75-34 and be making an effort to implement the plan. The POTW is complying with all NPDES permit requirements and any additional requirements in any order or decree, issued pursuant to the Clean Water Act affecting combined sewer outflows. These requirements include, but are not limited to, any combined sewer overflow requirements that conform to the Combined Sewer Overflow Control Policy.

c. If, by July 1, 1983, a POTW has begun the PRM 75-34 analysis but due to circumstances beyond its control has not completed it, Consistent Removal, subject to the approval of the Director, may continue to be claimed according to the formula in subdivision 2 a of this subsection as long as the POTW acts in a timely fashion to complete the analysis and makes an effort to implement the non-structural cost-effective measures identified by the analysis; and so long as the POTW has expressed its willingness to apply, after completing the analysis, for a construction grant necessary to implement any other cost-effective Overflow controls identified in the analysis should federal funds become available, so applies for such funds, and proceeds with the required construction in an expeditious manner. In addition, Consistent Removal may, subject to the approval of the Director, continue to be claimed according to the formula in subdivision 2 a of this subsection where the POTW has completed and the Director has accepted the analysis required by PRM 75-34 and the POTW has requested inclusion in its VPDES permit of an acceptable compliance schedule providing for timely implementation, the Director shall consider the availability of funds, cost of centrol measures, and seriousness of the water quality problem.)

9 VAC 25-31-800. Pretreatment Program Requirements: Development and Implementation by POTW.

A. POTWs required to develop a pretreatment program.

Any POTW (or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (mgd) and receiving from Industrial Users pollutants which Pass Through or Interfere with the operation of the POTW or are otherwise subject to Pretreatment Standards will be required to establish a POTW Pretreatment Program unless the Director exercises his or her option to assume local responsibilities. The Regional Administrator or Director may require that a POTW with a design flow of 5 mgd or less develop a POTW Pretreatment Program if he or she finds that the nature or volume of the industrial influent, treatment process upsets, violations of POTW effluent limitations, contamination of municipal sludge, violations of water quality standards, or other circumstances warrant in order to prevent Interference with the POTW or Pass Through.

B. Deadline for Program Approval.

POTWs identified as being required to develop a POTW Pretreatment Program under subsection A of this section shall develop and submit such a program for approval as soon as possible, but in no case later than one year after written notification from the Director of such identification. The approved program shall be in operation within two years of the effective date of the permit. The POTW Pretreatment Program shall meet the criteria set forth in subsection F of this section and shall be administered by the POTW to ensure compliance by Industrial Users with applicable Pretreatment Standards and Requirements.

C. Incorporation of approved programs in permits.

A POTW may develop an appropriate POTW Pretreatment Program any time before the time limit set forth in subsection B of this section. The POTW's VPDES Permit will be reissued or modified to incorporate the approved Program as enforceable conditions of the Permit. The modification of a POTW's VPDES Permit for the purposes of incorporating a POTW Pretreatment Program approved in accordance with the procedures in 9 VAC 25-31-830 shall be deemed a minor Permit modification subject to the procedures in 9 VAC 25-31-400.

D. Incorporation of compliance schedules in permits.

[Reserved]

E. Cause for revocation and reissuance or modification of permits.

Under the authority of the Law and Section 402 (b) (1) (C) of the CWA, the Director may modify, or alternatively, revoke and reissue a POTW's Permit in order to:

- 1. Put the POTW on a compliance schedule for the development of a POTW Pretreatment Program where the addition of pollutants into a POTW by an Industrial User or combination of Industrial Users presents a substantial hazard to the functioning of the treatment works, quality of the receiving waters, human health, or the environment;
- 2. Coordinate the issuance of Section 201 construction grant with the incorporation into a permit of a compliance schedule for POTW Pretreatment Program;
- 3. Incorporate a modification of the permit approved under Section 301(h) or 301(i) of the CWA;
- 4. Incorporate an approved POTW Pretreatment Program in the POTW permit;
- 5. Incorporate a compliance schedule for the development of a POTW pretreatment program in the POTW permit; or
- 6. Incorporate the removal credits (established under 9 VAC 25-31-790) in the POTW permit.
- F. POTW pretreatment requirements.

A POTW pretreatment program must be based on the following legal authority and include the following procedures. These authorities and procedures shall at all times be fully and effectively exercised and implemented.

- 1. Legal authority. The POTW shall operate pursuant to legal authority enforceable in federal, state or local courts, which authorizes or enables the POTW to apply and to enforce the requirements of Sections 307(b), (c) and (d), and 402(b) (8) of the CWA and any regulations implementing those sections. Such authority may be contained in a statute or ordinances which the POTW is authorized to enact, enter into or implement, and which are authorized by state law. At a minimum, this legal authority shall enable the POTW to:
 - a. Deny or condition new or increased contributions of pollutants, or changes in the nature of pollutants, to the POTW by Industrial Users where such contributions do not meet applicable Pretreatment

Standards and Requirements or where such contributions would cause the POTW to violate its VPDES permit;

- b. Require compliance with applicable Pretreatment Standards and Requirements by Industrial Users;
- c. Control through permit, or order the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards and Requirements. In the case of Industrial Users identified as significant under 9 VAC 25-31-10, this control shall be achieved through <u>individual permits</u> or equivalent individual control mechanisms issued to each such user <u>except as follows:</u>
- (1) (a) At the discretion of the POTW, this control may include use of general control mechanisms if the following conditions are met. All of the facilities to be covered must:
 - (i) Involve the same or substantially similar types of operations;
 - (ii) Discharge the same types of wastes;
 - (iii) Require the same effluent limitations;
 - (iv) Require the same or similar monitoring; and
- (v) In the opinion of the POTW, are more appropriately controlled under a general control mechanism than under individual control mechanisms.
- written request for coverage that identifies its contact information, production processes, the types of wastes generated, the location for monitoring all wastes covered by the general control mechanism, any requests in accordance with 9 VAC 25-31-840 E.2. for a monitoring waiver for a pollutant neither present nor expected to be present in the Discharge, and any other information the POTW deems appropriate. A monitoring waiver for a pollutant neither present nor expected to be present in the Discharge is not effective in the general control mechanism until after the POTW has provided written notice to the Significant Industrial User that such a waiver request has been granted in accordance with 9 VAC 25-31-840 E.2. The POTW must retain a copy of the general control mechanism, documentation to support the POTW's determination that a specific Significant Industrial User meets the criteria in paragraphs c.(1)(a)(i) through (v) of this section, and a copy of the User's written request for coverage for 3 years after the expiration of the general control mechanism. A POTW may not control a Significant

Industrial User through a general control mechanism where the facility is subject to production-based categorical Pretreatment Standards or categorical Pretreatment Standards expressed as mass of pollutant discharged per day or for Industrial Users whose limits are based on the Combined Wastestream Formula or Net/Gross calculations (9 VAC 25-31-780 E. and 9 VAC 25-31-870).

Such control mechanisms (2) Both individual and general control mechanisms must be enforceable and contain, at a minimum, the following conditions:

- (a) Statement of duration (in no case more than five years);

 (b) Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;

 (c) Effluent limits, including Best Management Practices, based on applicable general pretreatment standards in this part, categorical pretreatment standards, local limits, and the Law;

 (d) Self-monitoring, sampling, reporting, notification and recordkeeping requirements, including an identification of the pollutants to be monitored, (including the process for seeking a waiver for a pollutant neither present nor expected to be present in the Discharge in accordance with 9 VAC 25-31-840 E.2., or a specific waived pollutant in the case of an individual control mechanism), sampling location, sampling frequency, and sample type, based on the applicable general pretreatment standards in this part, categorical pretreatment standards, local limits, and the Law;

 (e) Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and (f) Any any applicable compliance schedules, which may not extend beyond applicable federal deadlines;
- d. Require:
 - (1) The development of a compliance schedule by each Industrial User for the installation of technology required to meet applicable Pretreatment Standards and Requirements; and

(f)Requirements to control slug discharges, if determined by the POTW to be necessary.

(2) The submission of all notices and self-monitoring reports from Industrial Users as are necessary to assess and assure compliance by Industrial Users with Pretreatment Standards and Requirements, including but not limited to the reports required in 9 VAC 25-31-840;

- e. Carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by Industrial Users, compliance or noncompliance with applicable Pretreatment Standards and Requirements by Industrial Users. Representatives of the POTW shall be authorized to enter any premises of any Industrial User in which a Discharge source or treatment system is located or in which records are required to be kept under 9 VAC 25-31-840 O. to assure compliance with Pretreatment Standards. Such authority shall be at least as extensive as the authority provided under Section 308 of the CWA;
- f. Obtain remedies for noncompliance by any Industrial User with any Pretreatment Standard and Requirement. All POTW's shall be able to seek injunctive relief for noncompliance by Industrial Users with Pretreatment Standards and Requirements. All POTWs shall also have authority to seek or assess civil or criminal penalties in at least the amount of \$1,000 a day for each violation by Industrial Users of Pretreatment Standards and Requirements. Pretreatment requirements which will be enforced through the remedies set forth in this subsection, will include but not be limited to, the duty to allow or carry out inspections, entry, or monitoring activities; any rules, regulations, or orders issued by the POTW; any requirements set forth in individual control mechanisms issued by the POTW; or any reporting requirements imposed by the POTW or this part. The POTW shall have authority and procedures (after informal notice to the discharger) to immediately and effectively halt or prevent any discharge of pollutants to the POTW which reasonably appears to present an imminent endangerment to the health or welfare of persons. The POTW shall also have authority and procedures (which shall include notice to the affected industrial users and an opportunity to respond) to halt or prevent any discharge to the POTW which presents or may present an endangerment to the environment or which threatens to interfere with the operation of the POTW. The Director shall have authority to seek judicial relief and may also use administrative penalty authority when the POTW has sought a monetary penalty which the Director believes to be insufficient; and
- g. Comply with the confidentiality requirements set forth in 9 VAC 25-31-860.
- 2. Procedures. The POTW shall develop and implement procedures to ensure compliance with the requirements of a Pretreatment Program. At a minimum, these procedures shall enable the POTW to:

- a. Identify and locate all possible Industrial Users which might be subject to the POTW Pretreatment Program. Any compilation, index or inventory of Industrial Users made under this subsection shall be made available to the Regional Administrator or Department upon request;
- b. Identify the character and volume of pollutants contributed to the POTW by the Industrial Users identified under subdivision 2 a of this subsection. This information shall be made available to the Regional Administrator or Department upon request;
- c. Notify Industrial Users identified under subdivision 2 a of this subsection, of applicable Pretreatment Standards and any applicable requirements under Sections 204(b) and 405 of the CWA and Subtitles C and D of the Resource Conservation and Recovery Act. Within 30 days of approval pursuant to subdivision 6 of this subsection, of a list of significant industrial users, notify each significant industrial user of its status as such and of all requirements applicable to it as a result of such status;
- d. Receive and analyze self-monitoring reports and other notices submitted by Industrial Users in accordance with the self-monitoring requirements in 9 VAC 25-31-840;
- e. Randomly sample and analyze the effluent from industrial users and conduct surveillance activities in order to identify, independent of information supplied by industrial users, occasional and continuing noncompliance with pretreatment standards. Inspect and sample the effluent from each Significant Industrial User at least once a year except as otherwise specified below.
- (1) Where the POTW has authorized the Industrial User subject to a categorical Pretreatment Standard to forego sampling of a pollutant regulated by a categorical Pretreatment Standard in accordance with 9 VAC 25-31-840 E. the POTW must sample for the waived pollutant(s) at least once during the term of the Categorical Industrial User's control mechanism. In the event that the POTW subsequently determines that a waived pollutant is present or is expected to be present in the Industrial User's wastewater based on changes that occur in the User's operations, the POTW must immediately begin at least annual effluent monitoring of the User's Discharge and inspection.
- (2) Where the POTW has determined that an Industrial User meets the criteria for classification as a Non-Significant Categorical Industrial User, the POTW must evaluate, at least once per year, whether an Industrial User continues to meet the criteria in 9 VAC 25-31-10.

- (3) In the case of Industrial Users subject to reduced reporting requirements under 9 VAC 25-31-840 E., the POTW must randomly sample and analyze the effluent from Industrial Users and conduct inspections at least once every two years. If the Industrial User no longer meets the conditions for reduced reporting in 9 VAC 25-31-840 E., the POTW must immediately begin sampling and inspecting the Industrial User at least once a year.
- f. Evaluate, at least once every two years, whether each such Significant Industrial User needs a plan or other action to control slug discharges. For Industrial Users identified as significant prior to November 14, 2005, this evaluation must have been conducted at least once by October 14, 2005; additional Significant Industrial Users must be evaluated within 1 year of being designated a Significant Industrial User. For purposes of this subsection, a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or non-customary batch discharge which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, local limits or Permit conditions. The results of such activities shall be available to the Department upon request. Significant Industrial Users are required to notify the POTW immediately of any changes at its facility affecting potential for a Slug Discharge. If the POTW decides that a slug control plan is needed, the plan shall contain, at a minimum, the following elements:
 - (1) Description of discharge practices, including non-routine batch discharges;
 - (2) Description of stored chemicals;
 - (3) Procedures for immediately notifying the POTW of slug discharges, including any discharge that would violate a prohibition under 9 VAC 25-31-770 B, with procedures for follow-up written notification within five days; and
 - (4) If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment necessary for emergency response.
- f-g_Investigate instances of noncompliance with Pretreatment Standards and Requirements, as indicated in the reports and notices required under 9 VAC 25-31-840, or indicated by analysis,

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inspection, and surveillance activities described in subdivision 2 e of this subsection. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions; and

- g. h. Comply with the public participation requirements of the Code of Virginia and 40 CFR Part 25 (2005) in the enforcement of national pretreatment standards. These procedures shall include provision for at least annual public notification, in the largest daily a newspaper(s) of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW published in the municipality in which the POTW is located, of industrial users which, at any time during the previous twelve 12 months were in significant noncompliance with applicable pretreatment requirements. For the purposes of this provision, an Significant Industrial User (or any Industrial User which violates paragraphs 2.g.(3), (4), or (8) of this section) is in significant noncompliance if its violation meets one or more of the following criteria:
 - (1) Chronic violations of wastewater discharge limits, defined here as those in which sixty-six 66 percent or more of all of the measurements taken during a six 6-month period exceed (by any magnitude) the daily maximum limit or the average limit a numeric Pretreatment Standard or Requirement, including instantaneous limits, as defined by 9 VAC 25-31-10; for the same pollutant parameter;
 - (2) Technical Review Criteria (TRC) violations, defined here as those in which thirty-three 33 percent or more of all of the measurements for each pollutant parameter taken during a six-6 month period equal or exceed the product of the daily maximum limit or the average limit numeric Pretreatment Standard or Requirement, including instantaneous limits, as defined by 9 VAC 25-31-10 multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH);
 - (3) Any other violation of a pretreatment effluent limit (daily maximum or longer-term average)

 Standard or Requirement as defined by 9 VAC 25-31-10 (daily maximum, long-term average, instantaneous limit, or narrative standard) that the Control Authority POTW determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public):

- (4) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority under subdivision 1 f of this subsection to halt or prevent such a discharge;
- (5) Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance:
- (6) Failure to provide, within 30 45 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;
- (7) Failure to accurately report noncompliance; or
- (8) Any other violation or group of violations which may include a violation of Best Management Practices, which the Control Authority POTW determines will adversely affect the operation or implementation of the local pretreatment program.
- 3. Funding. The POTW shall have sufficient resources and qualified personnel to carry out the authorities and procedures described in subdivisions 1 and 2 of this subsection. In some limited circumstances, funding and personnel may be delayed where (i) the POTW has adequate legal authority and procedures to carry out the Pretreatment Program requirements described in this section, and (ii) a limited aspect of the Program does not need to be implemented immediately (see 9 VAC 25-31-810 B).
- 4. Local limits. The POTW shall develop local limits as required in 9 VAC 25-31-770 C 1, using current influent, effluent and sludge data, or demonstrate that they are not necessary.
- 5. The POTW shall develop and implement an enforcement response plan. This plan shall contain detailed procedures indicating how a POTW will investigate and respond to instances of industrial user noncompliance. The plan shall, at a minimum:
 - a. Describe how the POTW will investigate instances of noncompliance;
 - b. Describe the types of escalating enforcement responses the POTW will take in response to all anticipated types of industrial user violations and the time periods within which responses will take place;

- c. Identify (by title) the official(s) responsible for each type of response; and
- d. Adequately reflect the POTW's primary responsibility to enforce all applicable pretreatment requirements and standards, as detailed in subdivisions 1 and 2 of this subsection.
- 6. The POTW shall prepare and maintain a list of its Significant Industrial Users. The list shall identify the criteria in the definition of Significant Industrial User in Part I (9 VAC 25-31-10) which are applicable to each Industrial User and, for Industrial Users meeting the criteria in subdivision 2 of that definition, where applicable, shall also indicate whether the POTW has made a determination pursuant to subdivision 3 of that definition that such Industrial User should not be considered a Significant Industrial User. This list shall be submitted to the Department pursuant to 9 VAC 25-31-810 as a nonsubstantial program modification pursuant to 9 VAC 25-31-900 D. Modifications to the list shall be submitted to the Department pursuant to 9 VAC 25-31-840 I 1.
- G. A POTW that chooses to receive electronic documents must satisfy the requirements of 40 CFR Part 3—(Electronic reporting).

9 VAC 25-31-840. Reporting Requirements for POTWs and Industrial Users.

A. Definition.

The term "Control Authority" as it is used in this section refers to:

- 1. The POTW if the POTW's Submission for its pretreatment program, as defined in 9 VAC 25-31-10, has been approved in accordance with the requirements of 9 VAC 25-31-830; or
- 2. The Director if the Submission has not been approved. [Reserved]
- B. Reporting requirements for industrial users upon effective date of categorical pretreatment standard baseline report.

Within 180 days after the effective date of a categorical Pretreatment Standard, or 180 days after the final administrative decision made upon a category determination submission under 9 VAC 25-31-780 A 4, whichever is later, existing Industrial Users subject to such categorical Pretreatment Standards and currently discharging to or scheduled to discharge to a POTW shall be required to submit to the Control Authority a report which contains the information listed in subdivisions 1 through 7 of this subsection. At least 90 days

prior to commencement of discharge, New Sources, and sources that become Industrial Users subsequent to the promulgation of an applicable categorical Standard, shall be required to submit to the Control Authority a report which contains the information listed in subdivisions 1 through 5 of this subsection. New sources shall also be required to include in this report information on the method of pretreatment the source intends to use to meet applicable pretreatment standards. New Sources shall give estimates of the information requested in subdivisions 4 and 5 of this subsection:

- 1. Identifying information. The User shall submit the name and address of the facility including the name of the operator and owners;
- 2. Permits. The User shall submit a list of any environmental control permits held by or for the facility;
- 3. Description of operations. The User shall submit a brief description of the nature, average rate of production, and Standard Industrial Classification of the operation(s) carried out by such Industrial User. This description should include a schematic process diagram which indicates points of Discharge to the POTW from the regulated processes;
- 4. Flow measurement. The User shall submit information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from each of the following:
 - a. Regulated process streams; and
 - b. Other streams as necessary to allow use of the combined wastestream formula of 9 VAC 25-31-780
 - E. (See subdivision 5 d of this subsection.) The Control Authority may allow for verifiable estimates of these flows where justified by cost or feasibility considerations;
- 5. Measurement of pollutants.
 - a. The user shall identify the Pretreatment Standards applicable to each regulated process;
 - b. In addition, the User shall submit the results of sampling and analysis identifying the nature and concentration (or mass, where required by the Standard or Control Authority) of regulated pollutants in the Discharge from each regulated process. Both daily maximum and average concentration (or mass, where required) shall be reported. The sample shall be representative of daily operations. In cases where the Standard requires compliance with a Best Management Practice or pollution prevention

alternative, the User shall submit documentation as required by the Control Authority or the applicable Standards to determine compliance with the Standard;

c. A minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organics. For all other pollutants, 24-hour composite samples must be obtained through flow-proportional composite sampling techniques where feasible. The Control Authority may waive flow-proportional composite sampling for any Industrial User that demonstrates that flow-proportional sampling is infeasible. In such cases, samples may be obtained through time-proportional composite sampling techniques or through a minimum of four (4) grab samples where the User demonstrates that this will provide a representative sample of the effluent being discharged;

d.c. The User shall take a minimum of one representative sample to compile that data necessary to comply with the requirements of this subsection;

e.d. Samples shall be taken immediately downstream from pretreatment facilities if such exist or immediately downstream from the regulated process if no pretreatment exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment the User shall measure the flows and concentrations necessary to allow use of the combined wastestream formula of 9 VAC 25-31-780 E in order to evaluate compliance with the Pretreatment Standards. Where an alternate concentration or mass limit has been calculated in accordance with 9 VAC 25-31-780 E this adjusted limit along with supporting data shall be submitted to the Control Authority;

f.e. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 (2005) and amendments thereto. Where 40 CFR Part 136 (2005) does not contain sampling or analytical techniques for the pollutant in question, or where the Administrator determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed by using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the POTW or other parties, approved by the Administrator;

g.f. The Control Authority may allow the submission of a baseline report which utilizes only historical data so long as the data provides information sufficient to determine the need for industrial pretreatment measures; and

- h.g. The baseline report shall indicate the time, date and place, of sampling, and methods of analysis, and shall certify that such sampling and analysis is representative of normal work cycles and expected pollutant Discharges to the POTW;
- 6. Certification. A statement, reviewed by an authorized representative of the Industrial User (as defined in subsection $\vdash \underline{M}$. of this section) and certified to by a qualified professional, indicating whether Pretreatment Standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O and M) and/or additional pretreatment is required for the Industrial User to meet the Pretreatment Standards and Requirements; and
- 7. Compliance schedule. If additional pretreatment and/or O and M will be required to meet the Pretreatment Standards; the shortest schedule by which the Industrial User will provide such additional pretreatment and/or O and M. The completion date in this schedule shall not be later than the compliance date established for the applicable Pretreatment Standard.
 - a. Where the Industrial User's categorical Pretreatment Standard has been modified by a removal allowance (9 VAC 25-31-790), the combined wastestream formula (9 VAC 25-31-780 E), and/or a Fundamentally Different Factors variance (9 VAC 25-31-850) at the time the User submits the report required by this subsection, the information required by subdivisions 6 and 7 of this subsection shall pertain to the modified limits.
 - b. If the categorical Pretreatment Standard is modified by a removal allowance (9 VAC 25-31-790), the combined wastestream formula (9 VAC 25-31-780 E), and/or a Fundamentally Different Factors variance (9 VAC 25-31-850) after the User submits the report required by this subsection, any necessary amendments to the information requested by subdivisions 6 and 7 of this subsection shall be submitted by the User to the Control Authority within 60 days after the modified limit is approved.
- C. Compliance schedule for meeting categorical Pretreatment Standards.

The following conditions shall apply to the schedule required by subdivision B 7 of this section:

1. The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the Industrial User to meet the applicable categorical Pretreatment Standards (e.g., hiring an engineer,

completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction, etc.);

- 2. No increment referred to in subdivision 1 of this subsection shall exceed 9 months; and
- 3. Not later than 14 days following each date in the schedule and the final date for compliance, the Industrial User shall submit a progress report to the Control Authority including, at a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps being taken by the Industrial User to return the construction to the schedule established. In no event shall more than 9 months elapse between such progress reports to the Control Authority.
- D. Report on compliance with categorical pretreatment standard deadline.

Within 90 days following the date for final compliance with applicable categorical Pretreatment Standards or in the case of a New Source following commencement of the introduction of wastewater into the POTW, any Industrial User subject to Pretreatment Standards and Requirements shall submit to the Control Authority a report containing the information described in subdivisions B 4 through 6 of this section. For Industrial Users subject to equivalent mass or concentration limits established by the Control Authority in accordance with the procedures in 9 VAC 25-31-780 C, this report shall contain a reasonable measure of the User's long term production rate. For all other Industrial Users subject to categorical Pretreatment Standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the User's actual production during the appropriate sampling period.

- E. Periodic reports on continued compliance.
 - 1. Any Industrial User subject to a categorical Pretreatment Standard, after the compliance date of such Pretreatment Standard, or, in the case of a New Source, after commencement of the discharge into the POTW, shall submit to the Control Authority during the months of June and December, unless required more frequently in the Pretreatment Standard or by the Control Authority or the Director, a report indicating the nature and concentration of pollutants in the effluent which are limited by such categorical Pretreatment Standards. In addition, this report shall include a record of measured or estimated average and maximum daily flows for the reporting period for the Discharge reported in subdivision B 4 of this section except that the Control Authority may require more detailed reporting of flows. In cases where the

Pretreatment Standard requires compliance with a Best Management Practice (or pollution prevention alternative), the User shall submit documentation required by the Control Authority or the Pretreatment Standard necessary to determine the compliance status of the User. At the discretion of the Control Authority and in consideration of such factors as local high or low flow rates, holidays, budget cycles, etc., the Control Authority may agree to alter the months during which the above reports are to be submitted.

- 2. The Control Authority may authorize the Industrial User subject to a categorical Pretreatment Standard to forego sampling of a pollutant regulated by a categorical Pretreatment Standard if the Industrial User has demonstrated through sampling and other technical factors that the pollutant is neither present nor expected to be present in the Discharge, or is present only at background levels from intake water and without any increase in the pollutant due to activities of the Industrial User. This authorization is subject to the following conditions:
 - a. The Control Authority may authorize a waiver where a pollutant is determined to be present solely due to sanitary wastewater discharged from the facility provided that the sanitary wastewater is not regulated by an applicable categorical Standard and otherwise includes no process wastewater.
 - b. The monitoring waiver is valid only for the duration of the effective period of the Permit or other equivalent individual control mechanism, but in no case longer than 5 years. The User must submit a new request for the waiver before the waiver can be granted for each subsequent control mechanism.
 - c. In making a demonstration that a pollutant is not present, the Industrial User must provide data from at least one sampling of the facility's process wastewater prior to any treatment present at the facility that is representative of all wastewater from all processes. The request for a monitoring waiver must be signed in accordance with paragraph (I) of this section, and include the certification statement in 9 VAC 25-31-780 A.2.b. Non-detectable sample results may only be used as a demonstration that a pollutant is not present if the EPA approved method from 40 CFR Part 136 with the lowest minimum detection level for that pollutant was used in the analysis.
 - d. Any grant of the monitoring waiver by the Control Authority must be included as a condition in the User's control mechanism. The reasons supporting the waiver and any information submitted by the User in its request for the waiver must be maintained by the Control Authority for 3 years after expiration of the waiver.

e. Upon approval of the monitoring waiver and revision of the User's control mechanism by the Control

Authority, the Industrial User must certify on each report with the statement below, that there has been

no increase in the pollutant in its wastestream due to activities of the Industrial User:

Based on my inquiry of the person or persons directly responsible for managing compliance with the Pretreatment Standard for 40 CFR [specify applicable National Pretreatment Standard part(s)], I certify that, to the best of my knowledge and belief, there has been no increase in the level of pollutant(s)] in the wastewaters due to the activities at the facility since filing of the last periodic report under 9 VAC 25-31-840 E.1.

- f. In the event that a waived pollutant is found to be present or is expected to be present based on changes that occur in the User's operations, the User must immediately: Comply with the monitoring requirements of paragraph E.1. of this section or other more frequent monitoring requirements imposed by the Control Authority, and notify the Control Authority.
- g. This provision does not supersede certification processes and requirements established in categorical Pretreatment Standards, except as otherwise specified in the categorical Pretreatment Standard.
- 3. The Control Authority may reduce the requirement in the paragraph E.1. of this section to a requirement to report no less frequently than once a year, unless required more frequently in the Pretreatment Standard or by the Approval Authority, where the Industrial User meets all of the following conditions:
 - a. The Industrial User's total categorical wastewater flow does not exceed any of the following:
 - (1) 0.01 percent of the design dry weather hydraulic capacity of the POTW, or 5,000 gallons per day, whichever is smaller, as measured by a continuous effluent flow monitoring device unless the Industrial User discharges in batches;
 - (2) 0.01 percent of the design dry weather organic treatment capacity of the POTW; and
 - (3) 0.01 percent of the maximum allowable headworks loading for any pollutant regulated by the applicable categorical Pretreatment Standard for which approved local limits were developed by a POTW in accordance with 9 VAC 25-31-770 C. and D.

- b. The Industrial User has not been in significant noncompliance, as defined in 9 VAC 25-31-800 F.2.g., for any time in the past two years:
- c. The Industrial User does not have daily flow rates, production levels, or pollutant levels that vary so significantly that decreasing the reporting requirement for this Industrial User would result in data that are not representative of conditions occurring during the reporting period pursuant to paragraph G.3. of this section;
- d. The Industrial User must notify the Control Authority immediately of any changes at its facility causing it to no longer meet conditions of paragraphs E.3.a. or b. of this section. Upon notification, the Industrial User must immediately begin complying with the minimum reporting in paragraph E.1. of this section; and
- e. The Control Authority must retain documentation to support the Control Authority's determination that a specific Industrial User qualifies for reduced reporting requirements under paragraph E.3. of this section for a period of 3 years after the expiration of the term of the control mechanism.
- 2.4. Where the Control Authority has imposed mass limitations on Industrial Users as provided for by 9 VAC 25-31-780 D, the report required by subdivision 1 of this subsection shall indicate the mass of pollutants regulated by Pretreatment Standards in the Discharge from the Industrial User.
- 3.5. For Industrial Users subject to equivalent mass or concentration limits established by the Control Authority in accordance with the procedures in 9 VAC 25-31-780 C, the report required by subdivision 1 of this subsection shall contain a reasonable measure of the User's long term production rate. For all other Industrial Users subject to categorical Pretreatment Standards expressed only in terms of allowable pollutant discharge per unit of production (or other measure of operation), the report required by subdivision 1 of this subsection shall include the User's actual average production rate for the reporting period.
- F. Notice of potential problems, including slug loading.

All categorical and non-categorical Industrial Users shall notify the POTW immediately of all discharges that could cause problems to the POTW, including any slug loadings, as defined by 9 VAC 25-31-770 B, by the Industrial User.

G. Monitoring and analysis to demonstrate continued compliance with Pretreatment Standards and Requirements.

- 1. Except in the case of Non-Significant Categorical Users, the reports required in subsections B, D, and E, and H of this section shall contain the results of sampling and analysis of the Discharge, including the flow and the nature and concentration, or production and mass where requested by the Control Authority, of pollutants contained therein which are limited by the applicable Pretreatment Standards. This sampling and analysis may be performed by the Control Authority in lieu of the Industrial User. Where the POTW performs the required sampling and analysis in lieu of the Industrial User, the User will not be required to submit the compliance certification required under subdivision B 6 and subsection D of this section. In addition, where the POTW itself collects all the information required for the report, including flow data, the Industrial User will not be required to submit the report.
- 2. If sampling performed by an Industrial User indicates a violation, the user shall notify the Control Authority within 24 hours of becoming aware of the violation. The User shall also repeat the sampling and analysis and submit the results of the repeat analysis to the Control Authority within 30 days after becoming aware of the violation., except the Industrial User is not required to resample if: Where the Control Authority has performed the sampling and analysis in lieu of the Industrial User, the Control Authority must perform the repeat sampling and analysis unless it notifies the User of the violation and requires the User to perform the repeat analysis. Resampling is not required if:
 - a. The Control Authority performs sampling at the Industrial User at a frequency of at least once per month; or
 - b. The Control Authority performs sampling at the User between the time when the User performs its initial sampling initial sampling was conducted and the time when the User or the Control Authority receives the results of this sampling.
- 3. The reports required in subsection E of this section shall must be based upon data obtained through appropriate sampling and analysis performed during the period covered by the report, which data is are representative of conditions occurring during the reporting period. The Control Authority shall require that frequency of monitoring necessary to assess and assure compliance by Industrial Users with applicable Pretreatment Standards and Requirements. Grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organic compounds. For all other pollutants, 24-hour composite samples must be obtained through flow-proportional composite sampling techniques, unless time-proportional composite sampling or grab sampling is authorized by the Control Authority. Where time-

must be representative of the discharge and the decision to allow the alternative sampling must be documented in the Industrial User file for that facility or facilities. Using protocols (including appropriate preservation) specified in 40 CFR Part 136 and appropriate EPA guidance, multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows: For cyanide, total phenols, and sulfides the samples may be composited in the laboratory or in the field; for volatile organics and oil & grease the samples may be composited in the laboratory. Composite samples for other parameters unaffected by the compositing procedures as documented in approved EPA methodologies may be authorized by the Control Authority, as appropriate.

- 4. For sampling required in support of baseline monitoring and 90-day compliance reports required in paragraphs (b) and (d) of this section, a minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide and volatile organic compounds for facilities for which historical sampling data do not exist; for facilities for which historical sampling data are available, the Control Authority may authorize a lower minimum. For the reports required by paragraphs E and H of this section, the Control Authority shall require the number of grab samples necessary to assess and assure compliance by Industrial Users with Applicable Pretreatment Standards and Requirements.
- 4. <u>5.</u> All analyses shall be performed in accordance with procedures contained in 40 CFR Part 136 (2005) and amendments thereto or with any other test procedures approved by EPA, and shall be reported to the Control Authority. Sampling shall be performed in accordance with EPA approved techniques. Where 40 CFR Part 136 (2005) does not include sampling or analytical techniques for the pollutants in question, or where EPA determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or any other sampling and analytical procedures, including procedures suggested by the POTW or other parties, approved by EPA.
- 5.6. If an Industrial User subject to the reporting requirement in subsection E or H of this section monitors any regulated pollutant at the appropriate sampling location more frequently than required by the Control Authority, using the procedures prescribed in subdivision 4 5 of this subsection, the results of this monitoring shall be included in the report.
- H. Reporting requirements for Industrial Users not subject to categorical Pretreatment Standards.

The Control Authority shall must require appropriate reporting from those Industrial Users with discharges that are not subject to categorical Pretreatment Standards. Significant Noncategorical Industrial Users shall must submit to the Control Authority at least once every six months (on dates specified by the Control Authority) a description of the nature, concentration, and flow of the pollutants required to be reported by the Control Authority. In cases where a local limit requires compliance with a Best Management Practice or pollution prevention alternative, the User must submit documentation required by the Control Authority to determine the compliance status of the User. These reports shall must be based on sampling and analysis performed in the period covered by the report, and performed in accordance with the techniques described in 40 CFR Part 136 (2005) and amendments thereto. Where 40 CFR Part 136 (2000) does not contain sampling or analytical techniques for the pollutant in question, or where the Administrator determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed by using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the POTW or other persons, approved by the Administrator. This sampling and analysis may be performed by the Control Authority in lieu of the significant noncategorical industrial user. Where the POTW itself collects all the information required for the report, the noncategorical significant industrial user will not be required to submit the report.

I. Annual POTW reports.

POTWs with approved Pretreatment Programs shall provide the Department with a report that briefly describes the POTW's program activities, including activities of all participating agencies, if more than one jurisdiction is involved in the local program. The report required by this section shall be submitted no later than one year after approval of the POTW's Pretreatment Program, and at least annually thereafter, and shall include, at a minimum, the following:

1. An updated list of the POTW's Industrial Users, including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The POTW shall provide a brief explanation of each deletion. This list shall identify which Industrial Users are subject to categorical pretreatment Standards and specify which Standards are applicable to each Industrial User. The list shall indicate which Industrial Users are subject to local standards that are more stringent than the categorical Pretreatment Standards. The POTW shall also list the Industrial Users that are subject only to local Requirements. The list must also identify Industrial Users subject to categorical Pretreatment Standards

that are subject to reduced reporting requirements under paragraph E.3., and identify which Industrial

<u>Users are Non-Significant Categorical Industrial Users.</u>

- 2. A summary of the status of Industrial User compliance over the reporting period;
- A summary of compliance and enforcement activities (including inspections) conducted by the POTW during the reporting period;
- 4. A summary of changes to the POTW's pretreatment program that have not been previously reported to the Department; and
- 5. Any other relevant information requested by the Director.
- J. Notification of changed discharge.

All Industrial Users shall promptly notify the POTW Control Authority (and the POTW if the POTW is not the Control Authority) in advance of any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the Industrial User has submitted initial notification under the Code of Virginia and this section.

K. Compliance schedule for POTW's.

The following conditions and reporting requirements shall apply to the compliance schedule for development of an approvable POTW Pretreatment Program required by 9 VAC 25-31-800:

- 1. The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the development and implementation of a POTW Pretreatment Program (e.g., acquiring required authorities, developing funding mechanisms, acquiring equipment);
- 2. No increment referred to in subdivision # K.1 of this section shall exceed nine months; and
- 3. Not later than 14 days following each date in the schedule and the final date for compliance, the POTW shall submit a progress report to the Department including, as a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps taken by the POTW to return to the schedule established. In no event shall more than nine months elapse between such progress reports to the Department.

L. Signatory requirements for industrial user reports.

The reports required by subsections B, D, and E of this section shall include the certification statement as set forth in 9 VAC 25-31-780 A 2 b, and shall be signed as follows:

- 1. By a responsible corporate officer, if the Industrial User submitting the reports required by subsections B, D and E of this section is a corporation. For the purpose of this subsection, a responsible corporate officer means (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 2. By a general partner or proprietor if the Industrial User submitting the reports required by subsections B, D and E of this section is a partnership or sole proprietorship respectively;
- 3. By a duly authorized representative of the individual designated in subdivision 1 or 2 of this subsection if:
 - a. The authorization is made in writing by the individual described in subdivision 1 or 2 of this subsection;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and
 - c. The written authorization is submitted to the Control Authority; or

4. If an authorization under subdivision 3 of this subsection is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements of subdivision 3 of this subsection must be submitted to the Control Authority prior to or together with any reports to be signed by an authorized representative.

M. Signatory requirements for POTW reports.

Reports submitted to the Department by the POTW in accordance with subsection I of this section must be signed by a principal executive officer, ranking elected official or other duly authorized employee, if such employee is responsible for overall operation of the POTW. The duly authorized employee must be an individual or position having responsibility for the overall operation of the facility or the Pretreatment Program. This authorization must be made in writing by the principal executive officer or ranking elected official, and submitted to the Approval Authority prior to or together with the report being submitted.

N. Provision Governing Fraud and False Statements.

The reports and other documents required to be submitted or maintained under this section shall be subject to:

- 1. The provisions of 18 USC. Section 1001 relating to fraud and false statements;
- 2. The provisions of the Law or Sections 309(c) (4) of the CWA, as amended, governing false statements, representation or certification; and
- 3. The provisions of Section 309(c) (6) of the CWA regarding responsible corporate officers.
- O. Record-keeping requirements.
 - 1. Any Industrial User and POTW subject to the reporting requirements established in this section shall maintain records of all information resulting from any monitoring activities required by this section, including documentation associated with Best Management Practices. Such records shall include for all samples:
 - a. The date, exact place, method, and time of sampling and the names of the person or persons taking the samples;
 - b. The dates analyses were performed;

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- c. Who performed the analyses;
- d. The analytical techniques/methods use; and
- e. The results of such analyses.
- 2. Any Industrial User or POTW subject to the reporting requirements established in this section (including documentation associated with Best Management Practices) shall be required to retain for a minimum of 3 years any records of monitoring activities and results (whether or not such monitoring activities are required by this section) and shall make such records available for inspection and copying by the Director and the Regional Administrator (and POTW in the case of an Industrial User). This period of retention shall be extended during the course of any unresolved litigation regarding the Industrial User or POTW or when requested by the Director or the Regional Administrator.
- 3. Any POTW to which reports are submitted by an Industrial User pursuant to subsections B, D, E, and H of this section shall retain such reports for a minimum of 3 years and shall make such reports available for inspection and copying by the Director and the Regional Administrator. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Industrial User or the operation of the POTW Pretreatment Program or when requested by the Director or the Regional Administrator.
- P. 1. The Industrial User shall notify the POTW, the EPA Regional Waste Management Division Director, and state hazardous

waste authorities in writing of any discharge into the POTW of a substance, which, if otherwise disposed of, would be a hazardous waste under the Code of Virginia and 40 CFR Part 261 (2005). Such notification must include the name of the hazardous waste as set forth in the Code of Virginia and 40 CFR Part 261 (2005), the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the Industrial User discharges more than 100 kilograms of such waste per calendar month to the POTW, the notification shall also contain the following information to the extent such information is known and readily available to the Industrial User: An identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that calendar month, and an estimation of the mass of constituents in the wastestream expected to be discharged during the following twelve months. All notifications must take place within 180

days of the effective date of this rule. Industrial users who commence discharging after the effective date of this rule shall provide the notification no later than 180 days after the discharge of the listed or characteristic hazardous waste. Any notification under this subsection need be submitted only once for each hazardous waste discharged. However, notifications of changed discharges must be submitted under subsection J of this section. The notification requirement in this section does not apply to pollutants already reported under self-monitoring requirements of subsections B, D, and E of this section.

- 2. Dischargers are exempt from the requirements of subdivision 1 of this subsection during a calendar month in which they discharge no more than fifteen kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR Parts 261.30(d) and 261.33(e) (2005). Discharge of more than 15 kilograms of non-acute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR Parts 261.30(d) and 261.33(e) (2005), requires a one-time notification. Subsequent months during which the Industrial User discharges more than such quantities of any hazardous waste do not require additional notification.
- 3. In the case of any new regulations under Section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the Industrial User must notify the POTW, the EPA Regional Waste Management Waste Division Director, and state hazardous waste authorities of the discharge of such substance within 90 days of the effective date of such regulations.
- 4. In the case of any notification made under this subsection, the Industrial User shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.
- Q. Annual certification by Non-Significant Categorical Industrial Users. A facility determined to be a Non-Significant Categorical Industrial User pursuant to 9 VAC 25-31-10 must annually submit the following certification statement, signed in accordance with the signatory requirements in 9 VAC 25-31-840 L. This certification must accompany an alternative report required by the Control Authority:

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- 1. The facility described as [facility name] met the definition of a non-significant categorical Industrial User as described in 9 VAC 25-31-10;
- 2. the facility compiled with all applicable Pretreatment Standards and requirements during this reporting period; and
- 3. the facility never discharged more than 100 gallons of total categorical wastewater on any given day during this reporting period. This compliance certification is based upon the following information.

R. The Control Authority that chooses to receive electronic documents must satisfy the requirements of 40 CFR Part 3—(Electronic reporting).

9 VAC 25-31-870. Net/Gross Calculation.

Categorical Pretreatment Standards may be adjusted to reflect the presence of pollutants in the Industrial User's intake water in accordance with this section.

A. Application.

Categorical Pretreatment Standards may be adjusted to reflect the presence of pollutants in the Industrial User's intake water in accordance with this section. Any Industrial User wishing to obtain credit for intake pollutants must make application to the Control Authority. Upon request of the Industrial User, the applicable Standard will be calculated on a "net" basis (i.e., adjusted to reflect credit for pollutants in the intake water) if the requirements of subsections B and C of this section are met.

- B. Criteria.
 - 1. Either
 - a. The applicable categorical Pretreatment Standards contained in 40 CFR subchapter N specifically provide that they shall be applied on a net basis; or
 - <u>b.</u> The Industrial User <u>must</u> demonstrate<u>s</u> that the control system it proposes or uses to meet applicable categorical Pretreatment Standards would, if properly installed and operated, meet the Standards in the absence of pollutants in the intake waters.

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2. Credit for generic pollutants such as biochemical oxygen demand (BOD), total suspended solids (TSS),

and oil and grease should not be granted unless the Industrial User demonstrates that the constituents of

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the generic measure in the User's effluent are substantially similar to the constituents of the generic

measure in the intake water or unless appropriate additional limits are placed on process water pollutants

either at the outfall or elsewhere.

3. Credit shall be granted only to the extent necessary to meet the applicable categorical Pretreatment

Standard(s), up to a maximum value equal to the influent value. Additional monitoring may be necessary

to determine eligibility for credits and compliance with Standard(s) adjusted under this section.

4. Credit shall be granted only if the User demonstrates that the intake water is drawn from the same body

of water as that into which the POTW discharges. The Control Authority may waive this requirement if it

finds that no environmental degradation will result.

C. The applicable regulations incorporated by reference in 9 VAC 25-31-30 specifically provide that they

shall be applied on a net basis.

Certified True and Accurate:		
_	David K. Paylor, Director	
Depa	rtment of Environmental Quality	
Date:		