# Regulation 61-9

# Water Pollution Control Permits

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S.C. Department of Health and Environmental Control

2600 Bull Street | Columbia, SC 29201

| Statutory Authority: | S.C. Code Sections 48-1-10 et seq. and 48-14-10 et seq. |
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# 61-9.122
# The National Pollutant Discharge Elimination System

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## PART A
## DEFINITIONS AND GENERAL PROGRAM REQUIREMENTS

**122.1 Purpose and scope.**

(a) Coverage

(1) The regulatory provisions contained in R.61-9.122 and 124 implement the National Pollutant Discharge Elimination System (NPDES) Program under sections 318, 402, and 405 of the Clean Water Act (CWA) (Public Law 92—500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, Pub. L. 97-117, and Pub. L. 100-4; 33 U.S.C. 1251 et seq.) and the South Carolina Pollution Control Act, S.C. Code Ann. 48-1-10, et seq.

(2) These provisions cover basic Department permitting requirements (122) and procedures for Department processing of permit applications and appeals (124).

(3) These provisions also establish the requirements for public participation in State permit issuance and enforcement and related variance proceedings.

(4) The NPDES permit program has separate, additional provisions that are used by the Department to determine what requirements must be placed in permits, if issued. These provisions are located at S.C. R61-9.125, 129, 133, and 503, 40 CFR 136, and 40 CFR subchapter N (parts 400 through 471) and 40 CFR 125.80-89 (Federal Register December 18, 2001 amended June 19, 2003), which are hereby adopted by reference.

(b) Scope of the NPDES permit requirement.

(1) The NPDES program requires permits for the discharge of "pollutants" from any "point source" into "waters of the State" and into "waters of the United States." The terms "pollutant," "point source," "waters of the State," and "waters of the United States" are defined in section 122.2.

(2) The permit program established under this part also applies to owners or operators of any treatment works treating domestic sewage, whether or not the treatment works is otherwise required to obtain an NPDES permit, unless all requirements implementing section 405(d) of the CWA applicable to the treatment works treating domestic sewage are included in a permit issued under the appropriate provisions of subtitle C of the Solid Waste Disposal Act, Part C of the Safe Drinking Water Act, the Marine Protection, Research, and Sanctuaries Act of 1972, or the Clean Air Act, or under a Land Application or State permit issued by the Department under R.61-9.505, as adequate to assure compliance with section 405 of the CWA.

(3) The Department may designate any person subject to the standards for sewage sludge use and disposal as a "treatment works treating domestic sewage" as defined in section 122.2, where it finds that a permit is necessary to protect public health and the environment from the adverse effects of sewage sludge or to ensure compliance with the technical standards for sludge use and disposal developed under CWA section 405(d). Any person designated as a "treatment works treating domestic sewage" shall submit an application for a permit under section 122.21 within 180 days of being notified by the Department that a permit is required. The Department's decision to designate a person as a "treatment works treating domestic sewage" under this paragraph shall be stated in the fact sheet for the permit.

(4) The following are point sources requiring NPDES permits for discharges:

(i) Concentrated animal feeding operations as defined in section 122.23;

(ii) Concentrated aquatic animal production facilities as defined in section 122.24;

(iii) Discharges into aquaculture projects as set forth in section 122.25;

(iv) Discharges of storm water as set forth in sections 122.26 and 122.30 through 36; and,

(v) Silvicultural point sources as defined in section 122.27.

(c) The Department may incorporate the requirements (either directly or by reference), for permits for the Use and Disposal of Sewage Sludge (see R.61-9.503), or the Use and Disposal of Industrial Sludge (see R.61-9.504) into NPDES permit(s) that may be issued to the applicant. A separate Land Application permit (see R.61-9.505) may be issued by the Department for the activities covered under R.61.9-503 or R.61-9.504, unless an NPDES permit is required for the activity.

(d) Relation to other requirements.

(1) Permit application forms. Applicants for permits must submit their applications on permit application forms designated by the Department. The basic information required in the general form (Form 1) and the additional information required by NPDES applications (Forms 2 a through e) are listed in section 122.21.

(2) Technical Regulations. The NPDES permit program has separate additional regulations. These separate regulations are used by the Department to determine what requirements must be placed in permits if they are issued. These separate regulations are located at R.61-9.125, 129, 133, and 403; 40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 460); R.61-9.503, R.61-9.504 and R.61-9.505.

(e) Public participation. This part of the regulation (R.61-9.122) establishes the requirements for public participation in NPDES permit issuance and enforcement and related variance proceedings.

(f) [Reserved].

(g) Authority.

(1) Section 48-1-90(a), S.C. Code of Laws (1976), provides that "it shall be unlawful for any person, directly or indirectly, to throw, drain, run, allow to seep, or otherwise discharge into the environment of the State organic or inorganic matter, including sewage, industrial wastes and other wastes, except as in compliance with a permit issued by the Department." Section 301(a) of CWA provides that "Except as in compliance with this section and sections 302, 306, 307, 318, 402, and 404 of this Act, the discharge of any pollutant by any person shall be unlawful."

(2) Section 48-1-100(a), S.C. Code of Laws (1976), provides that "if, after appropriate public comment procedures, as defined by Department regulations, the Department finds that the discharge from the proposed outlet ... will not be in contravention of provisions of Chapter 1, Title 48, S.C. Code of Laws, a permit to construct and a permit to discharge must be issued to the applicant." Section 402(a)(1) of CWA provides in part that "The [Department] may, after opportunity for public hearing,

issue a permit for the discharge of any pollutant, or combination of pollutants, ... upon condition that such discharge will meet either all applicable requirements under sections 301, 302, 306, 307, 308, and 403 of this Act, or prior to the taking of necessary implementing actions relating to all such requirements, such conditions as the [Department] determines are necessary to carry out the provisions of this Act."

(3) Section 318(a) of CWA provides that "The [Department] is authorized, after public hearings, to permit the discharge of a specific pollutant or pollutants under controlled conditions associated with an approved aquaculture project under Federal or State supervision pursuant to section 402 of this Act."

(4) Section 405 of CWA provides, in part, that "Where the disposal of sewage sludge resulting from the operation of a treatment works as defined in section 212 of this Act (including the removal of in- place sewage sludge from one location and its deposit at another location) would result in any pollutant from such sewage sludge entering the [waters of the State], such disposal is prohibited except in accordance with a permit issued by the [Department] under section 402 of this Act."

(5) Section 405(d)(4) of the CWA requires the Department, prior to promulgation of standards for sewage sludge use and disposal, to "impose conditions in permits issued to publicly owned treatment works under section 402 of this Act, or take such other measures as the [Department] deems appropriate to protect public health and the environment from any adverse effects which may occur from toxic pollutants in sewage sludge."

(6) Section 405(f) of CWA provides that NPDES permits must include requirements implementing the standards for sludge use and disposal (40 CFR Part 503) "unless such requirements have been included in a permit issued under the appropriate provisions of subtitle C of the Solid Waste Disposal Act, part C of the Safe Drinking Water Act, the Marine Protection, Research, and Sanctuaries Act of 1972, or the Clean Air Act, or under State [NPDES] permit programs approved by the Administrator...." Section 405(f) also authorizes the Department to issue permits with requirements for sludge use or disposal that assure compliance with 40 CFR Part 503 to any treatment works treating domestic sewage that is not subject to NPDES (i.e., has no point source discharge) and has not been issued a permit that includes applicable 40 CFR Part 503 standards under the other permit programs listed in section 405(f)(1) of the CWA.

(7) Sections 402(b), 318(b) and (c), and 405(c) and (f) of CWA authorize EPA approval of State NPDES permit programs for discharges from point sources, discharges to aquaculture projects, and use and disposal of sewage sludge.

(8) Section 304(i) of CWA provides that the Administrator shall promulgate guidelines establishing uniform application forms and other minimum requirements for the acquisition of information from dischargers in approved States and establishing minimum procedural and other elements of approved State NPDES programs.

(9) Section 48-1-40 authorizes the Department "after public hearing as herein provided, [to] adopt standards and determine what qualities of water ... shall indicate a polluted condition and these standards shall be promulgated and made a part of the rules and regulations of the Department." Section 48-1-50(22) authorizes the Department to "[r]equire the owner or operator of any ... disposal system to establish and maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze…discharges in accordance with established methods, at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require." Section 48-1-50(23) authorizes the Department to "[a]dopt…effluent control regulations, standards and limitations that are applicable only when a

specified class of pollutant is present." Section 501(a) of CWA provides that "the [Department] is authorized to prescribe such regulations as are necessary to carry out [its] functions under this Act."

(10) Section 48-1-100(a) requires an opportunity for public comment before issuance of permits to discharge. Section 101(e) of CWA provides that "Public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator or any State under this Act shall be provided for, encouraged, and assisted by the Administrator and the States. The Administrator, in cooperation with the States, shall develop and publish regulations specifying minimum guidelines for public participation in such processes."

**122.2 Definitions.**

(a) The following definitions apply to this regulation, R.61-9.124, R.61-9.125, R.61-9.129, R.61-9.133, and R.61-9.403. Terms not defined in this section have the meaning given by the Clean Water Act (CWA) or the Pollution Control Act (PCA).

(b) Definitions:

"Administrator" means the Administrator of the Environmental Protection Agency or any employee of the Agency to whom the Administrator may by order delegate the authority to carry out his functions under section 307(a) of the CWA, or any person who shall by operation of law be authorized to carry out such functions.

Note: "Animal feeding operation" is defined at section 122.23.

"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 CWA, 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 section 301, 302, 303, 304, 306, 307, 308, 403 or 405 of CWA.

"Applicant" means a person applying to the Department for a State or NPDES permit to discharge wastes into the waters of the State or to operate a treatment works.

"Application" means the uniform NPDES application form, including subsequent additions, revisions, or modifications thereof promulgated by the Administrator of EPA, and adopted for use by the Board or a State permit application form.

Note: "Aquaculture project" is defined at section 122.25.

"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" (BMP) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of

the State. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"BMP" means best management practices.

"Board" means the Board of Health and Environmental Control for the State of South Carolina and shall be inclusive of any agent designated by the Board to perform any function.

Note: "Bypass" is defined at section 122.41(m).

"CFR" means the Code of Federal Regulations, as amended.

"Class I sludge management facility" means any POTW identified under R.61-9.403.8(a), 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 Department because of the potential for its sludge use or disposal practices to adversely affect public health and the environment.

"Code" means the South Carolina Code of 1976, as amended.

"Commissioner" means the Commissioner of the S.C. Department of Health and Environmental Control, or his designated representative.

Note: "Concentrated animal feeding operation" is defined at section 122.23.

Note: "Concentrated aquatic animal feeding operation" is defined at section 122.24.

"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.

"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.

"CWA" means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, and Pub. L. 97-117, 33 U.S.C. 1251 et seq. Specific references to sections within the CWA will be according to Pub. L. 92-500 notation.

"CWA and regulations" means the Clean Water Act (CWA) and applicable regulations promulgated thereunder and includes State NPDES 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 S.C. Department of Health and Environmental Control and shall also be inclusive of those persons within the Department authorized by the Board to administer the NPDES

program or take any action in behalf of the Board.

"Direct discharge" means the discharge of a pollutant.

"Discharge" means any discharge or discharge of any sewage, industrial wastes or other wastes into any of the waters of the State, whether treated or not.

"Discharge of a pollutant"

(1) means:

(i) Any addition of any pollutant or combination of pollutants to waters of the State from any point source or

(ii) 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.

(2) includes additions of pollutants into waters of the State from: surface runoff which is collected or channelled 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 EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees, and modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

"Discharger" means any person who discharges any treated or untreated sewage, industrial wastes, or other wastes into any of the waters of the State.

"DMR" means Discharge Monitoring Report.

"Draft permit" means a document prepared by the staff of the Department, in accordance with R.61-9.124.6, prior to public notice of an application for a permit by a discharger. This document indicates the Department's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a permit to discharge. It contains proposed effluent standards and limitations, proposed compliance schedules and other proposed conditions or restrictions deemed necessary by the Department for a discharge. A notice of intent to terminate a permit, and a notice of intent to deny a permit, as discussed in R.61-9.124.5, are types of draft permits. A denial of a request for modification, revocation and reissuance, or termination, as discussed in R.61-9.124.5, is not a draft permit. A "proposed permit" is not a draft permit.

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

"Effluent limitations guidelines" means: A regulation published by the Administrator under section 304(b) of CWA to adopt or revise effluent limitations.

"Effluent standards and limitations" means restrictions or prohibitions of chemical, physical, biological, and other constituents which are discharged from point sources into State waters, including but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, pretreatment standards and schedules of compliance.

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

"EPA" means the United States Environmental Protection Agency.

"Facility or activity" means any NPDES point source or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

"Fact sheet" means a description of a discharge available to the public prepared by the Department staff pursuant to the guidelines, which includes, but is not limited to, information on the location of the discharge, rate of frequency of the discharge, components of the discharge, proposed requirements of the Department regarding the discharge, the location and identification of uses of the receiving waters, water quality standards and procedures for formulation of final requirements on the discharge by the Department.

"Federal Act" means the Federal Water Pollution Control Act (CWA), as amended.

"General permit" means an NPDES permit issued under section 122.28 authorizing a category of discharges or activities under the PCA and CWA within a geographical area.

"Hazardous substance" means any substance designated under 40 CFR Part 116 pursuant to section 311 of CWA.

"Indian country" means:

(1) 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;

(2) All dependent Indian communities within 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

(3) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

"Indirect discharger" means a non-domestic discharge introducing pollutants to a publicly owned treatment works.

"Industry" means a private person, corporation, firm, plant or establishment which discharges sewage, industrial wastes or other wastes into the waters of the State.

"Interstate agency" means an agency of two or more States established by or under an agreement or compact approved by the Congress, or any other agency of two or more States having substantial

powers or duties pertaining to the control of pollution as determined and approved by the Administrator under the CWA and regulations.

"Mailing list" means a list of persons requesting notification and information on public hearings, permits and other NPDES forms.

"Major Facility" means any NPDES facility or activity classified as such by the Regional Administrator in conjunction with the Department.

"Management agency" means an area-wide waste treatment management agency designated by the governor pursuant to Section 208(a) of the Federal Act.

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

"Minor discharge" means a discharge of wastewater which has a total volume of less than 50,000 gallons on every day of the year, does not closely affect the waters of another state and is not identified by the Department, the Regional Administrator or by the Administrator of EPA in regulations issued by him pursuant to Section 307(a) of the Federal Act, as a discharge which is not a minor discharge, except that in the case of a discharge of less than 50,000 gallons on any day of the year which represents 1 or 2 or more discharges from a single person which in total exceeds 50,000 gallons on any day of the year, then no discharge from the facility is a minor discharge.

Note: "Municipal separate storm sewer system" is defined at sections 122.26 (b).

"Municipality" means a city, town, borough, county, parish, 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 section 208 of CWA.

"National Pollutant Discharge Elimination System" means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of CWA.

"New discharger"

(1) means any building, structure, facility, or installation

(i) from which there is or may be a discharge of pollutants;

(ii) that did not commence the discharge of pollutants at a particular site prior to August 13, 1979;

(iii) which is not a new source; and

(iv) which has never received a finally effective NPDES permit for discharges at that site.

(2) includes an indirect discharger which commences discharging into waters of the State 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, at a site under Department's permitting jurisdiction for which it is not covered by an individual or general permit and which is located in an area determined by the Department in the issuance of a final permit to be an area of biological concern. In determining whether an area is an area of biological concern, the Department shall consider the factors specified in section 122(a)(1) through (10). An offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a new discharger only for the duration of its discharge in an area of biological concern.

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

(1) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or

(2) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

"NPDES" means National Pollutant Discharge Elimination System established by the CWA.

"NPDES form" means any issued permit or any uniform national form used by the Department developed for use in the NPDES, including a NPDES application, a Refuse Act permit application and a reporting form.

"NPDES permit" means a permit issued by the Department to a discharger pursuant to regulations adopted by the Board for all point source discharges into surface waters, and shall constitute a final determination of the Board.

"Non-compliance list" means a list of dischargers, prepared by the Department pursuant to this regulation and the guidelines for transmittal to the Regional Administrator, who fail or refuse to comply with a compliance schedule in a NPDES permit issued pursuant to the State law.

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

"Permit" means an authorization, license, or equivalent control document issued by the Department to implement the requirements of this regulation, 40 CFR Parts 123, and R.61-9.124. Permit includes an NPDES general permit (section 122.28). 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 any individual, public or private corporation, political subdivision, association, partnership, corporation, municipality, State or Federal agency, industry, copartnership, firm, trust, estate, any other legal entity whatsoever, or an agent or employee thereof.

"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, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

"Point source discharge" means a discharge which is released to the waters of the State by a discernible, confined and discrete conveyance, including but not limited to a pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft from which waste is or may be discharged.

"Pollutant"

(1) 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 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

(2) does not mean:

(i) Sewage from vessels or

(ii) 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 authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources.

"Pollution Control Act" (PCA) means the South Carolina Pollution Control Act (PCA), S.C. Code Ann. section 48-1-10 et seq. (1976).

"POTW" means publicly owned treatment works.

"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 Appendix A of this regulation.

"Privately owned treatment works" means any device or system which both is used to treat wastes from any facility whose operator is not the operator of the treatment works and is 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.

"Proposed permit" means a State NPDES 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 by the State. A "proposed permit" is not a draft permit.

"Publicly owned treatment works" or POTW means a treatment works as defined by section 212 of the Clean Water Act, which is owned by a state or municipality (as defined by section 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 section 502(4) of the CWA, which has jurisdiction over the Indirect

Discharges to and the discharge from such a treatment works.

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

“Refuse Act permit application” means an application for a permit issued under authority of Section 13 of the United States Rivers and Harbors Act of March 3, 1899.

“Regional Administrator” means the Regional Administrator of Region IV of the Environmental Protection Agency or the authorized representative of the Regional Administrator.

“Reporting form” means the uniform NPDES reporting form, including subsequent additions, revisions or modifications thereof, adopted by the Department for use in administering this regulation, or a State form prescribed by the Department for use in administering this regulation, for reporting data and information to the Department by a discharger on monitoring and other conditions of permits.

"Satellite sewer system" means a sewer system that is owned or operated by one person that discharges to a system that is owned or operated by a different person. Satellite sewer systems depend on a separate person for final wastewater treatment and discharge and include systems approved under R.61- 9.505.8.

“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 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 septic tank, cesspool or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

“Sewage from vessels” means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under section 312 of CWA.

“Sewage Sludge” means any solid, semi-solid, 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, septage, portable toilet pumpings, type III marine sanitation device pumpings (33 CFR Part 159), 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.

"Sewer system" means any system of wastewater collection lines, sewers, interceptors and pump stations, except for service connections, as defined by R.61-67. In this part, a sewer system includes “sewage system” as defined by the Pollution Control Act.

Note: "Silvicultural point source" is defined at section 122.27.

"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 section 405(d) of the CWA and is required to obtain a permit under section 122.1(b)(2).

"Standards for sewage sludge use or disposal" means the regulations promulgated pursuant to section 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 State of South Carolina.

"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 programs.

"State Law" means the S.C. Pollution Control Act (PCA), specifically 48-1-10 through 48-1-350 of the South Carolina Code of 1976, and any subsequent amendments thereto.

"State permit" See R-61-9.505.2 for definition.

Note: "Storm water" is defined at section 122.26(b)(13).

Note: "Storm water discharge associated with industrial activity" is defined at section 122.26(b)(14).

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

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

"Trade secret" means the whole or any portion or phase of any manufacturing proprietary process or method, not patented, which is secret, useful in compounding an article of trade having a commercial value, and the secrecy of which the owner has taken reasonable measures to prevent from becoming available to persons other than those selected by the owner to have access thereto to limited purpose. It shall not be construed for purpose of this regulation to include any information relative to the quantity and character of waste products or their constituents discharged into waters of the State.

"Treatment works" means any plant, disposal field, lagoon, constructed drainage ditch or surface water intercepting ditch, incinerator, area devoted to sanitary landfills or other works not specifically mentioned herein, installed for the purpose of treating, neutralizing, stabilizing or disposing of sewage, industrial waste or other wastes.

"Treatment works treating domestic sewage" (TWTDS) means a POTW or any other sewage sludge or waste water treatment devices or system, 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. In States where there is no approved State sludge management program under section 405(f) of the CWA, the Regional Administrator may designate any person subject to the standards for sewage sludge use and disposal in 40 CFR Part 503 as a treatment works treating domestic sewage, where he or she finds that there is a potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling use or disposal practices or where he or she finds that such designation is necessary to ensure that such person is in compliance with 40 CFR Part 503.

"TWTDS" means "treatment works treating domestic sewage.

Note: "Upset" is defined at section 122.41(n).

"Variance" means any mechanism or provision under section 301 or 316 of CWA, PCA, or R.61-9.125, or in the applicable effluent limitations guidelines which allows modification to or waiver of the generally applicable effluent limitation requirements or time deadlines of CWA. This includes provisions which allow the establishment of alternative limitations based on fundamentally different factors or on section 301(c), 301(g), 301(h), 301(i), or 316(a) of CWA.

"Vessel" means any contrivance used or capable of being used for navigation upon water, whether or not capable of self-propulsion, including foreign and domestic vessels engaged in commerce upon the waters of this State, passenger or other cargo carrying vessels, privately owned recreational watercraft or any other floating craft.

"Waste" shall be synonymous with sewage, industrial waste, and other wastes.

"Waters of the State" means lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial limits of the State, and all other bodies of surface or underground water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially within or bordering the State or within its jurisdiction.

"Waters of the United States" or "waters of the U.S." 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, sand flats, "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:

(i) Which are or could be used by interstate or foreign travelers for recreational or other

purposes;

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purposes by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under this definition;

(5) Tributaries of waters identified in paragraphs (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 paragraphs (1) through (6) of this definition.

(8) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.

"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.

**122.3 Exclusions.**

The following discharges do not require NPDES permits:

(a) Any discharge of sewage from vessels, effluent from properly functioning marine engines, laundry, shower, and galley sink wastes, or any other discharge incidental to the normal operation of a vessel. This exclusion does not apply to rubbish, trash, garbage, or other such materials discharged overboard; nor to other discharges when the vessel is operating in a capacity other than as a means of transportation such as when used as an energy or mining facility, a storage facility or a seafood processing facility, or when secured to a storage facility or a seafood processing facility, or when secured to the bed of the ocean, contiguous zone or waters of the State for the purpose of mineral or oil exploration or development.

(b) Discharges of dredged or fill material into waters of the United States which are regulated under section 404 of CWA.

(c) The introduction of sewage, industrial wastes or other pollutants into publicly owned treatment works by indirect dischargers. Plans or agreements to switch to this method of disposal in the future do not relieve dischargers of the obligation to have and comply with permits until all discharges of pollutants

to waters of the State are eliminated. (See also section 122.47(b)). This exclusion does not apply to the introduction of pollutants to privately owned treatment works or to other discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other party not leading to treatment works.

(d) Any discharge in compliance with the instructions of an On-Scene Coordinator pursuant to 40 CFR Part 1510 (The National Oil and Hazardous Substances Pollution Plan) or 33 CFR 153.10(e) (Pollution by Oil and Hazardous Substances).

(e) Any introduction of pollutants from non point-source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but not discharges from concentrated animal feeding operations as defined in section 122.23, discharges from concentrated aquatic animal production facilities defined in section 122.24, discharges to aquaculture projects as defined in section 122.25, and discharges from silvicultural point sources as defined in section 122.27.

(f) Return flows from irrigated agriculture.

(g) Discharges into a privately owned treatment works, except as the Department may otherwise require under section 122.44(m).

**122.4 Prohibitions.**

No permit may be issued:

(a) When the conditions of the permit do not provide for compliance with the applicable requirements of CWA, State regulations, or regulations promulgated under CWA;

(b) When the applicant is required to obtain a State or other appropriate certification under section 401 of CWA and R.61-9.124.53 and that certification has not been obtained or waived;

(c) By the Department where the Regional Administrator has objected to issuance of the permit under 40 CFR Part 123.44;

(d) When the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States;

(e) When, in the judgment of the Secretary, anchorage and navigation in or on any of the waters of the United States would be substantially impaired by the discharge;

(f) For the discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste;

(g) (1) For any discharge inconsistent with a plan or plan amendment approved under section 208(b) of CWA, unless the Department finds such variance necessary to protect the public health, safety, and welfare;

(2) In reissuance of a permit which requires connection to a regional sewer system or other treatment facilities under the water quality management plan under section 208 of the CWA, once the permittee is notified by the Department that the regional sewer system is operational.

(h) For any discharge to the territorial sea, the waters of the contiguous zone, or the oceans in the following circumstances;

(1) Before the promulgation of guidelines under section 403(c) of CWA (for determining degradation of the waters of the territorial seas, the contiguous zone, and the oceans) unless the Department determines permit issuance to be in the public interest; or

(2) After promulgation of guidelines under section 403(c) of CWA, when insufficient information exists to make a reasonable judgment whether the discharge complies with them.

(i) To a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards. The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards or is not expected to meet those standards even after the application of the effluent limitations required by sections 301(b)(1)(A) and 301(b)(1)(B) of CWA, and for which the State or interstate agency has performed a pollutants load allocation for the pollutant to be discharged, must demonstrate, before the close of the public comment period, that:

(1) There are sufficient remaining pollutant load allocations to allow for the discharge; and

(2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards. The Department may waive the submission of information by the new source or new discharger required by paragraph (i) of this section if the Department determines that the Department already has adequate information to evaluate the request. An explanation of the development of limitations to meet the criteria of this paragraph (i)(2) is to be included in the fact sheet to the permit under section 124.56(b)(1).

**122.5 Effect of a permit.**

(a) (1) Except for any toxic effluent standards and prohibitions imposed under section 307 of the CWA and "standards for sewage sludge use or disposal" under 405(d) of the CWA, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with the Pollution Control Act and with sections 301, 302, 306, 307, 318, 403, and 405(a)-(b) of CWA. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in section 122.62 and section 122.64.

(2) Compliance with a permit condition which implements a particular "standard for sewage sludge use or disposal" shall be an affirmative defense in any enforcement action brought for a violation of that "standard for sewage sludge use or disposal" pursuant to sections 405(e) and 309 of the CWA.

(b) The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

(c) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

**122.6 Continuation of expiring permits.**

(a) The conditions of an expired permit continue in force under S.C. Code section 1-23-370(b) until

the effective date of a new permit (see R.61-9.124.15), except when the permit requires connection to a regional sewer system or other treatment facilities under the water quality management plan under section 208 of the CWA and the permittee has been notified by the Department that the regional sewer system is operational, if:

(1) The permittee has submitted a timely application under section 122.21 which is a complete (under section 122.21(e)) application for a new permit; and

(2) The Department, through no fault of the permittee does not issue a new permit with an effective date under R.61-9.124.15 on or before the expiration date of the previous permit (for example, when issuance is impracticable due to time or resource constraints); or

(3) The permittee has submitted a timely application under section 122.21 which is a complete application for a new permit and makes a timely appeal of the new permit.

(b) Effect. Permits continued under this section remain fully effective and enforceable.

(c) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit the Department may choose to do any or all of the following:

(1) Initiate enforcement action based upon the permit which has been continued;

(2) Issue a notice of intent to deny the new permit under section 124.6. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(3) Issue a new permit under R.61-9.124 with appropriate conditions; or

(4) Take other actions authorized by these regulations.

**122.7 Confidentiality of information.**

(a) [Reserved.]

(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 NPDES application forms provided by the Department under section 122.21 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

## PART B
## APPLICATION AND SPECIAL NPDES PROGRAM REQUIREMENTS

**122.21 Application for a permit.**

(a) Duty to apply.

(1) 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 R.61-9.503 and who does not have an effective permit, except persons covered by general permits under section 122.28, excluded under section 122.3, or a user of a privately owned treatment works, unless the Department requires otherwise under section 122.44(m), must submit a complete application to the Department in accordance with this section and R.61-9.124. All concentrated animal feeding operations have a duty to seek coverage under an NPDES permit, as described in section 122.23(d).

(2) Applicants for State-issued permits must use State forms which must require at a minimum the information listed in the appropriate paragraphs of this section.

(3) A person discharging or proposing to discharge wastes into the waters of the State shall promptly make application for and obtain a valid NPDES Permit and, if required, a valid State Construction Permit.

(b) [Reserved].

(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 Department. 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. Facilities described under section 122.26(b)(14)(x) or (b)(15)(i) shall submit applications at least 90 days before the date on which construction is to commence. 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. See also paragraph (k) of this section and section 122.26(c)(1)(i)(G) and (c)(1)(ii).

(2) Permits under section 405(f) of CWA. All “treatment works treating domestic sewage” (TWTDS) whose sewage sludge use or disposal practices are regulated by part 503 of this chapter must submit permit applications according to the applicable schedule in paragraphs (c)(2)(i) or (ii) of this section.

(i) A TWTDS with a currently effective NPDES permit must submit a permit application at the time of its next NPDES permit renewal application. Such information must be submitted in accordance with paragraph (d) of this section.

(ii) Any other TWTDS not addressed under paragraphs (c)(2)(i) of this section must submit the information listed in paragraphs (c)(2)(ii)(A) through (E) of this section to the Department within 1 year after publication of a standard applicable to its sewage sludge use or disposal practice(s), using Form 2S or another form provided by the Department. The Department will determine when such TWTDS must submit a full permit application.

(A) The TWTDS’s name, mailing address, location, and status as federal, State, private, public or other entity;

(B) The applicant’s name, address, telephone number, and ownership status;

(C) A description of the sewage sludge use or disposal practices. Unless the sewage sludge meets the requirements of paragraph (q)(8)(iv) 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;

(D) Annual amount of sewage sludge generated, treated, used or disposed (estimated dry weight basis); and

(E) The most recent data the TWTDS may have on the quality of the sewage sludge.

(iii) Notwithstanding paragraphs (c)(2)(i) or (ii) of this section, the Department may require permit applications from any TWTDS at any time if the Department 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.

(iv) Any TWTDS that commences operations after promulgation of an applicable "standard for sewage sludge use or disposal" must submit an application to the Department at least 180 days prior to the date proposed for commencing operations.

(3) [Reserved]

(d) Duty to reapply.

(1) Any POTW with a current 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 Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit).

(2) All other permittees with currently effective permits shall submit a new application 180 days before the existing permit expires, except that the Department may grant permission to submit an application later than the deadline for submission otherwise applicable, but no later than the permit expiration date; and

(3) [Reserved]

(e) Completeness.

(1) The Department shall not issue a permit before receiving a complete application for a permit except for NPDES general permits. An application for a permit is complete when the Department 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) A permit application shall not be considered complete if a permitting authority has waived application requirements under paragraphs (j) or (q) of this section and EPA has disapproved the waiver application. If a waiver request has been submitted to EPA more than 210 days prior to permit expiration and 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.

(3) The Department, at its discretion, or upon request of the Regional Administrator, may request of an applicant any additional information deemed necessary to complete or correct deficiencies in a Refuse Act permit application, before processing the application or issuing or denying the issuance of a permit.

(4) The Department may take enforcement action as prescribed by the State law or this regulation against any person who fails to file a complete application, if deficiencies are not corrected or complete information is not supplied within sixty (60) days to the Department following its request.

(f) Information requirements.

All applicants for NPDES permits 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 paragraphs (g) through (k) of this section):

(1) The activities conducted by the applicant which require it to obtain an NPDES 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.

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:

(i) Hazardous Waste Management program under RCRA.

(ii) UIC program under SDWA.

(iii) NPDES program under CWA.

(iv) Prevention of Significant Deterioration (PSD) program under the Clean Air Act.

(v) Nonattainment program under the Clean Air Act.

(vi) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act.

(vii) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act.

(viii) Dredge or fill permits under section 404 of CWA.

(ix) 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.

(8) A brief description of the nature of the business, activity, or type project.

(g) Application requirements for existing manufacturing, commercial, mining, and silvicultural dischargers.

Existing manufacturing, commercial, mining, and silvicultural dischargers applying for NPDES permits, except for those facilities subject to the requirements of section 122.21(h), shall provide the following information to the Department, using application forms provided by the Department.

(1) Outfall location. The latitude and longitude to the nearest 15 seconds and the name of the receiving water.

(2) Line Drawing. 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 paragraph (g)(3) of this section. 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) Average flows and treatment. 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 stormwater runoff; 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) Intermittent flows. If any of the discharges described in paragraph (g)(3) of this section are intermittent or seasonal, a description of the frequency, duration and flow rate of each discharge occurrence (except for stormwater runoff, spillage or leaks).

(5) Maximum production. If an effluent guideline promulgated under section 304 of 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 as required by section 122.45(b)(2).

(6) Improvements. 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) Effluent characteristics.

(i) Information on the discharge of pollutants specified in this paragraph (g)(7) (except information on storm water discharges which is to be provided as specified in section 122.26). 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. 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 Department 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 paragraphs (g)(7)(vi) and (vii) of this section 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 Department 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 (4) grab samples will be a representative sample of the effluent being discharged.

(ii) Storm water discharges. 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 percent 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 fifteen minutes (applicants submitting permit applications for storm water discharges under section 122.26(d) 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 Department). 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 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 thirty minutes (or as soon thereafter as practicable) of the discharge for all pollutants specified in section 122.26(c)(1). For all storm water permit applicants taking flow-weighted composites, quantitative data must be reported for all pollutants specified in section 122.26 except pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform, and fecal streptococcus. The Department 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, and additional time for submitting data on a case-by-case 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 runoff from the facility.)

(iii) Every applicant must report quantitative data for every outfall for the following pollutants:

(A) Biochemical Oxygen Demand (BOD5)

(B) Chemical Oxygen Demand

(C) Total Organic Carbon

(D) Total Suspended Solids

(E) Ammonia (as N)

(F) Temperature (both winter and summer)

(G) Ph

(iv) The Department may waive the reporting requirements for individual point sources or for a particular industry category for one or more of the pollutants listed in paragraph (g)(7)(iii) of this section 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.

(v) Each applicant with processes in one or more primary industry category (see Appendix A to this regulation) contributing to a discharge must report quantitative data for the following pollutants in each outfall containing process wastewater:

(A) The organic toxic pollutants in the fractions designated in Table I of Appendix D for the applicant's industrial category or categories unless the applicant qualifies as a small business under paragraph (g)(8) of this section. Table II of Appendix D 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. [See Notes 2, 3, and 4 of 40CFR122.21.]

(B) The pollutants listed in Table III of Appendix D (the toxic metals, cyanide, and total phenols).

(vi)(A) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants in Table IV of Appendix D (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.

(B) Each applicant must indicate whether it knows or has reason to believe that any of

the pollutants listed in Table II or Table III of appendix D of this part (the toxic pollutants and total phenols) for which quantitative data are not otherwise required under paragraph (g)(7)(v) of this section 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 paragraph (g)(8) of this section is not required to analyze for pollutants listed in Table II of Appendix D (the organic toxic pollutants).

(vii) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants in Table V of Appendix D (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.

(viii) 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:

(A) 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

(B) Knows or has reason to believe that TCDD is or may be present in an effluent.

(8) Small business exemption. An applicant which qualifies as a small business under one of the following criteria is exempt from the requirements in paragraph (g)(7) (v)(A) or (g)(7)(vi)(A) of this section to submit quantitative data for the pollutants listed in Table II of Appendix D (the organic toxic pollutants):

(i) For coal mines, a probable total annual production of less than 100,000 tons per year.

(ii) For all other applicants, gross total annual sales averaging less than $100,000 per year (in second quarter 1980 dollars).

(9) Used or manufactured toxics. A listing of any toxic pollutant which the applicant currently uses or manufactures as an intermediate or final product or byproduct. The Department 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 Department has adequate information to issue the permit.

(10) [Reserved].

(11) Biological toxicity tests. An identification of any biological toxicity tests which the applicant knows or has reason to believe have been made within the last 3 years on any of the applicant's discharges or on a receiving water in relation to a discharge.

(12) Contract analyses. If a contract laboratory or consulting firm performed any of the

analyses required by paragraph (g)(7) of this section, the identity of each laboratory or firm and the analyses performed.

(13) Additional information. In addition to the information reported on the application form, applicants shall provide to the Department upon request such other information as the Department may reasonably require to assess the discharges of the facility and to determine whether to issue an NPDES 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 non-process wastewater.

Except for stormwater discharges, all manufacturing, commercial, mining and silvicultural dischargers applying for NPDES permits which discharge only non-process 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 location. Outfall number, latitude and longitude to the nearest 15 seconds, and the name of the receiving water.

(2) Discharge date (for new dischargers). Date of expected commencement of discharge.

(3) Type of waste. 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) Effluent characteristics.

(i) Quantitative data for the pollutants or parameters listed below, unless testing is waived by the Department. 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. 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.

(A) Biochemical Oxygen Demand (BOD5).

(B) Total Suspended Solids (TSS).

(C) Fecal Coliform (if believed present or if sanitary waste is or will be discharged).

(D) Total Residual Chlorine (if chlorine is used).

(E) Oil and Grease.

(F) Chemical Oxygen Demand (COD) (only if non-contact cooling water is or will be discharged).

(G) Total Organic Carbon (TOC) (only if non-contact cooling water is or will be discharged).

(H) Ammonia (as N).

(I) Discharge Flow.

(J) pH.

(K) Temperature (Winter and Summer).

(ii) The Department may waive the testing and reporting requirements for any of the pollutants or flow listed in paragraph (h)(4)(i) of this section 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. If the applicant is a new discharger, he must complete and submit Item IV of Form 2e (see section 122.21(h)(4)) by providing quantitative data in accordance with that section no later than two years after commencement of discharge. However, the applicant need not complete those portions of Item IV requiring tests which he has already performed and reported under the discharge monitoring requirements of his NPDES permit.

(iii) The requirements of parts i and iii of this section 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 section 122.45(g) are met.

(5) Flow. A description of the frequency of flow and duration of any seasonal or intermittent discharge (except for stormwater runoff, leaks, or spills).

(6) Treatment system. A brief description of any system used or to be used.

(7) Optional information. Any additional information the applicant wishes to be considered, such as influent data for the purpose of obtaining "net" credits pursuant to section 122.45(g).

(8) Certification. Signature of certifying official under section 122.22.

(i) Application requirements for new and existing concentrated animal feeding operations and aquatic animal production facilities.

New and existing concentrated animal feeding operations (defined in section 122.23) and concentrated aquatic animal production facilities (defined in section 122.24) shall provide the following information to the Department, using the application form provided by the Department:

(1) For concentrated animal feeding operations:

(i) The name of the owner or operator;

(ii) The facility location and mailing addresses;

(iii) Latitude and longitude of the production area (entrance to production area);

(iv) 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 paragraph (f)(7) of this section;

(v) 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);

(vi) The type of containment and storage (anaerobic lagoon, roofed storage shed, storage ponds, under-floor 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);

(vii) The total number of acres under control of the applicant available for land application of manure, litter, or process wastewater;

(viii) Estimated amounts of manure, litter, and process wastewater generated per year (tons/gallons);

(ix) Estimated amounts of manure, litter, and process wastewater transferred to other persons per year (tons/gallons); and

(x) For CAFO 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 permit coverage.

(2) For concentrated aquatic animal production facilities:

(i) The maximum daily and average monthly flow from each outfall.

(ii) The number of ponds, raceways, and similar structures.

(iii) The name of the receiving water and the source of intake water.

(iv) For each species of aquatic animals, the total yearly and maximum harvestable weight.

(v) The calendar month of maximum feeding and the total mass of food fed during that month.

(j) Application requirements for new and existing POTWs.

Unless otherwise indicated, all POTW and other dischargers designated by the Department must provide, at a minimum, the information in this paragraph to the Department, using Form 2A or another 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 Department may waive any requirement of this paragraph if he or she has access to substantially identical information. The Department may also waive any requirement of

this paragraph 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 State's justification for the waiver. A Regional Administrator's disapproval of a State's proposed waiver does not constitute final Agency action, but does provide notice to the State and permit applicant(s) that EPA may object to any State- issued permit issued in the absence of the required information.

(1) Basic application information. All applicants must provide the following information:

(i) Facility information. Name, mailing address, and location of the facility for which the application is submitted;

(ii) Applicant information. Name, mailing address, and telephone number of the applicant, and indication as to whether the applicant is the facility's owner, operator, or both;

(iii) Existing environmental permits. Identification of all environmental permits or construction approvals received or applied for (including dates) under any of the following programs:

(A) Hazardous Waste Management program under the Resource Conservation and Recovery Act (RCRA), Subpart C;

(B) Underground Injection Control program under the Safe Drinking Water Act (SDWA);

(C) NPDES program under 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) Ocean dumping permits under the Marine Protection, Research, and Sanctuaries Act;

(H) Dredge or fill permits under section 404 of the CWA; and

(I) Other relevant environmental permits, including State permits.

(iv) Population. 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;

(v) Indian country. Information concerning whether the facility is located in Indian country and whether the facility discharges to a receiving stream that flows through Indian country;

(vi) Flow rate. 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 3 years;

(vii) Collection system. 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

(viii) Outfalls and other discharge or disposal methods. The following information for outfalls to waters of the State and/or of the United States and other discharge or disposal methods:

(A) For effluent discharges to waters of the State and/or of the United States, the total number and types of outfalls (e.g., treated effluent, combined sewer overflows, bypasses, constructed emergency overflows);

(B) For wastewater discharged to surface impoundments:

(1) The location of each surface impoundment;

(2) The average daily volume discharged to each surface impoundment; and

(3) Whether the discharge is continuous or intermittent;

(C) For wastewater applied to the land:

(1) The location of each land application site;

(2) The size of each land application site, in acres;

(3) The average daily volume applied to each land application site, in gallons per day; and

(4) Whether land application is continuous or intermittent;

(D) For effluent sent to another facility for treatment prior to discharge:

(1) The means by which the effluent is transported;

(2) 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;

(3) The name, mailing address, contact person, phone number, and NPDES permit number (if any) of the receiving facility; and

(4) The average daily flow rate from this facility into the receiving facility, in millions of gallons per day; and

(E) For wastewater disposed of in a manner not included in paragraphs (j)(1)(viii)(A) through (D) of this section (e.g., underground percolation, underground injection):

(1) A description of the disposal method, including the location and size of each disposal site, if applicable;

(2) The annual average daily volume disposed of by this method, in gallons per day; and

(3) Whether disposal through this method is continuous or intermittent;

(2) Additional Information. All applicants with a design flow greater than or equal to 0.1 mgd must provide the following information:

(i) Inflow and infiltration. The current average daily volume of inflow and infiltration, in gallons per day, and steps the facility is taking to minimize inflow and infiltration;

(ii) Topographic map. 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:

(A) Treatment plant area and unit processes;

(B) 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;

(C) Each well where fluids from the treatment plant are injected underground;

(D) 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;

(E) Sewage sludge management facilities (including on-site treatment, storage, and disposal sites); and

(F) Location at which waste classified as hazardous under RCRA enters the treatment plant by truck, rail, or dedicated pipe;

(iii) Process flow diagram or schematic.

(A) 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

(B) A narrative description of the diagram; and

(iv) Scheduled improvements, schedules of implementation. The following information regarding scheduled improvements:

(A) The outfall number of each outfall affected;

(B) A narrative description of each required improvement;

(C) Scheduled or actual dates of completion for the following:

(1) Commencement of construction;

(2) Completion of construction;

(3) Commencement of discharge; and

(4) Attainment of operational level;

(D) A description of permits and clearances concerning other Federal and/or State requirements;

(3) Information on effluent discharges. Each applicant must provide the following information for each outfall, including bypass points, through which effluent is discharged, as applicable:

(i) Description of outfall. The following information about 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) Average daily flow rate, in million gallons per day;

(F) The following information for each outfall with a seasonal or periodic discharge:

(1) Number of times per year the discharge occurs;

(2) Duration of each discharge;

(3) Flow of each discharge; and

(4) Months in which discharge occurs; and

(G) Whether the outfall is equipped with a diffuser and the type (e.g., high-rate) of diffuser used;

(ii) Description of receiving waters. The following information (if known) for each outfall through which effluent is discharged to waters of the state and or of the United States:

(A) Name of receiving water;

(B) Name of watershed/river/stream system and United States Soil Conservation Service 14-digit watershed code;

(C) Name of State Management/River Basin and United States Geological Survey 8-

digit hydrologic cataloging unit code; and

(D) Critical flow of receiving stream and total hardness of receiving stream at critical low flow (if applicable);

(iii) Description of treatment. The following information describing the treatment provided for discharges from each outfall to waters of state and/or the United States:

(A) The highest level of treatment (e.g., primary, equivalent to secondary, secondary, advanced, other) that is provided for the discharge for each outfall and:

(1) Design biochemical oxygen demand (BOD5 or CBOD5) removal (percent);

(2) Design total suspended solids (TSS) removal (percent); and, where applicable,

(3) Design phosphorus (P) removal (percent);

(4) Design nitrogen (N) removal (percent); and

(5) Any other removals that an advanced treatment system is designed to achieve.

(B) 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.

(i) As provided in paragraphs (j)(4)(ii) through (x) of this section, all applicants must submit to the Department effluent monitoring information for samples taken from each outfall through which effluent is discharged to waters of the United States, except for CSOs. The Department 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 Department may also allow applicants to composite samples from one or more outfalls that discharge into the same mixing zone;

(ii) All applicants must sample and analyze for the pollutants listed in Appendix J, Table 1A of this part;

(iii) All applicants with a design flow greater than or equal to 0.1 mgd must sample and analyze for the pollutants listed in Appendix J, Table 1 of R.61-9.122. 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 from Table 1;

(iv) The following applicants must sample and analyze for the pollutants listed in Appendix J, Table 2 of R.61-9.122, and for any other pollutants for which the State or EPA have established water quality standards applicable to the receiving waters:

(A) All POTW with a design flow rate equal to or greater than one million gallons per day;

(B) All POTW with approved pretreatment programs or POTW required to develop a pretreatment program;

(C) Other POTW, as required by the Department;

(v) The Department should require sampling for additional pollutants, as appropriate, on a case-by-case basis.

(vi) Applicants must provide data from a minimum of three samples taken within four and one-half 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 Department should require additional samples, as appropriate, on a case-by-case basis.

(vii) All existing data for pollutants specified in paragraphs (j)(4)(ii) through (v) of this section that is collected within four and one-half 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.

(viii) Applicants must collect samples of effluent and analyze such samples for pollutants in accordance with analytical methods approved under 40 CFR part 136 unless an alternative is specified in the existing NPDES 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.

(ix) The effluent monitoring data provided must include at least the following information for each parameter:

(A) Maximum daily discharge, expressed as concentration or mass, based upon actual sample values;

(B) Average daily discharge for all samples, expressed as concentration or mass, and the number of samples used to obtain this value;

(C) The analytical method used; and

(D) The threshold level (i.e., method detection limit, minimum level, or other designated method endpoints) for the analytical method used.

(x) Unless otherwise required by the Department, metals must be reported as total recoverable.

(5) Effluent monitoring for whole effluent toxicity.

(i) All applicants must provide an identification of any whole effluent toxicity tests conducted during the four and one-half years prior to the date of the application on any of the applicant's discharges or on any receiving water near the discharge.

(ii) As provided in paragraphs (j)(5)(iii)-(ix) of this section, 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:

(A) All POTW with design flow rates greater than or equal to one million gallons per day;

(B) All POTW with approved pretreatment programs or POTW required to develop a pretreatment program;

(C) Other POTW, as required by the Department, based on consideration of the following factors:

(1) 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);

(2) The ratio of effluent flow to receiving stream flow;

(3) Existing controls on point or non-point sources, including total maximum daily load calculations for the receiving stream segment and the relative contribution of the POTW;

(4) 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

(5) Other considerations (including, but not limited to, the history of toxic impacts and compliance problems at the POTW) that the Department determines could cause or contribute to adverse water quality impacts.

(iii) Where the POTW has two or more outfalls with substantially identical effluent discharging to the same receiving stream segment, the Department may allow applicants to submit whole effluent toxicity data for only one outfall on a case-by-case basis. The Department may also allow applicants to composite samples from one or more outfalls that discharge into the same mixing zone.

(iv) Each applicant required to perform whole effluent toxicity testing pursuant to paragraph (j)(5)(ii) of this section must provide:

(A) Results of a minimum of four quarterly tests for a year, from the year preceding the permit application; or

(B) Results from four tests performed at least annually in the four and one half year period prior to the application, provided the results show no appreciable toxicity using a safety factor determined by the permitting authority.

(v) 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. EPA recommends that applicants conduct acute or chronic testing based on the following dilutions:

(A) Acute toxicity testing if the dilution of the effluent is greater than 1000:1 at the edge of the mixing zone;

(B) Acute or chronic toxicity testing if the dilution of the effluent is between 100:1 and 1000:1 at the edge of the mixing zone. Acute testing may be more appropriate at the higher end of this range (1000:1), and chronic testing may be more appropriate at the lower end of this range (100:1); and

(C) Chronic testing if the dilution of the effluent is less than 100:1 at the edge of the mixing zone.

(vi) Each applicant required to perform whole effluent toxicity testing pursuant to paragraph (j)(5)(ii) of this section must provide the number of chronic or acute whole effluent toxicity tests that have been conducted since the last permit reissuance.

(vii) 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 paragraph (j)(5)(ii) of this section for which such information has not been reported previously to the Department.

(viii) Whole effluent toxicity testing conducted pursuant to paragraph (j)(5)(ii) of this section must be conducted using methods approved under 40 CFR part 136.

(ix) For whole effluent toxicity data submitted to the Department within four and one-half 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.

(x) Each POTW required to perform whole effluent toxicity testing pursuant to paragraph (j)(5)(ii) of this section 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 four and one-half years revealed toxicity.

(1) Industrial discharges. Applicants must submit the following information about industrial discharges to the POTW:

(i) Number of significant industrial users (SIU) and categorical industrial users (CIU) discharging to the POTW; and

(ii) POTW with one or more SIU shall provide the following information for each SIU, as defined at R.61-9.403.3(o), that discharges to the POTW:

(A) Name and mailing address;

(B) Description of all industrial processes that affect or contribute to the SIU's discharge;

(C) Principal products and raw materials of the SIU that affect or contribute to the SIU's discharge;

(D) Average daily volume of wastewater discharged, indicating the amount attributable to process flow and non-process flow;

(E) Whether the SIU is subject to local limits;

(F) Whether the SIU is subject to categorical standards, and if so, under which

category(ies) and subcategory(ies); and

(G) Whether any problems at the POTW (e.g., upsets, pass through, interference) have been attributed to the SIU in the past four and one-half years.

(iii) The information required in paragraphs (j)(6)(i) and (ii) of this section may be waived by the Department for POTW with pretreatment programs if the applicant has submitted either of the following that contain information substantially identical to that required in paragraphs (j)(6)(i) and (ii) of this section.

(A) An annual report submitted within one year of the application; or

(B) A pretreatment program;

(2) Discharges from hazardous waste generators and from waste cleanup or remediation sites. POTW 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:

(i) 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, the applicant must report the following:

(A) The method by which the waste is received (i.e., whether by truck, rail, or dedicated pipe) and

(B) The hazardous waste number and amount received annually of each hazardous waste;

(ii) 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 sections 3004(u) or 3008(h) of RCRA, the applicant must report the following:

(A) The identity and description of the site(s) or facility(ies) at which the wastewater originates;

(B) The identities of the wastewater's hazardous constituents, as listed in Appendix VIII of 40 CFR part 261, if known; and

(C) The extent of treatment, if any, the wastewater receives or will receive before entering the POTW.

(iii) Applicants are exempt from the requirements of paragraph (j)(7)(ii) of this section if they receive no more than fifteen 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).

(3) Combined sewer overflows. Each applicant with combined sewer systems must provide the following information:

(i) Combined sewer system information. The following information regarding the combined sewer system:

(A) System map. A map indicating the location of the following:

(1) All CSO discharge points;

(2) Sensitive use areas potentially affected by CSO (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding national resource waters); and

(3) Waters supporting threatened and endangered species potentially affected by CSO; and

(B) System diagram. A diagram of the combined sewer collection system that includes the following information:

(1) The location of major sewer trunk lines, both combined and separate sanitary;

(2) The locations of points where separate sanitary sewers feed into the combined sewer system;

(3) In-line and off-line storage structures;

(4) The locations of flow-regulating devices; and

(5) The locations of pump stations.

(ii) Information on CSO outfalls. The following information for each CSO discharge point covered by the permit application:

(A) Description of outfall. The following information on 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) 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;

(v) CSO frequency; and

(6) The number of storm events monitored in the past year;

(B) CSO events. The following information about CSO overflows from each outfall:

(1) The number of events in the past year;

(2) The average duration per event, if available;

(3) The average volume per CSO event, if available; and

(4) The minimum rainfall that caused a CSO event, if available, in the last year.

(C) Description of receiving waters. The following information about receiving waters:

(1) Name of receiving water;

(2) Name of watershed/stream system and the United States Soil Conservation Service watershed (14-digit) code (if known); and

(3) Name of State Management/River Basin and the United States Geological Survey hydrologic cataloging unit (8-digit) code (if known); and

(D) CSO operations. 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);

(4) Contractors. 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; and

(5) Signature. All applications must be signed by a certifying official in compliance with section 122.22.

(k) Application requirements for new sources and new discharges.

New manufacturing, commercial, mining, and silvicultural dischargers applying for NPDES permits (except for new discharges of facilities subject to the requirements of paragraph (h) of this section or new discharges of storm water associated with industrial activity which are subject to the requirements of section 122.26(c)(1) and this section (except as provided by section 122.26(c)(1)(ii)) shall provide the following information to the Department, using application forms provided by the Department.

(1) Expected outfall location. The latitude and longitude to the nearest 15 seconds and the name of the receiving water.

(2) Discharge dates. The expected date of commencement of discharge.

(3) Flows, sources of pollution, and treatment technologies.

(i) Expected treatment of wastewater. 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.

(ii) Line drawing. A line drawing of the water flow through the facility with a water balance as described in section 122.21(g)(2).

(iii) Intermittent flows. 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 runoff, spillage, or leaks).

(4) Production. If a new source performance standard promulgated under section 306 of CWA or an effluent limitation guideline applies to the applicant and is expressed in terms of production (or other measure of operation), 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 as required by section 122.45(b)(2) for each of the first three years. Alternative estimates may also be submitted if production is likely to vary.

(5) Effluent characteristics. The requirements in paragraphs (h)(4)(i), (ii), and (iii) 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 section 122.45(g) are met. All levels (except for discharge flow, temperature, and pH) must be estimated as concentration and as total mass.

(i) Each applicant must report estimated daily maximum, daily average, and source of information for each outfall for the following pollutants or parameters. The Department 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.

(A) Biochemical Oxygen Demand (BOD).

(B) Chemical Oxygen Demand (COD).

(C) Total Organic Carbon (TOC).

(D) Total Suspended Solids (TSS).

(E) Flow.

(F) Ammonia (as N).

(G) Temperature (winter and summer).

(H) pH.

(ii) 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 Appendix D (certain conventional and nonconventional pollutants).

(iii) 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:

(A) The pollutants listed in Table III of Appendix D (the toxic metals, in the discharge from any outfall; total cyanide, and total phenols);

(B) The organic toxic pollutants in Table II of Appendix D (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.

(iv) 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 the effluent:

(A) 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) (CAS #93-76-5);

(B) 2-(2,4,5-trichlorophenoxy)propanoic acid (Silvex, 2,4,5-TP) (CAS #93-72-1);

(C) 2-(2,4,5-trichlorophenoxy) ethyl 2,2,-dichloropropionate (Erbon) (CAS #136-25-4);

(D) O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) (CAS #299-84-3);

(E) 2,4,5-trichlorophenol (TCP) (CAS #95-95-4); or

(F) Hexachlorophene (HCP) (CAS #70-30-4);

(v) Each applicant must report any pollutants listed in Table V of Appendix D (certain hazardous substances) if he believes they will be present in any outfall (no quantitative estimates are required unless they are already available).

(vi) No later than two years after the commencement of discharge from the proposed facility, the applicant is required to complete and submit Items V and VI of NPDES application Form 2c (see section 122.21(g)). However, the applicant need not complete those portions of Item V requiring tests which he has already performed and reported under the discharge monitoring requirements of his NPDES permit.

(6) Engineering Report. 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) Other information. Any optional information the permittee wishes to have considered.

(8) Certification. Signature of certifying official under section 122.22.

(l) [Reserved].

(m) 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 paragraph:

(1) Fundamentally different factors.

(i) 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:

(A) For a request from best practicable control technology currently available (BPT) by the close of the public comment period under R.61-9.124.10.

(B) For a request from best available technology economically achievable (BAT) and/or best conventional pollutant control technology (BCT), by no later than:

(1) 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

(2) 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.

(ii) The request shall explain how the requirements of the applicable regulatory and/or statutory criteria have been met.

(2) Non-conventional pollutants. A request for a variance from the BAT requirements for CWA section 301(b)(2)(F) pollutants (commonly called "non-conventional" pollutants) pursuant to section 301(c) of CWA because of the economic capability of the owner or operator, or pursuant to section 301(g) of the CWA (provided, however, that a section 301(g) variance may only be requested for ammonia; chlorine; color; iron; total phenols (4AAP) (when determined by the Department to be a pollutant covered by section 301(b)(2)(F)) and any other pollutant which the Administrator lists under section 301(g)(4) of the CWA) must be made as follows:

(i) For those requests for a variance from an effluent limitation based upon an effluent limitation guideline by:

(A) 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 section 301(c) or section 301(g) modification or both. This request must have been filed not later than:

(1) September 25, 1978, for a pollutant which is controlled by a BAT effluent limitation guideline promulgated before December 27, 1977; or

(2) 270 days after promulgation of an applicable effluent limitation guideline for guidelines promulgated after December 27, 1977, and

(B) Submitting a completed request no later than the close of the public comment period under section 124.10 demonstrating that the requirements of section 124.13 and the applicable requirements of R.61-9.125 have been met.

(C) Notwithstanding this provision, the complete application for a request under section 301(g) shall be filed 180 days before EPA must make a decision.

(ii) For those requests for a variance from effluent limitations not based on effluent limitation guidelines, the request need only comply with paragraph (m)(2)(i)(B) of this section and need not be preceded by a initial request under paragraph (m)(2)(i)(A) of this section.

(3) [Reserved].

(4) [Reserved].

(5) Water quality related effluent limitations. A modification under section 302(b)(2) of requirements under section 302(a) for achieving water quality related effluent limitations may be requested no later than the close of the public comment period under R.61-9.124.10 on the permit from which the modification is sought.

(6) Thermal discharges. A variance under CWA section 316(a) 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 under CWA Section 402(a)(1) or are based on water quality standards, the request for a variance may be filed by the close of the public comment period under R.61-9.124.10. A copy of the request as required under R.61-9.125, Part H, shall be sent simultaneously to the appropriate State or interstate certifying agency as required under R.61-9.125. (See 40 CFR 124.66 for special procedures for thermal variances in accordance with section 316(a) of the CWA.)

(n) 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) Discharges into marine waters. A request for a modification under CWA section 301(h) of requirements of CWA section 301(b)(1)(B) for discharges into marine waters must be filed in accordance with the requirements of R.61-9.125 Part G.

(2) [Reserved].

(3) Water quality based effluent limitation. A modification under CWA section 302(b)(2) of the requirements under section 302(a) for achieving water quality based effluent limitations shall be requested no later than the close of the public comment period under section 124.10 on the permit from which the modification is sought.

(o) Expedited variance procedures and time extensions.

(1) Notwithstanding the time requirements in paragraphs (m) and (n) of this section, the Department may notify a permit applicant before a draft permit is issued under section 124.6 that the draft permit will likely contain limitations which are eligible for variances. In the notice the Department may require the applicant as a condition of consideration of any potential variance request to submit a

request, explaining how the requirements of R.61-9.125 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 paragraph (m)(2)(i)(B) or (m)(2)(ii) of this section may request an extension. The extension may be granted or denied at the discretion of the Department. Extensions shall be no more than 6 months in duration.

(p) Recordkeeping.

Except for information required by paragraph (q) 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 R.61-9.503 or R.61-9.504), 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 3 years from the date the application is signed.

(q) Sewage sludge management.

All TWTDS subject to paragraph (c)(2)(i) of this section must provide the information in this paragraph to the Department, using Form 2S or another 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 Department may waive any requirement of this paragraph if he or she has access to substantially identical information. The Department may also waive any requirement of this paragraph 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 State's justification for the waiver. A Regional Administrator's disapproval of a State's proposed waiver does not constitute final Agency action, but does provide notice to the State and permit applicant(s) that EPA may object to any State-issued permit issued in the absence of the required information.

(1) Facility information. All applicants must submit the following information:

(i) The name, mailing address, and location of the TWTDS for which the application is submitted;

(ii) Whether the facility is a Class I Sludge Management Facility;

(iii) The design flow rate (in million gallons per day);

(iv) The total population served; and

(v) The status of the TWTDS as Federal, State, private, public, or other entity.

(2) Applicant information. All applicants must submit the following information:

(i) The name, mailing address, and telephone number of the applicant; and

(ii) Indication whether the applicant is the owner, operator, or both.

(3) Permit information. All applicants must submit the facility's NPDES 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:

(i) Hazardous Waste Management program under the Resource Conservation and Recovery Act (RCRA);

(ii) UIC program under the Safe Drinking Water Act (SDWA);

(iii) NPDES program under the Clean Water Act (CWA);

(iv) Prevention of Significant Deterioration (PSD) program under the Clean Air Act;

(v) Nonattainment program under the Clean Air Act;

(vi) National Emission Standards for Hazardous Air Pollutants (NESHAPS) preconstruction approval under the Clean Air Act;

(vii) Dredge or fill permits under section 404 of CWA;

(viii) Other relevant environmental permits, including State or local permits.

(4) Indian country. All applicants must identify any generation, treatment, storage, land application, or disposal of sewage sludge that occurs in Indian country.

(5) Topographic map. 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:

(i) All sewage sludge management facilities, including on-site treatment, storage, and disposal sites and

(ii) 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.

(6) Sewage sludge handling. 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.

(7) Sewage sludge quality. The applicant must submit sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in R.61-9.503 for the applicant's use or disposal practices on the date of permit application.

(i) The Department may require sampling for additional pollutants, as appropriate, on a case-by-case basis.

(ii) Applicants must provide data from a minimum of three samples taken within four and one-half 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.

(iii) Applicants must collect and analyze samples in accordance with analytical methods approved under SW-846 unless an alternative has been specified in an existing sewage sludge permit.

(iv) The monitoring data provided must include at least the following information for each parameter:

(A) Average monthly concentration for all samples (mg/kg dry weight), based upon actual sample values;

(B) The analytical method used; and

(C) The method detection level.

(8) Preparation of sewage sludge. If the applicant is a "person who prepares" sewage sludge, as defined at R.61-9.503.9(r), the applicant must provide the following information:

(i) If the applicant's facility generates sewage sludge, the total dry metric tons per 365-day period generated at the facility;

(ii) If the applicant's facility receives sewage sludge from another facility, the following information for each facility from which sewage sludge is received:

(A) The name, mailing address, and location of the other facility;

(B) The total dry metric tons per 365-day period received from the other facility; and

(C) A description of any treatment processes occurring at the other facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics.

(iii) If the applicant's facility changes the quality of sewage sludge through blending, treatment, or other activities, the following information:

(A) Whether the Class A pathogen reduction requirements in R.61-9.503.32(a) or the Class B pathogen reduction requirements in R.61-9.503.32(b) are met, and a description of any treatment processes used to reduce pathogens in sewage sludge;

(B) Whether any of the vector attraction reduction options of R.61-9.503.33(b)(1) through (b)(8) are met, and a description of any treatment processes used to reduce vector attraction properties in sewage sludge; and

(C) A description of any other blending, treatment, or other activities that change the quality of sewage sludge.

(iv) If sewage sludge from the applicant's facility meets the ceiling concentrations in R.61-9.503.13(b)(1), the pollutant concentrations in section 503.13(b)(3), the Class A pathogen requirements in section 503.32(a), and one of the vector attraction reduction requirements in section 503.33(b)(1) through (b)(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 paragraph that is applied to the land.

(v) 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 paragraph (q)(8)(iv) of this section, the applicant must provide the following information:

(A) The total dry metric tons per 365-day period of sewage sludge subject to this paragraph that is sold or given away in a bag or other container for application to the land and

(B) A copy of all labels or notices that accompany the sewage sludge being sold or given away.

(vi) If sewage sludge from the applicant's facility is provided to another "person who prepares," as defined at R.61-9.503.9(r), and the sewage sludge is not subject to paragraph (q)(8)(iv) of this section, the applicant must provide the following information for each facility receiving the sewage sludge:

(A) The name and mailing address of the receiving facility;

(B) The total dry metric tons per 365-day period of sewage sludge subject to this paragraph that the applicant provides to the receiving facility;

(C) A description of any treatment processes occurring at the receiving facility, including blending activities and treatment to reduce pathogens or vector attraction characteristic;

(D) A copy of the notice and necessary information that the applicant is required to provide the receiving facility under R.61-9.503.12(g); and

(E) 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.

(9) Land application of bulk sewage sludge. If sewage sludge from the applicant's facility is applied to the land in bulk form, and is not subject to paragraphs (q)(8)(iv), (v), or (vi) of this section, the applicant must provide the following information:

(i) The total dry metric tons per 365-day period of sewage sludge subject to this paragraph that is applied to the land;

(ii) 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;

(iii) The following information for each land application site that has been identified at the time of permit application.

(A) The name (if any), and location for the land application site;

(B) The site's latitude and longitude to the nearest second, and method of determination;

(C) A topographic map (or other map if a topographic map is unavailable) that shows the

site's location;

(D) The name, mailing address, and telephone number of the site owner, if different from the applicant;

(E) The name, mailing address, and telephone number of the person who applies sewage sludge to the site, if different from the applicant;

(F) Whether the site is agricultural land, forest, a public contact site, or a reclamation site, as such site types are defined under R.61-9.503.11;

(G) The type of vegetation grown on the site, if known, and the nitrogen requirement for this vegetation;

(H) Whether either of the vector attraction reduction options of R.61-9. 503.33(b)(9) or (b)(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

(I) Other information that describes how the site will be managed, as specified by the permitting authority.

(iv) 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 R.61-9.503.13(b)(2) to the site:

(A) Whether the applicant has contacted the permitting authority in the State where the bulk sewage sludge subject to section 503.13(b)(2) will be applied, to ascertain whether bulk sewage sludge subject to section 503.13(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;

(B) 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 section 503.13(b)(2) to the site since July 20, 1993, if, based on the inquiry in paragraph (q)(iv)(A), bulk sewage sludge subject to cumulative pollutant loading rates in section 503.13(b)(2) has been applied to the site since July 20, 1993;

(v) 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:

(A) Describes the geographical area covered by the plan;

(B) Identifies the site selection criteria;

(C) Describes how the site(s) will be managed;

(D) Provides for advance notice to the Department of specific land application sites and reasonable time for the permit authority to object prior to land application of the sewage sludge; and

(E) Provides for advance public notice of land application sites in the manner prescribed by State and local law. When State or local law does not require advance public notice, it must be

provided in a manner reasonably calculated to apprise the general public of the planned land application.

(10) Surface disposal. If sewage sludge from the applicant's facility is placed on a surface disposal site, the applicant must provide the following information:

(i) The total dry metric tons of sewage sludge from the applicant's facility that is placed on surface disposal sites per 365-day period;

(ii) The following information for each surface disposal site receiving sewage sludge from the applicant's facility that the applicant does not own or operate:

(A) The site name or number, contact person, mailing address, and telephone number for the surface disposal site and

(B) The total dry metric tons from the applicant's facility per 365-day period placed on the surface disposal site;

(iii) The following information for each active sewage sludge unit at each surface disposal site that the applicant owns or operates:

(A) The name or number and the location of the active sewage sludge unit;

(B) The unit's latitude and longitude to the nearest second, and method of determination;

(C) If not already provided, a topographic map (or other map if a topographic map is unavailable) that shows the unit's location;

(D) The total dry metric tons placed on the active sewage sludge unit per 365-day period;

(E) The total dry metric tons placed on the active sewage sludge unit over the life of the unit;

(F) A description of any liner for the active sewage sludge unit, including whether it has a maximum permeability of 1 x 10-7 cm/sec;

(G) 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;

(H) 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;

(I) The remaining capacity (dry metric tons) for the active sewage sludge unit;

(J) The date on which the active sewage sludge unit is expected to close, if such a date has been identified;

(K) The following information for any other facility that sends sewage sludge to the active sewage sludge unit:

(1) The name, contact person, and mailing address of the facility and

(2) 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;

(L) Whether any of the vector attraction reduction options of R.61-9.503.33(b)(9) through (b)(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;

(M) The following information, as applicable to any ground water monitoring occurring at the active sewage sludge unit:

(1) A description of any ground water monitoring occurring at the active sewage sludge unit;

(2) Any available ground-water monitoring data, with a description of the well locations and approximate depth to ground water;

(3) A copy of any ground-water monitoring plan that has been prepared for the active sewage sludge unit;

(4) A copy of any certification that has been obtained from a qualified ground-water scientist that the aquifer has not been contaminated; and

(N) 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.

(11) Incineration. If sewage sludge from the applicant's facility is fired in a sewage sludge incinerator, the applicant must provide the following information:

(i) The total dry metric tons of sewage sludge from the applicant's facility that is fired in sewage sludge incinerators per 365-day period;

(ii) The following information for each sewage sludge incinerator firing the applicant's sewage sludge that the applicant does not own or operate:

(A) The name and/or number, contact person, mailing address, and telephone number of the sewage sludge incinerator and

(B) The total dry metric tons from the applicant's facility per 365-day period fired in the sewage sludge incinerator;

(iii) The following information for each sewage sludge incinerator that the applicant owns or operates:

(A) The name and/or number and the location of the sewage sludge incinerator;

(B) The incinerator's latitude and longitude to the nearest second, and method of determination;

(C) The total dry metric tons per 365-day period fired in the sewage sludge incinerator;

(D) Information, test data, and documentation of ongoing operating parameters indicating that compliance with the National Emission Standard for Beryllium in 40 CFR part 61 will be achieved;

(E) Information, test data, and documentation of ongoing operating parameters indicating that compliance with the National Emission Standard for Mercury in 40 CFR part 61 will be achieved;

(F) The dispersion factor for the sewage sludge incinerator, as well as modeling results and supporting documentation;

(G) The control efficiency for parameters regulated in R.61-9.503.43, as well as performance test results and supporting documentation;

(H) Information used to calculate the risk specific concentration (RSC) for chromium, including the results of incinerator stack tests for hexavalent and total chromium concentrations, if the applicant is requesting a chromium limit based on a site-specific RSC value;

(I) Whether the applicant monitors total hydrocarbons (THC) or carbon monoxide (CO) in the exit gas for the sewage sludge incinerator;

(J) The type of sewage sludge incinerator;

(K) The maximum performance test combustion temperature, as obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies;

(L) The following information on the sewage sludge feed rate used during the performance test:

(1) Sewage sludge feed rate in dry metric tons per day;

(2) Identification of whether the feed rate submitted is average use or maximum design; and

(3) A description of how the feed rate was calculated;

(M) The incinerator stack height in meters for each stack, including identification of whether actual or creditable stack height was used;

(N) The operating parameters for the sewage sludge incinerator air pollution control device(s), as obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies;

(O) Identification of the monitoring equipment in place, including (but not limited to) equipment to monitor the following:

(1) Total hydrocarbons or Carbon Monoxide;

(2) Percent oxygen;

(3) Percent moisture; and

(4) Combustion temperature; and

(P) A list of all air pollution control equipment used with this sewage sludge incinerator.

(12) Disposal in a municipal solid waste landfill. 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:

(i) The name, contact person, mailing address, location, and all applicable permit numbers of the MSWLF;

(ii) The total dry metric tons per 365-day period sent from this facility to the MSWLF;

(iii) 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

(iv) Information, if known, indicating whether the MSWLF complies with criteria set forth in 40 CFR part 258.

(13) Contractors. 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.

(14) Other information. At the request of the Department, the applicant must provide any other information necessary to determine the appropriate standards for permitting under R.61-9.503, 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.

(15) Signature. All applications must be signed by a certifying official in compliance with section 122.22.

**122.22 Signatories to permit applications and reports.**

(a) Applications. All permit applications shall be signed as follows:

(1) For a corporation: by a responsible corporate officer. For the purpose of this section, 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 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 initiating and directing other comprehensive measures to assure long term

environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency or public facility: By either a principal executive officer, mayor, or other duly authorized employee or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(i) The chief executive officer of the agency, or

(ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator, Region IV, EPA).

(b) All reports required by permits, and other information requested by the Department, shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a) of this section;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,

(3) The written authorization is submitted to the Department.

(c) Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) Certification. Any person signing a document under paragraph (a) or (b) of 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."

**122.23 Concentrated animal feeding operations.**

(a) Permit requirement for CAFO. Concentrated animal feeding operations, as defined in paragraph (b) of this section, are point sources that require NPDES permits for discharges or potential discharges. Once an operation is defined as a CAFO, the NPDES requirements for CAFO apply with respect to all

animals in confinement at the operation and all manure, litter, and process wastewater generated by those animals or the production of those animals, regardless of the type of animal.

(b) Definitions applicable to this section:

(1) "Animal feeding operation (AFO)" means a lot or facility (other than an aquatic animal production facility)

(i) where the following conditions are met:

(A) 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

(B) Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

(ii) Two or more AFO under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation if they adjoin each other or if they use a common area or system for the disposal of wastes.

(2) "Concentrated animal feeding operation (CAFO)" means an AFO that is defined as a Large CAFO or as a Medium CAFO by the terms of this paragraph, or that is designated as a CAFO in accordance with paragraph (c) of this section.

(3) The term "land application area" means land under the control of an AFO owner or operator, whether it is owned, rented, or leased, to which manure, litter, or process wastewater from the production area is or may be applied.

(4) "Large concentrated animal feeding operation (Large CAFO)". An AFO is defined as a Large CAFO if it stables or confines as many as or more than the numbers of animals specified in any of the following categories:

(i) 700 mature dairy cows, whether milked or dry;

(ii) 1,000 veal calves;

(iii) 1,000 cattle other than mature dairy cows or veal calves. The term cattle includes but is not limited to heifers, steers, bulls, and cow/calf pairs;

(iv) 2,500 swine, each weighing 55 pounds or more;

(v) 10,000 swine, each weighing less than 55 pounds;

(vi) 500 horses;

(vii) 10,000 sheep or lambs;

(viii) 55,000 turkeys;

(ix) 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;

(x) 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;

(xi) 82,000 laying hens, if the AFO uses other than a liquid manure handling system;

(xii) 30,000 ducks, if the AFO uses other than a liquid manure handling system; or

(xiii) 5,000 ducks, if the AFO uses a liquid manure handling system.

(5) The term "manure" is defined to include manure, bedding, compost, and raw materials or other materials commingled with manure or set aside for disposal.

(6) "Medium concentrated animal feeding operation (Medium CAFO)". The term Medium CAFO includes any AFO with the type and number of animals that fall within any of the ranges listed in paragraph (b)(6)(i) of this section and which has been defined or designated as a CAFO. An AFO is defined as a Medium CAFO if:

(i) The type and number of animals that it stables or confines falls within any of the following ranges:

(A) 200 to 699 mature dairy cows, whether milked or dry;

(B) 300 to 999 veal calves;

(C) 300 to 999 cattle other than mature dairy cows or veal calves. The term cattle includes but is not limited to heifers, steers, bulls and cow/calf pairs;

(D) 750 to 2,499 swine each weighing 55 pounds or more;

(E) 3,000 to 9,999 swine each weighing less than 55 pounds;

(F) 150 to 499 horses;

(G) 3,000 to 9,999 sheep or

lambs; (H) 16,500 to 54,999

turkeys;

(I) 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;

(J) 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;

(K) 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;

(L) 10,000 to 29,999 ducks, if the AFO uses other than a liquid manure handling system; or

(M) 1,500 to 4,999 ducks, if the AFO uses a liquid manure handling system; and

(ii) Either one of the following conditions is met:

(A) Pollutants are discharged into waters of the State through a man-made ditch, flushing system, or other similar man-made device or

(B) Pollutants are discharged directly into waters of the State which originate outside of the facility and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

(7) "Process wastewater" means water directly or indirectly used in the operation of the AFO for any or all 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 animals; or dust control. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts including manure, litter, feed, milk, eggs, or bedding.

(8) "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, milk rooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under-house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area 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 which 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.

(9) "Small concentrated animal feeding operation (Small CAFO)". An AFO that is designated as a CAFO and that is not a Medium CAFO.

(c) How may an AFO be designated as a CAFO? The appropriate authority (i.e., the Department or Regional Administrator, or both, as specified in paragraph (c)(1) of this section) may designate any AFO as a CAFO upon determining that it is a significant contributor of pollutants to waters of the State.

(1) Who may designate? In South Carolina, CAFO designations may be made by the Department. The Regional Administrator may also designate CAFO in South Carolina, but only where the Regional Administrator has determined that one or more pollutants in the AFO's discharge contributes to an impairment in a downstream or adjacent state or Indian country water that is impaired for that pollutant.

(2) In making this designation, the Department or the Regional Administrator shall consider the following factors:

(i) The size of the AFO and the amount of wastes reaching waters of the State;

(ii) The location of the AFO relative to waters of the State;

(iii) The means of conveyance of animal wastes and process wastewaters into waters of the State;

(iv) The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge of animal wastes, manure, and process waste waters into waters of the State; and

(v) Other relevant factors.

(3) No AFO shall be designated under this paragraph unless the Department or the Regional Administrator has conducted an on-site inspection of the operation and determined that the operation should and could be regulated under the permit program. In addition, no AFO with numbers of animals below those established in paragraph (b)(6) of this section may be designated as a CAFO unless:

(i) Pollutants are discharged into waters of the State through a manmade ditch, flushing system, or other similar manmade device or

(ii) Pollutants are discharged directly into waters of the State which originate outside of the facility and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

(d) Who must seek coverage under an NPDES permit?

(1) All CAFO owners or operators must apply for a permit. All CAFO owners or operators must seek coverage under an NPDES permit, except as provided in paragraph (d)(2) of this section. Specifically, the CAFO owner or operator must either apply for an individual NPDES permit or submit a notice of intent for coverage under an NPDES general permit. If the Department has not made a general permit available to the CAFO, the CAFO owner or operator must submit an application for an individual permit to the Department.

(2) Exception. An owner or operator of a Large CAFO need not seek coverage under an NPDES permit otherwise required by this section once the owner or operator has received from the Department notification of a determination under paragraph (f) of this section that the CAFO has "no potential to discharge" manure, litter, or process wastewater.

(3) Information to submit with permit application. A permit application for an individual permit must include the information specified in section 122.21. A notice of intent for a general permit must include the information specified in sections 122.21 and 122.28.

(e) Land application discharges from a CAFO are subject to NPDES requirements. The discharge of manure, litter, or process wastewater to waters of the State from a CAFO as a result of the application of that manure, litter, or process wastewater by the CAFO to land areas under its control is a discharge from that CAFO subject to NPDES permit requirements, except where it is an agricultural storm water discharge as provided in 33 U.S.C. 1362(14). For purposes of this paragraph, where the manure, litter or process wastewater has been applied in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater, as specified in section 122.42(e)(1)(vi) through (ix), a precipitation-related discharge of manure, litter, or process wastewater from land areas under the control of a CAFO is an agricultural storm water discharge.

(f) "No potential to discharge" determinations for Large CAFO.

(1) Determination by the Department. The Department, upon request, may make a case-specific determination that a Large CAFO has "no potential to discharge" pollutants to waters of the State. In making this determination, the Department must consider the potential for discharges from both the production area and any land application areas. The Department must also consider any record of prior discharges by the CAFO. In no case may the CAFO be determined to have "no potential to discharge" if it has had a discharge within the 5 years prior to the date of the request submitted under paragraph (f)(2) of this section. For purposes of this section, the term "no potential to discharge" means that there is no potential for any CAFO manure, litter, or process wastewater to be added to waters of the State under any circumstance or climatic condition. A determination that there is "no potential to discharge" for purposes of this section only relates to discharges of manure, litter, and process wastewater covered by this section.

(2) Information to support a "no potential to discharge" request. In requesting a determination of "no potential to discharge", the CAFO owner or operator must submit any information that would support such a determination, within the time frame provided by the Department and in accordance with paragraphs (g) and (h) of this section. Such information must include all of the information specified in sections 122.21(f) and (i)(1)(i) through (ix). The Department has discretion to require additional information to supplement the request and may also gather additional information through on-site inspection of the CAFO.

(3) Process for making a "no potential to discharge" determination. Before making a final decision to grant a "no potential to discharge" determination, the Department must issue a notice to the public stating that a "no potential to discharge" request has been received. This notice must be accompanied by a fact sheet which includes, when applicable, a brief description of the type of facility or activity which is the subject of the "no potential to discharge" determination; a brief summary of the factual basis upon which the request is based for granting the "no potential to discharge" determination; and a description of the procedures for reaching a final decision on the "no potential to discharge" determination. The Department must base the decision to grant a "no potential to discharge" determination on the administrative record, which shall include all information submitted in support of a "no potential to discharge" determination and any other supporting data gathered by the permitting authority. The Department must notify any CAFO seeking a "no potential to discharge" determination of its final determination within 90 days of receiving the request.

(4) What is the deadline for requesting a "no potential to discharge" determination? The owner or operator must request a "no potential to discharge" determination by the applicable permit application date specified in paragraph (g) of this section. If the Department's final decision is to deny the "no potential to discharge" determination, the owner or operator must seek coverage under a permit within 30 days after the denial.

(5) The "no potential to discharge" determination does not relieve the CAFO from the consequences of an actual discharge. Any unpermitted CAFO that discharges pollutants into the waters of the State is in violation of the Clean Water Act and PCA even if it has received a "no potential to discharge" determination from the Department. Any CAFO that has received a determination of "no potential to discharge", but who anticipates changes in circumstances that could create the potential for a discharge, should contact the Department and apply for and obtain permit authorization prior to the change of circumstances.

(6) The Department retains authority to require a permit. Where the Department has issued a determination of "no potential to discharge", the Department retains the authority to subsequently require

NPDES permit coverage if circumstances at the facility change, if new information becomes available, or if there is another reason for the Department to determine that the CAFO has a potential to discharge.

(g) When must a CAFO seek coverage under an NPDES permit?

(1) Operations defined as CAFO prior to the effective date of this regulation. For operations that are defined as CAFO under regulations that are in effect prior to the effective date of this regulation, the owner or operator must have or seek to obtain coverage under an NPDES permit as of the effective date of this regulation and comply with all applicable NPDES requirements, including the duty to maintain permit coverage in accordance with paragraph (h) of this section.

(2) Operations defined as CAFO as of the effective date of this regulation, who were not defined as CAFO prior to that date. For all CAFO, the owner or operator of the CAFO must seek to obtain coverage under an NPDES permit by a date specified by the Department, but no later than February 13, 2006.

(3) Operations that become defined as CAFO after the effective date of this regulation, but which are not new sources. For newly constructed AFO and AFO that make changes to their operations that result in becoming defined as CAFO for the first time, after the effective date of this regulation, but that are not new sources, the owner or operator must seek to obtain coverage under an NPDES permit, as follows:

(i) For newly constructed operations not subject to effluent limitations guidelines, 180 days prior to the time CAFO commences operation or

(ii) For other operations (e.g., resulting from an increase in the number of animals), as soon as possible, but no later than 90 days after becoming defined as a CAFO; except that

(iii) If an operational change that makes the operation a CAFO would not have made it a CAFO prior to the effective date of this regulation, the operation has until April 13, 2006, or 90 days after becoming defined as a CAFO, whichever is later.

(4) New sources. New sources must seek to obtain coverage under a permit at least 180 days prior to the time that the CAFO commences operation.

(5) Operations that are designated as CAFO. For operations designated as a CAFO in accordance with paragraph (c) of this section, the owner or operator must seek to obtain coverage under a permit no later than 90 days after receiving notice of the designation.

(6) No potential to discharge. Notwithstanding any other provision of this section, a CAFO that has received a "no potential to discharge" determination in accordance with paragraph (f) of this section is not required to seek coverage under an NPDES permit that would otherwise be required by this section. If circumstances materially change at a CAFO that has received a NPTD determination, such that the CAFO has a potential for a discharge, the CAFO has a duty to immediately notify the Department and seek coverage under an NPDES permit within 30 days after the change in circumstances.

(h) Duty to Maintain Permit Coverage. No later than 180 days before the expiration of the permit, the permittee must submit an application to renew its permit in accordance with section 122.21(g). However, the permittee need not continue to seek continued permit coverage or reapply for a permit if:

(1) The facility has ceased operation or is no longer a CAFO and

(2) The permittee has demonstrated to the satisfaction of the Department that there is no remaining potential for a discharge of manure, litter or associated process wastewater that was generated while the operation was a CAFO, other than agricultural storm water from land application areas.

**122.24 Concentrated aquatic animal production facilities.**

(a) Permit requirement. Concentrated aquatic animal production facilities, as defined in this section, are point sources subject to the NPDES permit program.

(b) Definition. "Concentrated aquatic animal production facility" means a hatchery, fish farm, or other facility which meets the criteria in Appendix C of this regulation, or which the Department designates under paragraph (c) of this section.

(c) Case-by-case designation of concentrated aquatic animal production facilities.

(1) The Department may designate any warm or cold water aquatic animal production facility as a concentrated aquatic animal production facility upon determining that it is a significant contributor of pollution to waters of the State. In making this designation the Department shall consider the following factors:

(i) The location and quality of the receiving waters of the State;

(ii) The holding, feeding, and production capacities of the facility;

(iii) The quantity and nature of the pollutants reaching waters of the State; and

(iv) Other relevant factors.

(2) A permit application shall not be required from a concentrated aquatic animal production facility designated under this paragraph until the Department has conducted on-site inspection of the facility and has determined that the facility should and could be regulated under the permit program.

**122.25 Aquaculture projects.**

(a) Permit requirement. Discharges into aquaculture projects, as defined in this section, are subject to the NPDES permit program through section 318 of CWA, and in accordance with R.61-9.125 Part B.

(b) Definitions.

(1) "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.

(2) "Designated project area" means the portions of the waters of the State 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.

**122.26 Storm water discharges.**

(a) Permit requirement.

(1) Prior to October 1, 1992, a permit shall not be required for a discharge composed entirely of storm water, except:

(i) A discharge with respect to which a permit has been issued prior to February 4, 1987;

(ii) A discharge associated with industrial activity (see section 122.26(a)(4));

(iii) A discharge from a large municipal separate storm sewer system;

(iv) A discharge from a medium municipal separate storm sewer system;

(v) A discharge which the Department or the EPA Regional Administrator determines to contribute to a violation of a water quality standard or is a significant contributor of pollutants to waters of the State. This designation may include a discharge from any conveyance or system of conveyances used for collecting and conveying storm water runoff or a system of discharges from municipal separate storm sewers, except for those discharges from conveyances which do not require a permit under paragraph (a)(2) of this section or agricultural storm water runoff which is exempted from the definition of point source at section 122.2. The Department may designate discharges from municipal separate storm sewers on a system-wide or jurisdiction-wide basis. In making this determination the Department may consider the following factors:

(A) The location of the discharge with respect to waters of the State as defined at section 122.2;

(B) The size of the discharge;

(C) The quantity and nature of the pollutants discharged to waters of the State; and

(D) Other relevant factors.

(2) The Department may not require a permit for discharges of storm water runoff from mining operations or oil and gas exploration, production, processing or treatment operations or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with or that has not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations.

(3) Large and medium municipal separate storm sewer systems.

(i) Permits must be obtained for all discharges from large and medium municipal separate storm sewer systems.

(ii) The Department may either issue one system-wide permit covering all discharges from municipal separate storm sewers within a large or medium municipal storm sewer system or issue distinct permits for appropriate categories of discharges within a large or medium municipal separate storm sewer system including, but not limited to: all discharges owned or operated by the same municipality; located within the same jurisdiction; all discharges within a system that discharge to the same watershed; discharges within a system that are similar in nature; or for individual discharges from municipal separate storm sewers within the system.

(iii) The operator of a discharge from a municipal separate storm sewer which is part of a large or medium municipal separate storm sewer system must either:

(A) Participate in a permit application (to be a permittee or a co-permittee) with one or more other operators of discharges from the large or medium municipal storm sewer system which covers all, or a portion of all, discharges from the municipal separate storm sewer system;

(B) Submit a distinct permit application which only covers discharges from the municipal separate storm sewers for which the operator is responsible; or

(C) A regional authority may be responsible for submitting a permit application under the following guidelines:

(1) The regional authority together with co-applicants shall have authority over a storm water management program that is in existence, or shall be in existence at the time part 1 of the application is due:

(2) The permit applicant or co-applicants shall establish their ability to make a timely submission of part 1 and part 2 of the municipal application;

(3) Each of the operators of municipal separate storm sewers within the systems described in paragraphs (b)(4)(i), (ii) and (iii) or (b)(7)(i), (ii), and (iii) of this section, that are under the purview of the designated regional authority, shall comply with the application requirements of paragraph (d) of this section.

(iv) One permit application may be submitted for all or a portion of all municipal separate storm sewers within adjacent or interconnected large or medium municipal separate storm sewer systems. The Department may issue one system-wide permit covering all, or a portion of all municipal separate storm sewers in adjacent or interconnected large or medium municipal separate storm sewer systems.

(v) Permits for all or a portion of all discharges from large or medium municipal separate storm sewer systems that are issued on a system-wide, jurisdiction-wide, watershed or other basis may specify different conditions relating to different discharges covered by the permit, including different management programs for different drainage areas which contribute storm water to the system.

(vi) Co-permittees need only comply with permit conditions relating to discharges from the municipal separate storm sewers for which they are operators.

(1) Discharges through large and medium municipal separate storm sewer systems. In addition to meeting the requirements of paragraph (c) of this section, an operator of a storm water discharge associated with industrial activity which discharges through a large or medium municipal separate storm sewer system shall submit to the operator of the municipal separate storm sewer system receiving the

discharge no later than May 15, 1991, or 180 days prior to commencing such discharge: the name of the facility; a contact person and phone number; the location of the discharge; a description, including Standard Industrial Classification, which best reflects the principal products or services provided by each facility; and any existing NPDES permit number.

(2) Other municipal separate storm sewers. The Department may issue permits for municipal separate storm sewers that are designated under paragraph (a)(1)(v) of this section on a system-wide basis, jurisdiction-wide basis, watershed basis or other appropriate basis, or may issue permits for individual discharges.

(3) Non-municipal separate storm sewers. For storm water discharges associated with industrial activity from point sources which discharge through a non-municipal or non-publicly owned separate storm sewer system, the Department, in its discretion, may issue: a single NPDES permit, with each discharger a co-permittee to a permit issued to the operator of the portion of the system that discharges into waters of the State; or, individual permits to each discharger of storm water associated with industrial activity through the non-municipal conveyance system.

(i) All storm water discharges associated with industrial activity that discharge through a storm water discharge system that is not a municipal separate storm sewer must be covered by an individual permit, or a permit issued to the operator of the portion of the system that discharges to waters of the State, with each discharger to the non-municipal conveyance a co-permittee to that permit.

(ii) Where there is more than one operator of a single system of such conveyances, all operators of such conveyances, all operators of storm water discharges associated with industrial activity must submit applications.

(iii) Any permit covering more than one operator shall identify the effluent limitations or other permit conditions, if any, that apply to each operator.

(4) Combined sewer systems. Conveyances that discharge storm water runoff combined with municipal sewage are point sources that must obtain NPDES permits in accordance with the procedures of section 122.21 and are not subject to the provisions of this section.

(5) Whether a discharge from a municipal separate storm sewer is or is not subject to regulation under this section shall have no bearing on whether the owner or operator of the discharge is eligible for funding under Title II, Title III or Title IV of the Clean Water Act. See 40 CFR Part 35, subpart I, Appendix A(b)H.2.j.

(6) (i) On and after October 1, 1994, for discharges composed entirely of storm water, that are not required by paragraph (a)(1) of this section to obtain a permit, operators shall be required to obtain a NPDES permit only if:

(A) The discharge is from a small MS4 required to be regulated pursuant to section 122.32;

(B) The discharge is a storm water discharge associated with small construction activity pursuant to paragraph (b)(15) of this section;

(C) Either the Department or the EPA Regional Administrator determines that storm water controls are needed for the discharge based on wasteload allocations that are part of "total

maximum daily loads" (TMDLs) that address the pollutant(s) of concern; or

(D) Either the Department or the EPA Regional Administrator determines that the discharge, or category of discharges within a geographic area, contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States.

(ii) Operators of small MS4s designated pursuant to paragraphs (a)(9)(i)(A), (a)(9)(i)(C), or (a)(9)(i)(D) of this section shall seek coverage under an NPDES permit in accordance with sections 122.33 through 122.35. Operators of non-municipal sources designated pursuant to paragraphs (a)(9)(i)(B), (a)(9)(i)(C), or (a)(9)(i)(D) of this section shall seek coverage under an NPDES permit in accordance with paragraph (c)(1) of this section.

(iii) Operators of storm water discharges designated pursuant to paragraph (a)(9)(i)(C) or (a)(9)(i)(D) of this section shall apply to the Department for a permit within 180 days of receipt of notice, unless permission for a later date is granted by the Department (see section 124.52[c] of this chapter).

(b) Definitions.

(1) "Co-permittee" means a permittee to an NPDES permit that is only responsible for permit conditions relating to the discharge for which it is operator.

Note: "General permit application" is defined at 122.28(b)(4).

(2) "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to an NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

(3) "Incorporated place" means a city, town, township, or village that is incorporated under the laws of the State of South Carolina.

(4) "Large municipal separate storm sewer system" means all municipal separate storm sewers that are either:

(i) Located in an incorporated place with a population of 250,000 or more as determined by the 1990 Decennial Census by the Bureau of the Census (Appendix F of this part); or

(ii) Located in the counties listed in appendix H, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or

(iii) Owned or operated by a municipality other than those described in paragraph (b)(4)(i) or (ii) of this section and that are designated by the Department as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph (b)(4)(i) or (ii) of this section. In making this determination the Department may consider the following factors:

(A) Physical interconnections between the municipal separate storm sewers;

(B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph (b)(4)(i) of this

section;

(C) The quantity and nature of pollutants discharged to waters of the State;

(D) The nature of the receiving waters; and

(E) Other relevant factors; or

(iv) The Department may, upon petition, designate as a large municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraph (b)(4)(i), (ii), and (iii) of this section.

(5) "Major municipal separate storm sewer outfall" (or "major outfall") means a municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more).

(6) "Major outfall" means a major municipal separate storm sewer outfall.

(7) "Medium municipal" separate storm sewer system means all municipal separate storm sewers that are either:

(i) Located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of Census (appendix G); or

(ii) Located in the counties listed in appendix I, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or

(iii) Owned or operated by a municipality other than those described in paragraph (b)(7)(i) or (ii) of this section and that are designated by the Department as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph (b)(7)(i) or (ii) of this section. In making this determination, the Department may consider the following factors:

(A) Physical interconnections between the municipal separate storm sewers;

(B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph (b)(7)(i) of this section;

(C) The quantity and nature of pollutants discharged to waters of the State;

(D) The nature of the receiving waters; or

(E) Other relevant factors; or

(iv) The Department may, upon petition, designate as a medium municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (b)(7)(i), (ii), and (iii) of this section.

(8) "Municipal separate storm sewer" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the State;

(ii) Designed or used for collecting or conveying storm water;

(iii) Which is not a combined sewer; and

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at section 122.2.

Note: "Notice of Intent" is defined at 122.28(b)(4).

(9) "Outfall" means a point source as defined by section 122.2 at the point where a municipal separate storm sewer discharges to waters of the State and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.

(10) "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.

(11) "Runoff coefficient" means the fraction of total rainfall that will appear at a conveyance as runoff.

(12) "Significant materials" includes, 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 section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

(13) "Storm water" means storm water runoff, snow melt runoff and surface runoff and drainage.

(14) "Storm water discharge associated with industrial activity" means the discharge from any conveyance that is used for collecting and conveying storm water and that 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 NPDES program under this regulation. For the categories of industries identified in this section, 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 (as defined at 40 CFR Part 401); 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 paragraph, material handling activities include 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 paragraphs (b)(14)(i) through (xi) of this section) include those facilities designated under the provisions of paragraph (a)(1)(v) of this section. The following categories of facilities are considered to be engaging in "industrial activity" for purposes of paragraph (b)(14):

(i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) in paragraph (b)(14) of this section);

(ii) 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;

(iii) 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) 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, byproducts 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);

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA;

(v) 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;

(vi) 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;

(vii) Steam electric power generating facilities, including coal handling sites;

(viii) 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 paragraphs (b)(14)(i)-(vii) or (ix)-(xi) of this section are associated with industrial activity;

(ix) 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 under R.61-9.403. 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 section 405 of the CWA;

(x) Construction activity including clearing, grading, and excavation, except operations that result in the disturbance of less than five acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more;

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, and 4221-25;

(15) Storm water discharge associated with small construction activity means the discharge of storm water from:

(i) Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres and, in coastal counties within one-half (1/2) mile of a receiving water body (but not for single-family homes which are not part of a subdivision development), that result in any land disturbance less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility. The Department may waive the otherwise applicable requirements in a general permit for a storm water discharge from construction activities that disturb less than five acres where:

(A) The value of the rainfall erosivity factor ("R" in the Revised Universal Soil Loss Equation) is less than five during the period of construction activity. The rainfall erosivity factor is determined in accordance with Chapter 2 of Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE), pages 21-64, dated January 1997. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C 552(a) and 1 CFR part 51. Copies may be obtained from EPA's Water Resource Center, Mail Code RC4100, 401 M St. S.W., Washington, DC 20460. A copy is also available for inspection at the U.S. EPA Water Docket , 401 M Street S.W., Washington, DC. 20460, or

the Office of the Federal Register, 800 N. Capitol Street N.W. Suite 700, Washington, DC. An operator must certify to the Department that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five; or

(B) Storm water controls are not needed based on a "total maximum daily load" (TMDL) approved or established by EPA that addresses the pollutant(s) of concern or, for non-impaired waters that do not require TMDLs, an equivalent analysis that determines allocations for small construction sites for the pollutant(s) of concern or that determines that such allocations are not needed to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety. For the purpose of this paragraph, the pollutant(s) of concern include sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. The operator must certify to the Department that the construction activity will take place, and storm water discharges will occur, within the drainage area addressed by the TMDL or equivalent analysis.

(ii) Any other construction activity designated by the Department, or in States with approved NPDES programs either the Department or the EPA Regional Administrator, based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the United States.

| Exhibit 1 to Section 122.26(b)(15) - Summary of Coverage of "Storm Water Discharges Associated with Small Construction Activity" Under the NPDES Storm Water Program | |
|---|---|
| Automatic Designation: Required Nationwide Coverage | Construction activities that result in a land disturbance of equal to or greater than one acre and less than five acres. |
| | Construction activities disturbing less than one acre if part of a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre and less than five acres. (See Section 122.26(b)(15)(i).) |
| Potential Designation: Optional Evaluation and Designation by the NPDES Permitting Authority or EPA Regional Administrator | Construction activities that result in a land disturbance of less than one acre based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants. (See Section 122.26(b)(15)(ii).) |
| Potential Waiver: Waiver from Requirements as Determined by the NPDES Permitting Authority | Any automatically designated construction activity where the operator certifies: (1) A rainfall erosivity factor of less than five or (2) that the activity will occur within an area where controls are not needed based on a TMDL or, for non-impaired waters that do not require a TMDL, an equivalent analysis for the pollutants of concern. (See Section 122.26(b)(15)(i).) |

(16) Small municipal separate storm sewer system means all separate storm sewers that are:

(i) Owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over

disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district, or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States and

(ii) Not defined as "large" or "medium" municipal separate storm sewer systems pursuant to paragraphs (b)(4) and (b)(7) of this section, or designated under paragraph (a)(1)(v) of this section.

(iii) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

(17) Small MS4 means a small municipal separate storm sewer system.

(18) Municipal separate storm sewer system means all separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems pursuant to paragraphs (b)(4), (b)(7), and (b)(16) of this section, or designated under paragraph (a)(1)(v) of this section.

(19) MS4 means a municipal separate storm sewer system.

(20) Uncontrolled sanitary landfill means a landfill or open dump whether in operation or closed, that does not meet the requirements for run-on or runoff controls established pursuant to subtitle D of the Solid Waste Disposal Act.

(21) "Storm water point source" means a conveyance or system of conveyances (including but not limited to pipes, conduits, ditches and channels) primarily used for collecting and conveying storm water runoff and that:

(i) Is located in an urbanized area as designated by the Bureau of the Census;

(ii) Discharges from lands of facilities used for industrial or commercial activities; or

(iii) Is referenced under section 122.26 (Storm Water Discharges).

(c) Application requirements for storm water discharges associated with industrial activity and storm water discharges associated with small construction activity;

(1) Individual application. Dischargers of storm water associated with industrial activity and with small construction activity are required to apply for an individual permit or seek coverage under a promulgated storm water general permit. Facilities that are required to obtain an individual permit, or any discharge of storm water which the Department is evaluating for designation (see R.61-9.124.52(c)) under paragraph (a)(1)(v) of this section and is not a municipal storm sewer, shall submit an NPDES application in accordance with the requirements of section 122.21 as modified and supplemented by the provisions of the remainder of this paragraph. Applicants for discharges composed entirely of storm water shall submit Form 1 and Form 2F. Applicants for discharges composed of storm water and non-storm water shall submit Form 1, Form 2C and Form 2F. Applicants for new sources or new discharges (as defined in section 122.2 of this regulation) composed of storm water and non-storm water shall submit Form 1, Form 2D, and Form 2F.

(i) Except as provided in section 122.26(c)(1)(ii)-(iv), the operator of a storm water discharge associated with industrial activity subject to this section shall provide:

(A) A site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) of the facility including: each of its drainage and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each past or present area used for outdoor storage or disposal of significant materials; each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied, each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under R.61-79.262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility;

(B) An estimate of the area of impervious surfaces (including paved areas and building roofs) and the total area drained by each outfall (within a mile radius of the facility) and a narrative description of the following: Significant materials that in the three years prior to the submittal of this application have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage or disposal of such materials; materials management practices employed, in the three years prior to the submittal of this application, to minimize contact by these materials with storm water runoff; materials loading and access areas; the location, manner and frequency in which pesticides, herbicides, soil conditioners and fertilizers are applied; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the ultimate disposal of any solid or fluid wastes other than by discharge;

(C) A certification that all outfalls that should contain storm water discharges associated with industrial activity have been tested or evaluated for the presence of non-storm water discharges which are not covered by a NPDES permit; tests for such non-storm water discharges may include smoke tests, fluorometric dye tests, analysis of accurate schematics, as well as other appropriate tests. The certification shall include a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test;

(D) Existing information regarding significant leaks or spills of toxic or hazardous pollutants at the facility that have taken place within the three years prior to the submittal of this application;

(E) Quantitative data based on samples collected during storm events and collected in accordance with section 122.21 of this regulation from all outfalls containing a storm water discharge associated with industrial activity for the following parameters:

(1) Any pollutant limited in an effluent guideline to which the facility is subject;

(2) Any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit);

(3) Oil and grease, pH, BOD5, COD, TSS, total phosphorus, total Kjeldahl nitrogen, and nitrate plus nitrite nitrogen;

(4) Any information on the discharge required under section 122.21(g)(7) (vi) and (vii) of this regulation;

(5) Flow measurements or estimates of the flow rate, and the total amount of discharge for the storm event(s) sampled, and the method of flow measurement or estimation; and

(6) The date and duration (in hours) of the storm event(s) sampled, rainfall measurements or estimates of the storm event (in inches) which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event (in hours);

(F) Operators of a discharge which is composed entirely of storm water are exempt from the requirements of section 122.21(g)(2), (g)(3), (g)(4), (g)(5), (g)(7)(iii), (g)(7)(iv), (g)(7)(v), (g)(7)(viii); and

(G) Operators of new sources or new discharges (as defined in section 122.2 of this regulation) which are composed in part or entirely of storm water must include estimates for the pollutants or parameters listed in paragraph (c)(1)(i)(E) of this section instead of actual sampling data, along with the source of each estimate. Operators of new sources or new discharges composed in part or entirely of storm water must provide quantitative data for the parameters listed in paragraph (c)(1)(i)(E) of this section within two years after commencement of discharge, unless such data has already been reported under the monitoring requirements of the NPDES permit for the discharge. Operators of a new source or new discharge which is composed entirely of storm water are exempt from the requirements of section 122.21(k)(3)(ii), (k)(3)(iii), and (k)(5).

(ii) An operator of an existing or new storm water discharge that is associated with industrial activity solely under paragraph (b)(14)(x) of this section or is associated with small construction activity solely under paragraph (b)(15) of this section, is exempt from the requirements of section 122.21(g) and paragraph (c)(1)(i) of this section.

(A) The location (including a map) and the nature of the construction activity;

(B) The total area of the site and the area of the site that is expected to undergo excavation during the life of the permit;

(C) Proposed measures, including best management practices, to control pollutants in storm water discharges during construction, including a brief description of applicable State and local erosion and sediment control requirements;

(D) Proposed measures to control pollutants in storm water discharges that will occur after construction operations have been completed, including a brief description of applicable State or local erosion and sediment control requirements;

(E) An estimate of the runoff coefficient of the site and the increase in impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge; and

(F) The name of the receiving water.

(iii) The operator of an existing or new discharge composed entirely of storm water from an

oil or gas exploration, production, processing, or treatment operation, or transmission facility is not required to submit a permit application in accordance with paragraph (c)(1)(i) of this section, unless the facility:

(A) Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21 or 40 CFR 302.6 at anytime since November 16, 1987; or

(B) Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 at any time since November 16, 1987; or

(C) Contributes to a violation of a water quality standard.

(iv) The operator of an existing or new discharge composed entirely of storm water from a mining operation is not required to submit a permit application unless the discharge has come into contact with any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations.

(v) Applicants shall provide such other information the Department may reasonably require under section 122.21(g)(13) of this regulation to determine whether to issue a permit and may require any facility subject to paragraph (c)(1)(ii) of this section to comply with paragraph (c)(1)(i) of this section.

(2) (Reserved.)

(d) Application requirements for large and medium municipal separate storm sewer discharges.

The operator of a discharge from a large or medium municipal separate storm sewer or a municipal separate storm sewer that is designated by the Department under paragraph (a)(1)(v) of this section, may submit a jurisdiction-wide or system-wide permit application. Where more than one public entity owns or operates a municipal separate storm sewer within a geographic area (including adjacent or interconnected municipal separate storm sewer systems), such operators may be a co-applicant to the same application. Permit applications for discharges from large and medium municipal storm sewers or municipal storm sewers designated under paragraph (a)(1)(v) of this section shall include:

(1) Part 1. Part 1 of the application shall consist of:

(i) General information. The applicant's name, address, telephone number of contact person, ownership status, and status as a State or local government entity.

(ii) Legal authority. A description of existing legal authority to control discharges to the municipal separate storm sewer system. When existing legal authority is not sufficient to meet the criteria provided in paragraph (d)(2)(i) of this section, the description shall list additional authorities as will be necessary to meet the criteria and shall include a schedule and commitment to seek such additional authority that will be needed to meet the criteria.

(iii) Source identification.

(A) A description of the historic use of ordinances, guidance or other controls which

limited the discharge of non-storm water discharges to any Publicly Owned Treatment Works serving the same area as the municipal separate storm sewer system.

(B) A USGS 7.5 minute topographic map (or equivalent topographic map with a scale between 1:10,000 and 1:24,000 if cost effective) extending one mile beyond the service boundaries of the municipal storm sewer system covered by the permit application. The following information shall be provided:

(1) The location of known municipal storm sewer system outfalls discharging to waters of the State:

(2) A description of the land use activities (e.g. divisions indicating undeveloped, residential, commercial agricultural and industrial uses) accompanied with estimates of population densities and projected growth for a ten year period within the drainage area served by the separate storm sewer. For each land use type, an estimate of an average runoff coefficient shall be provided;

(3) The location and a description of the activities of the facility of each currently operating or closed municipal landfill or other treatment, storage or disposal facility for municipal waste;

(4) The location and the permit number of any known discharge to the municipal storm sewer that has been issued an NPDES permit;

(5) The location of major structural controls for storm water discharge (retention basins, detention basins, major infiltration devices, etc.); and

(6) The identification of publicly owned parks, recreational areas, and other open lands.

(iv) Discharge characterization.

(A) Monthly mean rain and snow fall estimates (or summary of weather bureau data) and the monthly average number of storm events.

(B) Existing quantitative data describing the volume and quality of discharges from the municipal storm sewer, including a description of the outfalls sampled, sampling procedures and analytical methods used.

(C) A list of water bodies that receive discharges from the municipal separate storm sewer system, including downstream segments, lakes and estuaries, where pollutants from the system discharges may accumulate and cause water degradation and a brief description of known water quality impacts. At a minimum, the description of impacts shall include a description of whether the water bodies receiving such discharges have been:

(1) Assessed and reported in section 305(b) reports submitted by the State, the basis for the assessment (evaluated or monitored), a summary of designated use support and attainment of Clean Water Act (CWA) goals (fishable and swimmable waters) and causes of nonsupport of designated uses;

(2) Listed under section 304(l)(1)(A)(i), section 304(l)(1)(A)(ii) or section 304(l)(1)(B) of the CWA that is not expected to meet water quality standards or water quality goals;

(3) Listed in State Nonpoint Source Assessments required by section 319(a) of the CWA that, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain water quality standards due to storm sewers, construction, highway maintenance and runoff from municipal landfills and municipal sludge adding significant pollution (or contributing to a violation of water quality standards);

(4) Identified and classified according to eutrophic condition of publicly owned lakes listed in State reports required under section 314(a) of the CWA (include the following: a description of those publicly owned lakes for which uses are known to be impaired; a description of procedures, processes and methods to control the discharge of pollutants from municipal separate storm sewers into such lakes; and a description of methods and procedures to restore the quality of such lakes);

(5) [Reserved].

(6) Designated estuaries under the National Estuary Program under section 320 of the CWA;

(7) Recognized by the applicant as highly valued or sensitive waters;

(8) Defined by the State or U.S. Fish and Wildlife Service's National Wetlands Inventory as wetlands; and

(9) Found to have pollutants in bottom sediments, fish tissue or biosurvey data.

(D) Field screening. Results of a field screening analysis for illicit connections and illegal dumping for either selected field screening points or major outfalls covered in the permit application. At a minimum, a screening analysis shall include a narrative description, for either each field screening point or major outfall, of visual observations made during dry weather periods. If any flow is observed, two grab samples shall be collected during a 24 hour period with a minimum period of four hours between samples. For all such samples, a narrative description of the color, odor, turbidity, the presence of an oil sheen or surface scum as well as any other relevant observations regarding the potential presence of non-storm water discharges or illegal dumping shall be provided. In addition, a narrative description of the results of a field analysis using suitable methods to estimate pH, total chlorine, total copper, total phenol, and detergents (or surfactants) shall be provided along with a description of the flow rate. Where the field analysis does not involve analytical methods approved under 40 CFR Part 136, the applicant shall provide a description of the method used including the name of the manufacturer of the test method along with the range and accuracy of the test. Field screening points shall be either major outfalls or other outfall points (or any other point of access such as manholes) randomly located throughout the storm sewer system by placing a grid over a drainage system map and identifying those cells of the grid which contain a segment of the storm sewer system or major outfall. The field screening points shall be established using the following guidelines and criteria:

(1) A grid system consisting of perpendicular north-south and east-west lines spaced 1/4 mile apart shall be overlaid on a map of the municipal storm sewer system, creating a series of cells;

(2) All cells that contain a segment of the storm sewer system shall be identified; one field screening point shall be selected in each cell; major outfalls may be used as field screening points;

(3) Field screening points should be located downstream of any sources of suspected illegal or illicit activity;

(4) Field screening points shall be located to the degree practicable at the farthest manhole or other accessible location downstream in the system, within each cell; however, safety of personnel and accessibility of the location should be considered in making this determination;

(5) Hydrological conditions; total drainage area of the site; population density of the site; traffic density; age of the structures or buildings in the area; history of the area; and land use types;

(6) For medium municipal separate storm sewer systems, no more than 250 cells need to have identified field screening points; in large municipal separate storm sewer systems, no more than 500 cells need to have identified field screening points; cells established by the grid that contain no storm sewer segments will be eliminated from consideration; if fewer than 250 cells in medium municipal sewers are created, and fewer than 500 in large systems are created by the overlay on the municipal sewer map, then all those cells which contain a segment of the sewer system shall be subject to field screening (unless access to the separate storm sewer system is impossible); and

(7) Large or medium municipal separate storm sewer systems which are unable to utilize the procedures described in paragraphs (d)(1)(iv)(D)(1) through (6) of this section, because a sufficiently detailed map of the separate storm sewer systems is unavailable, shall field screen no more than 500 or 250 major outfalls respectively (or all major outfalls in the system, if less); in such circumstances, the applicant shall establish a grid system consisting of north-south and east-west lines spaced 1/4 mile apart as an overlay to the boundaries of the municipal storm sewer system, thereby creating a series of cells; the applicant will then select major outfalls in as many cells as possible until at least 500 major outfalls (large municipalities) or 250 major outfalls (medium municipalities) are selected; a field screening analysis shall be undertaken at these major outfalls.

(E) Characterization plan. Information and a proposed program to meet the requirements of paragraph (d)(2)(iii) of this section. Such description shall include: the location of outfalls or field screening points appropriate for representative data collection under paragraph (d)(2)(iii)(A) of this section, a description of why the outfall or field screening point is representative, the seasons during which sampling is intended, a description of the sampling equipment. The proposed location of outfalls or field screening points for such sampling should reflect water quality concerns (see paragraph (d)(1)(iv)(C) of this section) to the extent practicable.

(v) Management Programs.

(A) A description of the existing management programs to control pollutants from the municipal separate storm sewer system. The description shall provide information on existing structural and source controls, including operation and maintenance measures for structural controls, that are currently being implemented. Such controls may include, but are not limited to: procedures to control pollution resulting from construction activities; floodplain management controls; wetland protection measures; best management practices for new subdivisions; and emergency spill response programs. The description may address controls established under State law as well as local requirements.

(B) A description of the existing program to identify illicit connections to the municipal storm sewer system. The description should include inspection procedures and methods for detecting

and preventing illicit discharges and describe areas where this program has been implemented.

(vi) Fiscal resources. A description of the financial resources currently available to the municipality to complete part 2 of the permit application. A description of the municipality's budget for existing storm water programs, including an overview of the municipality's financial resources and budget, including overall indebtedness and assets, and sources of funds for storm water programs.

(2) Part 2. Part 2 of the application shall consist of:

(i) Adequate legal authority. A demonstration that the applicant can operate pursuant to legal authority established by statue, ordinance or series of contracts which authorizes or enables the applicant at a minimum to:

(A) Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by storm water discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity;

(B) Prohibit through ordinance, order or similar means, illicit discharges to the municipal separate storm sewer;

(C) Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping, or disposal of materials other than storm water;

(D) Control through interagency agreements among co-applicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system;

(E) Require compliance with conditions in ordinances, permits, contracts or orders; and

(F) Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer.

(ii) Source identification. The location of any major outfall that discharges to waters of the State that was not reported under paragraph (d)(1)(iii)(B)(1) of this section. Provide an inventory, organized by watershed of the name and address, and a description (such as SIC codes) which best reflects the principal products or services provided by each facility which may discharge to the municipal separate storm sewer, storm water associated with industrial activity;

(iii) Characterization data. When "quantitative data" for a pollutant are required under paragraph (d)(2)(iii)(A)(3) of this paragraph, the applicant must collect a sample of effluent in accordance with section 122.21(g)(7) and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR Part 136. When no analytical method is approved, the applicant may use any suitable method but must provide a description of the method. The applicant must provide information characterizing the quality and quantity of discharges covered in the permit application, including:

(A) Quantitative data from representative outfalls designated by the Department (based on information received in part 1 of the application, the Department shall designate between five and ten outfalls or field screening points as representative of the commercial, residential and industrial land use activities of the drainage area contributing to the system, or where there are less than five outfalls covered

in the application, the Department shall designate all outfalls) developed as follows:

(1) For each outfall or field screening point designated under this subparagraph, samples shall be collected of storm water discharges from three storm events occurring at least one month apart in accordance with the requirements at section 122.21(g)(7) (the Department may allow exemptions to sampling three storm events when climatic conditions create good cause for such exemptions);

(2) A narrative description shall be provided of the date and duration of the storm event(s) sampled, rainfall estimates of the storm event which generated the sampled discharge and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event;

(3) For samples collected and described under paragraphs (d)(2)(iii)(A)(1) and (A)(2) of this section, quantitative data shall be provided for: the organic pollutants listed in Table II; the pollutants listed in Table III (toxic metals, cyanide, and total phenols) of appendix D, and for the following pollutants;

(a) Total suspended solids (TSS)

(b) Total dissolved solids (TDS)

(c) COD

(d) BOD5

(e) Oil and grease

(f) Fecal coliform

(g) Fecal streptococcus

(h) pH

(i) Total Kjeldahl nitrogen

(j) Nitrate plus nitrite

(k) Dissolved phosphorus

(l) Total ammonia plus organic nitrogen

(m) Total phosphorus

(4) Additional limited quantitative data required by the Department for determining permit conditions (the Department may require that quantitative data shall be provided for additional parameters, and may establish sampling conditions such as the location, season of sample collection, form of precipitation (snow melt, rainfall) and other parameters necessary to insure representativeness);

(B) Estimates of the annual pollutant load of the cumulative discharges to waters of the

State from all identified municipal outfalls and the event mean concentration of the cumulative discharges to waters of the State from all identified municipal outfalls during a storm event (as described under section 122.21(g)(7)) for BOD5, COD, TSS, dissolved solids, total nitrogen, total ammonia plus organic nitrogen, total phosphorus, dissolved phosphorus, cadmium, copper, lead, and zinc. Estimates shall be accompanied by a description of the procedures for estimating constituent loads and concentrations, including any modelling, data analysis, and calculation methods;

(C) A proposed schedule to provide estimates for each major outfall identified in either paragraph (d)(2)(ii) or (d)(1)(iii)(B)(1) of this section of the seasonal pollutant load and of the event mean concentration of a representative storm for any constituent detected in any sample required under paragraph (d)(2)(iii)(A) of this section; and

(D) A proposed monitoring program for representative data collection for the term of the permit that describes the location of outfalls or field screening points to be sampled (or the location of instream stations), why the location is representative, the frequency of sampling, parameters to be sampled, and a description of sampling equipment.

(iv) Proposed management program. A proposed management program covers the duration of the permit. It shall include a comprehensive planning process which involves public participation and where necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable using management practices, control techniques and system, design and engineering methods, and such other provisions which are appropriate. The program shall also include a description of staff and equipment available to implement the program. Separate proposed programs may be submitted by each co-applicant. Proposed programs may impose controls on a system-wide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. Proposed programs will be considered by the Department when developing permit conditions to reduce pollutants in discharges to the maximum extent practicable. Proposed management programs shall describe priorities for implementing controls. Such programs shall be based on:

(A) A description of structural and source control measures to reduce pollutants from runoff from commercial and residential areas that are discharged from the municipal storm sewer system that are to be implemented during the life of the permit, accompanied with an estimate of the expected reduction of pollutant loads and a proposed schedule for implementing such controls. At a minimum, the description shall include:

(1) A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers;

(2) A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed. (Controls to reduce pollutants in discharges from municipal separate storm sewers containing construction site runoff are addressed in paragraph (d)(2)(iv)(D) of this section;

(3) A description of practices for operating and maintaining public streets, roads and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems, including pollutants discharged as a result of deicing activities;

(4) A description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies and that existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from storm water is feasible;

(5) A description of a program to monitor pollutants in runoff from operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste, which shall identify priorities and procedures for inspections and establishing and implementing control measures for such discharges (this program can be coordinated with the program developed under paragraph (d)(2)(iv)(C) of this section); and

(6) A description of a program to reduce to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities;

(B) A description of a program, including a schedule, to detect and remove (or require the discharger to the municipal separate storm sewer to obtain a separate NPDES permit for) illicit discharges and improper disposal into the storm sewer. The proposed program shall include:

(1) A description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal separate storm sewer system; this program description shall address all types of illicit discharges; however, the following category of non-storm water discharges or flows shall be addressed where such discharges are identified by the municipality as sources of pollutants to waters of the State:; water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (program descriptions shall address discharges or flows from fire fighting only where such discharges or flows are identified as significant sources of pollutants to waters of the State);

(2) A description of procedures to conduct on-going field screening activities during the life of the permit, including areas or locations that will be evaluated by such field screens;

(3) A description of procedures to be followed to investigate portions of the separate storm sewer system that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water (such procedures may include: sampling procedures for constituents such as fecal coliform, fecal streptococcus, surfactants (MBAS), residual chlorine, fluorides, and potassium; testing with fluorometric dyes; or conducting in storm sewer inspections where safety and other considerations allow. Such description shall include the location of storm sewers that have been identified for such evaluation);

(4) A description of procedures to prevent, contain, and respond to spills that may discharge into the municipal separate storm sewer;

(5) A description of a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal

separate storm sewers;

(6) A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; and

(7) A description of controls to limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewer systems where necessary;

(C) A description of a program to monitor and control pollutants in storm water discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the municipal storm sewer system. The program shall:

(1) Identify priorities and procedures for inspections and establishing and implementing control measures for such discharges;

(2) Describe a monitoring program for storm water discharges associated with the industrial facilities identified in paragraph (d)(2)(iv)(C) of this section, to be implemented during the term of the permit, including the submission of quantitative data on the following constituents: any pollutants limited in effluent guidelines subcategories, where applicable; any pollutant listed in an existing NPDES permit for a facility; oil and grease, COD, pH, BOD5, TSS, total phosphorus, total Kjeldahl nitrogen, nitrate plus nitrite nitrogen, and any information on discharges required under section 122.21(g)(7)(vi) and (vii).

(D) A description of a program to implement and maintain structural and non-structural best management practices to reduce pollutants in storm water runoff from construction sites to the municipal storm sewer system, which shall include;

(1) A description of procedures for site planning which incorporate consideration of potential water quality impacts;

(2) A description of requirements for nonstructural and structural best management practices;

(3) A description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; and

(4) A description of appropriate educational and training measures for construction site operators.

(v) Assessment of controls. Estimated reductions in loadings of pollutants from discharges of municipal storm sewer constituents from municipal storm sewer systems expected as the result of the municipal storm water quality management program. The assessment shall also identify known impacts of storm water controls on ground water.

(vi) Fiscal analysis. For each fiscal year to be covered by the permit, a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the programs under paragraphs (d)(2)(iii) and (iv) of this section. Such analysis shall include a description of the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.

(vii) Where more than one legal entity submits an application, the application shall contain a description of the roles and responsibilities of each legal entity and procedures to ensure effective coordination.

(viii) Where requirements under paragraph (d)(1)(iv)(E), (d)(2)(ii), (d)(2)(iii)(B) and (d)(2)(iv) of this section are not practicable or are not applicable, the Department may exclude any operator of a discharge from a municipal separate storm sewer which is designated under paragraph (a)(1)(v), (b)(4)(ii) or (b)(7)(ii) of this section from such requirements. The Department shall not exclude the operator of a discharge from a municipal separate storm sewer identified in Appendix F, G, H, or I from any of the permit application requirements under this paragraph, except where authorized under this section.

(e) Application deadlines.

Any operator of a point source required to obtain a permit under paragraph (a)(1) of this section that does not have an effective NPDES permit covering its storm water outfalls shall submit an application in accordance with the following deadlines;

(1) Storm water discharges associated with industrial activity.

(i) Except as provided in paragraph (e)(1)(ii) of this section, for any storm water discharge associated with industrial activity identified in paragraphs (b)(14)(i) through (xi) of this section, that is not part of a group application as described in paragraph (c)(2) of this section or which is not authorized by a storm water general permit, a permit application made pursuant to paragraph (C) of this section shall be submitted to the Department by October 1, 1992;

(ii) For any storm water discharge associated with industrial activity from a facility that is owned or operated by a municipality with a population of less than 100,000 that is not authorized by a general or individual permit, other than an airport, power plant, or uncontrolled sanitary landfill, the permit application must be submitted to the Department by March 10, 2003.

(2) For any group application submitted in accordance with paragraph (c)(2) of this section:

(i) Part 1.

(A) Except as provided in paragraph (e)(2)(i)(B) of this section, part 1 of the application shall be submitted to the Department by September 30, 1991;

(B) Any municipality with a population of less than 250,000 shall not be required to submit a part 1 application before May 18, 1992.

(C) For any storm water discharge associated with industrial activity from a facility that is owned or operated by a municipality with a population of less than 100,000 other than an airport, powerplant, or uncontrolled sanitary landfill, permit applications requirements are reserved.

(ii) Based on information in the part 1 application, the Department will approve or deny the members in the group application within 60 days after receiving part 1 of the group application.

(iii) Part 2.

(A) Except as provided in paragraph (e)(2)(iii)(B) of this section, part 2 of the application shall be submitted to the Department by October 1, 1992;

(B) Any municipality with a population of less than 250,000 shall not be required to submit a part 2 application before May 17, 1993.

(C) For any storm water discharge associated with industrial activity from a facility that is
owned or operated by a municipality with a population of less than 100,000 other than an airport, powerplant, or uncontrolled sanitary landfill, permit applications requirements are reserved.

(iv) Rejected facilities.

(A) Except as provided in paragraph (e)(2)(iv)(B) of this section, facilities that are rejected as members of the group shall submit an individual application (or obtain coverage under an applicable general permit) no later than 12 months after the date of receipt of the notice of rejection or October 1, 1992, whichever comes first.

(B) Facilities that are owned or operated by a municipality and that are rejected as members of part 1 group application shall submit an individual application no later than 180 days after the date of receipt of the notice of rejection or October 1, 1992, whichever is later.

(v) A facility listed under paragraph (b)(14)(i)-(xi) of this section may add on to a group application submitted in accordance with paragraph (e)(2)(i) of this section at the discretion of the Department, and only upon a showing of good cause by the facility and the group applicant; the request for the addition of the facility shall be made no later than February 19, 1992; the addition of the facility shall not cause the percentage of the facilities that are required to submit quantitative data to be less than 10%, unless there are over 100 facilities in the group that are submitting quantitative data; approval to become part of group application must be obtained from the group or the trade association representing the individual facilities.

(3) For any discharge from a large municipal separate storm sewer system;

(i) Part 1 of the application shall be submitted to the Department by November 18, 1991;

(ii) Based on information received in the part 1 application, the Department will approve or deny a sampling plan under paragraph (d)(1)(iv)(E) of this section within 90 days after receiving the part 1 application;

(iii) Part 2 of the application shall be submitted to the Department by November 16, 1992.

(4) For any discharge from a medium municipal separate storm sewer system;

(i) Part 1 of the application shall be submitted to the Department by May 18, 1992.

(ii) Based on information received in the part 1 application, the Department will approve or deny a sampling plan under paragraph (d)(i)(iv)(E) of this section within 90 days after receiving the part 1 application.

(iii) Part 2 of the application shall be submitted to the Department by May 17, 1993.

(5) A permit application shall be submitted to the Department within 180 days of notice, unless permission for a later date is granted by the Department (see R.61-9.124.52(c)), for:

(i) A storm water discharge which either the Department or the EPA Regional Administrator determines that the discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the State (see paragraph (a)(1)(v) and (b)(15)(ii) of this section);

(ii) A storm water discharge subject to paragraph (c)(1)(v) of this section.

(6) Facilities with existing NPDES permits for storm water discharges associated with industrial activity shall maintain existing permits. New applications shall be submitted in accordance with the requirements of sections 122.21 and 122.26(c) 180 days before the expiration of such permits. Facilities with expired permits or permits due to expire before May 18, 1992, shall submit applications in accordance with the deadline set forth under paragraph (e)(1) of this section.

(7) The Department shall issue or deny permits for discharges composed entirely of storm water under this section in accordance with the following schedule:

(i) (A) Except as provided in paragraph (e)(7)(i)(B) of this section, the Department shall issue or deny permits for storm water discharges associated with an industrial activity no later than October 1, 1993, or, for new sources or existing sources which fail to submit a complete permit application by October 1, 1992, one year after receipt of a complete permit application;

(B) For any municipality with a population of less than 250,000 which submits a timely Part I group application under paragraph (e)(2)(i)(B) of this section, the Department shall issue or deny permits for storm water discharges associated with an industrial activity no later than May 17, 1994, or, for any such municipality which fails to complete a Part II group permit application by May 17, 1993, one year after receipt of a complete permit application;

(ii) The Department shall issue or deny permits for large municipal separate storm sewer systems no later than November 16, 1993, or, for new sources or existing sources which fail to submit a complete permit application by November 16, 1992, one year after receipt of a complete permit application;

(iii) The Department shall issue or deny permits for medium municipal separate storm sewer systems no later than May 17, 1994, or, for new sources or existing sources which fail to submit a complete permit application by May 17, 1993, one year after receipt of a complete permit application.

(8) For any storm water discharge associated with small construction activity identified in paragraph (b)(15)(i) of this section, see section 122.21(c)(1). Discharges from these sources require permit authorization by March 10, 2003, unless designated for coverage before then.

(9) For any discharge from a regulated small MS4, the permit application made under section 122.33 must be submitted to the Department by:

(i) March 10, 2003 if designated under section 122.32(a)(1) unless your MS4 serves a jurisdiction with a population under 10,000 and the NPDES permitting authority has established a phasing schedule under section 40 CFR 123.35(d)(3) (see section 122.33(c)(1)); or

(ii) Within 180 days of notice, unless the NPDES permitting authority grants a later date, if designated under section 122.32(a)(2). (See section 122.33(c)(2)).

(f) Petitions.

(1) Any operator of a municipal separate storm sewer system may petition the Department to require a separate NPDES permit for any discharge into the municipal separate storm sewer system.

(2) Any person may petition the Department to require a NPDES permit for a discharge which is composed entirely of storm water which contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the State.

(3) The owner or operator of a municipal separate storm sewer system may petition the Department to reduce the Census estimates of population served by such separate system to account for storm water discharged to combined sewers as defined by 40 CFR 35.2005(b)(11) that is treated in a publicly owned treatment works. In municipalities in which combined sewers are operated, the Census estimates of population may be reduced proportional to the fraction, based on estimated lengths, of the length of combined sewers over the sum of the length of combined sewers and municipal separate storm sewers where an applicant has submitted the NPDES permit number associated with each discharge point and a map indicating areas served by combined sewers and the location of any combined sewer overflow discharge point.

(4) Any person may petition the Department for the designation of a large, medium, or small municipal separate storm sewer system as defined by paragraph (b)(4)(iv), (b)(7)(iv), or (b)(16) of this section.

(5) The Department shall make a final determination on any petition received under this section within 90 days after receiving the petition with the exception of petitions to designate a small MS4 in which case the Department shall make a final determination on the petition within 180 days after its receipt.

(g) Conditional exclusion for "no exposure" of industrial activities and materials to storm water.

Discharges composed entirely of storm water are not storm water discharges associated with industrial activity if there is "no exposure" of industrial materials and activities to rain, snow, snowmelt and/or runoff, and the discharger satisfies the conditions in paragraphs (g)(1) through (g)(4) of this section. "No exposure" means that all industrial materials and activities are protected by a storm resistant- shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product.

(1) Qualification. To qualify for this exclusion, the operator of the discharge must:

(i) Provide a storm resistant shelter to protect industrial materials and activities from exposure to rain, snow, snowmelt, and runoff;

(ii) Complete and sign (according to section 122.22) a certification that there are no discharges of storm water contaminated by exposure to industrial materials and activities from the entire facility, except as provided in paragraph (g)(2) of this section;

(iii) Submit the signed certification to the NPDES permitting authority once every five years;

(iv) Allow the Department to inspect the facility to determine compliance with the "no exposure" conditions;

(v) Allow the Department to make any "no exposure" inspection reports available to the public upon request; and

(vi) For facilities that discharge through an MS4, upon request, submit a copy of the certification of "no exposure" to the MS4 operator, as well as allow inspection and public reporting by the MS4 operator.

(2) Industrial materials and activities not requiring storm resistant shelter. To qualify for this exclusion, storm resistant shelter is not required for:

(i) Drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak ("Sealed" means banded or otherwise secured and without operational taps or valves);

(ii) Adequately maintained vehicles used in material handling; and

(iii) Final products, other than products that would be mobilized in storm water discharge (e.g., rock salt).

(3) Limitations.

(i) Storm water discharges from construction activities identified in paragraphs (b)(14)(x) and (b)(15) are not eligible for this conditional exclusion.

(ii) This conditional exclusion from the requirement for an NPDES permit is available on a facility-wide basis only, not for individual outfalls. If a facility has some discharges of storm water that would otherwise be "no exposure" discharges, individual permit requirements should be adjusted accordingly.

(iii) If circumstances change and industrial materials or activities become exposed to rain, snow, snowmelt, and/or runoff, the conditions for this exclusion no longer apply. In such cases, the discharge becomes subject to enforcement for un-permitted discharge. Any conditionally exempt discharger who anticipates changes in circumstances should apply for and obtain permit authorization prior to the change of circumstances.

(iv) Notwithstanding the provisions of this paragraph, the Department retains the authority to require permit authorization (and deny this exclusion) upon making a determination that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above an applicable water quality standard, including designated uses.

(4) Certification. The no exposure certification must require the submission of the following information, at a minimum, to aid the Department in determining if the facility qualifies for the no-exposure exclusion:

(i) The legal name, address and phone number of the discharger [see section 122.21(b)];

(ii) The facility name and address, the county name, and the latitude and longitude where the facility is located;

(iii) The certification must indicate that none of the following materials or activities are, or will be in the foreseeable future, exposed to precipitation:

(A) Using, storing, or cleaning industrial machinery or equipment, and areas where residuals from using, storing, or cleaning industrial machinery or equipment remain and are exposed to storm water;

(B) Materials or residuals on the ground or in storm water inlets from spills/leaks;

(C) Materials or products from past industrial activity;

(D) Material handling equipment (except adequately maintained vehicles);

(E) Materials or products during loading/unloading or transporting activities;

(F) Materials or products stored outdoors (except final products intended for outside use, e.g., new cars, where exposure to storm water does not result in the discharge of pollutants);

(G) Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, or similar containers;

(H) Materials or products handled/stored on roads or railways owned or maintained by the discharger;

(I) Waste material (except waste in covered, non-leaking containers, e.g., dumpsters);

(J) Application or disposal of process wastewater (unless otherwise permitted); and

(K) Particulate matter or visible deposits of residuals from roof stacks/vents not otherwise regulated, i.e., under an air quality control permit, and evident in the storm water outflow;

(iv) All "no exposure"' certifications must include the following certification statement, and be signed in accordance with the signatory requirements of section 122.22: "I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from NPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility

identified in this document (except as allowed under paragraph (g)(2)) of this section. I understand that I am obligated to submit a no exposure certification form once every five years to the Department and, if requested, to the operator of the local MS4 into which this facility discharges (where applicable). I understand that I must allow the Department, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under an NPDES permit prior to any point source discharge of storm water from the facility. 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 gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**122.27 Silvicultural activities.**

(a) Permit requirement. Silvicultural point sources, as defined in this section, are point sources subject to the NPDES permit program.

(b) Definitions.

(1) "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 waters of the State. The term does not
include non-point 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 runoff. 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 section 404 permit (See 33 CFR 209.120 and Part 233).

(2) "Rock crushing and gravel washing facilities" means facilities which process crushed and broken stone, gravel, and riprap (See 40 CFR Part 436, Subpart B, including the effluent limitations guidelines).

(3) "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). (See 40 CFR Part 429, Subpart I, including the effluent limitations guidelines).

**122.28 General permits.**

(a) Coverage. The Department may issue a general permit in accordance with the following:

(1) Area. The general permit shall be written to cover one or more categories or subcategories of discharges or sludge use or disposal practices or facilities described in the permit under paragraph (a)(2)(ii) of this section, except those covered by individual permits, within a geographic area. The area shall correspond to existing geographic or political boundaries such as:

(i) Designated planning areas under sections 208 and 303 of CWA:

(ii) Sewer districts or sewer authorities;

(iii) City, county, or State political boundaries;

(iv) State highway systems;

(v) Standard metropolitan statistical areas as defined by the Office of Management and Budget;

(vi) Urbanized areas as designated by the Bureau of the Census according to criteria in 30 FR 15202 (May 1, 1974); or

(vii) Any other appropriate division or combination of boundaries.

(viii) Watershed boundaries.

(2) Sources. The general permit may be written to regulate one or more categories or subcategories of discharges or sludge use or disposal practices or facilities within the area described in paragraph (a)(1) of this section, where the sources within a covered subcategory of discharges are either:

(i) Storm water point sources; or

(ii) One or more categories or subcategories of point sources other than storm water point sources, or one or more categories or subcategories of "treatment works treating domestic sewage," if the sources or "treatment works treating domestic sewage" within each category or subcategory all:

(A) Involve the same or substantially similar types of operations;

(B) Discharge the same types of wastes or engage in the same types of sludge use or disposal practices;

(C) Require the same effluent limitations, operating conditions, or standards for sewage sludge use or disposal;

(D) Require the same or similar monitoring; and

(E) In the opinion of the Department are more appropriately controlled under a general permit than under individual permits.

(3) Water quality-based limits. Where sources within a specific category or subcategory of dischargers are subject to water-quality-based limits imposed pursuant to 40CFR122.44, the sources in that specific category or subcategory shall be subject to the same water-quality-based effluent limitations.

(4) Other requirements.

(i) The general permit must clearly identify the applicable conditions for each category or subcategory of dischargers or treatment works treating domestic sewage covered by the permit.

(ii) The general permit may exclude specified sources or areas from coverage.

(b) Administration.

(1) In general. General permits may be issued, modified, revoked and reissued, or terminated in accordance with applicable requirements of R.61-9.124. Special procedures for issuance are found at 40 CFR 123.44.

(2) Authorization to discharge or authorization to engage in sludge use and disposal practices.

(i) Except as provided in paragraphs (b)(2)(v) and (b)(2)(vi) of this section, dischargers (or treatment works treating domestic sewage) seeking coverage under a general permit shall submit to the Department a written notice of intent to be covered by the general permit. A discharger (or treatment works treating domestic sewage) who fails to submit a notice of intent in accordance with the terms of the permit is not authorized to discharge (or in the case of sludge disposal permit, to engage in a sludge use or disposal practice), under the terms of the general permit unless the general permit, in accordance with paragraph (b)(2)(v) of this section, contains a provision that a notice of intent is not required or the Department notifies a discharger (or treatment works treating domestic sewage) that it is covered by a general permit in accordance with paragraph (b)(2)(vi) of this section. A complete and timely notice of intent (NOI) to be covered in accordance with general permit requirements, fulfills the requirements for permit applications for purposes of sections 122.6, 122.21 and 122.26.

(ii) The contents of the notice of intent shall be specified in the general permit and shall require the submission of information necessary for adequate program implementation, including at a minimum, the legal name and address of the owner or operator, the facility name and address, type of facility or discharges, and the receiving stream(s). General permits for storm water discharges associated with industrial activity from inactive mining, inactive oil and gas operations, or inactive landfills occurring on Federal lands where an operator cannot be identified may contain alternative notice of intent requirements. All notices of intent shall be signed in accordance with section 122.22. Notices of intent for coverage under a general permit for concentrated animal feeding operations (CAFO) must include the information specified in section 122.21(i)(1), including a topographic map.

(iii) General permits shall specify the deadlines for submitting notices of intent to be covered and the date(s) when a discharger is authorized to discharge under the permit.

(iv) General permits shall specify whether a discharger (or treatment works treating domestic sewage) that has submitted a complete and timely notice of intent to be covered in accordance with the general permit and that is eligible for coverage under the permit, is authorized to discharge (or in the case of a sludge disposal permit, to engage in a sludge use or disposal practice) in accordance with the permit either upon receipt of the notice of intent by the Department, after a waiting period specified in the general permit, on a date specified in the general permit, or upon receipt of notification of inclusion by the Department. Coverage may be terminated or revoked in accordance with paragraph (b)(3) of this section.

(v) Discharges other than discharges from publicly owned treatment works, combined sewer overflows, municipal separate storm sewer systems, primary industrial facilities, and storm water discharges associated with industrial activity, may, at the discretion of the Department, be authorized to discharge under a general permit without submitting a notice of intent where the Department finds that a notice of intent requirement would be inappropriate. In making such a finding,

the Department shall consider: the type of discharge; the expected nature of the discharge; the potential for toxic and conventional pollutants in the discharges; the expected volume of the discharges; other means of identifying discharges covered by the permit; and the estimated number of discharges to be covered by the permit. The Department shall provide in the public notice of the general permit the reasons for not requiring a notice of intent.

(i) The Department may notify a discharger (or treatment works treating domestic sewage) that it is covered by a general permit, even if the discharger (or treatment works treating domestic sewage) has not submitted a notice of intent to be covered. A discharger (or treatment works treating domestic sewage) so notified may request an individual permit under paragraph (b)(3)(iii) of this section.

(3) Requiring an individual permit.

(i) The Department may require any person authorized by a general permit to apply for and obtain an individual NPDES permit, Land Application permit, or State permit (See R.61-9.505 for Land Application permit and State permit requirements). An applicant, any affected state, or interstate agency, the Regional Administrator, or any other interested person may petition the Department to take action under this paragraph. The petition shall indicate specific reasons why an individual permit is requested and the interest in or relationship of the petitioner to the applicant. Cases where an individual NPDES permit, Land Application permit, or State permit (See R.61-9.505 for Land Application permit and State permit requirements) may be required include the following:

(A) The discharger or "treatment works treating domestic sewage" is not in compliance with the conditions of the general NPDES permit, Land Application permit, or State permit (See R.61-9.505 for Land Application permit and State permit requirements);

(B) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source or treatment works treating domestic sewage;

(C) Effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit, Land Application permit, or State permit (See R.61-9.505 for Land Application permit and State permit requirements);

(D) A Water Quality Management plan containing requirements applicable to such point sources is approved;

(E) Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;

(F) Standards for sewage sludge use or disposal have been promulgated for the sludge use and disposal practice covered by the general NPDES permit, Land Application permit, or State permit (See R.61-9.505 for Land Application permit and State permit requirements); or

(G) The discharge(s) is a significant contributor of pollutants. In making this determination, the Department may consider the following factors:

(1) The location of the discharge with respect to waters of the State;

(2) The size of the discharge;

(3) The quantity and nature of the pollutants discharged to waters of the State; and

(4) Other relevant factors.

(ii) [Reserved].

(iii) Any owner or operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. The owner or operator shall submit an application under section 122.21, with reasons supporting the request, to the Department no later than 90 days after the publication of the general permit in the State Register. The request shall be processed in accordance with R.61-9.124. The request shall be granted by issuing of an individual permit if the reasons cited by the owner or operator are adequate to support the request.

(iv) When an individual NPDES permit, Land Application permit, or State permit (See R.61-9.505 for Land Application permit and State permit requirements) is issued to an owner or operator otherwise subject to a general NPDES, Land Application, or State permit, the applicability of the general permit to the individual NPDES, Land Application, or State permittee is automatically terminated on the effective date of the individual permit.

(v) A source excluded from a general permit solely because it already has an individual permit may request that the individual permit be revoked, and that it be covered by the general permit. Upon revocation of the individual permit, the general permit shall apply to the source.

(4) Definitions:

(i) "General Permit Application" means an application filed by a potential permittee with the Department for a general permit.

(ii) "Notice of Intent" (NOI) means a form used by potential permittees to notify the Department, within a specified time, that they intend to comply with the general permit or that they do not wish to be covered by the general permit and wish an individual permit.

(c) Degree of Waste Treatment Required. All pollutants shall receive such treatment or corrective action so as to insure compliance with the terms and conditions of the issued permit and with the following, whenever applicable:

(1) Effluent limitations established by the EPA pursuant to Sections 301, 302, 303, 306, 307, 308, 318, and 405 of the Federal CWA;

(2) Criteria and standards for Best Management practices established by EPA pursuant to Section 304(e) of the Federal CWA;

(3) Notwithstanding the above, more stringent effluent limitations may be required as deemed necessary by the Department (i) to meet any other existing federal laws or regulations, or (ii) to insure compliance with any applicable State water quality standards, effluent limitations, or treatment standards; and

(4) Calculations and specifications of effluent limits and standards shall be made in accordance

with the provisions of section 122.45.

(d) Submittals and Signatory Requirements.

(1) An NOI shall be on forms as may be prescribed and furnished from time to time by the Department. A NOI shall be accompanied by all pertinent information as the Department may require in order to establish effluent limitations in accordance with this regulation, including, but not limited to, complete engineering reports, schedule of progress, plans, specifications, maps, measurements, quantitative and qualitative determinations, records, and all related materials.

(2) Engineering reports, plans, specifications, and other material submitted to the Department's NPDES or State permitting (See R.61-9.505 for Land Application permit and State permit requirements) divisions shall be signed by a Professional Engineer registered in State of South Carolina and competent in the field of sewage and industrial waste treatment.

(3) Material submitted shall be complete and accurate.

(4) Any NOI form submitted to the Department shall be signed in accordance with this Regulation.

(5) All other reports or requests for information required by the Department shall be signed by a person designated in section 122.22 or a duly authorized representative of such person, if:

(i) The representative so authorized is responsible for the overall operation of the facility from which the discharge originates, e.g., a plant manager, superintendent or person of equivalent responsibility;

(ii) The authorization is made in writing by the person designated under section 122.22; and

(iii) The written authorization is submitted to the Department.

(6) Any changes in the written authorization submitted to the Department which occur after the issuance of a permit shall be reported to the Department by submitting a copy of a new written authorization that meets the requirements of (5) above.

(7) Any person signing any document under (d) above shall make the following certification: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in the attached document; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

(e) Other Requirements.

(1) Notice and Public Participation. Public notice and participation requirements shall be in accordance with this Regulation.

(2) Terms and Conditions of Permits. General permits issued shall be subject to the terms and conditions contained in this Regulation.

(3) Monitoring, Recording and Reporting Requirements. Monitoring, recording, and reporting requirements shall be in accordance with the permit and this Regulation.

(4) Duration, Continuation, and Transferability of Permits. General permits shall be issued for a fixed term in accordance with this Regulation.

**122.29 New sources and new dischargers.**

(a) Definitions.

(1) "New source" and "new discharger" are defined in section 122.2.

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

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

(4) "Site" is defined in section 122.2;

(5) "Facilities or equipment" means buildings, structures, process or production equipment or machinery which form a permanent part of the 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 source or water pollution treatment for the source.

(b) Criteria for new source determination.

(1) Except as otherwise provided in an applicable new source performance standard, a source is a "new source" if it meets the definition of "new source" in section 122.2, and

(i) It is constructed at a site at which no other source is located; or

(ii) It totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

(iii) Its processes are substantially independent of an existing source at the same site. In determining whether these processes are substantially independent, the Department shall consider such factors 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.

(2) A source meeting the requirements of paragraphs (b)(1)(i), (ii), or (iii) of this section is a new source only if a new source performance standard is independently applicable to it. If there is no such independently applicable standard, the source is a new discharger. See section 122.2.

(3) Construction on a site at which an existing source is located results in a modification subject to section 122.62 rather than a new source (or a new discharger) if the construction does not create a new building, structure, facility, or installation meeting the criteria of paragraphs (b)(1)(ii) or (iii) of this section but otherwise alters, replaces, or adds to existing process or production equipment.

(4) Construction of a new source as defined under section 122.2 has commenced if the owner

or operator has:

(i) Begun, or caused to begin as part of a continuous on-site construction program:

(A) Any placement, assembly, or installation of facilities or equipment; or

(B) 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

(ii) 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 the paragraph.

(c) [Reserved].

(d) Effect of compliance with new source performance standards. (The provisions of this paragraph do not apply to existing sources which modify their pollution control facilities or construct new pollution control facilities and achieve performance standards, but which are neither new sources or new dischargers or otherwise do not meet the requirements of this paragraph.)

(1) Except as provided in paragraph (d)(2) of this section, any new discharger, the construction of which commenced after October 18, 1972, or new source which meets the applicable promulgated new source performance standards before the commencement of discharge, may not be subject to any more stringent new source performance standards or to any more stringent technology-based standards under section 301(b)(2) of CWA for the soonest ending of the following periods:

(i) Ten years from the date that construction is completed;

(ii) Ten years from the date the source begins to discharge process or other non-construction related wastewater; or

(iii) The period of depreciation or amortization of the facility for the purposes of section 167 or 169 (or both) of the Internal Revenue Code of 1954.

(2) The protection from more stringent standards of performance afforded by paragraph (d)(1) of this section does not apply to:

(i) Additional or more stringent permit conditions which are not technology based; for example, conditions based on water quality standards, or toxic effluent standards or prohibitions under section 307(a) of CWA; or

(ii) Additional permit conditions in accordance with section 125.3 controlling toxic pollutants or hazardous substances which are not controlled by new source performance standards. This includes permit conditions controlling pollutants other than those identified as toxic pollutants or hazardous substances when control of these pollutants has been specifically identified as the method to control the toxic pollutants or hazardous substances.

(3) When an NPDES permit issued to a source with a "protection period" under paragraph (d)(1)

of this section will expire on or after the expiration of the protection period, that permit shall require the owner or operator of the source to comply with the requirements of section 301 and any other then applicable requirements of CWA immediately upon the expiration of the protection period. No additional period for achieving compliance with these requirements may be allowed except when necessary to achieve compliance with requirements promulgated less than 3 years before the expiration of the protection period.

(4) The owner or operator of a new source, a new discharger which commenced discharge after August 13, 1979, or a recommencing discharger shall install and have in operating condition, and shall "start-up" all pollution control equipment required to meet the conditions of its permits before beginning to discharge. Within the shortest feasible time (not to exceed 90 days), the owner or operator must meet all permit conditions. The requirements of this paragraph do not apply if the owner or operator is issued a permit containing a compliance schedule under section 122.47(a)(2).

(5) After the effective date of new source performance standards, it shall be unlawful for any owner or operator of any new source to operate the source in violation of those standards applicable to the source.

**122.30 What are the objectives of the storm water regulations for small MS4s?**

(a) Sections 122.30 through 122.36 are written in a "readable regulation" format.

(b) Under the statutory mandate in section 402(p)(6) of the Clean Water Act, the purpose of this portion of the storm water program is to designate additional sources that need to be regulated to protect water quality and to establish a comprehensive storm water program to regulate these sources. (Because the storm water program is part of the National Pollutant Discharge Elimination System (NPDES) Program, you should also refer to section 122.1 which addresses the broader purpose of the NPDES program.)

(c) Storm water runoff continues to harm the nation's waters. Runoff from lands modified by human activities can harm surface water resources in several ways including changing natural hydrologic patterns and elevating pollutant concentrations and loadings. Storm water runoff may contain or mobilize high levels of contaminants, such as sediment, suspended solids, nutrients, heavy metals, pathogens, toxins, oxygen-demanding substances, and floatables.

(d) EPA and the Department strongly encourage partnerships and the watershed approach as the management framework for efficiently, effectively, and consistently protecting and restoring aquatic ecosystems and protecting public health.

**122.31 Indian Tribes.**

As a Tribe, what is my role under the NPDES storm water program? As a Triibe you may:

(a) Be authorized to operate the NPDES program including the storm water program, after EPA determines that you are eligible for treatment in the same manner as a State under sections 123.31 through 123.34. (If you do not have an authorized NPDES program, the Department implements the program for discharges on your reservation.);

(b) Be classified as an owner of a regulated small MS4, as defined in section 122.32. (Designation of your Tribe as an owner of a small MS4 for purposes of this part is an approach that is consistent with

U.S. EPA's 1984 Indian Policy of operating on a government-to-government basis with EPA looking to Tribes as the lead governmental authorities to address environmental issues on their reservations as appropriate. If you operate a separate storm sewer system that meets the definition of a regulated small MS4, you are subject to the requirements under sections 122.33 through 122.35. If you are not designated as a regulated small MS4, you may ask EPA to designate you as such for the purposes of this part.); or

(c) Be a discharger of storm water associated with industrial activity or small construction activity under sections 122.26(b)(14) or (b)(15), in which case you must meet the applicable requirements. Within Indian country, the NPDES permitting authority is the Department, unless you are authorized to administer the NPDES program.

**122.32 Is an operator of a small MS4 regulated under the NPDES storm water program?**

(a) Unless you qualify for a waiver under paragraph (c) of this section, you are regulated if you operate a small MS4, including but not limited to systems operated by federal, State, Tribal, and local governments, including State departments of transportation, and:

(1) Your small MS4 is located in an urbanized area as determined by the latest Decennial Census by the Bureau of the Census (If your small MS4 is not located entirely within an urbanized area, only the portion that is within the urbanized area is regulated.); or

(2) You are designated by the Department, including where the designation is pursuant to 40 CFR 123.35(b)(3) or (b)(4) or is based upon a petition under section 122.26(f).

(b) You may be the subject of a petition to the NPDES permitting authority to require an NPDES permit for your discharge of storm water. If the NPDES permitting authority determines that you need a permit, you are required to comply with sections 122.33 through 122.35.

(c) The Department may waive the requirements otherwise applicable to you if you meet the criteria of paragraph (d) or (e) of this section. If you receive a waiver under this section, you may subsequently be required to seek coverage under an NPDES permit in accordance with section 122.33(a) if circumstances change. (See also section 123.35(b) of 40CFR123.)

(d) The Department may waive permit coverage if your MS4 serves a population of less than 1,000 within the urbanized area and you meet the following criteria:

(1) Your system is not contributing substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the NPDES storm water program (see section 123.35(b)(4) of 40CFR123) and

(2) If you discharge any pollutant(s) that have been identified as a cause of impairment of any water body to which you discharge, storm water controls are not needed based on wasteload allocations that are part of an EPA-approved or established total maximum daily load (TMDL) that addresses the pollutant(s) of concern.

(e) The Department may waive permit coverage if your MS4 serves a population under 10,000 and you meet the following criteria:

(1) The Department has evaluated all waters of the U.S., including small streams, tributaries, lakes, and ponds, that receive a discharge from your MS4;

(2) For all such waters, the Department has determined that storm water controls are not needed based on wasteload allocations that are part of an EPA-approved or established TMDL that addresses the pollutant(s) of concern or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the pollutant(s) of concern;

(3) For the purpose of this paragraph (e), the pollutant(s) of concern include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from your MS4; and

(4) The Department has determined that future discharges from your MS4 do not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts.

(f) Process for designating small MS4 to require storm water NPDES. The Department will designate small MS4s according to the following criteria as a determination that a storm water discharge results in or has the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts.

(1) The Department will make initial designations on a watershed basis but no later than December 8, 2004 [except see the phasing considerations in (h)(3) for MS4 with population less than 10,000], as follows:

(i) All MS4 which are located within an urbanized area as defined by the U.S. Bureau of the Census are to be designated and must obtain permits, unless a waiver is granted. (Many of the municipalities and counties which are small MS4 covered by this requirement are listed in Appendix 6 of 64FR68722, December 8, 1999.)

(ii) Consider all small MS4 with a population density of at least 1000 persons per square mile and a population of at least 10,000 located outside urban areas, according to the criteria. (Six municipalities which meet these descriptions are listed in Appendix 7 of 64FR68722.)

(iii) Consider small MS4 which are adjacent to and impact a designated MS4, according to criteria.

(iv) Consider other government entities which are MS4 relevant to criteria (e.g., military installations, prisons, and state, county, or municipal school, or hospital campuses).

(v) (A) Consider MS4 for which petitions are received requesting that permitting be required.

(B) See section 122.26(f)(5) as to the period for making a determination on designation.

(2) The Department will designate small MS4 to require permitting, as follows:

(i) Small MS4 within urbanized areas;

(ii) Entire municipalities which meet the criteria;

(iii) Counties, military installations, prisons, and state, county, or municipal school or hospital

campuses, giving consideration to whether solely the urbanized areas should be designated;

(i) Small MS4 physically interconnected with and substantially affecting regulated MS4, according to the criteria.

(3) In the process of designating small MS4, the Department will inform entities of the waiver requirements of 40 CFR 123.35(d) and evaluate any requested waiver in making a designation decision.

(4) The Department will evaluate any entity for which a petition is received requesting that a permit be required, based on criteria.

(5) The Department will reevaluate to designate appropriate, additional MS4 whenever the 303(d) list is revised.

(6) The Department will reevaluate at each census only to designate additional small MS4.

(g) Criteria for Designating Small MS4 for Storm Water NPDES Permitting

(1) Any small MS4 with a population of 10,000 or more and a population density of 1000 persons per square mile meeting any criterion will be designated, unless one or more of the exceptions in (1)(i) below applies. For smaller or less-densely populated MS4, the following criteria will be used in any evaluation of whether they should be designated to require a permit.

(i) Any water body receiving storm water from the MS4 is on the South Carolina {303(d)} list of impaired waters for a pollutant discharged in the storm water of the entity or a pollutant contributing to the standards violation leading to listing, unless the MS4 shows that it meets one of the following exceptions:

(A) The runoff from the MS4 caused by a 2-inch rainstorm would be less than one (1) percent of the annual average flow of each receiving stream on the 303(d) list;

(B) The MS4 has excellent BMP in place and presents data showing exemplary quality storm water runoff;

(C) The MS4 has a low ratio of runoff to rainfall (e.g., sandy soil) and moderate (that is, not high) water table; or

(D) The MS4 is shown to have a significantly lower percentage of impermeable area than would be expected for its level of development.

(ii) Any water body receiving storm water from the MS4 is classed ONRW, ORW, Freshwater-Trout, or SFH or is open for shellfish harvesting.

(iii) Population growth in the MS4 between the 1990 and 2000 (or the two most-recent) censuses has been 10 percent or more or growth has been 2 percent or more in each of the three (3) most-recent years.

(iv) The MS4 is located within 3 miles of an urbanized area, and the MS4 under consideration discharges storm water to one or more of the water bodies which receive storm water from the urbanized area.

(v) An MS4 which has been partly (at least 25%) designated (e.g., part lying within an urbanized area). Consideration will be given to designating only the portion of a county, military installation, prison, or state, county, or municipal school or hospital campus which is in the relevant urbanized area or, for the more extensively developed counties, designating areas up to three (3) miles from the boundary of the urbanized area.

(vi) The population density of the MS4 is at least 1500 persons per square mile.

(2) The following matters may also be considered in deciding whether a permit is required.

(i) The storm water discharge of an MS4 is causing or contributing to a violation of a water quality standard.

(ii) An MS4 is subject to activity contributing or expected to contribute to storm water contamination; for example, frequent military training exercises.

(iii) An MS4 includes industries with significant particulate emissions (such as battery manufacturing {e.g., lead}, steel manufacturing, etc.)

(iv) An MS4 includes a high percentage of impermeable area (pavement, roof).

(v) An MS4 owns or operates a wastewater treatment facility which has a history of being on the NPDES "Significant Non-compliance List" for effluent violations.

(vi) An MS4 approaches but does not reach two or more of the criteria in (1) above.

(3) Government-owned educational institutions, hospital and prison complexes, and military bases outside of urban areas will be considered in the same manner as municipalities outside urban areas. That is, if they have a population of 10,000 or more and a population density of 1500 persons per square mile, they will be designated. If they are less populated or less-densely populated, they will be considered based on the criteria, if a petition requests that a permit be required.

(4) As an initial decision, designate any small MS4 which has either greater than 2000 total population with a density of at least 1500 persons per square mile or greater than 4000 total population with a density of at least 1000 persons per square mile and which is within the boundaries of or whose boundaries touch, and which drains to at least one basin which receives drainage from, a permitted or designated MS4. However, consider exceptions and "other considerations" stated elsewhere in these criteria.

(h) Waivers and phasing. The Department may waive or phase in the requirements otherwise applicable to regulated small MS4s, as defined in Sec. 122.32(a)(1) and (2) of this item, under the following circumstances:

(1) The Department may waive permit coverage for each small MS4 in jurisdictions with a population under 1,000 within the urbanized area according to section 122.32(d).

(2) The Department may waive permit coverage for each small MS4 in jurisdictions with a population under 10,000 according to section 122.32(e).

(3) The Department may phase in permit coverage for small MS4s serving jurisdictions with a population under 10,000 on a schedule consistent with a State watershed permitting approach. Under this approach, the Department will permit coverage for small MS4s that qualify for such phased-in coverage during the year assigned for permitting in the basin where it is located. Under this option, all regulated small MS4s are required to have coverage under an NPDES permit no later than March 8, 2007.

(4) The Department will periodically review any waivers granted in accordance with paragraph (h)(2) of this section to determine whether any of the information required for granting the waiver has changed. At a minimum, the reviews will be conducted once every five years during pertinent years for basin permit issuance. In addition, the Department will consider any petition to review any waiver when the petitioner provides evidence that the information required for granting the waiver has substantially changed.

**122.33 How does an operator of a regulated, small MS4 apply for an NPDES permit, and when must he apply?**

(a) If you operate a regulated, small MS4 under section 122.32, you must seek coverage under a NPDES permit issued by the Department. As South Carolina is an NPDES authorized State, then the State is your NPDES permitting authority.

(b) You must seek authorization to discharge under a general or individual NPDES permit, as follows:

(1) If the Department has issued a general permit applicable to your discharge and you are seeking coverage under the general permit, you must submit a Notice of Intent (NOI) that includes the information on your best management practices and measurable goals required by section 122.34(d). You may file your own NOI, or you and other municipalities or governmental entities may jointly submit an NOI. If you want to share responsibilities for meeting the minimum measures with other municipalities or governmental entities, you must submit an NOI that describes which minimum measures you will implement and identify the entities that will implement the other minimum measures within the area served by your MS4. The general permit will explain any other steps necessary to obtain permit authorization.

(2) (i) If you are seeking authorization to discharge under an individual permit and wish to implement a program under section 122.34, you must submit an application to the Department that includes the information required under sections 122.21(f) and 122.34(d), an estimate of the area in square miles served by your small MS4, and any additional information that your NPDES permitting authority requests. A storm sewer map that satisfies the requirement of section 122.34(b)(3)(i) will satisfy the map requirement in section 122.21(f)(7).

(ii) If you are seeking authorization to discharge under an individual permit and wish to implement a program that is different from the program under section 122.34, you will need to comply with the permit application requirements of section 122.26(d). You must submit both Parts of the application requirements in sections 122.26(d)(1) and (2) by March 10, 2003. You do not need to submit the information required by sections 122.26(d)(1)(ii) and (d)(2) regarding your legal authority, unless you intend for the permit writer to take such information into account when developing your other permit conditions.

(iii) If allowed by the Department, you and another regulated entity may jointly apply under

either paragraph (b)(2)(i) or (b)(2)(ii) of this section to be co-permittees under an individual permit.

(3) If your small MS4 is in the same urbanized area as a medium or large MS4 with an NPDES storm water permit and that other MS4 is willing to have you participate in its storm water program, you and the other MS4 may jointly seek a modification of the other MS4 permit to include you as a limited co-permittee. As a limited co-permittee, you will be responsible for compliance with the permit's conditions applicable to your jurisdiction. If you choose this option you will need to comply with the permit application requirements of section 122.26, rather than the requirements of section 122.34. You do not need to comply with the specific application requirements of section 122.26(d)(1)(iii) and (iv) and (d)(2)(iii) (discharge characterization). You may satisfy the requirements in section 122.26 (d)(1)(v) and (d)(2)(iv) (identification of a management program) by referring to the other MS4's storm water management program.

(c) If you operate a regulated, small MS4:

(1) Designated under section 122.32(a)(1), you must apply for coverage under an NPDES permit, or apply for a modification of an existing NPDES permit under paragraph (b)(3) of this section by March 10, 2003, unless your MS4 serves a jurisdiction with a population under 10,000 and the Department has established a phasing schedule under 40CFR123.35(d)(3).

(2) Designated under section 122.32(a)(2), you must apply for coverage under an NPDES permit, or apply for a modification of an existing NPDES permit under paragraph (b)(3) of this section, within 180 days of receiving the notice of designation, unless the Department grants a later date.

**122.34 As an operator of a regulated, small MS4, what will my NPDES MS4 storm water permit require?**

(a) Your NPDES MS4 permit will require at a minimum that you develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from your MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. Your storm water management program must include the minimum control measures described in paragraph (b) of this section unless you apply for a permit under section 122.26(d). For purposes of this section, narrative effluent limitations requiring implementation of best management practices (BMP) are generally the most appropriate form of effluent limitations when designed to satisfy technology requirements (including reductions of pollutants to the maximum extent practicable) and to protect water quality. Implementation of best management practices consistent with the provisions of the storm water management program required pursuant to this section and the provisions of the permit required pursuant to section 122.33 constitutes compliance with the standard of reducing pollutants to the "maximum extent practicable." The Department will specify a period of up to 5 years from the date of permit issuance for you to develop and implement your program.

(b) Minimum control measures:

(1) Public education and outreach on storm water impacts. You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

(2) Public involvement/participation. You must, at a minimum, comply with State and local public notice requirements when implementing a public involvement/ participation program.

(3) Illicit discharge detection and elimination.

(i) You must develop, implement and enforce a program to detect and eliminate illicit discharges [as defined at section 122.26(b)(2)] into your small MS4.

(ii) You must:

(A) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the United States that receive discharges from those outfalls;

(B) To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions;

(C) Develop and implement a plan to detect and address non-storm-water discharges, including illegal dumping, to your system; and

(D) Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

(iii) You need address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)], uncontaminated, pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensate, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).

(4) Construction site storm water runoff control.

(i) You must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the Department waives requirements for storm water discharges associated with small construction activity in accordance with section 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.

(ii) Your program must include the development and implementation of, at a minimum:

(A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;

(B) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;

(C) Requirements for construction site operators to control waste such as discarded building materials, concrete-truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

(D) Procedures for site plan review which incorporate consideration of potential water quality impacts;

(E) Procedures for receipt and consideration of information submitted by the public; and

(F) Procedures for site inspection and enforcement of control measures.

(5) Post-construction storm water management in new development and redevelopment.

(i) You must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts.

(ii) You must:

(A) Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMP) appropriate for your community;

(B) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal, or local law; and

(C) Ensure adequate long-term operation and maintenance of BMP.

(6) Pollution prevention/good housekeeping for municipal operations. You must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, your State, Tribe, or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

(c) If an existing, qualifying local program requires you to implement one or more of the minimum control measures of paragraph (b) of this section, the Department may include conditions in your NPDES permit that direct you to follow the Department's requirements rather than the requirements of paragraph (b) of this section. A qualifying local program is a local storm water management program that imposes, at a minimum, the relevant requirements of paragraph (b) of this section.

(d) (1) In your permit application (either a notice of intent for coverage under a general permit or an individual permit application), you must identify and submit to the Department the following information:

(i) The best management practices (BMP) that you or another entity will implement for each of the storm water minimum control measures at paragraphs (b)(1) through (b)(6) of this section;

(ii) The measurable goals for each of the BMP including, as appropriate, the months and years in which you will undertake required actions, including interim milestones and the frequency of the action; and

(iii) The person or persons responsible for implementing or coordinating your storm water management program.

(2) If you obtain coverage under a general permit, you are not required to meet any measurable goal(s) identified in your notice of intent in order to demonstrate compliance with the minimum control measures in paragraphs (b)(3) through (b)(6) of this section unless, prior to submitting your NOI, EPA or the Department has provided or issued a menu of BMP that addresses each such minimum measure. Even if no regulatory authority issues the menu of BMP, however, you still must comply with other requirements of the general permit, including good faith implementation of BMP designed to comply with the minimum measures.

(e) You must comply with any more stringent effluent limitations in your permit, including permit requirements that modify, or are in addition to, the minimum control measures based on an approved total maximum daily load (TMDL) or equivalent analysis. The Department may include such more stringent limitations based on a TMDL or equivalent analysis that determines such limitations are needed to protect water quality.

(f) You must comply with other applicable NPDES permit requirements, standards and conditions established in the individual or general permit, developed consistent with the provisions of sections 122.41 through 122.49, as appropriate.

(g) Evaluation and assessment:

(1) Evaluation. You must evaluate program compliance, the appropriateness of your identified best management practices, and progress towards achieving your identified measurable goals.

Note to Paragraph (g)(1): The Department may determine monitoring requirements for you in accordance with State/Tribal monitoring plans appropriate to your watershed. Participation in a group monitoring program is encouraged.

(2) Recordkeeping. You must keep records required by the NPDES permit for at least 3 years. You must submit your records to the Department only when specifically asked to do so. You must make your records, including a description of your storm water management program, available to the public at reasonable times during regular business hours (see section 122.7 for confidentiality provision). (You may assess a reasonable charge for copying. You may require a member of the public to provide advance notice.)

(3) Reporting. Unless you are relying on another entity to satisfy your NPDES permit obligations under section 122.35(a), you must submit annual reports to the Department for your first permit term. For subsequent permit terms, you must submit reports in year two and four unless the Department requires more frequent reports. Your report must include:

(i) The status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving your identified measurable goals for each of the minimum control measures;

(ii) Results of information collected and analyzed, including monitoring data, if any, during the reporting period;

(iii) A summary of the storm water activities you plan to undertake during the next reporting cycle;

(iv) A change in any identified best management practices or measurable goals for any of the minimum control measures; and

(v) Notice that you are relying on another governmental entity to satisfy some of your permit obligations (if applicable).

**122.35 May an operator of a regulated small MS4 share the responsibility to implement the minimum control measures with other entities?**

(a) You may rely on another entity to satisfy your NPDES permit obligations to implement a minimum control measure if:

(1) The other entity, in fact, implements the control measure;

(2) The particular control measure, or component thereof, is at least as stringent as the corresponding NPDES permit requirement; and

(3) The other entity agrees to implement the control measure on your behalf. In the reports you must submit under section 122.34(g)(3), you must also specify that you rely on another entity to satisfy some of your permit obligations. If you are relying on another governmental entity regulated under section 122 to satisfy all of your permit obligations, including your obligation to file periodic reports required by section 122.34(g)(3), you must note that fact in your NOI, but you are not required to file the periodic reports. You remain responsible for compliance with your permit obligations if the other entity fails to implement the control measure (or component thereof). Therefore, EPA encourages you to enter into a legally binding agreement with that entity if you want to minimize any uncertainty about compliance with your permit.

(b) In some cases, the Department may recognize, either in your individual NPDES permit or in an NPDES general permit, that another governmental entity is responsible under an NPDES permit for implementing one or more of the minimum control measures for your small MS4 or that the Department itself is responsible. Where the Department does so, you are not required to include such minimum control measure(s) in your storm water management program. (For example, if a State or Tribe is subject to an NPDES permit that requires it to administer a program to control construction site runoff at the State or Tribal level and that program satisfies all of the requirements of section 122.34(b)(4), you could avoid responsibility for the construction measure, but would be responsible for the remaining minimum control measures.) Your permit may be reopened and modified to include the requirement to implement a minimum control measure if the entity fails to implement it.

**122.36 As an operator of a regulated small MS4, what happens if I don't comply with the application or permit requirements in sections 122.33 through 122.35?**

NPDES permits are federally enforceable. Violators may be subject to the enforcement actions and penalties described in Clean Water Act sections 309 (b), (c), and (g) and 505, or under applicable

State, Tribal, or local law. Compliance with a permit issued pursuant to section 402 of the Clean Water Act is deemed compliance, for purposes of sections 309 and 505, with sections 301, 302, 306, 307, and 403, except any standard imposed under section 307 for toxic pollutants injurious to human health. If you are covered as a co-permittee under an individual permit or under a general permit by means of a joint Notice of Intent you remain subject to the enforcement actions and penalties for the failure to comply with the terms of the permit in your jurisdiction except as set forth in section 122.35(b).

## PART C
## PERMIT CONDITIONS

### 122.41 Conditions applicable to all permits.

The following conditions apply to all NPDES permits. Additional conditions applicable to NPDES permits are in section 122.42. All conditions applicable to NPDES permit shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the federal regulations (or the corresponding approved State regulations) must be given in the permit.

(a) Duty to comply. The permittee must comply with all conditions of the permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the Pollution Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. The Department's approval of wastewater facility Plans and Specifications does not relieve the permittee of responsibility to meet permit limits.

(1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

(2) Failure to comply with permit conditions or the provisions of this regulation may subject the permittee to civil penalties under S.C. Code Section 48-1-330 or criminal sanctions under S.C. Code Section 48-1-320. Sanctions for violations of the Federal Clean Water Act may be imposed in accordance with the provisions of 40 CFR Part 122.41(a)(2) and (3).

(3) A person who violates any provision of this regulation, a term, condition or schedule of compliance contained within a valid NPDES permit, or the State law is subject to the actions defined in the State law.

(b) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. (But see 122.4(g)(2)).

(c) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(e) (1) Proper operation and maintenance. The permittee shall at all times properly operate and maintain in good working order and operate as efficiently as possible all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance based on design facility removals, adequate funding, adequate operator staffing and training and also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

(2) The permittee shall develop and maintain at the facility a complete Operations and Maintenance Manual for the waste treatment facilities and/or land application system. The manual shall be made available for on-site review during normal working hours. The manual shall contain operation and maintenance instructions for all equipment and appurtenances associated with the waste treatment facilities and land application system. The manual shall contain a general description of: the treatment process(es), the operational procedures to meet the requirements of (e)(1) above, and the corrective action to be taken should operating difficulties be encountered.

(3)(i) Except as stated in (ii) below, the permittee shall provide for the performance of daily treatment facility inspections by a certified operator of the appropriate grade as defined in the permit for the facility. The inspections shall include, but should not necessarily be limited to, areas which require visual observation to determine efficient operation and for which immediate corrective measures can be taken using the O & M manual as a guide. All inspections shall be recorded and shall include the date, time, and name of the person making the inspection, corrective measures taken, and routine equipment maintenance, repair, or replacement performed. The permittee shall maintain all records of inspections at the permitted facility as required by the permit, and the records shall be made available for on-site review during normal working hours.

(ii) The Department may make exceptions to operating requirements, if stated in the permit, as follows:

(A) Attendance by the certified operator of the appropriate grade ("the operator") is normally required only on days when treatment or discharge occurs.

(B) For performance of daily inspections, permits may allow a reduced grade of operator for limited time periods under specific circumstances when justified by the permittee in a staffing plan and approved by the Department.

(C) Reduced inspection frequency, but in no case less than weekly, may be suitable when specified in the permit, if there is complete telemetry of operating data and there is either a simple treatment system with a low potential for toxicity but requiring pumps or other electrical functions or the ability to stop the discharge for an appropriate period when necessary.

(D) In other circumstances where the permittee demonstrates the capability to evaluate the facility in an alternative manner equivalent to the inspection requirements in subparagraph 3(i).

(E) Any exceptions allowed under (A), (B), (C), and (D) above may be subject to compliance with the permit conditions.

(4) (i) Purpose. This regulation establishes rules for governing the operation and maintenance of

wastewater sewer systems, including gravity or pressure interceptor sewers. It is the purpose of this rule to establish standards for the management of sewer systems to prevent and/or minimize system failures that would lead to public health or environmental impacts.

(ii) Authority and applicability. Under Section 48-1-30 of the Code of Laws of South Carolina (1976 as amended), the Department is authorized to adopt such rules and regulations as may be necessary to implement the Pollution Control Act. This regulation applies to all sewer systems that have been or would be subject to a DHEC construction permit under Regulation 61-67 and whose owner owns or operates the wastewater treatment system to which the sewer discharges and which discharges under NPDES. Nothing in this regulation supersedes a more stringent requirement that may be imposed by sewer system owners that manage wastewater from satellite systems. This regulation (122.41(e)(4)) is effective when published in the State Register.

(iii) General requirements. The requirements to properly operate and maintain sewer systems are the responsibility of the system owner. General Standards. The sewer system owner must:

(A) Properly manage, operate, and maintain at all times all parts of its sewer system(s), to include maintaining contractual operation agreements to provide services, if appropriate;

(B) Provide adequate capacity to convey base flows and peak flows for all parts of the sewer system or, if capital improvements are necessary to meet this standard, develop a schedule of short and long term improvements;

(C) Take all reasonable steps to stop and mitigate the impact of releases of wastewater to the environment; and

(D) Notify the Department within 30 days of a proposed change in ownership of a sewer system.

(iv) [Reserved.]

(f) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(g) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

(h) Duty to provide information. The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

(i) Inspection and entry. The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the permittee's premises where a regulated facility or activity is located or

conducted, or where records must be kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and Pollution Control Act, any substances or parameters at any location.

(j) Monitoring and records.

(1) (i) (A)Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(B) Samples shall be reasonably distributed in time, while maintaining representative sampling.

(C) No analysis, which is otherwise valid, shall be terminated for the purpose of preventing the analysis from showing a permit or water quality violation.

(ii) Flow Measurements.

(A) Where primary flow meters are required, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be present and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of not greater than 10 percent from the true discharge rates throughout the range of expected discharge volumes. The primary flow device, where required, must be accessible to the use of a continuous flow recorder.

(B) Where permits require an estimate of flow, the permittee shall maintain at the permitted facility a record of the method(s) used in "estimating" the discharge flow (e.g., pump curves, production charts, water use records) for the outfall(s) designated on limits pages to monitor flow by an estimate.

(C) Records of any necessary calibrations must be kept.

(iii) The Department may designate a single, particular day of the month on which any group of parameters listed in the permit must be sampled. When this requirement is imposed in a permit, the Department may waive or alter compliance with the permit requirement for a specific sampling event for extenuating circumstances.

(iv) The Department may require that a permittee monitor parameters in the stream receiving his permitted discharge as necessary to evaluate the need for and to establish limits and conditions and to insure compliance with water quality standards (i.e., R.61-68).

(2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by R.61-9.503 or R.61-9.504); the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(3) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(4) Analyses for required monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless other test procedures have been specified in the permit or, in the case of sludge use or disposal, unless otherwise specified in R.61-9.503 or R.61-9.504.

(5) The PCA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $25,000 or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment provided by the Clean Water Act is also by imprisonment of not more than 4 years.

(k) Signatory requirement.

(1) All applications, reports, or information submitted to the Department shall be signed and certified (See section 122.22).

(2) The PCA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $25,000 per violation, or by imprisonment for not more than two years per violation, or by both.

(l) Reporting requirements.

(1) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under section 122.42(a)(l).

(iii) The alteration or addition results in a significant change in the permittee's sewage sludge or industrial sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan (included in the NPDES permit directly or by reference);

(2) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(3) Transfers. This permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and reissuance of the permit to change the name of permittee and incorporate such other requirements as may be necessary under the Pollution Control Act and the Clean Water Act. (See section 122.61; in some cases, modification or revocation and reissuance is mandatory.)

(4) Monitoring reports. Monitoring results shall be reported at the intervals specified in the permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in R.61-9.503 or R.61-9.504, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(5) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(6) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a

description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(ii) The following shall be included as informationwhich must be reported within 24 hours under this paragraph.

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See section 122.44(g)).

(B) Any upset which exceeds any effluent limitation in the permit.

(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours (See section 122.44(g)).

(iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (l)(6)(i) of this section if the oral report has been received within 24 hours.

(7) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.

(8) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

(m) Bypass.

(1) Definitions.

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

(ii) "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.

(2) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraph (m)(3) and (m)(4) of this section.

(3) Notice.

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).

(4) Prohibition of bypass

(i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(C) The permittee submitted notices as required under paragraph (m)(3) of this section.

(ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

(n) Upset.

(1) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. A upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(2) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(3) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;

(ii) The permitted facility was at the time being properly operated; and

(iii) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour notice).

(iv) The permittee complied with any remedial measures required under paragraph (d) of this section.

(4) Burden of proof. In any enforcement proceeding, the permittee seeking to establish the

occurrence of an upset has the burden of proof.

(o) Misrepresentation of Information.

(1) Any person making application for a NPDES discharge permit or filing any record, report, or other document pursuant to a regulation of the Department, shall certify that all information contained in such document is true. All application facts certified to by the applicant shall be considered valid conditions of the permit issued pursuant to the application.

(2) Any person who knowingly makes any false statement, representation, or certification in any application, record, report, or other documents filed with the Department pursuant to the State law, and the rules and regulations pursuant to that law, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for pursuant to 48-1-320 or 48-1-330.

**122.42 Additional conditions applicable to specified categories of NPDES permits.**

The following conditions, in addition to those set forth in section 122.41, apply to all NPDES permits within the categories specified below:

(a) Existing manufacturing, commercial, mining, and silvicultural dischargers. In addition to the reporting requirements under section 122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe:

(1) That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(i) One hundred micrograms per liter (100 µg/l);

(ii) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(iii) Five (5)times the maximum concentration value reported for that pollutant in the permit application in accordance with section 122.21(g)(7); or

(iv) The level established by the Department in accordance with section 122.44(f).

(2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed in the highest of the following "notification levels":

(i) Five hundred micrograms per liter (500 µg/l);

(ii) One milligram per liter (1 mg/l) for antimony;

(iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with section 122.21(g)(7).

(iv) The level established by the Department in accordance with section 122.44(f).

(b) Publicly owned treatment works. All POTWs must provide adequate notice to the Department of the following:

(1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to sections 301 or 306 of CWA if it were directly discharging those pollutants; and

(2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

(3) For purposes of this paragraph, adequate notice shall include information on:

(i) The quality and quantity of effluent introduced into the POTW, and

(ii) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(c) Municipal separate storm sewer systems. The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer that has been designated by the Department under section 122.26(a)(1)(v) of this regulation must submit an annual report by the anniversary of the date of the issuance of the permit for such system. The report shall include:

(1) The status of implementing the components of the storm water management program that are established as permit conditions;

(2) Proposed changes to the storm water management programs that are established as permit conditions. Such proposed changes shall be consistent with section 122.26(d)(2)(iii); and

(3) Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under section 122.26(d)(2)(iv) and (d)(2)(v);

(4) A summary of data, including monitoring data, that is accumulated throughout the reporting year;

(5) Annual expenditures and budget for year following each annual report;

(6) A summary describing the number and nature of enforcement actions, inspections, and public education programs;

(7) Identification of water quality improvements or degradation.

(d) Storm water discharges. The initial permits for discharges composed entirely of storm water issued pursuant to section 122.26(e)(7) of this regulation shall require compliance with the conditions of the permit as expeditiously as practicable, but in no event later than three years after the date of issuance of the permit.

(e) Concentrated animal feeding operations (CAFO).
Any permit issued to a CAFO must include:

(1) Requirements to develop and implement a nutrient management plan. At a minimum, a

nutrient management plan must include best management practices and procedures necessary to implement applicable effluent limitations and standards. Permitted CAFO must have their nutrient management plans developed and implemented by December 31, 2006. CAFO that seek to obtain coverage under a permit after December 31, 2006 must have a nutrient management plan developed and implemented upon the date of permit coverage. The nutrient management plan must, to the extent applicable:

(i) Ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities;

(ii) Ensure proper management of mortalities (i.e., dead animals) to ensure that they are not disposed of in a liquid manure, storm water, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities;

(iii) Ensure that clean water is diverted, as appropriate, from the production area;

(iv) Prevent direct contact of confined animals with waters of the United States;

(v) Ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants;

(vi) Identify appropriate site-specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the State;

(vii) Identify protocols for appropriate testing of manure, litter, process wastewater, and soil;

(viii) Establish protocols to land apply manure, litter, or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater; and

(ix) Identify specific records that will be maintained to document the implementation and management of the minimum elements described in paragraphs (e)(1)(i) through (e)(1)(viii) of this section.

(2) Recordkeeping requirements.

(i) The permittee must create, maintain for five years, and make available to the Department upon request, the following records:

(A) All applicable records identified pursuant to paragraph (e)(1)(ix) of this section;

(B) In addition, all CAFO subject to 40 CFR 412 must comply with record keeping requirements specified in sections 412.37(b) and (c) and sections 412.47(b) and (c).

(ii) A copy of the CAFO's site-specific nutrient management plan must be maintained on site and made available to the Department upon request.

(3) Requirements relating to transfer of manure or process wastewater to other persons. Prior to transferring manure, litter, or process wastewater to other persons, Large CAFO must provide the

recipient of the manure, litter, or process wastewater with the most current nutrient analysis. The analysis provided must be consistent with the requirements of 40 CFR 412. Large CAFO must retain for five years records of the date, recipient name and address, and approximate amount of manure, litter, or process wastewater transferred to another person.

(4) Annual reporting requirements for CAFO. The permittee must submit an annual report to the Department. The annual report must include:

(i) The number and type of animals (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), whether in open confinement or housed under roof;

(ii) Estimated total amount of manure, litter, and process wastewater generated by the CAFO in the previous 12 months (tons/gallons);

(iii) Estimated total amount of manure, litter, and process wastewater transferred to other person(s) by the CAFO in the previous 12 months (tons/gallons);

(iv) Total number of acres for land application covered by the nutrient management plan developed in accordance with paragraph (e)(1) of this section;

(v) Total number of acres under control of the CAFO that were used for land application of manure, litter, and process wastewater in the previous 12 months;

(vi) Summary of all manure, litter, and process wastewater discharges from the production area that have occurred in the previous 12 months, including date, time, and approximate volume; and

(vii) A statement indicating whether the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner.

(f) Easements. Easements for Storm Water NPDES Permits or Leaking Underground Storage Tank Groundwater Remediation NPDES Permits. Easements for ditch discharges from either a storm water point source or a leaking underground storage tank groundwater remediation project will not be required to be submitted to the Department as a prerequisite for obtaining an individual NPDES permit or for coverage under a general permit. The permittee must ensure that all easements necessary for the discharge are obtained prior to the discharge occurring.

**122.43 Establishing permit conditions.**

(a) In addition to conditions required in all permits (sections 122.41 and 122.42), the Department shall establish conditions, as required on a case-by-case basis, to provide for and assure compliance with all applicable requirements of CWA and PCA and regulations. These shall include conditions under section 122.46 (duration of permits), section 122.47(a) (schedules of compliance), and section 122.48 (monitoring).

(b) (1) An "applicable requirement" is a State statutory or regulatory requirement which takes effect prior to final administrative disposition of a permit. An applicable requirement is also any requirement which takes effect prior to the modification or revocation and reissuance of a permit, to the extent allowed in section 122.62.

(2) New or reissued permits, and to the extent allowed under section 122.62 modified or revoked and reissued permits, shall incorporate each of the applicable requirements referenced in section 122.44 and section 122.45.

(c) Incorporation. All permit conditions shall be incorporated either expressly or by reference. If incorporated by reference, a specific citation to the applicable regulations or requirements must be given in the permit.

**122.44 Establishing limitations, standards, and other permit conditions.**

In addition to the conditions established under section 122.43(a), each NPDES permit shall include conditions meeting the following requirements when applicable.

(a) (1) Technology—based effluent limitations and standards based on effluent limitations and standards promulgated under section 301 of the CWA, new source performance standards promulgated under section 306 of CWA, or case—by—case effluent limitations determined under section 402(a)(1) of CWA, or a combination of the three, in accordance with section 125.3. For new sources or new dischargers, these technology based limitations and standards are subject to the provisions of section 122.29(d) (protection period).

(2) Monitoring waivers for certain guideline-listed pollutants.

(i) The Department may authorize a discharger subject to technology-based effluent limitations guidelines and standards in an NPDES permit to forego sampling of a pollutant found at 40 CFR Subchapter N 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.

(ii) 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.

(iii) 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.

(iv) Any grant of the monitoring waiver must be included in the permit as an expressed permit condition and the reasons supporting the grant must be documented in the permit's fact sheet or statement of basis.

(v) This provision does not supersede certification processes and requirements already established in existing effluent limitations guidelines and standards.

(b) (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 Department shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition. See also section 122.41(a).

(2) Standards for sewage sludge use or disposal under section 405(d) of the CWA 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 under State NPDES permit programs 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 Department may initiate proceedings under these regulations to modify or revoke and reissue the permit to conform to the standard for sewage sludge use or disposal.

(c) Reopener clause:

(1) For any permit issued to a treatment works treating domestic sewage (including "sludge-only facilities"), the Department 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 Department may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph, 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.

(2) A permit may include a reopener referring to a permit modification reasonably foreseen based on expected revision to law or regulation or based on the expectation of receipt of information when either of these would be the basis for a modification under R61-9.122.62.

(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, and 318, and 405 of CWA necessary to:

(1) Achieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality.

(i) Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Department 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 State water quality standard, including State narrative criteria for water quality.

(ii) 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 State water quality standard, the permitting authority 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.

(iii) When the permitting authority determines, using the procedures in paragraph (d)(1)(ii) of this section, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant.

(iv) When the permitting authority determines, using the procedures in paragraph (d)(1)(ii) of this section, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the numeric criterion for whole effluent toxicity, the permit must contain effluent limits for whole effluent toxicity.

(v) Except as provided in this subparagraph, when the permitting authority determines, using the procedures in paragraph (d)(1)(ii) of this section, 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 State water quality standard, the permit must contain effluent limits for whole effluent toxicity. Limits on whole effluent toxicity are not necessary where the permitting authority demonstrates in the fact sheet or statement of basis of the NPDES permit, using the procedures in paragraph (d)(1)(ii) of this section, that chemical-specific limits for the effluent are sufficient to attain and maintain applicable numeric and narrative State water quality standards.

(vi) Where the Department 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 State water quality standard, the permitting authority must establish effluent limits using one or more the following options:

(A) Establish effluent limits using calculated numeric water quality criterion for the pollutant which the permitting authority 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 State criterion, or an explicit State policy or regulation interpreting its narrative water quality criterion, supplemented with other relevant information which may include: EPA's Water Quality Standards Handbook, October 1983, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current EPA criteria documents; or

(B) 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

(C) Establish effluent limitations on an indicator parameter for the pollutant of concern, provided:

(1) The permit identifies which pollutants are intended to be controlled by the use of the effluent limitation;

(2) The fact sheet required by R.61-9.124.56 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;

(3) 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

(4) The permit contains a reopener clause allowing the permitting authority to modify or revoke and reissue the permit if the limits on the indicator parameter no longer attain and

maintain applicable water quality standards.

(vii) When developing water quality-based effluent limits under this paragraph, the permitting authority shall ensure that:

(A) The level of water quality to be achieved by limits on point sources established under this paragraph is derived from, and complies with all applicable water quality standards; and

(B) 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 the State and approved by EPA pursuant to 40 CFR 130.7.

(2) Attain or maintain a specified water quality through water quality related effluent limits established under section 302 of CWA;

(3) Conform to the conditions to a State certification under R.61-101 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 the certifying State:

(5) Incorporate any more stringent limitations, treatment standards, or schedule of compliance requirements established under Federal or State 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 R.61-9.125 Part M, for ocean discharges;

(8) Incorporate alternative effluent limitations or standards where warranted by "fundamentally different factors," under R.61-9.125 Part D;

(9) [Reserved].

(e) Technology-based controls for toxic pollutants. Limitations established under paragraphs (a), (b), or (d) of this section, to control pollutants meeting the criteria listed in paragraph (e)(1) of this section. Limitations will be established in accordance with paragraph (e)(2) of this section. An explanation of the development of these limitations shall be included in the fact sheet under R.61-9.124.56(b)(1)(i).

(1) Limitations must control all toxic pollutants which the Department determines (based on information reported in a permit application under section 122.21(g)(7) or in a notification under section 122.42(a)(1) 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 under R.61-9.125.3(c); or

(2) The requirement that the limitations control the pollutants meeting the criteria of paragraph

(e)(1) of this section will be satisfied by:

(i) Limitations on those pollutants; or

(ii) Limitations on other pollutants which, in the judgement of the Department, will provide treatment of the pollutants under paragraph (e)(1) of this section to the levels required by 125.3(c).

(f) Notification level. A "notification level" which exceeds the notification level of section 122.42(a)(1)(i), (ii) or (iii), upon a petition from the permittee or on the Department'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 under R.61-9.125.3(c).

(g) Twenty-four hour reporting. Pollutants for which the permittee must report violations of maximum daily discharge limitations under section 122.41(l)(6)(ii)(C) (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 section 122.46.

(i) Monitoring requirements. In addition to section 122.48, the following monitoring requirements:

(1) To assure compliance with permit limitations and protection of the environment, requirements to monitor:

(i) The mass (or other measurement specified in the permit) for each pollutant limited in the permit and as necessary to characterize any other pollutant, which may be in the wastewater, which has a significant potential to have an effect on the environment or operation of treatment or disposal facilities,

(ii) The volume of effluent discharged from each outfall;

(iii) Other measurements as appropriate including pollutants in internal waste streams under section 122.45(h), pollutants in intake water for net limitations under section 122.45(g); frequency, rate of discharge, etc., for noncontinuous discharges under section 122.45(e); pollutants subject to notification requirements under section 122.42(a); and pollutants in sewage sludge or other monitoring as specified in R.61-9.503 or R.61-9.504; or as determined to be necessary on a case-by-case basis pursuant to section 405(d)(4) of the CWA.

(iv) According to test procedures approved under 40 CFR Part 136 for the analyses of pollutants having approved methods under that part, and according to a test procedure specified in the permit for pollutants with no approved methods.

(2) Except as provided in paragraphs (i)(4) and (i)(5) of this section, 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 than 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 R.61-9.503 (where applicable) but in no case less than once a year.

(3) 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.

(4) Requirements to report monitoring results for storm water discharges associated with industrial activity (other than those addressed in paragraph (i)(3) of this section) 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:

(i) 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 loadings 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;

(ii) 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 non-compliance.

(iii) Such report and certification be signed in accordance with section 122.22 and

(iv) 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.

(5) 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 section 122.41(l)(1), (4), (5) and (6) at least annually.

(j) Pretreatment program for POTWs. Requirements for POTWs to:

(1) Identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of CWA and R.61-9.403.

(2) (i) Submit a local program when required by and in accordance with R.61-9.403 to assure compliance with pretreatment standards to the extent applicable under section 307(b). The local program shall be incorporated into the permit as described in R.61-9.403. The program must require all indirect dischargers to the POTW to comply with the reporting requirements of R.61-9.403.

(ii) Provide a written technical evaluation of the need to revise local limits under R.61-9.403.5(c)(1), following permit issuance or reissuance.

(3) For POTWs which are "sludge-only facilities," a requirement to develop a pretreatment program under R.61-9.403 when the Department determines that a pretreatment program is necessary to assure compliance with section 405(d) of the CWA.

(k) Best management practices (BMP) 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 the 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 CWA.

(l) Reissued permits.

(1) Except as provided in paragraph (l)(2) or (l)(3) of this section when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under section 122.62).

(2) In the case of effluent limitations established on the basis of Section 402(a)(l)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) 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.

(i) Exceptions - A permit with respect to which paragraph (l)(2) of this section 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 Department determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b);

(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 section 301(c), 301(k), 301(n), or 316(a); 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.

(ii) Limitations. In no event may a permit with respect to which paragraph (l)(2) of this section 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, reissued, or modified to contain a less stringent effluent limitation if the implementation of such limitation would result in a violation of a water quality standard under section 303 of the CWA applicable to such waters.

(3) In the event this section (section 122.44(l)) of the regulations conflicts with the provisions of the Clean Water Act, the CWA will apply.

(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 Department may issue separate permits to the treatment works and to its users, or may require a separate permit application from any user. The Department'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 Department to POTWs under sections 201 and 204 of CWA which are reasonably necessary for the achievement of effluent limitations under Section 301 of CWA.

(o) Sewage sludge. Requirements under section 405 of CWA governing the disposal of sewage sludge from publicly owned treatment works or any other treatment works treating domestic sewage for any use for which regulations have been established, in accordance with any applicable regulations.

(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 R.61-9.124.59.

(r) [Reserved.]

(s) Qualifying State, Tribal, or local programs.

(1) For storm water discharges associated with small construction activity identified in section 122.26(b)(15), the Director may include permit conditions that incorporate qualifying State, Tribal, or local erosion and sediment control program requirements by reference. Where a qualifying State, Tribal, or local program does not include one or more of the elements in this paragraph (s)(1), then the Director must include those elements as conditions in the permit. A qualifying State, Tribal, or local erosion and sediment control program is one that includes:

(i) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;

(ii) Requirements for construction site operators to control waste such as discarded building

materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

(iii) Requirements for construction site operators to develop and implement a storm water pollution prevention plan. (A storm water pollution prevention plan includes site descriptions, descriptions of appropriate control measures, copies of approved State, Tribal or local requirements, maintenance procedures, inspection procedures, and identification of non-storm water discharges); and

(iv) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.

(2) For storm water discharges from construction activity identified in section 122.26(b)(14)(x), the Director may include permit conditions that incorporate qualifying State, Tribal, or local erosion and sediment control program requirements by reference. A qualifying State, Tribal or local erosion and sediment control program is one that includes the elements listed in paragraph (s)(1) of this section and any additional requirements necessary to achieve the applicable technology-based standards of "best available technology" and "best conventional technology" based on the best professional judgment of the permit writer.

**122.45 Calculating NPDES permit conditions.**

(a) Outfalls and discharge points. All permit effluent limitations, standards and prohibitions shall be established for each outfall or discharge point of the permitted facility, except as otherwise provided under section 122.44(k) (BMPs where limitations are infeasible) and paragraph (h) of this section (limitations on internal waste streams).

(b) Production-based limitations.

(1) In the case of POTWs, permit effluent limitations, standards, or prohibitions shall be calculated based on design flow.

(2)(i) Except in the case of POTWs or as provided in paragraph (b)(2)(ii) of this section, calculation of any permit limitations, standards, or prohibitions which are based on production (or other measure of operation) shall be based not upon the designed production capacity but rather upon a reasonable measure of actual production of the facility. For new sources or new dischargers, actual production shall be estimated using projected production. The time period of the measure of production shall correspond to the time period of the calculated permit limitations; for example, monthly production shall be used to calculate average monthly discharge limitations.

(ii)(A)(1) The Department may include a condition establishing alternate permit limitations, standards, or prohibitions based upon anticipated increased (not to exceed maximum production capability) or decreased production levels.

(2) For the automotive manufacturing industry only, the Department may establish a condition under paragraph (b)(2)(ii)(A)(1) of this section if the applicant satisfactorily demonstrates to the Department at the time the application is submitted that its actual production, as indicated in paragraph (b)(2)(i) of this section, is substantially below maximum production capability and that there is a reasonable potential for an increase above actual production during the duration of the permit.

(B) If the Department establishes permit conditions under paragraph (b)(2)(ii)(A) of this

section:

(1) The permit shall require the permittee to notify the Department at least two business days prior to a month in which the permittee expects to operate at a level higher than the lowest production level identified in the permit. The notice shall specify the anticipated level and the period during which the permittee expects to operate at the alternate level. If the notice covers more than one month, the notice shall specify the reasons for the anticipated production level increase. New notice of discharge at alternate levels is required to cover a period or production level not covered by prior notice or, if during two consecutive months otherwise covered by a notice, the production level at the permitted facility does not in fact meet the higher level designated in the notice.

(2) The permittee shall comply with the limitations, standards, or prohibitions that correspond to the lowest level of production specified in the permit, unless the permittee has notified the Department under paragraph (b)(2)(ii)(B)(1) of this section, in which case the permittee shall comply with the lower of the actual level of production during each month or the level specified in the notice.

(3) The permittee shall submit with the DMR the level of production that actually occurred during each month and the limitations, standards, or prohibitions applicable to that level of production.

(c) Metals. All permit effluent limitations, standards, or prohibitions for a metal shall be expressed in terms of "total recoverable metal" as defined in 40 CFR Part 136 unless:

(1) An applicable effluent standard or limitation has been promulgated under the CWA or under R.61-68 and specifies the limitation for the metal in the dissolved or valent or total form; or

(2) In establishing permit limitations on a case-by-case basis under R.61-9.125.3, it is necessary to express the limitation on the metal in the dissolved or valent or total form to carry out the provisions of the CWA; or

(3) All approved analytical methods for the metal inherently measure only its dissolved form (e.g. hexavalent chromium).

(d) Continuous discharges. For continuous discharges all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall unless impracticable be stated as:

(1) Maximum daily and average monthly discharge limitations for all dischargers other than publicly owned treatment works; and

(2) Average weekly and average monthly discharge limitations for POTWs.

(e) Non-continuous discharges. Discharges which are not continuous, as defined in section 122.2, shall be particularly described and limited, considering the following factors, as appropriate:

(1) Frequency (for example a batch discharge shall not occur more than once every 3 weeks);

(2) Total mass (for example, not to exceed 100 kilograms of zinc and 200 kilograms of chromium per batch discharge);

(3) Maximum rate of discharge of pollutants during the discharge (for example, not to exceed 2 kilograms of zinc per minute); and

(4) Prohibition or limitation of specified pollutants by mass, concentration, or other appropriate measure (for example, shall not contain at any time more than 0.1 mg/l zinc or more than 250 grams (3 kilogram) of zinc in any discharge).

(f) Mass limitations.

(1) All pollutants limited in permits shall have limitations, standards, or prohibitions expressed in terms of mass except:

(i) For pH, temperature, radiation, or other pollutants which cannot appropriately be expressed in mass:

(ii) When applicable standards and limitations are expressed in terms of other units of measurement; or

(iii) If in establishing permit limitations on a case-by-case basis under R.61-9.125.3, limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation (for example, discharges of TSS from certain mining operations), and permit conditions ensure that dilution will not be used as a substitute for treatment.

(2) Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the permittee to comply with both limitations.

(g) Pollutants in intake water.

(1) Upon request of the discharger, technology-based effluent limitations or standards shall be adjusted to reflect credit for pollutants in the discharger's intake water if;

(i) The applicable effluent limitations and standards contained in 40 CFR Subchapter N specifically provide that they shall be applied on a net basis; or

(ii) The discharger demonstrates that the control system it proposes or uses to meet applicable technology-based limitations and standards would, if properly installed and operated, meet the limitations and standards in the absence of pollutants in the intake waters.

(2) Credit for generic pollutants such as biochemical oxygen demand (BOD) or total suspended solids (TSS) should not be granted unless the permittee demonstrates that the constituents of the generic measure in the 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 limitation or standard, up to a maximum value equal to the influent value. Additional monitoring may be necessary to determine eligibility for credits and compliance with permit limits.

(4) Credit shall be granted only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made. The Department may waive this

requirement if it finds that no environmental degradation will result.

(5) This section does not apply to the discharge of raw water clarifier sludge generated from the treatment of intake water.

(h) Internal waste streams.

(1) When permit effluent limitations or standards imposed at the point of discharge are impractical or infeasible, effluent limitations or standards for discharges of pollutants may be imposed on internal waste streams before mixing with other waste streams or cooling water streams. In those instances, the monitoring required by section 122.48 shall also be applied to the internal waste streams.

(2) Limits on internal waste streams will be imposed only when the fact sheet under R.61-9.124.56 sets forth the exceptional circumstances which make such limitations necessary, such as when the final discharge point is inaccessible (for example, under 10 meters of water), the wastes at the point of discharge are so diluted as to make monitoring impracticable, or the interferences among pollutants at the point of discharge would make detection or analysis impracticable.

(i) Disposal of pollutants into wells, into POTWs. Permit limitations and standards shall be calculated as provided in section 122.50.

**122.46 Duration of permits.**

(a) An NPDES permit issued pursuant to State law and this regulation shall be effective for a fixed term not to exceed 5 years. A person who wishes to continue to operate under such permit shall apply for re-issuance of a permit pursuant to this regulation.

(b) Except as provided in section 122.6, the term of a permit shall not be extended by modification beyond the maximum duration specified in this section.

(c) The Department may issue any permit for a duration that is less than the full allowable term under this section.

(d) A permit may be issued to expire on or after the statutory deadline set forth in section 301(b)(2)(A), (C), and (E), if the permit includes effluent limitations to meet the requirements of section 301(b)(2) (A), (C), (D), (E) and (F), whether or not applicable effluent limitations guidelines have been promulgated or approved.

(e) A determination that a particular discharger falls within a given industrial category for purposes of setting a permit expiration date under paragraph (d) of this section is not conclusive as to the discharger's inclusion in that industrial category for any other purposes, and does not prejudice any rights to challenge or change that inclusion at the time that a permit based on that determination is formulated.

**122.47 Schedule of compliance.**

(a) General. The NPDES permit may, when appropriate, specify a schedule of compliance leading to compliance with CWA, PCA, and regulations.

(1) Time for compliance. Any schedules of compliance under this section shall require compliance as soon as possible, but not later than the applicable statutory deadline under the CWA or as

provided for under section 122.47(c).

(2) The first NPDES permit issued to a new source or a new discharger shall contain a schedule of compliance only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised after commencement of construction but less than three years before commencement of the relevant discharge. For recommencing dischargers, a schedule of compliance shall be available only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised less than three years before recommencement of discharge.

(3) Interim dates. Except as provided in paragraph (b)(1)(ii) of this section, if a permit establishes a schedule of compliance which exceeds nine (9) months from the date of permit issuance, the schedule shall set forth interim requirements and the date for their achievement.

(i) The time between interim dates shall not exceed nine (9) months, except that in the case of a schedule for compliance with standards for sewage sludge use and disposal, the time between interim dates shall not exceed six months.

(ii) If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than nine (9) months and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(4) Reporting. The permit shall be written to require that no later than 10 days following each interim date and the final date of compliance, the permittee shall notify the Department in writing of its compliance or noncompliance with the interim or final requirements, or submit progress reports if paragraph (a)(3)(ii) is applicable.

(b) Alternative schedules of compliance. An NPDES permit applicant or permittee may cease conducting regulated activities (by terminating of direct discharge for NPDES sources) rather than continuing to operate and meet permit requirements as follows:

(1) If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

(i) The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or

(ii) The permittee shall cease conducting permitted activities before non-compliance with any interim or final compliance schedule requirement already specified in the permit.

(2) If the decision to cease conducting regulated activities is made before issuance of a permit whose term will include the termination date, the permit shall contain a schedule leading to termination which will ensure timely compliance with applicable requirements no later than the statutory deadline.

(3) If the permittee is undecided whether to cease conducting regulated activities, the Department may issue or modify a permit to contain two schedules as follows:

(i) Both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner if the decision is to continue conducting

regulated activities;

(ii) One schedule shall lead to timely compliance with applicable requirements, no later than the statutory deadline;

(iii) The second schedule shall lead to cessation of regulated activities by a date which will ensure timely compliance with applicable requirements no later than the statutory deadline.

(iv) Each permit containing two schedules shall include a requirement that after the permittee has made a final decision under paragraph (b)(3)(i) of this section it shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities.

(4) The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the Department, such as a resolution of the board of directors of a corporation.

(c) Terms and Conditions of Permits: Schedules of Compliance.

(1) A person issued an NPDES permit by the Department who is not in compliance with applicable effluent standards and limitations or other requirements contained therein at the time the permit is issued, shall be required to achieve compliance within a period of time as set forth by the Department, with effluent standards and limitations, with water quality standards, or with specific requirements or conditions set by the Department. The Department shall require compliance with terms and conditions of the permit in the shortest reasonable period of time as determined thereby or within a time schedule for compliance which shall be specified in the issued permit.

(2) If a time schedule for compliance specified in an NPDES permit which is established by the Department pursuant to Subpart (1) above, exceeds nine (9) months, the time schedule shall provide for interim dates of achievement for compliance with certain applicable terms and conditions of the permit.

(d) Terms and Conditions of Permits: Compliance Reports by Dischargers.

(1) Within ten (10) days after an interim date of compliance or the final date of compliance specified in an NPDES permit, a permittee shall provide the Department with written notice of his compliance or noncompliance with the requirements or conditions specified to be completed by that date.

(2) Failure to submit the written notice to the Department is just cause for the Department to pursue enforcement action against the discharger pursuant to the State law or this regulation.

(e) Noncompliance. A discharger who fails or refuses to comply with an interim or final date of compliance specified in an NPDES permit, may be deemed by the Department to be in violation of the permit and may be subject to enforcement action prescribed in the State law or this regulation.

**122.48 Requirements for recording and reporting of monitoring results.**

(a) All permits shall specify:

(1) Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate);

(2) Monitoring shall include 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 section 122.44. Reporting shall be no less frequent than specified in the above regulation.

(4) That a permittee required to monitor a waste discharge shall maintain records of all information resulting from such monitoring, including the date, place and time of sampling; the dates analyses were performed; the person performing the analyses; the analytical techniques, procedures or methods used; and the results of such analyses. All records and results of monitoring activities and calibration and maintenance records shall be retained by the permittee a minimum of three (3) years unless otherwise required or extended by the Department.

(b) Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required by the Department to be maintained as a condition in a permit, or who alters or falsifies the results obtained by such devices or methods, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for pursuant to 48-1-320 and 48-1-330 of the Code.

**122.49 [Reserved].**

**122.50 Disposal of pollutants into publicly owned treatment works.**

(a) When part of a discharger's process wastewater is not being discharged into waters of the State or contiguous zone because it is disposed into a POTW, thereby reducing the flow or level of pollutants being discharged into waters of the State, applicable effluent standards and limitations for the discharge in an NPDES permit shall be adjusted to reflect the reduced raw waste resulting from such disposal. Effluent limitations and standards in the permit shall be calculated by one of the following methods:

(1) If none of the waste from a particular process is discharged into waters of the State, and effluent limitations guidelines provide separate allocation for wastes from that process, all allocations for the process shall be eliminated from calculation of permit effluent limitations or standards.

(2) In all cases other than those described in paragraph (a)(1) of this section, effluent limitations shall be adjusted by multiplying the effluent limitation derived by applying effluent limitation guidelines to the total waste stream by the amount of wastewater flow to be treated and discharged into waters of the State, and dividing the result by the total wastewater flow. Effluent limitations and standards so calculated may be further adjusted under R.61-9.125 Part D to make them more or less stringent if discharges to publicly owned treatment works change the character or treatability of the pollutants being discharged to receiving waters. This method may be algebraically expressed as:

$$P = \frac{E \times N}{T}$$

where P is the permit effluent limitation, E is the limitation derived by applying effluent guidelines to the total wastestream, N is the wastewater flow to be treated and discharged to waters of the State, and T is the total wastewater flow.

(b) Paragraph (a) of this section does not apply to the extent that promulgated effluent limitations

guidelines:

(1) Control concentrations of pollutants discharged but not mass; or

(2) Specify a different specific technique for adjusting effluent limitations to account for well injection, or disposal into POTWs.

(c) Paragraph (a) of this section does not alter a discharger's obligation to meet any more stringent requirements established under sections 122.41, 122.42, 122.43, and 122.44.

## PART D
## TRANSFER, MODIFICATION, REVOCATION, AND REISSUANCE AND TERMINATION OF PERMITS

### 122.61 Transfer of permits.

(a) Transfers by modification. Except as provided in paragraph (b) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under section 122.62(e)(2)), or a minor modification made (under section 122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under CWA.

(b) Other transfers. As an alternative to transfers under paragraph (a) of this section, any NPDES permit may be transferred to a new permittee if:

(1) The current permittee notifies the Department at least 30 days in advance of the proposed transfer date in paragraph (b)(2) of this section;

(2) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

(3) Permits are non-transferable except with prior consent of the Department. A modification under this subparagraph may also be a minor modification under section 122.63.

### 122.62 Modification or revocation and reissuance of permits.

(a) When the Department receives any information (for example, inspects the facility, receives information submitted by the permittee as required in the permit (see section 122.41), receives a request for modification or revocation and reissuance under section 124.5, or conducts a review of the permit file), it may determine whether or not one or more of the causes listed in paragraph (d) and (e) of this section for modification or revocation and reissuance or both exist.

(b) If cause exists, the Department may modify or revoke and reissue the permit accordingly, subject to the limitations of R.61-9.124.5(c), and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term. See R.61-9.124.5(c)(2).

(c) If cause does not exist under this section or section 122.63, the Department shall not modify or revoke and reissue the permit. If a permit modification satisfies the criteria in section 122.63 for "minor modifications" the permit may be modified without a draft permit or public review. Otherwise, a draft

permit must be prepared and other procedures in R.61-9.124 followed.

(d) Causes for modification. The following are causes for modification but not revocation and reissuance of permits except when the permittee requests or agrees.

(1) Alterations. There are material and substantial alterations or additions to the permitted facility or activity (including a change or changes in the permittee's sludge use or disposal practice) which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

(2) Information. The Department has received new information. Permits may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance. For NPDES general permits (section 122.28) this cause includes any information indicating that cumulative effects on the environment are unacceptable. For new source or new discharger NPDES permits (sections 122.21, 122.29), this cause shall include any significant information derived from effluent testing required under section 122.21(k)(5)(vi) or section 122.21(h)(4)(iii) after issuance of the permit.

(3) New regulations. The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause, only as follows:

(i) For promulgation of amended standards or regulations, when:

(A) The permit condition requested to be modified was based on a promulgated effluent limitation guideline, EPA approved or promulgated water quality standards, or the Secondary Treatment Regulations under R.61-9.133; and

(B) EPA has revised, withdrawn, or modified that portion of the regulation or effluent limitation guideline on which the permit condition was based, or has approved a State action with regard to a water quality standard on which the permit condition was based; and

(C) A permittee requests modification in accordance with R.61-9.124.5 within ninety (90) days after Federal Register notice of the action on which the request is based.

(ii) For judicial decisions, a court of competent jurisdiction has remanded and stayed promulgated regulations or effluent limitation guidelines, if the remand and stay concern that portion of the regulations or guidelines on which the permit condition was based and a request is filed by the permittee in accordance with R.61-9.124.5 within ninety (90) days of judicial remand.

(iii) For changes based upon modified State certifications of NPDES permits, see R.61-9.124.55(b).

(4) Compliance schedules. The Department determines good cause exists for modification of a compliance schedule or terms and conditions of a permit, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonably available remedy. However, in no case may an NPDES compliance schedule be modified to extend beyond an applicable CWA statutory deadline. See also section 122.63(c) (minor modifications) and paragraph (d)(13) of this section (NPDES innovative technology).

(5) When the permittee has filed a request for a variance under CWA section 301(c), 301(k), or 316(a) or for "fundamentally different factors" within the time specified in section 122.21.

(6) 307(a) toxics. When required to incorporate an applicable 307(a) toxic effluent standard or prohibition (see section 122.44(b)).

(7) Reopener. When required by the "reopener" conditions in a permit, which are established in the permit under section 122.44(b) (for CWA toxic effluent limitations and standards for sewage sludge use or disposal, see also section 122.44(c)) or R.61-9.403.18(e) (Pretreatment Program).

(8)(i) Net limits. Upon request of a permittee who qualifies for effluent limitations on a net basis under section 122.45(g).

(ii) When a discharger is no longer eligible for net limitations, as provided in section 122.45(g)(1)(ii).

(9) Pretreatment. As necessary under R.61-9.403.8(e) (compliance schedule for development of pretreatment program).

(10) Failure to notify. Upon failure of an approved State to notify, as required by section 40 CFR 402(b)(3), another State whose waters may be affected by a discharge from the approved State.

(11) Non-limited pollutants. When the level of discharge of any pollutant which is not limited in the permit exceeds the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under R.61-9.125.3(c).

(12) Notification levels. To establish a "notification level" as provided in section 122.44(f).

(13) Compliance schedules. To modify a schedule of compliance to reflect the time lost during construction of an innovative or alternative facility, in the case of a POTW which has received a grant under section 202(a)(3) of CWA for 100% of the costs to modify or replace facilities constructed with a grant for innovative and alternative wastewater technology under section 202(a)(2). In no case shall the compliance schedule be modified to extend beyond an applicable CWA statutory deadline for compliance.

(14) For a small MS4, to include an effluent limitation requiring implementation of a minimum control measure or measures as specified in section 122.34(b) when:

(i) The permit does not include such measure(s) based upon the determination that another entity was responsible for implementation of the requirement(s); and

(ii) The other entity fails to implement measure(s) that satisfy the requirement(s).

(15) To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions.

(16) When the discharger has installed the treatment technology considered by the permit writer in setting effluent limitations imposed under 402(a)(1) of the CWA and has properly operated and maintained the facilities but nevertheless has been unable to achieve those effluent limitations. In this

case, the limitations in the modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by a subsequently promulgated effluent limitations guideline).

(17) [Reserved].

(18) Land application plans. When required by an NPDES permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.

(e) Causes for modification or revocation and reissuance. The following are causes to modify or, alternatively, revoke and reissue a permit:

(1) Cause exists for termination under section 122.64, and the Department determines that modification or revocation and reissuance is appropriate.

(2) The Department has received notification (as required in the permit, see section 122.41(l)(3)) of a proposed transfer of the permit. A permit also may be modified to reflect a transfer after the effective date of an automatic transfer (section 122.61(b)) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

(3) There is a violation of any terms or conditions of the permit.

(4) The permittee has obtained a permit by misrepresentation or has failed to disclose all relevant facts to the Department.

**122.63 Minor modifications of permits.**

Upon the consent of the permittee, the Department may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of R.61-9.124. Any permit modification not processed as a minor modification under this section must be made for cause and with R.61-9.124 draft permit and public notice as required in section 122.62. Minor modifications may only:

(a) Correct typographical errors;

(b) Require more frequent monitoring or reporting by the permittee.

(c) Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; or

(d) Approve permit transfer for a Change in Ownership, as follows:

(1) Allow for a change in ownership or operational control of a facility where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Department.

(2) Whenever there occurs a change in the ownership of treatment works which are the subject

of a NPDES permit the new owner shall notify the Department of this change in ownership within thirty (30) days thereof and shall be bound by all the terms and conditions of said permit or permits.

(3) Change the name of the facility.

(4) Permits are non-transferrable except with the prior consent of the Department.

(e) (1) Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge under section 122.29.

(2) Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.

(f) (1) Add or revise requirements for certification under section 208 of CWA.

(2) [Reserved.]

(3) Change sludge disposal sites from one approved site or facility to another.

(g) Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in R.61-9.403.11 (or a modification thereto that has been approved in accordance with the procedures in R.61-9.403.18) as enforceable conditions of the POTW's permits.

(h) (1) Change the operator grade or other operator requirements, including revision to frequency of operator visits.

(2) (i) Change a sampling date stated in the permit or add a sampling date,

(ii) Add specific sample locations if unclear in the issued permit,

(iii) Reduce sampling frequency after some period of time, if specifically allowed in an issued permit.

(3) Add the treatment system reliability classification.

(4) Require submittal of closure plans.

(5) Change page numbers of the issued permit.

**122.64 Termination of permits.**

(a) The following are causes for terminating a permit during its term, or for denying a permit renewal application:

(1) Noncompliance by the permittee with any condition of the permit:

(2) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

(3) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

(4) (i) A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit (for example, plant closure or termination of discharge by connection to a POTW).

(ii) Cessation of substantially all manufacturing operations, which are a basis for effluent limits or which contribute to a discharge, for a period of 180 days or longer.

(5) A permittee with a permit which requires connection to a regional sewer system or other treatment facilities under the water quality management plan under section 208 of the CWA is ineligible for reissuance of a permit once notified by the Department that the regional sewer system is operational.

(b) The Department shall follow the applicable procedures in R.61-9.124 in terminating any NPDES permit under this section, except that if the entire discharge is permanently terminated by elimination of the flow or by connection to a POTW (but not by land application or disposal into a well), the Department may terminate the permit by notice to the permittee. Termination by notice shall be effective 30 days after notice is sent, unless the permittee objects within that time. If the permittee objects during that period, the Department shall follow R.61-9.124 procedures for termination. Expedited permit termination procedures are not available to permittees that are subject to pending State and/or Federal enforcement actions including citizen suits brought under State or Federal law. If requesting expedited permit termination procedures, a permittee must certify that it is not subject to any pending State or Federal enforcement actions including citizen suits brought under State or Federal law. State-authorized NPDES programs are not required to use 40 CFR 22 procedures for NPDES permit terminations.

## APPENDIX A
## NPDES PRIMARY INDUSTRY CATEGORIES

Any permit issued after June 30, 1981 to dischargers in the following categories shall include effluent limitations and a compliance schedule to meet the requirements of section 301(b)(2)(A), (C), (D), (E) and (F) of CWA, whether or not applicable effluent limitations guidelines have been promulgated. See section 122.44 and section 122.46.

Industry Category

Adhesives and sealants
Aluminum forming
Auto and other laundries
Battery manufacturing
Coal mining
Coil coating
Copper forming
Electrical and electronic components
Electroplating
Explosives manufacturing
Foundries
Gum and wood chemicals
Inorganic chemicals manufacturing

Iron and steel manufacturing
Leather tanning and finishing
Mechanical products manufacturing
Nonferrous metal manufacturing
Ore mining
Organic chemicals manufacturing
Paint and ink formulation
Pesticides
Petroleum refining
Pharmaceutical preparations
Photographic equipment and supplies
Plastics processing
Plastic and synthetic materials manufacturing
Porcelain enameling
Printing and publishing
Pulp and paper mills
Rubber processing
Soap and detergent manufacturing
Steam electric power plants
Textile Mills
Timber Products Processing

## APPENDIX B
## RESERVED

## APPENDIX C
## CRITERIA FOR DETERMINING A CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY (SECTION 122.24)

A hatchery, fish farm, or other facility is a concentrated aquatic animal production facility for purposes of section 122.24 if it contains, grows, or holds aquatic animals in either of the following categories:

(a) 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:

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

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

(b) 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:

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

(2) 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.

**APPENDIX D**
**NPDES PERMIT APPLICATION TESTING REQUIREMENTS (SECTION 122.21)**
**(REFER TO 40 CFR PART 122, APPENDIX D)**

**APPENDIX E**
**RAINFALL ZONES OF THE UNITED STATES**
**(REFER TO 40 CFR PART 122, APPENDIX E)**

**APPENDIX F**
**INCORPORATED PLACES WITH POPULATIONS GREATER THAN 250,000 ACCORDING TO THE 1990 DECENNIAL CENSUS BY BUREAU OF CENSUS**
**(REFER TO 40 CFR PART 122, APPENDIX F)**

**APPENDIX G**
**INCORPORATED PLACES WITH POPULATIONS GREATER THAN 100,000 AND LESS THAN 250,000 ACCORDING TO 1990 DECENNIAL CENSUS BY BUREAU OF CENSUS**
**(REFER TO 40 CFR PART 122, APPENDIX G)**

**APPENDIX H**
**COUNTIES WITH UNINCORPORATED URBANIZED AREAS WITH A POPULATION OF 250,000 OR MORE ACCORDING TO THE 1990 DECENNIAL CENSUS BY THE BUREAU OF CENSUS**
**(REFER TO 40 CFR PART 122, APPENDIX H)**

**APPENDIX I**
**COUNTIES WITH UNINCORPORATED URBANIZED AREAS GREATER THAN 100,000, BUT LESS THAN 250,000 ACCORDING TO THE 1990 DECENNIAL CENSUS BY THE BUREAU OF CENSUS**
**(REFER TO 40 CFR PART 122, APPENDIX I)**

**APPENDIX J**
**NPDES PERMIT TESTING REQUIREMENTS FOR PUBLICLY OWNED TREATMENT WORKS [SECTION 122.21(J)]**

Table 1A--Effluent Parameters for All POTWS

Biochemical oxygen demand (BOD5 or CBOD5), 5-day

Fecal coliforms
Design Flow Rate
pH
Temperature
Total suspended solids

Table 1--Effluent Parameters for All POTWS With a Flow Equal to or Greater Than 0.1 MGD

Ammonia (as N)
Chlorine (total residual, TRC)
Dissolved oxygen
Nitrate/nitrite
Kjeldahl nitrogen
Oil and grease
Phosphorus
Total dissolved solids

Table 2--Effluent Parameters for Selected POTWS

Cyanide
Hardness
Metals (total recoverable), cyanide and total phenols

| | |
|---|---|
| Antimony | |
| Arsenic | Beryllium |
| Cadmium | Chromium |
| Copper | Lead |
| Mercury | Nickel |
| Selenium | Silver |
| Thallium | Zinc |

Phenolic compounds, total
Volatile organic compounds

| | |
|---|---|
| Acrolein | Acrylonitrile |
| Benzene | Bromoform |
| Carbon tetrachloride | Chlorobenzene |
| Chlorodibromomethane | Chloroethane |
| 2-chloroethylvinyl ether | Chloroform |
| Dichlorobromomethane | 1,1-dichloroethane |
| 1,2-dichloroethane | Trans-1,2-dichloroethylene |
| 1,1-dichloroethylene | 1,2-dichloropropane |
| 1,3-dichloropropylene | Ethylbenzene |
| Methyl bromide | Methyl chloride |
| Methylene chloride | 1,1,2,2-tetrachloroethane |
| Tetrachloroethylene | Toluene |
| 1,1,1-trichloroethane | 1,1,2-trichloroethane |
| Trichloroethylene | Vinyl chloride |

Acid-extractable compounds

| | |
|---|---|
| P-chloro-m-cresol | 2-chlorophenol |
| 2,4-dichlorophenol | 2,4-dimethylphenol |
| 4,6-dinitro-o-cresol | 2,4-dinitrophenol |
| 2-nitrophenol | 4-nitrophenol |
| Pentachlorophenol | Phenol |

2,4,6-trichlorophenol

Base-neutral compounds:

| | |
|---|---|
| Acenaphthene | Acenaphthylene |
| Anthracene | Benzidine |
| Benzo(a)anthracene | Benzo(a)pyrene |
| 3,4-benzofluoranthene | Benzo(ghi)perylene |
| Benzo(k)fluoranthene | Bis (2-chloroethoxy) methane |
| Bis (2-chloroethyl) ether | Bis (2-chloroisopropyl) ether |
| Bis (2-ethylhexyl) phthalate | 4-bromophenyl phenyl ether |
| Butyl benzyl phthalate | 2-chloronaphthalene |
| 4-chlorophenyl phenyl ether | Chrysene |
| Di-n-butyl phthalate | Di-n-octyl phthalate |
| Dibenzo(a,h)anthracene | 1,2-dichlorobenzene |
| 1,3-dichlorobenzene | 1,4-dichlorobenzene |
| 3,3'-dichlorobenzidine | Diethyl phthalate |
| Dimethyl phthalate | 2,4-dinitrotoluene |
| 2,6-dinitrotoluene | 1,2-diphenylhydrazine |
| Fluoranthene | Fluorene |
| Hexachlorobenzene | Hexachlorobutadiene |
| Hexachlorocyclo-pentadiene | Hexachloroethane |
| Indeno(1,2,3-cd)pyrene | Isophorone |
| Naphthalene | Nitrobenzene |
| N-nitrosodi-n-propylamine | N-nitrosodimethylamine |
| N-nitrosodiphenylamine | Phenanthrene |
| Pyrene | 1,2,4 -trichlorobenzene |

# 61-9.124
# Procedures for Decision Making

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## PART A
## GENERAL PROGRAM REQUIREMENTS

### 124.1 Purpose and scope.

This part contains the Department's procedures for issuing, modifying, revoking and reissuing, or terminating all NPDES, Land Application, and State permits (including "sludge-only" permits issued pursuant to R.61-9.122.1(b)(2)).

### 124.2 Definitions.

In addition to the definitions given in R.61-9.122.2, R.61-9.503.9, R.61-9.503.11, R.61-9.503.21, R.61-9.503.31, R.61-9.503.41, R.61-9.504.9, R.61-9.504.11, R.61-9.504.21, R.61-9.504.31, R.61-9.505.2 and 40 CFR 501.2 (sludge management), the following definitions apply to this regulation. Terms not defined in this section have the meaning given by the Clean Water Act (CWA) or Pollution Control Act (PCA).

(a) "Appropriate Act and regulations" means the Clean Water Act (CWA); the Pollution Control Act (PCA); the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA); or Safe Drinking Water Act (SDWA), whichever is applicable; and applicable regulations promulgated under those statutes. Appropriate Act and regulations includes program requirements.

(b) (Reserved.)

(c) "Interstate Agency" means an agency of two or more States established by or under an agreement or compact approved by the Congress, or any other agency of two or more States having substantial powers or duties pertaining to the control of pollution as determined and approved by the Administrator under the "appropriate Act and regulations."

(d) "RCRA" means the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 (Pub. L. 94-580, as amended by Pub. L. 95-609, 42 U.S.C. Section 6901 et seq).

(e) "SDWA" means the Safe Drinking Water Act (Pub. L. 95-523, as amended by Pub. L. 95-1900; 42 U.S.C. 300f et seq; and the 1986 Amendments Pub. L.99-339.

(f) "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 appropriate Act and regulations.

(g) "Section 404 permit" means a permit to regulate the discharge of dredged material and the discharge of fill material under Section 404 of the Clean Water Act in the waters of the State.

(h) "UIC" means the Underground Injection Control program under Part C of the Safe Drinking Water Act, including an "approved program."

### 124.3 Application for a permit.

(a) (1) Any person who requires a permit under the NPDES program shall complete, sign, and submit to the Department an application for each permit required under R.61-9.122.1. Applications are not required for NPDES general permits under R.61-9.122.28.

(2) The Department shall not begin the processing of a permit until the applicant has fully complied with the application requirements for that permit.

(3) Permit applications must comply with the signature and certification requirements of R.61-9.122.22.

(4) A person discharging waste from more than one (1) location shall file a separate application for each discharge location. A single application may be filed for multiple outfalls discharging from a single location, except that the discharge from each outfall shall be described separately in the application.

(b) (1) Any person who requires a permit under the Land Application or State program shall complete, sign, and submit to the Department an application for each permit required under R 61-9.503, R.61-9.504 or R.61-9.505. Applications are not required for General permits under R.61-9.505.23. Notices of Intent are required for General permits. See R.61-9.505.23.

(2) The Department shall not begin the processing of a permit until the applicant has fully complied with the application requirements for that permit.

(3) Permit applications must comply with the signature and certification requirements of R.61-9.505.22.

(4) A person discharging waste from more than one (1) location shall file a separate application for each discharge location. A single application may be filed for multiple sites discharging from a single location, except that the discharge from each site shall be described separately in the application.

**124.4 [Reserved.]**

**124.5 Modification, revocation and reissuance, or termination of permits.**

(a) Permits may be modified (to include any term, condition, or a schedule of compliance), revoked and reissued, suspended or terminated either at the request of any interested person (including the permittee) or upon the Department's initiative. However, permits may only be modified, revoked and reissued, or terminated after notice and for the reasons specified in R.61-9.122.62, R.61-9.122.64, R.61-9.505.62 or R.61-9.505.64. All requests shall be in writing and shall contain facts or reasons supporting the request.

(b) See section 124.19 for appeals procedure.

(c) (1) If the Department tentatively decides to modify or revoke and reissue a NPDES permit under R.61-9.122.62 or Land Application permit under R.61-9.505.62, it shall prepare a draft NPDES or Land Application permit under section 124.6 incorporating the proposed changes. The Department may request additional information and, in the case of a modified permit, may require the submission of an updated application. In the case of revoked and reissued permits, the Department shall require the submission of a new application.

(2) In a permit modification under this section, only those conditions to be modified shall be reopened when a new draft permit is prepared. All other aspects of the existing permit shall remain in effect for the duration of the unmodified permit. When a permit is revoked and reissued under

this section, the entire permit is reopened just as if the permit had expired and was being reissued. During any revocation and reissuance proceeding, the permittee shall comply with all conditions of the existing permit until a new final permit is reissued and effective.

(3) "Minor Modifications" as defined in R.61-9.122.63 or R.61-9.505.63 are not subject to the requirements of this provision.

(d) (1) If the Department tentatively decides to terminate a permit under section 122.64(a) (NPDES) or a permit under section 122.64(b) (NPDES) where the permittee objects, the Department shall issue a notice of intent to terminate.

(2) If the Department tentatively decides to terminate a permit under R.61-9.505.64, it shall issue a notice of intent to terminate.

(3) A notice of intent to terminate is a type of draft permit which follows the same procedures as any other draft permit prepared under section 124.6.

**124.6 Draft permits.**

(a) Once an application is complete, the Department shall tentatively decide whether to prepare a draft permit or to deny the application.

(b) If the Department tentatively decides to deny the permit application, it shall issue a notice of intent to deny. A notice of intent to deny the permit application is a type of draft permit which follows the same procedures as any other draft permit prepared under this section. See section 124.6(e). If the Department's final decision (section 124.15) is that the tentative decision to deny the permit application was incorrect, it shall withdraw the notice of intent to deny and proceed to prepare a draft permit under paragraph (d) of this section.

(c) If the Department tentatively decides to issue an NPDES, Land Application, State, or general permit, it shall prepare a draft NPDES, Land Application, State, general or 404 general permit under paragraph (d) of this section.

(d) If the Department decides to prepare a draft permit, it shall prepare a draft permit that contains the following information:

(1) For permits under R.61-9.122, all conditions under R.61-9.122.41 and R.61-9.122.43;

(2) For permits under R.61-9.122, all compliance schedules under R.61-9.122.47;

(3) For permits under R.61-9.122, all monitoring requirements under R.61-9.122.48;

(4) (i) For permits under R.61-9.505, all applicable conditions under R.61-9.505.41; and R.61-9.505.43;

(ii) For permits under R.61-9.505, all compliance schedules under R.61-9.505.47; and

(iii) For permits under R.61-9.505, all applicable monitoring requirements under R.61-9.505.48;

(iv) For Land Application, State or sludge disposal permits, effluent limitations, standards, prohibitions, standards for sewage sludge use or disposal, and conditions under R.61-9.503; R.61-9.504; or R.61-9.505 including R.61-9.505.41, R.61-9.505.42, R.61-9.505.44, and any applicable conditions as determined by the Department;

(v) For NPDES permits, effluent limitations, standards, prohibitions, standards for sewage sludge use or disposal, and conditions under R.61-9.122.41, R.61-9.122.42, and R.61-9.122.44, including when applicable any conditions certified by a State agency under section 124.55 and all variances that are to be included under section 124.63.

(e) Draft NPDES, Land Application, State or general permits prepared by the State shall be accompanied by a fact sheet if required under section 124.8.

**124.7 [Reserved.]**

**124.8 Fact sheet.**

(a) A fact sheet shall be prepared for every draft permit for a major NPDES facility or activity, for every Class I sludge management facility, for every NPDES general permit (R.61-9.122.28), for every NPDES draft permit that incorporates a variance or requires an explanation under section 124.56(b), for every draft permit that includes a sewage sludge land application plan under 40 CFR 501.15(a)(2)(ix), and for every draft permit which the Department finds is the subject of wide-spread public interest or raises major issues. The fact sheet shall briefly set forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit. The Department shall send this fact sheet to the applicant and, on request, to any other person. A fact sheet may be prepared by the Department for draft permits under R.61-9.505.

(b) The fact sheet shall include, when applicable:

(1) A brief description of the type of facility or activity which is the subject of the draft permit;

(2) The type and quantity of wastes, fluids, or pollutants which are proposed to be treated, stored, disposed of, injected, emitted, or discharged;

(3) [Reserved].

(4) [Reserved].

(5) Reasons why any requested variances or alternatives to required standards do or do not appear justified;

(6) A description of the procedures for reaching a final decision on the draft permit including:

(i) The beginning and ending dates of the comment period under section 124.10 and the address where comments will be received;

(ii) Procedures for requesting a hearing and the nature of that hearing; and

(iii) Any other procedures by which the public may participate in the final decision.

(7) Name and telephone number of a person to contact for additional information.

(8) For NPDES permits, provisions satisfying the requirements of section 124.56.

(9) Justification for waiver of any application requirements under section 122.21(j) or (q) of this chapter.

**124.9 [Reserved.]**

**124.10 Public notice of permit actions and public comment period.**

(a) Scope.

(1) The Department shall give public notice of NPDES or Land Application permits that the following actions have occurred:

(i) A permit application has been tentatively denied under section 124.6(b);

(ii) A draft permit has been prepared under section 124.6(d);

(iii) A hearing has been scheduled under section 124.12;

(iv) [Reserved].

(v) [Reserved].

(vi) An NPDES new source determination has been made under R.61-9.122.29.

(2) No public notice is required when a request for permit modification, revocation and reissuance, or termination is denied under section 124.5(b). Written notice of that denial shall be given to the requester and to the permittee.

(3) Public notices may describe more than one permit or permit actions.

(b) (1) Public notice of the preparation of a draft NPDES or Land Application permit (including a notice of intent to deny a permit application) required under paragraph (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 paragraph (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 paragraph may waive his or her rights to receive notice for any classes and categories of permits);

(i) The applicant (except for NPDES or Land Application general permits when there is no

applicant);

(ii) Any other agency which the Department knows has issued or is required to issue a RCRA, UIC, PSD (or other permit under the Clean Air Act), NPDES, 404, sludge management permit, or ocean dumping permit under the Marine Research Protection and Sanctuaries Act for the same facility or activity (including EPA when a draft NPDES permit is prepared by the State);

(iii) 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.

(iv) 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;

(v) Any user identified in the permit application of a privately owned treatment works;

(vi) [Reserved].

(vii) [Reserved].

(viii) [Reserved].

(ix) Persons on a mailing list developed by:

(A) Including those who request in writing to be on the list;

(B) Soliciting persons for "area lists" from participants in past permit proceedings in that area; and

(C) 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 Regional and State funded newsletters, environmental bulletins, or State law journals. (The Department may update the mailing list from time to time by requesting written indication of continued interest from those listed. The Department may delete from the list the name of any person who fails to respond to such a request).

(x)(A) To any unit of local government having jurisdiction over the area where the facility is proposed to be located; and

(B) To each State agency having any authority under State law with respect to the construction or operation of such facility.

(2)(i) For major NPDES permits, NPDES general permits, and permits that include sewage sludge land application plans under 40 CFR 501.15(a)(2)(ix), publication of a notice in a daily or weekly newspaper within the area affected by the facility or activity.

(ii) [Reserved].

(3) In a manner constituting legal notice to the public under State law; and

(4) 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. All public notices for NPDES and Land Application permits issued under this regulation shall contain the following minimum information:

(i) Name and address of the office processing the permit action for which notice is being given;

(ii) 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 NPDES and 404 draft general permits under R.61-9.122.28 and 40 CFR 233.37;

(iii) A brief description of the business conducted at the facility or activity described in the permit application or the draft permit, for NPDES or 404 general permits when there is no application.

(iv) 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; and

(v) A brief description of the comment procedures required by section 124.11 and section 124.12 and the time and place of any hearing that will be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final permit decision.

(vi) [Reserved].

(vii) For NPDES permits only (including those for "sludge-only facilities"), 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 sludge treatment works treating domestic sewage and 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.

(viii) [Reserved].

(ix) Requirements applicable to cooling water intake structures under section 316(b) of the CWA, in accordance with 40 CFR 125, subpart I.

(x) Any additional information considered necessary or proper.

2. Public notices for hearings. In addition to the general public notice described in paragraph (d)(1) of this section, the public notice of a hearing under section 124.12 shall include the following information:

(i) Reference to the date of previous public notices relating to the permit;

(ii) Date, time, and place of the hearing;

(iii) A brief description of the nature and purpose of the hearing, including the applicable rules and procedures; and

(e) In addition to the general public notice described in paragraph (d((1) of this section, all persons identified in paragraphs (c)(1)(i)(ii), (iii), and (iv) of this section shall be mailed a copy of the fact sheet, the permit application (if any) and the draft permit (if any).

**124.11 Public comments and requests for public hearings.**

During the public comment period provided under section 124.10, any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments shall be considered in making the final decision and shall be answered as provided in section 124.17.

**124.12 Public hearings.**

(a) Determinations and Scheduling.

(1) Within the thirty (30) day comment period or other applicable comment period provided after posting or publishing of a public notice, an applicant, any affected state or interstate agency, the Regional Administrator or any other interested person or agency may file a petition with the Department for a public hearing on an application for a permit. A petition for a public hearing shall indicate the specific reasons why a hearing is requested, the existing or proposed discharge identified therein and specifically indicate which portions of the application or other permit form or information constitutes necessity for a public hearing. If the Department determines that a petition constitutes significant cause or that there is sufficient public interest in an application for a public hearing, it may direct the scheduling of a hearing thereon.

(2) A hearing shall be scheduled not less than four (4) nor more than eight (8) weeks after the Department determines the necessity of the hearing in the geographical location of the applicant or, at the discretion of the Department, at another appropriate location, and shall be noticed at least thirty (30) days before the hearing. The notice of public hearing shall be transmitted to the applicant and shall be published in at least one (1) newspaper of general circulation in the geographical area of the existing or proposed discharge identified on the permit application and shall be mailed to any person or group upon request therefor. Notice shall be mailed to all persons and governmental agencies which received a copy of the notice or the fact sheet for the permit application.

(3) The Department may hold a single public hearing on related groups of permit applications.

(4) The Department may also hold a public hearing at its discretion, whenever, for instance, such a hearing might clarify one or more issues involved in the permit decision;

(5) Public notice of the hearing shall be given as specified in section 124.10.

(b) [Reserved.]

(c) Any person may submit oral or written statements and data concerning the draft permit.

Reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. The public comment period under section 124.10 shall automatically be extended to the close of any public hearing under this section. The hearing officer may also extend the comment period by so stating at the hearing.

(d) A tape recording or written transcript of the hearing shall be made available to the public.

**124.13 Obligation to raise issues and provide information during the public comment period.**

All persons, including applicants, who believe any condition of a draft permit is inappropriate or that the Department's tentative decision to deny an application, terminate a permit, or prepare a draft permit is inappropriate, must raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period (including any public hearing) under section 124.10. No issue shall be raised during an appeal by any party that was not submitted to the administrative record as part of the preparation and comment on a draft permit, unless good cause is shown for the failure to submit it. Any supporting materials which are submitted shall be included in full and may not be incorporated by reference, unless they are already part of the administrative record in the same proceeding, or consist of State or Federal statutes and regulations, Department and EPA documents of general applicability, or other generally available reference materials. Commenters shall make supporting materials not already included in the administrative record available. (A comment period longer than 30 days may be necessary to give commenters a reasonable opportunity to comply with the requirements of this section. Additional time shall be granted under section 124.10 to the extent that a commenter who requests additional time demonstrates the need for such time).

**124.14 [Reserved.]**

**124.15 Issuance and effective date of permit.**

(a) After the close of the public comment period under section 124.10 on a draft permit, the Department shall issue a final permit decision. The Department shall notify the applicant and each person who has submitted written comments or requested notice of the final permit decision. This notice shall include reference to the procedures for appealing a decision on a permit. For the purposes of this section, a final permit decision means a final decision to issue, deny, modify, revoke and reissue, or terminate a permit.

(b) A final permit decision shall become effective 30 days after the service of notice of the decision unless:

(1) A later effective date is specified in the decision; or

(2) Reserved.

(3) No comments requested a change in the draft permit, in which case the permit shall become effective on the effective date shown in the issued permit.

**124.16 [Reserved.]**

**124.17 Response to comments.**

(a) The Department is only required to issue a response to comments when a final permit is issued. This response shall:

(1) Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and

(2) Briefly describe and respond to all significant comments on the draft permit raised during the public comment period, or during any hearing.

(b) [Reserved.]

(c) The response to comments shall be available to the public.

**124.18 [Reserved.]**

**124.19 Appeal of NPDES and State Permits.**

a. A Department decision involving issuance, denial, renewal, modification, suspension, or revocation of an NPDES, Land Application, or State permit may be appealed by an affected person with standing pursuant to applicable law, including S.C. Code Title 1, Chapter 23 and Title 44, Chapter 1.

b. Any person to whom an order, related to an NPDES, Land Application, or State permit, is issued may appeal it pursuant to applicable law, including S.C. Code Title 1, Chapter 23 and Title 44, Chapter 1.

**124.20 [Reserved.]**

**124.21 [Reserved.]**

## PART B [RESERVED.]

## PART C [RESERVED.]

## PART D
## SPECIFIC PROCEDURES APPLICABLE TO NPDES PERMITS

**124.51 Purpose and scope.**

(a) This part sets forth additional requirements and procedures for decision making for the NPDES program. Part D applies only to NPDES permits prepared under R.61-9.122.

(b) Decisions on NPDES variance requests ordinarily will be made during the permit issuance process. Variances and other changes in permit conditions ordinarily will be decided through the same notice-and-comment and hearing procedures as the basic permit.

**124.52 Permits required on a case-by-case basis.**

(a) Various sections of R.61-9.122 Part B allow the Department to determine, on a case-by-case

basis, that certain concentrated animal feeding operations (R.61-9.122.23), concentrated aquatic animal production facilities (R.61-9.122.24) storm water discharges (R.61-9.122.26) and certain other facilities covered by general permits (R.61-9.122.28) that do not generally require an individual permit may be required to obtain an individual permit because of their contributions to water pollution.

(b) Whenever the Department decides that an individual permit is required under this section, except as provided in paragraph (c) of this section, the Department shall notify the discharger in writing of that decision and the reasons for it, and shall send an application form with the notice. The discharger must apply for a permit under R.61-9.122.21 within 60 days of notice, unless permission for a later date is granted by the Department. The question whether the designation was proper will remain open for consideration during the public comment period under section 124.11 and in any subsequent hearing.

(c) Prior to a case-by-case determination that an individual permit is required for a storm water discharge under this section (see R.61-9.122.26(a)(1)(v), (a)(9)(iii), and (c)(1)(v)), the Department may require the discharger to submit a permit application or other information regarding the discharge under section 308 of the CWA. In requiring such information, the Department shall notify the discharger in writing and shall send an application form with the notice. The discharger must apply for a permit within 180 days of notice, unless permission for a later date is granted by the Department. The question whether the initial designation was proper will remain open for consideration during the public comment period under section 124.11 and in any subsequent hearing.

**124.53 [Reserved.]**

**124.54 [Reserved.]**

**124.55 [Reserved.]**

**124.56 Fact sheets.**

In addition to meeting the requirements of section 124.8, NPDES fact sheets shall contain the following:

(a) Any calculations or other necessary explanation of the derivation of specific effluent limitations and conditions or standards for sewage sludge use or disposal, including a citation to the applicable effluent limitation guideline, performance standard, or standard for sewage sludge use or disposal as required by R.61-9.122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

(b) (1) When the draft permit contains any of the following conditions, an explanation of the reasons why such conditions are applicable:

(i) Limitations to control toxic pollutants under R.61-9.122.44(e);

(ii) Limitations on internal waste streams under R.61-9.122.45(h);

(iii) Limitations on indicator pollutants under R.61-9.125.3(g);

(iv) Limitations set on a case-by-case basis under R.61-9.125.3(c)(2) or (c)(3), or pursuant to section 405(d)(4) of the CWA;

(v) Limitations to meet the criteria for permit issuance under R61-9.122.4(i); or

(vi) Waivers from monitoring requirements granted under R61-9.122.44(a).

(2) For every permit to be issued to a treatment works owned by a person other than a State or municipality, an explanation of the Department's decision on regulation of users under R.61-9.122.44(m).

(c) When appropriate, a sketch or detailed description of the location of the discharge or regulated activity described in the application; and

(d) [Reserved.]

(e) [Reserved.]

**124.57 Public notice.**

(a) Section 316(a) requests. In addition to the information required under section 124.10(d)(1), public notice of an NPDES draft permit for a discharge where a CWA section 316(a) request has been filed under section R.61-9.122.21(l) shall include:

(1) A statement that the thermal component of the discharge is subject to effluent limitations under CWA sections 301 or 306 and a brief description, including a quantitative statement, of the thermal effluent limitations proposed under section 301 or 306;

(2) A statement that a section 316(a) request has been filed and that alternative less stringent effluent limitations may be imposed on the thermal component of the discharge under section 316(a) and a brief description, including a quantitative statement, of the alternative effluent limitations, if any, included in the request; and

(b) [Reserved.]

**124.58 [Reserved.]**

**124.59 Conditions requested by the Corps of Engineers and other government agencies.**

(a) If during the comment period for an NPDES draft permit, the District Engineer advises the Department in writing that anchorage and navigation of any waters of the State would be substantially impaired by the granting of a permit, the permit shall be denied and the applicant so notified. If the District Engineer advised the Department that imposing specified conditions upon the permit is necessary to avoid any substantial impairment of anchorage or navigation, then the Department shall include the specified conditions in the permit. Review or appeal of denial of a permit or of conditions specified by the District Engineer shall be made through the applicable procedures of the Corps of Engineers, and may not be made through the procedures provided in this regulation. If the conditions are stayed by a court of competent jurisdiction or by applicable procedures of the Corps of Engineers, those conditions shall be considered stayed in the NPDES permit for the duration of that stay.

(b) If during the comment period the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, or any other State or Federal agency with jurisdiction over fish, wildlife, or public health advises

the Department in writing that the imposition of specified conditions upon the permit is necessary to avoid substantial impairment of fish, shellfish, or wildlife resources, the Department may include the specified conditions in the permit to the extent they are determined necessary to carry out the provisions of R.61-9.122.49 and of the CWA.

(c) In appropriate cases, the Department may consult with one or more of the agencies referred to in this section before issuing a draft permit and may reflect their views in the fact sheet, or the draft permit.

**124.60 [Reserved.]**

**124.61 [Reserved.]**

**124.62 Decision on variances.**

(a) The Department may grant or deny requests for the following variances (subject to EPA objection under 40 CFR Part 123.44 for State NPDES permits);

(1) Reserved.

(2) After consultation with the Regional Administrator, extensions under CWA section 301(k) based on the use of innovative technology; or

(3) Variances under CWA section 316(a) for thermal pollution.

(b) The Department may deny, or forward to the Regional Administrator with a written concurrence, or submit to EPA without recommendation a completed request for:

(1) Reserved.

(2) A variance based on water quality related effluent limitations under CWA section 302(b)(2) or PCA.

(c) The Regional Administrator may deny, forward, or submit to the Office Director for Water Enforcement and Permits with a recommendation for approval, a request for a variance listed in paragraph
(b) of this section that is forwarded by the Department.

(d) The EPA Office Director for Water Enforcement and Permits may approve or deny any variance request submitted under paragraph (c) of this section. If the Office Director approves the variance, the Department may prepare a draft permit incorporating the variance.

(e) The Department may deny or forward to the Administrator (or his delegate) with a written concurrence a completed request for:

(1) A variance based on the presence of "fundamentally different factors" from those on which an effluent limitations guideline was based;

(2) A variance based upon certain water quality factors under CWA section 301(g).

(f) The Administrator (or his delegate) may grant or deny a request for a variance listed in paragraph (e) of this section that is forwarded by the Department. If the Administrator (or his delegate) approves the variance, the Department may prepare a draft permit incorporating the variance.

**124.63 [Reserved.]**

**124.64 [Reserved.]**

**124.65 [Reserved].**

**124.66 [Reserved].**

# 61-9.125
# Criteria Standards for the National Pollutant Discharge Elimination System

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## PART A
## CRITERIA AND STANDARDS FOR IMPOSING TECHNOLOGY-BASED TREATMENT REQUIREMENTS UNDER SECTIONS 301(b) AND 402 OF THE CWA

### 125.1 Purpose and scope.

This part establishes criteria and standards for the imposition of technology-based treatment requirements in permits under section 48-1-90 of the South Carolina Pollution Control Act and section 301(b) of the Federal Clean Water Act, including the application of EPA promulgated effluent limitations and case-by-case determinations of effluent limitations under this regulation and section 402(a)(1) of the Clean Water Act.

### 125.2 Definitions.

Unless otherwise noted, the definitions in R.61-9.122, 40 CFR Part 123, and R.61-9.124 apply to this part.

### 125.3 Technology-based treatment requirements in permits.

(a) General. Technology-based treatment requirements under section 301(b) of the CWA represent the minimum level of control that must be imposed in an NPDES permit issued under section 402 of the CWA. (See R.61-9.122.41, 122.42, and 122.44 for a discussion of additional or more stringent effluent limitations and conditions.) NPDES permits shall contain the following technology-based treatment requirements in accordance with the following statutory deadlines:

(1) For POTW's, NPDES permit effluent limitations based upon:

(i) Secondary treatment - from date of permit issuance; and

(ii) The best practicable waste treatment technology; and

(2) For dischargers other than POTWs except as provided in R. 61-9.122.29(d), NPDES permit effluent limitations requiring:

(i) The best practicable control technology currently available (BPT).

(A) [Reserved]

(B) [Reserved]

(C) For all other BPT effluent limitations compliance is required from the date of permit issuance.

(ii) For conventional pollutants, the best conventional pollutant control technology (BCT).

(iii) For all toxic pollutants referred to in Committee Print No. 95-30, House Committee on Public Works and Transportation, the best available technology economically achievable (BAT).

(iv) For all toxic pollutants other than those listed in Committee Print No. 95-30, effluent limitations based on BAT.

(v) For all pollutants which are neither toxic nor conventional pollutants, effluent limitations based on BAT.

(b) Statutory variances and extensions.

(1) The following variances from technology-based treatment requirements are authorized by the CWA and may be applied for under R.61-9.122.21;

(i) [Reserved].

(ii) For dischargers other than POTW's;

(A) [Reserved].

(B) [Reserved]; and

(C) A section 316(a) thermal variance from BPT, BCT and BAT (Part H).

(2) The following extensions of deadlines for compliance with technology-based treatment requirements are authorized by the CWA and may be applied for under R.61-9.124.53:

(i) [Reserved]

(ii) For dischargers other than POTW's:

(A) [Reserved]

(B) A section 301(k) extension of the BAT deadline.

(c) Methods of imposing technology-based treatment requirements in permits. Technology-based treatment requirements may be imposed through one of the following three methods;

(1) Application of EPA-promulgated effluent limitations developed under section 304 of the CWA to dischargers by category or subcategory. These effluent limitations are not applicable to the extent that they have been remanded or withdrawn. However, in the case of a court remand, determinations underlying effluent limitations shall be binding in permit issuance proceedings where those determinations are not required to be reexamined by a court remanding the regulations. In addition, dischargers may seek fundamentally different factors variances from these effluent limitations under R.61-9.122.21 and Part D of this regulation.

(2) On a case-by-case basis under section 402(a)(1) of the CWA, to the extent that EPA-promulgated effluent limitations are inapplicable. The permit writer shall apply the appropriate factors listed in section 125.3(d) and shall consider:

(i) The appropriate technology for the category or class of point sources of which the applicant is a member, based upon all available information; and

(ii) Any unique factors relating to the applicant.

(3) Through a combination of the methods in paragraphs (d)(1) and (d)(2) of this section. Where promulgated effluent limitations guidelines only apply to certain aspects of the discharger's operation, or to certain pollutants, other aspects or activities are subject to regulation on a case-by-case basis in order to carry out the provisions of the CWA and Pollution Control Act.

(4) Limitations developed under paragraph (d)(2) of this section may be expressed, where appropriate, in terms of toxicity (e.g., "the LC50 for fat head minnow of the effluent from outfall 001 shall be greater than 25%"), provided that it is shown that the limits reflect the appropriate requirements (for example, technology-based or water-quality-based standards) of the CWA.

(d) In setting case-by-case limitations pursuant to section 125.3(c), the permit writer must consider the following factors:

(1) For BPT requirements:

(i) The total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application;

(ii) The age of equipment and facilities involved;

(iii) The process employed;

(iv) The engineering aspects of the application of various types of control techniques;

(v) Process changes; and

(vi) Non-water quality environmental impact (including energy requirements).

(2) For BCT requirements:

(i) The reasonableness of the relationship between the costs of attaining a reduction in effluent and the effluent reduction benefits derived;

(ii) The comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources;

(iii) The age of equipment and facilities involved;

(iv) The process employed;

(v) The engineering aspects of the application of various types of control techniques;

(vi) Process changes; and

(vii) Non-water quality environmental impact (including energy requirements).

(3) For BAT requirements:

(i) The age of equipment and facilities involved;

(ii) The process employed;

(iii) The engineering aspects of the application of various types of control techniques;

(iv) Process changes;

(v) The cost of achieving such effluent reduction; and

(vi) Non-water quality environmental impact (including energy requirements).

(e) Technology-based treatment requirements are applied prior to or at the point of discharge.

(f) Technology-based treatment requirements cannot be satisfied through the use of "non-treatment" techniques such as flow augmentation and in-stream mechanical aerators. However, these techniques may be considered as a method of achieving water quality standards on a case-by-case basis when:

(1) The technology-based treatment requirements applicable to the discharge are not sufficient to achieve the standards;

(2) The discharger agrees to waive any opportunity to request a variance under section 301(c), (g) or (h) of the CWA; and

(3) The discharger demonstrates that such a technique is the preferred environmental and economic method to achieve the standards after consideration of alternatives such as advanced waste treatment, recycle and reuse, land disposal, changes in operating methods, and other available methods.

(g) Technology-based effluent limitations shall be established under this part for solids, sludges, filter backwash, and other pollutants removed in the course of treatment or control of wastewaters in the same manner as for other pollutants.

(h) (1) The Department may set a permit limit for a conventional pollutant at a level more stringent than the best conventional pollution control technology (BCT), or a limit for a nonconventional pollutant which shall not be subject to modification under section 301(c) or (g) of the CWA where:

(i) Effluent limitations guidelines specify the pollutant as an indicator for a toxic pollutant, or

(ii)(A) The limitation reflects BAT-level control of discharges of one or more toxic pollutants which are present in the waste stream, and a specific BAT limitation upon the toxic pollutant(s) is not feasible for economic or technical reasons;

(B) The permit identifies which toxic pollutants are intended to be controlled by use of the limitation; and

(C) The fact sheet required by R.61-9.124.56 sets forth the basis for the limitation, including a finding that compliance with the limitation will result in BAT-level control of the toxic pollutant discharges identified in paragraph (h)(1)(ii)(B) of this part, and a finding that it would be economically or technically infeasible to directly limit the toxic pollutant(s).

(2) The Department may set a permit limit for a conventional pollutant at a level more stringent than BCT when;

(i) Effluent limitations guidelines specify the pollutant as an indicator for a hazardous substance, or

(ii)(A) The limitation reflects BAT-level control of discharges (or an appropriate level determined under section 301(c) or (g) of the CWA) of one or more hazardous substance(s) which are present in the waste stream, and a specific BAT (or other appropriate) limitation upon the hazardous substance(s) is not feasible for economic or technical reasons;

(B) The permit identifies which hazardous substances are intended to be controlled by use of the limitation; and

(C) The fact sheet required by R.61-9.124.56 sets forth the basis for the limitation, including a finding that compliance with the limitations will results in BAT-level (or other appropriate level) control of the hazardous substances discharges identified in paragraph (h)(2)(ii)(B) of this section, and a finding that it would be economically or technically infeasible to directly limit the hazardous substance(s).

(iii) Hazardous substances which are also toxic pollutants are subject to paragraph (h)(1) of this section.

(3) The Department may not set a more stringent limit under the preceding paragraphs if the method of treatment required to comply with the limit differs from that which would be required if the toxic pollutant(s) or hazardous substance(s) controlled by the limit were limited directly.

(4) Toxic pollutants identified under paragraph (h)(1) of this section remain subject to the requirements of R.61-9.122.42(a)(1) (notification of increased discharges of toxic pollutants above levels reported in the application form).

## PART B
## CRITERIA FOR ISSUANCE OF PERMITS TO AQUACULTURE PROJECTS

**125.10 Purpose and scope.**

(a) These regulations establish guidelines under sections 318 and 402 of the CWA for approval of any discharge of pollutants associated with an aquaculture project.

(b) The regulations authorize, on a selective basis, controlled discharges which would otherwise be unlawful under the PCA, section 48-1-90, and the CWA in order to determine the feasibility of using pollutants to grow aquatic organisms which can be harvested and used beneficially.

(c) Permits issued for discharges into aquaculture projects under this part are NPDES permits and are subject to the applicable requirements of R.61-9.122 and 124 and 40 CFR Part 123. Any permit shall include such conditions (including monitoring and reporting requirements) as are necessary to comply with those regulations. Technology-based effluent limitations need not be applied to discharges into the approved project except with respect to toxic pollutants.

**125.11 Criteria.**

(a) No NPDES permit shall be issued to an aquaculture project unless:

(1) The Department determines that the aquaculture project:

(i) Is intended by the project operator to produce a crop which has significant direct or indirect commercial value (or is intended to be operated for research into possible production of such a crop); and

(ii) Does not occupy a designated project area which is larger than can be economically operated for the crop under cultivation or than is necessary for research purposes.

(2) The applicant has demonstrated, to the satisfaction of the Director, that the use of the pollutant to be discharged to the aquaculture project will result in an increased harvest of organisms under culture over what would naturally occur in the area;

(3) The applicant has demonstrated, to the satisfaction of the Department that if the species to be cultivated in the aquaculture project is not indigenous to the immediate geographical area, there will be minimal adverse effects on the flora and fauna indigenous to the area, and the total commercial value of the introduced species is at least equal to that of the displaced or affected indigenous flora and fauna;

(4) The Department determines that the crop will not have a significant potential for human health hazards resulting from its consumption;

(5) The Department determines that migration of pollutants from the designated project area to water outside of the aquaculture project will not cause or contribute to a violation of water quality standards or a violation of the applicable standards and limitations applicable to the supplier of the pollutant that would govern if the aquaculture project were itself a point source. The approval of an aquaculture project shall not result in the enlargement of a pre-existing mixing zone area beyond what had been designated by the State for the original discharge.

(b) No permit shall be issued for any aquaculture project in conflict with a plan or an amendment to a plan approved under section 208(b) of the CWA.

(c) No permit shall be issued for any aquaculture project located in the territorial sea, the waters of the contiguous zone, or the oceans, except in conformity with guidelines issued under section 403(c) of the CWA.

(d) Designated project areas shall not include a portion of a body of water large enough to expose a substantial portion of the indigenous biota to the conditions within the designated project area. For example, the designated project area shall not include the entire width of a watercourse, since all organisms indigenous to that watercourse might be subjected to discharges of pollutants that would, except for the provisions of section 318 of the CWA, violate section 301 of the CWA.

(e) Any modifications caused by the construction or creation of a reef, barrier or containment structure shall not unduly alter the tidal regimen of an estuary or interfere with migrations of unconfined aquatic species.

(f) Any pollutants not required by or beneficial to the aquaculture crop shall not exceed applicable

standards and limitations when entering the designated project area.

**PART C [RESERVED.]**

**PART D**
**CRITERIA AND STANDARDS FOR DETERMINING FUNDAMENTALLY DIFFERENT FACTORS UNDER SECTIONS 301(b)(1)(A), 301(b)(2)(A) AND (E) OF THE CWA**

**125.30 Purpose and scope.**

(a) This part establishes the criteria and standards to be used in determining whether effluent limitations alternative to those required by promulgated EPA effluent limitations guidelines under sections 301 and 304 of the CWA (hereinafter referred to as "national limits") should be imposed on a discharger because factors relating to the discharger's facilities, equipment, processes or other factors related to the discharger are fundamentally different from the factors considered by EPA in development of the national limits. This part applies to all national limitations promulgated under sections 301 and 304 of the CWA, except for the BPT limits contained in 40 CFR 423.12 (steam electric generating point source category).

(b) In establishing national limits, EPA takes into account all the information it can collect, develop and solicit regarding the factors listed in sections 304(b) and 304(g) of the CWA. In some cases, however, data which could affect these national limits as they apply to a particular discharge may not be available or may not be considered during their development. As a result, it may be necessary on a case-by-case basis to adjust the national limits, and make them either more or less stringent as they apply to certain dischargers within an industrial category or subcategory. This will only be done if data specific to that discharger indicates it presents factors fundamentally different from those considered by EPA in developing the limit at issue. Any interested person believing that factors relating to the discharger's facilities, equipment, processes or other facilities related to the discharger are fundamentally different from the factors considered during development of the national limits may request a fundamentally different factors variance under R.61-9.122.21(l)(1). In addition, such a variance may be proposed by the Department in the draft permit.

**125.31 Criteria.**

(a) A request for the establishment of effluent limitations under this part (fundamentally different factors variance) shall be approved only if:

(1) There is an applicable national limit which is applied in the permit and specifically controls the pollutant for which alternative effluent limitations or standards have been requested; and

(2) Factors relating to the discharge controlled by the permit are fundamentally different from those considered by EPA in establishing the national limits; and

(3) The request for alternative effluent limitations or standards is made in accordance with the procedural requirements of R.61-9.124.

(b) A request for the establishment of effluent limitations less stringent than those required by national limits guidelines shall be approved only if:

(1) The alternative effluent limitation or standard requested is no less stringent than justified by the fundamental difference; and

(2) The alternative effluent limitation or standard will ensure compliance with section 208(e) and 301(b)(1)(C) of the CWA; and

(3) Compliance with the national limits (either by using the technologies upon which the national limits are based or by other control alternatives) would result in:

(i) A removal cost wholly out of proportion to the removal cost considered during development of the national limits; or

(ii) A non-water quality environmental impact (including energy requirements) fundamentally more adverse than the impact considered during development of the national limits.

(c) A request for alternative limits more stringent than required by national limits shall be approved only if:

(1) The alternative effluent limitation or standard requested is no more stringent than justified by the fundamental difference; and

(2) Compliance with the alternative effluent limitation or standard would not result in:

(i) A removal cost wholly out of proportion to the removal cost considered during development of the national limits; or

(ii) A non-water quality environmental impact (including energy requirements) fundamentally more adverse than the impact considered during development of the national limits.

(d) Factors which may be considered fundamentally different are:

(1) The nature or quality of pollutants contained in the raw waste load of the applicant's process wastewater;

(2) The volume of the discharger's process wastewater and effluent discharged;

(3) Non-water quality environmental impact of control and treatment of the discharger's raw waste load;

(4) Energy requirements of the application of control and treatment technology;

(5) Age, size, land availability, and configuration as they relate to the discharger's equipment or facilities; processes employed; process changes; and engineering aspects of the application of control technology;

(6) Cost of compliance with required control technology.

(e) A variance request or portion of such a request under this section shall not be granted on any of

the following grounds;

(1) The infeasibility of installing the required waste treatment equipment within the time the CWA allows.

(2) The assertion that the national limits cannot be achieved with the appropriate waste treatment facilities installed, if such assertion is not based on factor(s) listed in paragraph (d) of this section;

(3) The discharger's ability to pay for the required waste treatment; or

(4) The impact of a discharge on local receiving water quality.

(f) Nothing in this section shall be construed to impair the right of the State or locality under section 510 of the CWA to impose more stringent limitations than those required by Federal law.

**125.32 Method of application.**

(a) A written request for a variance under this part D shall be submitted in duplicate to the Department in accordance with R.61-9.122.21(m)(1) and R.61-9.124.3.

(b) The burden is on the person requesting the variance to explain that:

(1) Factor(s) listed in section 125.31(b) regarding the discharger's facility are fundamentally different from the factors EPA considered in establishing the national limits. The requester should refer to all relevant material and information, such as the published guideline regulations development document, all associated technical and economic data collected for use in developing each national limit, all records of legal proceedings, and all written and printed documentation including records of communication, etc., relevant to the regulations which are kept on public file by the EPA;

(2) The alternative limitations requested are justified by the fundamental difference alleged in paragraph (b)(1) of this section; and

(3) The appropriate requirements of section 125.31 have been met.

**PARTS E – G [RESERVED.]**

**PART H**
**CRITERIA FOR DETERMINING ALTERNATIVE EFFLUENT LIMITATIONS UNDER SECTION 316(a) OF THE CWA**

**125.70 Purpose and scope**

(a) Section 316(a) of the CWA provides that: "With respect to any point source otherwise subject to the provisions of section 301 or section 306 of this ACT, whenever the owner or operator of any such source, after opportunity for public hearing, can demonstrate to the satisfaction of ... the State that any effluent limitation proposed for the control of the thermal component of any discharge from such source will require effluent limitations more stringent than necessary to assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife in and on the body of water into which the discharge is to be made, the ...State may impose an effluent limitation under such sections on such

plant, with respect to the thermal component of such discharge (taking into account the interaction of such thermal component with other pollutants), that will assure the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in and on that body of water."

(b) This part describes the factors, criteria and standards for establishment of alternative thermal effluent limitations under section 316(a) of the CWA in permits issued under section 402(a) of the CWA.

**125.71 Definitions.**

For the purpose of this part:

(a) "Alternative effluent limitations" means all effluent limitations or standards of performance for the control of the thermal component of any discharge which are established under section 316(a) of the CWA, this section, and the State Water Quality Standard R.61-68.

(b) "Representative important species" means species which are representative, in terms of their biological needs, of a balanced, indigenous community of shellfish, fish and wildlife in the body of water into which a discharge of heat is made.

(c) The term "balanced, indigenous community" is synonymous with the term "balanced, indigenous population" in the CWA and means a biotic community typically characterized by diversity, the capacity to sustain itself through cyclic seasonal changes, presence of necessary food chain species and by a lack of domination by pollution tolerant species. Such a community may include historically non-native species introduced in connection with a program of wildlife management and species whose presence or abundance results from substantial, irreversible environmental modifications. Normally, however, such a community will not include species whose presence or abundance is attributable to the introduction of pollutants that will be eliminated by compliance by all sources with section 301(b)(2) of the CWA; and may not include species whose presence or abundance is attributable to alternative effluent limitations imposed pursuant to section 316(a) of the CWA.

**125.72 Early screening of applications for variances under section 316(a) of the CWA.**

(a) Any initial application for a section 316(a) variance shall include the following early screening information:

(1) A description of the alternative effluent limitation requested;

(2) A general description of the method by which the discharger proposes to demonstrate that the otherwise applicable thermal discharge effluent limitations are more stringent than necessary;

(3) A general description of the type of data, studies, experiments and other information which the discharger intends to submit for the demonstration; and

(4) Such data and information as may be available to assist the Department in selecting the appropriate representative important species.

(b) After submitting the early screening information under paragraph (a) of this section, the discharger shall consult with the Department at the earliest practicable time (but not later than 30 days after the application is filed) to discuss the discharger's early screening information. Within 60 days after the application is filed, the discharger shall submit for the Department's approval a detailed plan of study

which the discharger will undertake to support its section 316(a) demonstration. The discharger shall specify the nature and extent of the following type of information to be included in the plan of study; Biological, hydrographical and meteorological data; physical monitoring data; engineering or diffusion models; laboratory studies; representative important species; and other relevant information. In selecting representative important species, special consideration shall be given to species mentioned in applicable water quality standards. After the discharger submits its detailed plan of study, the Department shall either approve the plan or specify any necessary revisions to the plan. The discharger shall provide any additional information or studies which the Department subsequently determines necessary to support the demonstration, including such studies or inspections as may be necessary to select representative important species. The discharger may provide any additional information or studies which the discharger feels are appropriate to support the demonstration.

(c) Any application for the renewal of a section 316(a) variance shall include only such information described in paragraph (a) and (b) of this section and section 125.73(c)(1) as the Department requests within 60 days after receipt of the permit application.

(d) [Reserved.]

(e) In making the demonstration the discharge shall consider any information or guidance published by EPA to assist in making such demonstrations.

(f) If an applicant desires a ruling on a section 316(a) application before the ruling on any other necessary permit terms and conditions, it shall so request upon filing its application under paragraph (a) of this section. This request shall be granted or denied at the discretion of the Department.

**125.73 Criteria and standards for the determination of alternative effluent limitations under section 316(a) of the CWA.**

(a) Thermal discharge effluent limitations or standards established in permits may be less stringent than those required by applicable standards and limitations if the discharger demonstrates to the satisfaction of the Department that such effluent limitations are more stringent than necessary to assure the protection and propagation of a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is made. This demonstration must show that the alternative effluent limitation desired by the discharger, considering the cumulative impact of its thermal discharge together with all other significant impacts on the species affected, will assure the protection and propagation of a balanced indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is to be made.

(b) In determining whether or not the protection and propagation of the affected species will be assured, the Department may consider any information contained or referenced in any applicable thermal water quality criteria and thermal water quality information published by the Administrator under section 304(a) of the CWA, or any other information it deems relevant.

(c) (1) Existing dischargers may base their demonstration upon the absence of prior appreciable harm in lieu of predictive studies. Any such demonstrations shall show:

(i) That no appreciable harm has resulted from the normal component of the discharge (taking into account the interaction of such thermal component with other pollutants and the additive effect of other thermal sources to a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge has been made; or

(ii) That despite the occurrence of such previous harm, the desired alternative effluent limitations (or appropriate modifications thereof) will nevertheless assure the protection and propagation of a balanced, indigenous community of shellfish, fish and wildlife in and on the body of water into which the discharge is made.

(2) In determining whether or not prior appreciable harm has occurred, the Department shall consider the length of time in which the applicant has been discharging and the nature of the discharge.

**PART I [RESERVED.]**

**PART J [RESERVED.]**

**PART K [RESERVED.]**

**PART L [RESERVED.]**

**PART M [RESERVED.]**

# 61-9.129
# Toxic Pollutant Effluent Standards

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## PART A

## TOXIC POLLUTANT EFFLUENT STANDARDS AND PROHIBITIONS

### 129.1 Scope and Purpose.

(a) The provisions of this Part apply to owners or operators of specified facilities discharging into waters of the State.

(b) The effluent standards or prohibitions for toxic pollutants established in this Part shall be applicable to the sources and pollutants hereinafter set forth, and may be incorporated in any NPDES permit, modification or renewal thereof, in accordance with the provisions of this Part.

(c) The provisions of R.61-9.124 and R.61-9.125 shall apply to any NPDES permit proceedings for any point source discharge containing any toxic pollutant for which a standard or prohibition is established under this Part.

### 129.2 Definitions.

All terms not defined herein shall have the meaning given them R.61-9.122 or R.61-9.124. As used in this regulation, the term:

(a) "Air emissions" means the release or discharge of a toxic pollutant by an owner or operator into the ambient air either (1) by means of a stack or (2) as a fugitive dust, mist, or vapor as a result inherent to the manufacturing or formulating process.

(b) "Ambient water criterion" means that concentration of a toxic pollutant in the waters of the State that, based upon available data, will not result in adverse impact in important aquatic life, or on consumers of such aquatic life, after exposure of that aquatic life for periods of time exceeding 96 hours and continuing at least through one reproductive cycle; and will not result in a significant risk of adverse health effects in a large human population based on available information such as mammalian laboratory toxicity data, epidemiological studies of human occupational exposures, or human exposure data, or any other relevant data.

(c) "Construction" means any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises.

(d) "Effluent standard" means, for purposes of 307, the equivalent of effluent limitation as that term is defined in section 502(11) of the CWA with the exception that it does not include a schedule of compliance.

(e) "Existing Source" means any source which is not a new source as defined in this section.

(f) "Fugitive dust, mist, or vapor" means dust, mist or vapor containing a toxic pollutant regulated under this Part which is emitted from any source other than through a stack.

(g) "Manufacturer" means any establishment engaged in the mechanical or chemical transformation of materials or substances into new products including but not limited to the blending of materials such as pesticidal products, resins, or liquors.

(h) "New Source" means any source discharging a toxic pollutant, the construction of which is commenced after proposal of an effluent standard or prohibition applicable to such source if such effluent standard or prohibition is thereafter promulgated in accordance with section 307 of CWA.

(i) "Owner or operator" means any person who owns, leases, operates, controls, or supervises a source as defined above.

(j) "Permit" means a permit for the discharge of pollutants into waters of the State under the National Pollutant Discharge Elimination System established by Section 402 of the CWA, the PCA, and implemented in regulations in R.61-9.124 and R.61-9.125.

(k) "Process Wastes" means any designated toxic pollutant, whether in wastewater or otherwise present, which is inherent to or unavoidably resulting from any manufacturing process, including that which comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product or waste product and is discharged into the waters of the state.

(l) "Prohibited" means that the constituent shall be absent in any discharge subject to these standards, as determined by any analytical method.

(m) "Source" means any building, structure, facility, or installation from which there is or may be the discharge of toxic pollutants designated as such by the Administration under section 307(a)(1) of the CWA.

(n) "Stack" means any chimney, flue, conduit, or duct arranged to conduct emissions to the ambient air.

(o) "Ten year 24-hour rainfall event" means the maximum precipitation event with a probable recurrence interval of once in 10 years as defined by the National Weather Service in technical paper No. 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments or equivalent regional or State rainfall probability information developed therefrom.

(p) "Working day" means the hours during a calendar day in which a facility discharges effluents subject to this regulation.

**129.3 Abbreviations.**

The abbreviations used in this Part represent the following terms:

lb = pound (or pounds) g = gram
µg/l = micrograms per liter (1 one-millionth gram/liter) kg = kilogram(s)
kkg = 1000 kilogram(s)

**129.4 Toxic pollutants.**

The following are the pollutants subject to regulation under the provisions of this part:

(a) Aldrin/Dieldrin - "Aldrin" means the compound aldrin as identified by the chemical name,

1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-1,4-endo-5,8- exo-dimethanonaphthalene;
"Dieldrin" means the compound dieldrin as identified by the chemical name 1,2,3,4,10,10-hexachloro-6,7-epoxy- 1,4,4a,5,6,7,8,8a-octahydro-1,4-endo-5,8-exo-dimethanonaphthalene.

(b) DDT- "DDT" means the compounds DDT, DDD, and DDE as identified by the chemical names; (DDT)-1,1,1-trichloro-2,2-bis(p-chlorophenyl) ethane and some o,p'-isomers; (DDD) or (TDE)-1,1-dichloro-2,2-bis(p-chlorophenyl) ethane and some o,p'-isomers; (DDE)-1,1-dichloro-2,2,-bis(p-chlorophenyl) ethylene.

(c) Endrin- "Endrin" means the compound endrin as identified by the chemical name 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8, 8a-octahydro-1,4,-endo-5,8,-endo-dimethanonaphthalene.

(d) Toxaphene- "Toxaphene" means the material consisting of technical grade chlorinated camphene having the approximate formula of C10H10Cl8 and normally containing 67-69 percent chlorine by weight.

(e) Benzidine- "Benzidine" means the compound benzidine and its salts as identified by the chemical name 4,4'-diaminobiphenyl.

(f) Polychlorinated Biphenyls (PCBs) - "Polychlorinated biphenyls (PCBs)" means a mixture of compounds composed of the biphenyl molecule which has been chlorinated to varying degrees.

**129.5 Compliance.**

(a) (1) Within 60 days from the date of promulgation of any toxic pollutant effluent standard or prohibition, each owner or operator with a discharge subject to that standard or prohibition must notify the Department, of such discharge. Such notification shall include such information and follow such procedures as the Department may require.

(2) Any owner or operator who does not have a discharge subject to any toxic pollutant effluent standard at the time of such promulgation but who thereafter commences or intends to commence any activity which would result in such a discharge shall first notify the Department, in the manner herein provided, at least 60 days prior to any such discharge.

(b) Upon receipt of any application for issuance or reissuance of a permit or for a modification of an existing permit for a discharge subject to a toxic pollutant effluent standard or prohibition, the permitting authority shall proceed thereon in accordance with R.61-9.124 or R.61-9.125, whichever is applicable.

(c) (1) Every permit which contains limitations based upon a toxic pollutant effluent standard or prohibition under this Part is subject to revision following the completion of any proceeding revising such toxic pollutant effluent standard or prohibition regardless of the duration specified on the permit.

(2) For purposes of this section, all toxic pollutants for which standards are set under this Part are deemed to be injurious to human health within the meaning of section 402(k) of the CWA, unless otherwise specified in the standard established for any particular pollutant.

(d) (1) Upon the compliance date for any section 307(a) toxic pollutant effluent standard or prohibition, each owner or operator of a discharge subject to such standard or prohibition shall comply with such monitoring, sampling, recording, and reporting conditions as the Department may require for

that discharge. Notice of such conditions shall be provided in writing to the owner or operator.

(2) In addition to any conditions required pursuant to paragraph (d)(1) and to the extent not required in conditions contained in NPDES permits, within 60 days following the close of each calendar year, each owner or operator of a discharge subject to any toxic standard or prohibition shall report to the Department concerning the compliance of such discharges. Such report shall include, as a minimum, information concerning

(i) Relevant identification of the discharger such as name, location of facility, discharge points, receiving waters, and the industrial process or operation emitting the toxic pollutant;

(ii) Relevant conditions (pursuant to paragraph (d)(1) or to an NPDES permit) as to flow, section 307(a) toxic pollutant concentrations, and section 307(a) toxic pollutant mass emission rate;

(iii) Compliance by the discharger with such conditions.

(3) When samples collected for analysis are composited, such samples shall be composited in proportion to the flow at time of collection and preserved in compliance with requirements of the Department, but shall include at least five samples collected at approximately equal intervals throughout the working day.

(e) (1) [Reserved].

(2) Nothing in these regulations shall preclude the Department from requiring in any permit a more stringent effluent limitation or standard pursuant to section 301(b)(1)(C) of the CWA and implemented in R.61-9.124.42 and other related provisions of R.61-9.124.

(f) Any owner or operator of a facility which discharges a toxic pollutant to the waters of the State and to a publicly owned treatment system shall limit the summation of the mass emissions from both discharges to the less restrictive standard, either the direct discharge standard or the pretreatment standard; but in no case will this Subsection allow a discharge to the waters greater than the toxic pollutant effluent standard established for a direct discharge to the waters of the State.

(g) [Reserved.]

**129.6 Adjustment of effluent standard for presence of toxic pollutant in the intake water.**

(a) Upon the request of the owner or operator of a facility discharging a pollutant subject to a toxic pollutant effluent standard or prohibition, the Department shall give credit and shall adjust the effluent standard(s) in such permit to reflect credit for the toxic pollutant(s) in the owner's or operator's water supply if

(1) the source of the owner's or operator's water supply is the same body of water into which the discharge is made and if

(2) it is demonstrated to the satisfaction of the Department that the toxic pollutant(s) present in the owner's or operator's intake water will not be removed by any wastewater treatment systems whose design capacity and operation were such as to reduce toxic pollutants to the levels required by the applicable toxic pollutant effluent standards in the absence of the toxic pollutant in the intake water.

(b) Effluent limitations established pursuant to this section shall be calculated on the basis of the amount of section 307(a) toxic pollutant(s) present in the water after any water supply treatment steps have been performed by or for the owner or operator.

(c) Any permit which includes toxic pollutant effluent limitations established pursuant to this section shall also contain conditions requiring the permittee to conduct additional monitoring in the manner and locations determined by the Department for those toxic pollutants for which the toxic pollutant effluent standards have been adjusted.

**129.7 Requirement and procedure for establishing a more stringent effluent limitation.**

(a) In exceptional cases

(1) where the Department determines that the ambient water criterion established in these standards is not being met or will not be met in the receiving water as a result of one or more discharges at levels allowed by these standards, and

(2) where the Department further determines that this is resulting in or may cause or contribute to significant adverse effects on aquatic or other organisms usually or potentially present, or on human health, he may issue to an owner or operator a permit or a permit modification containing a toxic pollutant effluent limitation at a more stringent level than that required by the standard set forth in these regulations. Any such action shall be taken pursuant to the procedural provisions of R.61-9.124 and R.61-9.125, as appropriate.

(3) [Reserved].

(b) Any effluent limitation in an NPDES permit which the Department proposes to issue which is more stringent than the toxic pollutant effluent standards promulgated by the Administrator is subject to review by the Administrator under section 402(d) of the CWA. The Administrator may approve or disapprove such limitation(s) or specify another limitation(s) upon review of any record of any proceedings held in connection with the permit issuance or modification and any other evidence available to him. If he takes no action within ninety days of his receipt of the notification of the action of the permit issuing authority and any record thereof, the action of the Department's permit issuing authority shall be deemed to be approved.

**129.8 Compliance date.**

(a) The effluent standards or prohibitions set forth herein shall be complied with not later than one year after promulgation unless an earlier date is established by the Administrator for an industrial subcategory in the promulgation of the standards or prohibitions.

(b) Toxic pollutant effluent standards or prohibitions set forth herein shall become enforceable under sections 307(d) and 309 of the CWA on the date established in subsection (a) regardless of proceedings in connection with the issuance of any NPDES permit or application therefor, or modification or renewal thereof.

**129.9-129.99 [Reserved.]**

**129.100 Aldrin/Dieldrin.**

(a) Specialized definitions.

(1) "Aldrin/Dieldrin Manufacturer" means a manufacturer, excluding any source which is exclusively an aldrin/dieldrin formulator, who produces, prepares or processes technical aldrin or dieldrin or who uses aldrin or dieldrin as a material in the production, preparation or processing of another synthetic organic substance.

(2) "Aldrin/Dieldrin Formulator" means a person who produces, prepares or processes a formulated product comprising a mixture of either aldrin or dieldrin and inert materials or other diluents, into a product intended for application in any use registered under the Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 135, et seq.).

(3) The ambient water criterion for aldrin/dieldrin in navigable waters is 0.003 µg/l or the State Standard as identified in SC Regulation R.61-68, whichever is more stringent.

(b) Aldrin/Dieldrin manufacturer.

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the manufacturing areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by aldrin/dieldrin as a result of the manufacturing process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in subparagraph (ii); and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of aldrin/dieldrin; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR Part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.

(3) Effluent Standard.

(i) Existing Sources. Aldrin or dieldrin is prohibited in any discharge from any aldrin/dieldrin manufacturer.

(ii) New Sources. Aldrin or dieldrin is prohibited in any discharge from any aldrin/dieldrin manufacturer.

(c) Aldrin/Dieldrin Formulator.

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the formulating areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by aldrin/dieldrin as a result of the formulating process, including but not limited to:

(1) Stormwater and other runoff except as hereinafter provided in subparagraph (ii); and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of aldrin/dieldrin; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR Part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.

(3) Effluent Standard.

(i) Existing Sources. Aldrin or dieldrin is prohibited in any discharge from any aldrin/dieldrin formulator.

(ii) New Sources. Aldrin or dieldrin is prohibited in any discharge from any aldrin/dieldrin formulator.

**129.101 DDT, DDD and DDE.**

(a) Specialized Definitions.

(1) "DDT Manufacturer" means a manufacturer, excluding any source which is exclusively a DDT formulator, who produces, prepares or processes technical DDT, or who uses DDT as a material in the production, preparation or processing of another synthetic organic substance.

(2) "DDT Formulator" means a person who produces, prepares or processes a formulated product comprising a mixture of DDT and inert materials or other diluents into a product intended for application in any use registered under the Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 135, et seq.).

(3) The ambient water criterion for DDT in navigable waters is 0.001 µg/l, or the State Standard as identified in S.C. Regulation R.61-68, whichever is more stringent.

(b) DDT Manufacturer.

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the manufacturing areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by DDT as a result of the manufacturing process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in subparagraph (ii); and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of DDT; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR Part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.

(3) Effluent Standard.

(i) Existing Sources. DDT is prohibited in any discharge from any DDT manufacturer.

(ii) New Sources. DDT is prohibited in any discharge from any DDT manufacturer.

(c) DDT Formulator.

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the formulating areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by DDT as a result of the formulating process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in subparagraph (ii); and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of DDT; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR Part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.

(3) Effluent Standard.

(i) Existing Sources. DDT is prohibited in any discharge from any DDT formulator.

(ii) New Sources. DDT is prohibited in any discharge from any DDT formulator.

**129.102 Endrin.**

(a) Specialized definitions.

(1) "Endrin Manufacturer" means a manufacturer, excluding any source which is exclusively an endrin formulator, who produces, prepares or processes technical endrin or who uses endrin as a material in the production, preparation or processing of another synthetic organic substance.

(2) "Endrin Formulator" means a person who produces, prepares or processes a formulated product comprising a mixture of endrin and inert materials or other diluents into a product intended for application in any use registered under the Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C 135, et seq.).

(3) The ambient water criterion for endrin in waters of the State is 0.004 µg/l, or the State Standard as identified in S.C. Regulation R.61-68, whichever is more stringent.

(b) Endrin manufacturer.

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the manufacturing areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by endrin as a result of the manufacturing process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in subparagraph (ii); and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of endrin; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable - Environmental Protection Agency method specified in 40 CFR Part 136.

(3) Effluent Standard.

(i) Existing Sources - Discharges from an endrin manufacturer shall not contain endrin concentrations exceeding an average per working day of 1.5 µg/l calculated over any calendar month; and shall not exceed a monthly average daily loading of 0.0006 kg/kkg of endrin produced; and shall not

exceed 7.5 µg/l in a sample(s) representing any working day.

(ii) New Sources - Discharges from an endrin manufacturer shall not contain endrin concentrations exceeding an average per working day of 0.1 µg/l calculated over any calendar month; and shall not exceed a monthly average daily loading of 0.00004 kg/kkg of endrin produced; and shall not exceed 0.5 µg/l in a sample(s) representing any working day.

(iii) Mass Emission Standard During Shutdown of Production - In computing the allowable monthly average daily loading figure required under the preceding subparagraphs (i) and (ii), for any calendar month for which there is no endrin being manufactured at any plant or facility which normally contributes to the discharge which is subject to these standards, the applicable production value shall be deemed to be the average monthly production level for the most recent preceding 360 days of actual operation of the plant or facility.

(c) Endrin Formulator.

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the formulating areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by endrin as a result of the formulating process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in subparagraph (ii); and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of endrin; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable - Environmental Protection Agency method specified in 40 CFR Part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.

(3) Effluent Standard.

(i) Existing Sources - Endrin is prohibited in any discharge from any endrin formulator.

(ii) New Sources - Endrin is prohibited in any discharge from any endrin formulator.

(d) The standards set forth in this Section shall apply to the total combined weight or concentration of endrin, excluding any associated element or compound.

**129.103 Toxaphene.**

(a) Specialized definitions.

(1) "Toxaphene Manufacturer" means a manufacturer, excluding any source which is exclusively a toxaphene formulator, who produces, prepares or processes toxaphene or who uses toxaphene as a material in the production, preparation or processing of another synthetic organic substance.

(2) "Toxaphene Formulator" means a person who produces, prepares or processes a formulated product comprising a mixture of toxaphene and inert materials or other diluents into a product intended for application in any use registered under the Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 135, et seq.).

(3) The ambient water criterion for toxaphene in navigable waters is 0.005 µg/l or the State Standard as identified in S.C. Regulation 61-68, whichever is more stringent.

(b) Toxaphene manufacturer.

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the manufacturing areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by toxaphene as a result of the manufacturing process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in subparagraph (ii); and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of toxaphene; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable - Environmental Protection Agency method specified in 40 CFR Part 136.

(3) Effluent Standard.

(i) Existing Sources - Discharges from a toxaphene manufacturer shall not contain toxaphene concentrations exceeding an average per working day of 1.5 µg/l calculated over any calendar month; and shall not exceed a monthly average daily loading of 0.00003 kg/kkg of toxaphene produced, and shall not exceed 7.5 µg/l in a sample(s) representing any working day.

(ii) New Sources - Discharges from a toxaphene manufacturer shall not contain toxaphene concentrations exceeding an average per working day of 0.1 µg/l calculated over any calendar month; and shall not exceed a monthly average daily loading of 0.000002 kg/kkg of toxaphene produced, and shall not exceed 0.5 µg/l in a sample(s) representing any working day.

(iii) Mass Emission During Shutdown of Production - In computing the allowable monthly average daily loading figure required under the preceding subparagraphs (i) and (ii), for any calendar month for which there is no toxaphene being manufactured at any plant or facility which normally contributes to the discharge which is subject to these standards, the applicable production value shall be deemed to be the average monthly production level for the most recent preceding 360 days of actual operation of the plant or facility.

(c) Toxaphene Formulator.

(1) Applicability.

(i) The standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the formulating areas; loading and unloading areas, storage areas and other areas which are subject to direct contamination by toxaphene as a result of the formulating process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in subparagraph (ii); and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of toxaphene; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable - Environmental Protection Agency method specified in 40 CFR Part 136, except that a 1-liter sample size is required to increase the analytical sensitivity.

(3) Effluent Standards.

(i) Existing Sources - Toxaphene is prohibited in any discharge from any toxaphene formulator.

(ii) New Sources - Toxaphene is prohibited in any discharge from any toxaphene formulator.

(d) The standards set forth in this Section shall apply to the total combined weight or concentration of toxaphene, excluding any associated element or compound.

**129.104 Benzidine.**

(a) Specialized definitions.

(1) "Benzidine Manufacturer" means a manufacturer who produces benzidine or who produces benzidine as an intermediate product in the manufacture of dyes commonly used for textile, leather and paper dyeing.

(2) "Benzidine-Based Dye Applicator" means an owner or operator who uses benzidine-based

dyes in the dyeing of textiles, leather or paper.

(3) The ambient water criterion for benzidine in navigable waters is 0.1 µg/l or the State Standard as identified in S.C. Regulation 61-68 whichever is more stringent.

(b) Benzidine manufacturer.

(1) Applicability.

(i) These standards apply to:

(A) All discharges into the waters of the State of process wastes, and

(B) All discharges into the waters of the State of wastes containing benzidine from the manufacturing areas, loading and unloading areas, storage areas, and other areas subject to direct contamination by benzidine or benzidine-contaminated product as a result of the manufacturing process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in paragraph (b)(1)(ii) of this section and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of benzidine; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable - Environmental Protection Agency method specified in 40 CFR Part 136.

(3) Effluent standards.

(i) Existing sources - Discharges from a benzidine manufacturer shall not contain benzidine concentrations exceeding an average per working day of 10 µg/l calculated over any calendar month, and shall not exceed a monthly average daily loading of 0.130 kg/kkg of benzidine produced, and shall not exceed 50 µg/l in a sample(s) representing any working day.

(ii) New Sources - Discharges from a benzidine manufacturer shall not contain benzidine concentrations exceeding an average per working day of 10 µg/l calculated over any calendar month, and shall not exceed a monthly average daily loading of 0.130 kg/kkg of benzidine produced, and shall not exceed 50 µg/l in a sample(s) representing any working day.

(4) The standards set forth in this paragraph (b) shall apply to the total combined weight or concentration of benzidine, excluding any associated element or compound.

(c) Benzidine-Based Dye Applicators.

(1) Applicability.

(i) These standards apply to:

(A) All discharges into the waters of the State of process wastes, and

(B) All discharges into the waters of the State of wastes containing benzidine from the manufacturing areas, loading and unloading areas, storage areas, and other areas subject to direct contamination by benzidine or benzidine-contaminated product as a result of the manufacturing process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in paragraph (c)(1)(ii) of this section and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of benzidine; or to storm water that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable.

(i) Environmental Protection Agency method specified in 40 CFR Part 136; or

(ii) Mass balance monitoring approach which requires the calculation of the benzidine concentration by dividing the total benzidine contained in dyes used during a working day (as certified in writing by the manufacturer) by the total quantity of water discharged during the working day.

(iii) For enforcement purposes, the Department shall rely entirely upon the method specified in 40 CFR 136 in analyses it performs.

(3) Effluent standards.

(i) Existing sources - Discharges from benzidine-based dye applicators shall not contain benzidine concentrations exceeding an average per working day of 10 µg/l calculated over any calendar month; and shall not exceed 25 µg/l in a sample(s) or calculation(s) representing any working day.

(ii) New sources - Discharges from benzidine-based dye applicators shall not contain benzidine concentrations exceeding an average per working day of 10 µg/l calculated over any calendar month; and shall not exceed 25 µg/l in a sample(s) or calculation(s) representing any working day.

(4) The standards set forth in this paragraph (c) shall apply to the total combined concentrations of benzidine, excluding any associated element or compound.

**129.105 Polychlorinated biphenyls (PCBs).**

(a) Specialized definitions.

(1) "PCB Manufacturer" means a manufacturer who produces polychlorinated biphenyls.

(2) "Electrical capacitor manufacturer" means a manufacturer who produces or assembles electrical capacitors in which PCB or PCB-containing compounds are part of the dielectric.

(3) "Electrical transformer manufacturer" means a manufacturer who produces or assembles electrical transformers in which PCB or PCB-containing compounds are part of the dielectric.

(4) The ambient water criterion for PCBs in navigable waters is 0.001 µg/l or the State Standard as identified in S.C. Regulation 61-68 whichever is more stringent.

(b) PCB Manufacturer.

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes;

(B) All discharges from the manufacturing or incinerator areas, loading and unloading areas, storage areas, and other areas which are subject to direct contamination by PCBs as a result of the manufacturing process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in subparagraph (ii); and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of PCBs; or to storm water runoff that exceeds that from the ten year 24-hour rainfall event.

(2) Analytical method acceptable - Environmental Protection Agency method specified in 40 CFR Part 136 except that a 1-liter sample size is required to increase analytical sensitivity.

(3) Effluent Standards:

(i) Existing Sources. PCBs are prohibited in any discharge from any PCB manufacturer;

(ii) New Sources. PCBs are prohibited in any discharge from any PCB manufacturer.

(c) Electrical Capacitor Manufacturer.

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the manufacturing or incineration areas, loading and unloading areas, storage areas and other areas which are subject to direct contamination by PCBs as a result of the manufacturing process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in subparagraph (ii); and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of PCBs; or to storm water runoff that exceeds that from the ten-year 24-hour rainfall event.

(2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR Part 136, except that a 1-liter sample size is required to increase analytical sensitivity.

(3) Effluent Standards:

(i) Existing Sources. PCBs are prohibited in any discharge from any electrical capacitor manufacturer;

(ii) New Sources. PCBs are prohibited in any discharge from any electrical capacitor manufacturer.

(d) Electrical Transformer Manufacturer.

(1) Applicability.

(i) These standards or prohibitions apply to:

(A) All discharges of process wastes; and

(B) All discharges from the manufacturing or incineration areas, loading and unloading areas, storage areas, and other areas which are subject to direct contamination by PCBs as a result of the manufacturing process, including but not limited to:

(1) Storm water and other runoff except as hereinafter provided in subparagraph (ii); and

(2) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to storm water runoff or other discharges from areas subject to contamination solely by fallout from air emissions of PCBs; or to storm water runoff that exceeds that from the ten-year 24-hour rainfall event.

(2) Analytical method acceptable. Environmental Protection Agency method specified in 40 CFR Part 136, except that a 1-liter sample size is required to increase analytical sensitivity.

(3) Effluent Standards:

(i) Existing Sources. PCBs are prohibited in any discharge from any electrical transformer manufacturer;

(ii) New Sources. PCBs are prohibited in any discharge from any electrical transformer manufacturer.

(e) Adjustment of effluent standard for presence of PCBs in intake water. Whenever a facility

which is subject to these standards has PCBs in its effluent which result from the present of PCBs in its intake waters, the owner may apply to the Department for a credit pursuant to the provisions of section 129.6, where the source of the water supply is the same body of water into which the discharge is made. The requirement of subparagraph (1) of section 129.6(a), relating to the source of the water supply, shall be waived, and such facility shall be eligible to apply for a credit under section 129.6, upon a showing by the owner or operator of such facility to the Department, that the concentration of PCBs in the intake water supply of such facility does not exceed the concentration of PCBs in the receiving water body to which the plant discharges its effluent.

# 61-9.133
# Secondary Treatment Regulation

| Regulation History as Published in State Register | | | |
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**133.100 Purpose.**

This part provides information on the level of effluent quality attainable through the application of secondary or equivalent treatment. R.61-9.133 will apply to permits drafted or issued under R.61-9.122 (NPDES permits or NPDES general permits).

**133.101 Definitions.**

All terms not defined herein shall have the meaning given them R.61-9.122 or R.61-9.124. Terms used in this regulation are defined as follows:

(a) "7-day average." The arithmetic mean of pollutant parameter values for samples collected in a period of 7 consecutive days.

(b) "30-day average." The arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days.

(c) "BOD5." The five day measure of the pollutant parameter biochemical oxygen demand (BOD).

(d) "CBOD5." The five day measure of the pollutant parameter carbonaceous biochemical oxygen demand (CBOD5).

(e) "Effluent concentrations consistently achievable through proper operation and maintenance."

(1) For a given pollutant parameter, the 95th percentile value for the 30-day average effluent quality achieved by a treatment works in a period of at least two years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions, and

(2) A 7-day average value equal to 1.5 times the value derived under paragraph (f)(1) of this section.

(f) "Facilities eligible for treatment equivalent to secondary treatment." Treatment works shall be eligible for consideration for effluent limitations described for treatment equivalent to secondary treatment (section 133.105), if:

(1) The BOD5 and TSS effluent concentrations consistently achievable through proper operation and maintenance (section 133.101(f)) of the treatment works exceed the minimum level of the effluent quality set forth in section 133.102(a) and section 133.102(b),

(2) A trickling filter or waste stabilization pond is used as the principal process, and

(3) The treatment works provide significant biological treatment of municipal and/or domestic wastewater.

(g) "mg/l." Milligrams per liter.

(h) "Percent removal." A percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater

influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

(i) "Significant biological treatment." The use of an aerobic or anaerobic biological treatment process in a treatment works to consistently achieve a 30-day average of at least 65 percent removal of BOD5.

(j) "Significantly more stringent limitation" means BOD5 and TSS limitations necessary to meet the percent removal requirements of at least 5 mg/l more stringent than the otherwise applicable concentration-based limitations (e.g., less than 25 mg/l in the case of the secondary treatment limits for BOD5 and TSS), or the percent removal limitations in section 133.102 and section 133.105, if such limits would, by themselves, force significant construction or other significant capital expenditure.

(k) "TSS." The pollutant parameter total suspended solids.

**133.102 Secondary treatment.**

The following paragraphs describe the minimum level of effluent quality (in NPDES permits) attainable by secondary treatment in terms of the parameters - BOD5, TSS and pH. All requirements for each parameter shall be achieved except as provided for in section 133.103 and section 133.105.

(a) BOD5.

(1) The 30-day average shall not exceed 30 mg/l.

(2) The 7-day average shall not exceed 45 mg/l.

(3) The 30-day average percent removal shall not be less than 85 percent.

(4) At the option of the NPDES permitting authority, in lieu of the parameter BOD5 and the levels of the effluent quality specified in paragraphs (a)(1), (a)(2) and (a)(3), the parameter CBOD5 may be substituted with the following levels of the CBOD5 effluent quality provided:

(i) The 30-day average shall not exceed 25 mg/l.

(ii) The 7-day average shall not exceed 40 mg/l.

(iii) The 30-day average percent removal shall not be less than 85 percent.

(b) TSS.

(1) The 30-day average shall not exceed 30 mg/l.

(2) The 7-day average shall not exceed 45 mg/l.

(3) The 30-day average percent removal shall not be less than 85 percent.

(c) pH. The effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the publicly owned treatment works demonstrates that:

(1) Inorganic chemicals are not added to the waste stream as part of the treatment process; and

(2) Contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.

**133.103 Special considerations.**

(a) Combined sewers. Treatment works subject to this part may not be capable of meeting the percentage removal requirements established under section 133.102(a)(3) and section 133.102(b)(3), or section 133.105(a)(3) and section 133.105(b)(3) during wet weather where the treatment works receive flows from combined sewers (i.e., sewers which are designed to transport both storm water and sanitary sewage). For such treatment works, the decisions must be made on a case-by-case basis as to whether any attainable percentage removal level can be defined, and if so, what the level should be.

(b) Industrial wastes. For certain industrial categories, the discharge to waters of the State of BOD5 and TSS permitted under sections 301(b)(1)(A)(i), (b)(2)(E) or 306 of the CWA may be less stringent than the values given in section 133.102(a)(1), section 133.102(a)(4)(i), section 133.102(b)(1), section 133.105(a)(1), section 133.105(b)(1) and section 133.105(e)(1)(i). In cases when wastes would be introduced from such an industrial category into a publicly owned treatment works, the values for BOD5 and TSS in section 133.102(a)(1), section 133.102(a)(4)(i), section 133.102(b)(1), section 133.105(a)(1), section 133.105(b)(1), and section 133.105(e)(1)(i) may be adjusted upwards provided that:

(1) The permitted discharge of such pollutants, attributable to the industrial category, would not be greater than that which would be permitted under sections 301(b)(1)(A)(i), 301(b)(2)(E) or 306 of the CWA if such industrial category were to discharge directly into the waters of the State, and

(2) The flow or loading of such pollutants introduced by the industrial category exceeds 10 percent of the design flow or loading of the publicly owned treatment works. When such an adjustment is made, the values for BOD5 or TSS in section 133.102(a)(2), section 133.102(a)(4)(ii), section 133.102(b)(2), section 133.105(a)(2), section 133.105(b)(2), and section 133.105(e)(1)(ii) shall be adjusted proportionately.

(c) Waste stabilization ponds.

(1) The Department, is authorized to adjust the minimum level of effluent quality set forth in section 133.105(b)(1), (b)(2), and (b)(3) for treatment works subject to this part, to conform to the suspended solids concentrations achievable with waste stabilization ponds, provided that:

(A) Waste stabilization ponds including aerated lagoon systems are the principal process used for secondary treatment; and

(B) Operation and maintenance data indicate that the TSS values specified in section 133.105(b)(1), (b)(2), and (b)(3) cannot be achieved.

(2) (A) The term "TSS concentrations achievable with waste stabilization ponds" means a TSS value, determined by the Regional Administrator or the Department, subject to EPA approval, which is equal to the effluent concentration achieved 90 percent of the time within a State or appropriate contiguous geographical area by waste stabilization ponds that are achieving the levels of effluent quality for BOD5 specified in section 133.105(a)(1).

(B) Allowable limits:

(i) The 30-day average shall not exceed 90 mg/l.

(ii) The 7-day average shall not exceed 135 mg/l.

(d) Less concentrated influent wastewater for separate sewers. The Department may substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements set forth in section 133.102(a)(3), section 133.102(a)(4)(iii), section 133.102(b)(3), section 133.105(a)(3), section 133.105(b)(3) and section 133.105(e)(1)(iii) provided that the permittee satisfactorily demonstrates that:

(1) The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent wastewater,

(2) To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standard, and

(3) The less concentrated influent wastewater is not the result of excessive I/I. The determination of whether the less concentrated wastewater is the result of excessive I/I will use the definition of excessive I/I in 40 CFR 35.2005(b)(16) plus the additional criterion that inflow is non-excessive if the total flow to the POTW (i.e., wastewater plus inflow plus infiltration) is less than 275 gallons per capita per day.

(e) Less concentrated influent wastewater for combined sewers during dry weather. The Department, subject to EPA approval, is authorized to substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements set forth in section 133.102(a)(3), section 133.102(a)(4(iii), section 133.102(b)(3), section 133.105(a)(3), section 133.105(b)(3) and section 133.105(e)(1)(iii) provided that the permittee satisfactorily demonstrates that:

(1) The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits, but the percent removal requirements cannot be met due to less concentrated influent wastewater;

(2) To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent effluent concentrations than would otherwise be required by the concentration-based standards; and

(3) The less concentrated influent wastewater does not result from either excessive infiltration or clear water industrial discharges during dry weather periods. If the less concentrated influent wastewater is the result of clear water industrial discharges, then the treatment works must control such discharges pursuant to R.61-9.403.

**133.104 Sampling and test procedures.**

(a) Sampling and test procedures for pollutants listed in this part shall be in accordance with test methods set forth in 40 CFR Part 136.

(b) Chemical oxygen demand (COD) or total organic carbon (TOC) may be substituted for BOD5 when a long-term BOD:COD or BOD:TOC correlation has been demonstrated.

**133.105 Treatment equivalent to secondary treatment.**

This section describes the minimum level of effluent quality (in NPDES permits) attainable by facilities eligible for treatment equivalent to secondary treatment (section 133.101(g)) in terms of the parameters - BOD5, TSS and pH. All requirements for the specified parameters in paragraphs (a), (b) and (c) of this section shall be achieved except as provided for in section 133.103, or paragraphs (d), (e) or (f) of this section.

(a) BOD5.

(1) The 30-day average shall not exceed 45 mg/l.

(2) The 7-day average shall not exceed 65 mg/l.

(3) The 30-day average percent removal shall not be less than 65 percent.

(b) TSS. Except where TSS values have been adjusted in accordance with section 133.103(c).

(1) The 30-day average shall not exceed 45 mg/l.

(2) The 7-day average shall not exceed 65 mg/l.

(3) The 30-day average percent removal shall not be less than 65 percent.

(c) pH. The requirements of section 133.102(c) shall be met.

(d) Alternative State requirements. Except as limited by paragraph (f) of this section, the Department may adjust the minimum levels of effluent quality set forth in paragraphs (a)(1), (a)(2), (b)(1) and (b)(2) of this section for trickling filter facilities and in paragraphs (a)(1) and (a)(2) of this section for waste stabilization pond facilities, to conform to the BOD5 and TSS effluent concentrations consistently achievable through proper operation and maintenance (section 133.101(f)) by the median (50th percentile) facility in a representative sample of facilities within the State or appropriate contiguous geographical area that meet the definition of facilities eligible for treatment equivalent to secondary treatment (section 133.101(g)).

(e) CBOD5 limitations:

(1) Where data are available to establish CBOD5 limitations for a treatment works subject to this section, the Department may substitute the parameter CBOD5 for the parameter BOD5 in section 133.105(a)(1), section 133.105(a)(2) and section 133.105(a)(3), on a case-by-case basis provided that the levels of CBOD5 effluent quality are not less stringent than the following:

(i) The 30-day average shall not exceed 40 mg/l.

(ii) The 7-day average shall not exceed 60 mg/l.

(iii) The 30-day average percent removal shall not be less than 65 percent.

(2) Where data are available, the parameter CBOD5 may be used for effluent quality limitations established under paragraph (d) of this section. Where concurrent BOD effluent data are available, they must be submitted with the CBOD data as a part of the approval process outlined in paragraph (d) of this section.

(f) Permit adjustments. Any NPDES permit adjustment made pursuant to this part may not be any less stringent than the limitations required pursuant to section 133.105(a)-(e). Furthermore, the Department shall require more stringent limitations when adjusting permits if:

(1) For existing facilities the Department determines that the 30-day average and 7-day average BOD5 and TSS effluent values that could be achievable through proper operation and maintenance of the treatment works, based on an analysis of the past performance of the treatment works, would enable the treatment works to achieve more stringent limitations, or

(2) For new facilities, the Department determines that the 30-day average and 7-day average BOD5 and TSS effluent values that could be achievable through proper operation and maintenance of the treatment works, considering the design capability of the treatment process and geographical and climatic conditions, would enable the treatment works to achieve more stringent limitations.

# 61-9.403
# General Pretreatment Regulations for Existing and New Sources of Pollution

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**Section 403.1 Purpose and applicability.**

(a) This regulation implements sections 204(b)(1)(C), 208(b)(2)(C)(iii), 301(b)(1)(A)(ii), 301(b)(2)(A)(ii), 301(h)(5) and 301(i)(2), 304(e) and (g), 307, 308, 309, 402(b), 405, and 501(a) of the Federal Water Pollution Control Act as amended by the Clean Water Act of 1977 (Pub. L-95-217) or "CWA." It establishes responsibilities of State and local government, industry and the public to implement National Pretreatment Standards to control pollutants which pass through or interfere with treatment processes in Publicly Owned Treatment Works (POTWs) or which may contaminate sewage sludge.

(b) This regulation applies:

(1) to pollutants from non-domestic sources covered by Pretreatment Standards which are indirectly discharged into or transported by truck or rail or otherwise introduced into POTWs as defined below in section 403.3;

(2) to POTWs which receive wastewater from sources subject to National Pretreatment Standards;

(3) to any new or existing source subject to Pretreatment Standards. National Pretreatment Standards do not apply to sources which discharge to a sewer which is not connected to a POTW Treatment Plant.

**Section 403.2 Objectives of general pretreatment regulations.**

By establishing the responsibilities of government and industry to implement National Pretreatment Standards this regulation fulfills three objectives:

(c) To prevent the introduction of pollutants into POTWs which will interfere with the operation of a POTW, including interference with its use or disposal of municipal sludge;

(d) To prevent the introduction of pollutants into POTWs which will pass through the treatment works or otherwise be incompatible with such works; and

(e) To improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges.

**Section 403.3 Definitions.**

(a) Except as discussed below, the general definitions, abbreviations, and methods of analysis set forth in 40 CFR Part 401, R.61-9.122, or R.61-9.124 apply.

(b) The term Best Management Practices or BMPmeans schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in Sections 403.5(a)(1) and (b). BMPalso include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

(c) The term "Control Authority" refers to:

(1) The POTW, if the POTWs Pretreatment Program submission has been approved in accordance with the requirements of section 403.11: or

(2) The Approval Authority if the Submission has not been approved.

(d) The term "Approved POTW Pretreatment Program" or "Program" or "POTW Pretreatment Program" means a program administered by a POTW that meets the criteria established in this regulation (sections 403.8 and 403.9) and which has been approved by the Regional Administrator or the Department in accordance with section 403.11 of this regulation.

(e) The term "Indirect Discharge" or "Discharge" means the introduction of pollutants into a POTW from any non-domestic source regulated under section 307(b), (c) or (d) of the CWA or Section 48-1-90 of the Pollution Control Act (PCA).

(f) The term "Industrial User" or "User" means a source of Indirect Discharge.

(g) The term "interference" means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

(1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

(2) Therefore is a cause of a violation of any requirement of the POTW's NPDES 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), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act, and the South Carolina Pollution Control Act.

(h) The term "National Pretreatment Standard," "Pretreatment Standard," or "Standard" means any regulation containing pollutant discharge limits promulgated by the EPA in accordance with section 307(b) and (c) of CWA, which applies to Industrial Users. This term includes prohibitive discharge limits established pursuant to section 403.5.

(i)(1) The term "New Source" 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 section 307(c) of CWA which will be applicable to such source if such Standards are thereafter promulgated in accordance with that section, provided that:

(i) The building, structure, facility or installation is constructed at a site at which no other source is located; or

(ii) The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

(iii) The production or 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 subsections (1)(ii), or (1)(iii) of this section but otherwise alters, replaces, or adds to existing process or production equipment.

(3) Construction of a new source as defined under this paragraph has commenced if the owner or operator has:

(i) Begun, or caused to begin as part of a continuous on-site construction program:

(A) Any placement, assembly, or installation of facilities or equipment; or

(B) 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

(ii) 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 paragraph.

(j) The terms "NPDES Permit" or "Permit" means a permit including a Land Application permit issued to a POTW pursuant to section 402 of CWA or Section 48-1-100 of the Pollution Control Act (See R.61-9.122 or R.61-9.505).

(k) The term "Pass Through" means a Discharge which exits the POTW into waters of the State or of the United States 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 NPDES permit (including an increase in the magnitude or duration of a violation).

(l) (1) The term "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.

(2) For Purposes of Part 403, the term "POTW" shall mean publicly owned treatment works or a private facility that has been determined to be a regional provider of service identified under the 208 Water Quality Management Plan.

(m) The term "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 by section 403.6(e). 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 section 403.6(f).

(n) The term "Pretreatment Requirements" means any substantive or procedural requirement related to Pretreatment, other than a National Pretreatment Standard, imposed on an Industrial User.

(o) Significant Industrial User

(1) Except as provided in subsections (2) and (3) of this section, the term Significant Industrial User means:

(i) All industrial users subject to Categorical Pretreatment Standards under section 403.6 and 40 CFR chapter I, subchapter N: and

(ii) 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 percent 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 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 (in accordance with section 403.8(f)(6).

(2) The Control Authority may determine that an Industrial User subject to categorical Pretreatment Standards under Section 403.6 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:

(i) The Industrial User, prior to the Control Authority's finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements;

(ii) The Industrial User annually submits the certification statement required in Section 403.12(q) together with any additional information necessary to support the certification statement; and

(iii) The Industrial User never discharges any untreated, concentrated wastewater.

(3) Upon a finding that an Industrial User meeting the criteria in paragraph (o)(1)(ii) of this section has no reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standards 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 section 403.8(f)(6), determine that such Industrial User is not a Significant Industrial User.

(p) The term "Submission" means a request by a POTW for approval of a Pretreatment Program to the Department.

(q) The term "Water Management Division Director" means one of the Directors of the Water Management Divisions within the Regional offices of the Environmental Protection Agency or this person's delegated representative.

**Section 403.4 State or local law.**

Nothing in this regulation is intended to affect any Pretreatment Requirements, including any standards or prohibitions, established by local law as long as the local requirements are not less stringent than any set forth in National Pretreatment Standards, or any other requirements or prohibitions established under CWA or this regulation.

**Section 403.5 National pretreatment standards: Prohibited discharges.**

(a) (1) General prohibitions. A User may not introduce into a POTW any pollutant(s) which cause Pass Through or Interference. These general prohibitions and the specific prohibitions in paragraph (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 paragraph (a)(1) of this section and the specific prohibitions in paragraphs (b)(3), (b)(4), (b)(5), (b)(6), and (b)(7) of this section where the User can demonstrate that:

(i) 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

(ii) (A) A local limit designed to prevent Pass Through and/or Interference, as the case may be, was developed in accordance with paragraph (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

(B) If a local limit designed to prevent Pass Through and/or Interference, as the case may be, has not been developed in accordance with paragraph (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 NPDES 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, waste streams 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.

(2) Pollutants which will cause corrosive structural damage to the POTW, but in no case Discharges with pH lower than 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 Department, 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;

(8) Any trucked or hauled pollutants, except at discharge points designated by the POTW.

(c) When specific limits must be developed by the POTW.

(1) Each POTW developing a POTW Pretreatment Program pursuant to section 403.8 shall develop and enforce specific limits to implement the prohibitions listed in paragraphs (a)(1) and (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 POTWshall, in cases where pollutants contributed by User(s) result in Interference or Pass Through, 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 NPDES permit or sludge use or disposal practices.

(i) This evaluation must reflect the POTW's reasonable potential analysis utilized for all pollutants completed by the Department as part of the NPDES process (R61-9.122). The POTW will utilize the Department's analysis in the determination of appropriate pretreatment requirements.

(ii) This analysis must utilize the current Water Quality Standards (R61-68).

(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) POTW may develop Best Management Practices (BMP) to implement paragraphs (c)(1) and (c)(2) of this section. Such BMP 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 paragraph (c) above, such limits shall be deemed Pretreatment Standards for the purposes of section 307(d) of CWA.

(1) The POTW shall utilize the EPA Guidance Manual (EPA 833-R-04-002) for the development of Local Limits.

(2) Appropriate removal rates shall be based on wastewater plant site-specific influent and effluent data unless otherwise approved by the Department.

(e) EPA and State enforcement actions. If, within 30 days after notice of an Interference or Pass Through violation has been sent by the Department 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 Department may take appropriate enforcement action.

(f) [Reserved.]

**Section 403.6 National pretreatment standards: Categorical standards.**

(a) National Pretreatment Standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new Industrial Users in specific industrial subcategories will be established as separate Federal regulations under the appropriate subpart of 40 CFR Chapter I, Subchapter N. These Standards, unless specifically noted otherwise, shall be in addition to all applicable pretreatment standards and requirements set forth in this part.

(b) 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 Department 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 request for 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 Department within 30 days of notification.

(2) Contents of Application. Each request shall contain a statement:

(i) Describing which subcategories might be applicable; and

(ii) 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 Department 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 Department 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 Department, the request for a determination shall be denied.

(4) Final decision.

(i) When the Department receives a submittal, he or she will, after determining that it contains all of the information required by paragraph (2) of this section, consider the submission, any additional evidence that may have been requested, and any other available information relevant to the request. The Department will then make a written determination of the applicable subcategory and state the reasons for the determination.

(ii) The Department shall forward the determination described in this paragraph to the Water Management Division Director who may make a final determination. The Water Management Division Director may waive receipt of these determinations. If the Water Management Division Director does not modify the Department's decision within 60 days after receipt thereof, or if the Water Management Division Director waives receipt of the determination, the Department's decision is final.

(iii) Where the Water Management Division Director elects to modify the Department's decision, the Water Management Division Director's decision will be final.

(iv) The Water Management Division Director or Department, as appropriate, shall send a copy of the determination to the affected Industrial User and the POTW. Where the final determination is made by the Water Management Division Director, he or she shall send a copy of the determination to the Department.

(5) Requests for hearing and/or legal decision. Within 30 days following the date of receipt of notice of the final determination as provided for by subsection (b)(4)(iv) of this section, 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.

(c) 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 short compliance time is specified in the appropriate subpart of 40 CFR chapter I, subchapter N. Direct dischargers with NPDES Permits modified or reissued to provide a variance pursuant to section 301(i)(2) of the Act 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 section 403.3(i). 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.

(d) (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 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 effluent concentration for purposes of calculating effluent limitations applicable to individual Industrial Users.

(3) A Control Authority calculating equivalent mass-per-day limitations under subsection (d)(2) of this section 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 subsection (d)(2) of this section shall calculate such limitations by dividing the mass limitations derived under subsection (d)(3) of this section 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 long-term 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 and with prior approval of the Department. The Control Authority may establish equivalent mass limits after Department review and approval only if the Industrial User meets all the following conditions in paragraphs (d)(5)(i)(A) through (d)(5)(i)(E) of this section.

(i) To be eligible for equivalent mass limits, the Industrial User must:

(A) Employ, or demonstrate that it will employ, water conservation methods and technologies that substantially reduce water use during the term of its control mechanism;

(B) 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;

(C) Provide sufficient information to establish the facility's actual average daily flow rate for all wastestreams, based on the 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 long-term average production rate must be representative of current operating conditions:

(D) 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

(E) Have consistently complied with all applicable categorical Pretreatment Standards during the period, at least three years, prior to the Industrial User's request for equivalent mass limits.

(ii) An Industrial User subject to equivalent mass limits must:

(A) Maintain and effectively operate control and treatment technologies adequate to achieve compliance with the equivalent mass limits:

(B) Continue to record the facility's flow rates through the use of a continuous effluent flow monitoring device. The devices shall be installed, calibrated, and maintained to ensure that the

accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of not greater than 10 percent from the true discharge rates throughout the range of expected discharge volumes;

(C) 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 (d)(5)(i)(C) 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

(D) Continue to employ the same or comparable water conservation methods and technologies as those implemented pursuant to paragraph (d)(5)(i)(A) of this section so long as it discharges under an equivalent mass limit.

(iii) A Control Authority which chooses to establish equivalent mass limits:

(A) 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:

(B) Upon notification of a revised production rate, must reassess with prior Department approval, the equivalent mass limit and recalculate the limit as necessary to reflect changed conditions at the facility; and

(C) May retain the same equivalent mass limit in subsequent control mechanism terms, with prior Department approval, 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 (e) of this section. The Industrial User must also be in compliance with section 403.17 (regarding the prohibition of bypass).

(iv) 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, with prior Department approval, 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 (e) of this section.

(7) Equivalent limitations calculated in accordance with subsections (d)(3), (d)(4), (d)(5), and (d)(6) of this section are deemed Pretreatment Standards for the purposes of section 307(d) of the CWA and this regulation. 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.

(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 flow figure shall be used in calculating both the average and the maximum equivalent limitations.

(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.

(e) 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 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.

(f) Combined waste stream 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 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:

(i) Alternative concentration limit.

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

where

$C_T$ = the alternative concentration limit for the concentration limit for the combined waste stream,

$C_I$ = 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:

(a) Boiler blowdown streams, non-contact cooling streams, storm water streams, and mineralizer 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 waste stream(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 (b) sanitary waste streams where such streams are not regulated by a Categorical Pretreatment Standard; or (c) from any process waste streams which were or could have been entirely exempted from Categorical Pretreatment Standards pursuant to paragraph 8 of the NRDC v.Costle Consent Decree (12 ERC 1833) for one or more of the following reasons (see Appendix D of this regulation):

(1) The pollutants of concern are not detectable in the effluent from the Industrial User (paragraph (8)(a)(iii));

(2) The pollutants of concern are present only in trace amounts and are neither causing nor likely to cause toxic effects (paragraph (8)(a)(iii);

(3) The pollutants of concern are present in amounts too small to be effectively reduced by technologies known to the Administrator (paragraph (8)(a)(iii)); or

(4) The waste stream contains only pollutants which are compatible with the POTW (paragraph (8)(b)(i)).

$F_T$ = 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.

(ii) 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 waste stream.

$M_i$ = 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 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:

(a) 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 waste-stream(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

(b) sanitary waste streams where such streams are not regulated by a categorical Pretreatment Standard; or

(c) from any process waste streams which were or could have been entirely exempted from categorical Pretreatment Standards pursuant to paragraph 8 of the NRDC v. Costle Consent Decree (12 ERC 1833) for one or more of the following reasons (see Appendix D of this regulation);

(1) The pollutants of concern are not detectable in the effluent from the Industrial User (paragraph (8)(a)(iii));

(2) The pollutants of concern are present only in trace amounts and are neither causing nor likely to cause toxic effects (paragraph (8)(a)(iii));

(3) The pollutants of concern are present in amounts too small to be effectively reduced by technologies known to the Administrator (paragraph (8)(a)(iii)); or

(4) The waste stream contains only pollutants which are compatible with the POTW (paragraph (8)(b)-(i)).

$F_T$ = 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 section 403.12(g).

(4) Choice of monitoring location. Where a treated regulated process waste stream is combined prior to treatment with wastewaters other than those generated by the regulated process, the Industrial

User may monitor either the segregated process waste stream or the combined waste stream for the purpose of determining compliance with applicable Pretreatment Standards. If the Industrial User chooses to monitor the segregated process waste stream, it shall apply the applicable categorical Pretreatment Standard. If the User chooses to monitor the combined waste stream, it shall apply an alternative discharge limit calculated using the combined waste stream 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.

**Section 403.7 Removal Credits.**

(a) Introduction.

(1) Definitions. For the purpose of this section:

(i) "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 subpart shall not mean dilution of a pollutant in the POTW.

(ii) "Sludge Requirements" shall mean the following statutory provisions and regulations or permits issued thereunder (or more stringent 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) and State regulations contained in any State 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, and the South Carolina Pollution Control 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 subparagraph (4) of this paragraph. Removal credits may only be given for indicator or surrogate pollutants regulated in a categorical Pretreatment Standard if the categorical Pretreatment Standard 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:

(i) Application. The POTW applies for, and receives authorization from the Department to give a removal credit in accordance with the requirements and procedures specified in paragraph (e) of this section.

(ii) Consistent removal determination. The POTW demonstrates and continues to achieve consistent removal of the pollutant in accordance with paragraph (b) of this section.

(iii) POTW local pretreatment program. The POTW has an approved pretreatment program

in accordance with and to the extent required by this regulation; 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 paragraph (d) of this section.

(iv) 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 Department 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 credits, the additional sludge management costs will not be eligible for EPA grant assistance. Removal credits may be made available for the following pollutants.

(A) For any pollutant listed in Appendix G-I for the use or disposal practice employed by the POTW, when the requirements in R.61-9.503 for that practice are met.

(B) For any pollutant listed in Appendix G-II for the use or disposal practice employed by the POTW when the concentration for a pollutant listed in Appendix G-II in the sewage sludge that is used or disposed does not exceed the concentration for the pollutant in Appendix G-II.

(C) For any pollutant in sewage sludge when the POTW disposes all of its sewage sludge in a municipal solid waste landfill unit that meets the criteria in 40 CFR Part 258 and R.61-107.

(v) NPDES 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 Department that even though it is not presently in compliance with applicable limitations and conditions in its NPDES 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:

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

Where:

x = pollutant discharge limit specified in the applicable categorical Pretreatment Standard

r = removal credit for that pollutant as established under paragraph (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 paragraph (b)(2) of this section. All sample data obtained for the measured pollutant during the time period prescribed in paragraph (b)(2) of this section 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 Department. 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 Department 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 paragraph (b)(1) of this section, which demonstrates Consistent Removal of the pollutants for which discharge limit revisions are proposed. This data shall meet the following requirements:

(i) 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.

(ii) 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 paragraph (b)(1) of this section.

(iii) Sampling Procedures: Composite.

(A) 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.

(B)(1) 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 Department 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.

(2) In addition, upon the Department's concurrence, a POTW may utilize an historical data base amassed prior to the effective date of this section provided that such data otherwise meet the requirements of this paragraph. 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.

(C) Effluent sample collection need not be delayed to compensate for hydraulic detention unless the POTW elects to include detention time compensation or unless the Department requires detention time compensation. The Department 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.

(iv) 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.

(v) Analytical methods. The sampling referred to in paragraphs (b)(2)(i) through (iv) of this section and an analysis of these samples shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto. Where 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the Department 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 Department.

(vi) 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 Department as provided for in paragraph (b)(1) of this section.

(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 paragraph (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 paragraph (b) of this section, the authority to grant provisional removal credits shall be terminated by the Department 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 Pretreatment Standard(s), as may be specified by the Department.

(d) Exception to POTW Pretreatment Program Requirement. A POTW required to develop a local pretreatment program by section 403.8 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 section 403.12(b)(1) through (7) (except new or modified industrial users must only submit the

information required by section 403.12(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 section 403.8 and section 403.9 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 NPDES permit, but in no case later than July 1, 1983, where no permit deadline exists:

(3) The POTW must:

(i) Compile and submit data demonstrating its consistent removal in accordance with paragraph (b) of this section;

(ii) Comply with the conditions specified in paragraph (a)(3) of this section; and

(iii) Submit a complete application for removal credit authority in accordance with paragraph (e) of this section.

(4) If a POTW receives authority to grant conditional removal credits and the Department subsequently makes a final determination, after appropriate notice, that the POTW failed to comply with the conditions in paragraphs (d)(2) and (3) of this section, the authority to grant conditional removal credits shall be terminated by the Department 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 Department.

(5) If a POTW grants conditional removal credits and the POTW or the Department subsequently makes a final determination, after appropriate notice, that the Industrial User(s) failed to comply with the conditions in paragraph (d)(1) of this section, the conditional credit shall be terminated by the POTW or the Department 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 Department. The conditional credit shall not be terminated where a violation of the provisions of this paragraph results from causes entirely outside of the control of the Industrial User(s) or the Industrial User(s) had demonstrated substantial compliance.

(6) The Department 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 Department. This review may occur at any time in accordance with the procedures of section 403.11, but in no event later than the time of any pretreatment program approval or any NPDES permit reissuance thereunder.

(e) POTW application for authorization to give removal credits and Department review.

(1) Who must apply. Any POTW that wants to give a removal credit must apply for authorization from the Department.

(2) To whom application 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:

(i) List of pollutants. A list of pollutants for which removal credits are proposed.

(ii) Consistent Removal Data. The data required pursuant to paragraph (b) of this section.

(iii) Calculation of revised discharge limits. Proposed revised discharge limits for each affected subcategory of Industrial Users calculated in accordance with paragraph (a)(4) of this section.

(iv) 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 paragraph (d) of this section.

(v) 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 paragraph (a)(3)(iv) of this section.

(vi) NPDES Permit Limit Certification. A certification that the granting of removal credits will not cause a violation of the POTW's NPDES permit limits and conditions as required in paragraph (a)(3)(v) of this section.

(5) Department Review. The Department shall review the POTW's application for authorization to give or modify removal credits in accordance with the procedures of section 403.11 and shall, in no event, have more than 180 days from public notice of an application to complete review.

(6) EPA review of State removal credit approvals. The Regional Administrator may agree in the Memorandum of Agreement under 40 CFR Part 123.24(d) to waive the right to review and object to submissions for authority to grant removal credits. Such an agreement shall not restrict the Regional Administrator's right to comment upon or object to permits issued to POTW's except to the extent R.61-9.122.24(d) allows such restriction.

(7) Nothing in these regulations 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.

(i) 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 (a)(3)(iv) of this

section or its NPDES permit limits and conditions as required by (a)(3)(v). 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.

(ii) [Reserved.]

(2) Inclusion in POTW permit. Once authority is granted, the removal credits shall be included in the POTW's NPDES Permit as soon as possible and shall become an enforceable requirement of the POTW's NPDES permit. The removal credits will remain in effect for the term of the POTW's NPDES permit, provided the POTW maintains compliance with the conditions specified in paragraph (f)(4) of this section.

(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 Department, 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.

(i) Notice of POTW. The Department shall notify the POTW if, on the basis of pollutant removal capability reports received pursuant to paragraph (f)(3) of this section or other relevant information available to it, the Department determines:

(A) That one or more of the discharge limit revisions made by the POTW itself, no longer meets the requirements of this section, or

(B) That such discharge limit revisions are causing a violation of any conditions or limits contained in the POTW's NPDES Permit.

(ii) 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 Department shall either withdraw such discharge limits or require modifications in the revised discharge limits.

(iii) Public notice of withdrawal or modification. The Department 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 hearing. Following such notice and withdrawal or modification, all Industrial Users to whom revised discharge limits has 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 Department.

(g) Removal credits in State-run pretreatment programs under section 403.10(e). Where the Department elects to implement a local pretreatment program in lieu of requiring the POTW to develop such a program (as provided in section 403.10(e), 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 paragraph (a)(3) of this section.

(h) Compensation for overflow. "Overflow" means the intentional or unintentional diversion of flow from the POTW before the POTW Treatment Plant. POTW which at least once annually overflow untreated wastewater to receiving waters may claim Consistent Removal of a pollutant only by complying with either paragraph (h)(1) or (h)(2) of this section. However, 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 by expected to occur at the POTW or at a sewer to which the Industrial User is connected. Discharges must cease or e 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:

(i) 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:

(ii) 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 paragraph (h)(1)(iii) of this section, to insure that Industrial Users are containing, ceasing, or reducing operations during POTW System Overflow; and

(iii) 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, Department, or EPA Regional Administrator, daily flow reports or other data sufficient to demonstrate hat 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) (i) The Consistent Removal claimed is reduced pursuant to the following equation:

$$r_c = r_m \frac{8760 \text{ w } Z}{8760}$$

Where:

$r_m$ = POTW's Consistent Removal rate for that pollutant as established under paragraphs (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 NPDES 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

(ii) [Reserved.]

(iii) [Reserved.]

**Section 403.8 POTW Pretreatment Program Requirements: Development and Implementation by POTW.**

(a) POTW required to develop a pretreatment program.

(1) 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.

(2) Reserved.

(3) The Department 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, or other circumstances warrant in order to prevent Interference with the POTW or Pass Through.

(b) Deadline for Program Approval. A POTW which meets the criteria of paragraph (a) of this section shall develop and submit a program for approval as soon as possible, but in no case later than one year after written notification from the Department of such identification. The POTW Pretreatment Program shall meet the criteria set forth in paragraph (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 paragraph (b) of this section. The POTW's NPDES Permit will be reissued or modified by the State to incorporate the approved Program as enforceable conditions of the Permit. The modification of a POTW's NPDES Permit for the purposes of incorporating a POTW Pretreatment Program approved in accordance with the procedure in section
403.11 shall be deemed a minor Permit modification subject to the procedures in R.61-9.122.63.

(d) Incorporation of compliance schedules in permits. If the POTW does not have an approved Pretreatment Program at the time the POTW's existing Permit is reissued or modified, the reissued or modified Permit will contain the shortest reasonable compliance schedule, for the approval of the legal authority, procedures and funding required by paragraph (f) of this section.

(e) Cause for reissuance or modification of Permits. Under the authority of section 402(b)(1)(C) of CWA, the Department 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) [Reserved].

(3) Incorporate a modification of the permit approved under section 301(h) or 301(i) of CWA;

(4) Incorporate an approved POTW Pretreatment Program in the POTW Permit; or

(5) Incorporate a compliance schedule for the development of a POTW Pretreatment Program in the POTW Permit.

(6) Incorporate the removal credits (established under section 403.7) 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) and (c), and 402(b)(8) of CWA and any regulations implementing those sections. Such authority may be contained in a statute, ordinance, or series of contracts or joint powers agreements 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:

(i) 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 NPDES permit;

(ii) Require compliance with applicable Pretreatment Standards and Requirements by Industrial Users;

(iii) Control through Permit, order, or similar means, 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 Section 403.3, this control shall be achieved through individual permits or equivalent individual control mechanisms issued to each such User except as follows.

(A) (1) At the discretion of the POTW and with prior Department approval, 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, and with prior Department approval, are more

appropriately controlled under a general control mechanism than under individual control mechanisms.

(2) To be covered by the general control mechanism, the Significant Industrial User must file a 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 section 403.12(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, with prior Department approval, such a waiver request has been granted in accordance with section 403.12(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 (f)(1)(iii)(A)(1) through (5) 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 (sections 403.6(f) and 403.15).

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

(1) Statement of duration (in no case more than 5 years);

(2) 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;

(3) Effluent limits, including Best Management Practices, based on applicable general Pretreatment Standards in S.C. R.61-9, part 403, categorical Pretreatment Standards, local limits, and State and local law;

(4) 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 section 402.12(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 part 403 of this chapter, categorical Pretreatment Standards, local limits, and State and local law;

(5) Statement of applicable civil and criminal penalties for violation of Pretreatment Standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond applicable federal deadlines;

(6) Requirements to control Slug Discharges, if determined by the POTW to be necessary.

(iv)(A) Require the development of a compliance schedule by each Industrial User for the installation of technology required to meet applicable Pretreatment Standards and Requirements and

(B) Require 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 section 403.12;

(v) 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 section 403.12(o) to assure compliance with Pretreatment Standards. Such authority shall be at least as extensive as the authority provided under section 308 of CWA;

(vi)(A) Obtain remedies for noncompliance by any Industrial User with any Pretreatment Standard and Requirement. All POTWs 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. POTWs whose approved Pretreatment Programs require modification to conform to the requirements of this paragraph shall submit a request for approval of a program modification in accordance with section 403.18.

(B) Pretreatment Requirements which will be enforced through the remedies set forth in paragraph (f)(1)(vi)(A) of this section, 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 control mechanisms issued by the POTW; or any reporting requirements imposed by the POTW or these regulations in this part. The POTW shall have authority and procedures (after informal notice to the discharger) immediately and effectively to 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 Department shall have authority to seek judicial relief and may also use administrative penalty authority when the POTW has sought a monetary penalty which the Department believes to be insufficient.

(vii) Comply with the confidentiality requirements set forth in section 403.14.

(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:

(i) 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 paragraph shall be made available to the Regional Administrator or Department upon request;

(ii) Identify the character and volume of pollutants contributed to the POTW by the Industrial Users identified under paragraph (f)(2)(i) of this section. This information shall be made available to the Regional Administrator or Department upon request;

(iii) Notify Industrial Users identified under paragraph (f)(2)(i) of this section, of applicable Pretreatment Standards and any applicable requirements under sections 204(b) and 405 of CWA and Subtitles C and D of the Resource Conservation and Recovery Act. Within 30 days of approval pursuant to section 403.8(f)(6), 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.

(iv) Receive and analyze self-monitoring reports and other notices submitted by Industrial Users in accordance with the self-monitoring requirements in section 403.12;

(v) 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:

(A) 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 Section 403.12(e)(3), 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 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.

(B) 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 section 403.3(o)(2).

(C) In the case of Industrial Users subject to reduced reporting requirements under section 403.12(e)(3), 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 section 403.12(e)(3), the POTW must immediately begin sampling and inspecting the Industrial User at least once a year.

(vi) Evaluate 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, 2006; 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 a 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:

(A) Description of stored chemicals;

(B) Procedures for immediately notifying the POTW of Slug Discharges, including any discharge that would violate a prohibition under section 403.5(b) with procedures for follow-up written notification within five days;

(C) 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 for emergency response;

(vii) Investigate instances of noncompliance with Pretreatment Standards and Requirements, as indicated in the reports and notices required under section 403.12, or indicated by analysis, inspection, and surveillance activities described in paragraph (f)(2)(v) of this section. 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

(viii) Comply with the public participation requirements of 40 CFR Part 25 in the enforcement of National Pretreatment Standards. These procedures shall include provision for at least annual public notification in a newspaper(s) of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW of Industrial Users which, at any time during the previous 12 months, were in significant noncompliance with applicable Pretreatment requirements. For the purposes of this provision, a Significant Industrial User (or any Industrial User which violates paragraphs (f)(2)(viii)(C), (D), or (H) of this section) is in significant noncompliance if its violation meets one or more of the following criteria:

(A) Chronic violations of wastewater Discharge limits, defined here as those in which sixty-six percent or more of all of the measurements taken for the same pollutant parameter during a six-month period exceed (by any magnitude) a numeric Pretreatment Standard or Requirement, including instantaneous limits, as defined by 403.3;

(B) Technical Review Criteria (TRC) violations, defined here as those in which thirty-three percent or more of all of the measurements taken for the same pollutant parameter during a six-month period equal or exceed the product of the numeric Pretreatment Standard or Requirement including instantaneous limits, as defined by 403.3 multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH).

(C) Any other violation of a Pretreatment Standard or Requirement as defined by 403.3 (daily maximum, long-term average, instantaneous limit, or narrative Standard) that the 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);

(D) 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 paragraph (f)(1)(vi)(B) of this section to halt or prevent such a discharge;

(E) 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;

(F) Failure to provide, within 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;

(G) Failure to accurately report noncompliance;

(H) Any other violation or group of violations, which may include a violation of Best Management Practices, which the 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 paragraphs (f)(1) and (2) of this section. 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 403.9(b).)

(4) Local limits. The POTW shall develop local limits as required in section 403.5(c)(1) or demonstrate to the satisfaction of the Department 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:

(i) Describe how the POTW will investigate instances of noncompliance;

(ii) 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;

(iii) Identify (by title) the official(s) responsible for each type of response;

(iv) Adequately reflect the POTW's primary responsibility to enforce all applicable pretreatment requirements and standards, as detailed in section 403.8(f)(1) and (f)(2).

(6) The POTW shall prepare and maintain a list of its Industrial Users meeting the criteria in section 403.3(o)(1). The list shall identify the criteria in section 403.3(o)(1) applicable to each Industrial User and, where applicable, shall also indicate whether the POTW has made a determination pursuant to section 403.3(o)(3) that such Industrial User should not be considered a Significant Industrial User. The initial list shall be submitted to the Department pursuant to section 403.9 as a non-substantial modification pursuant to section 403.18(d). Modifications to the list shall be submitted to the Department pursuant to section 403.12(i)(1).

**Section 403.9 POTW pretreatment programs and/or authorization to revise pretreatment standards: Submission for approval.**

(a) Who approves Program. A POTW requesting approval of a POTW Pretreatment Program shall develop a program description which includes the information set forth in paragraphs (b)(1) through (4) of this section. This description shall be submitted to the Department which will make a determination on the request for program approval in accordance with the procedures described in section 403.11.

(b) Contents of POTW program submission. The program description must contain the following information:

(1) A statement from the City Solicitor or a city official acting in a comparable capacity (or the attorney for those POTWs which have independent legal counsel) that the POTW has authority adequate to carry out the programs described in section 403.8. This statement shall:

(i) Identify the provision of the legal authority under section 403.8(f)(1) which provides the basis for each procedure under section 403.8(f)(2);

(ii) Identify the manner in which the POTW will implement the program requirements set forth in section 403.8, including the means by which Pretreatment Standards will be applied to individual Industrial Users (e.g., by order, permit, ordinance, etc.); and,

(iii) Identify how the POTW intends to ensure compliance with Pretreatment Standards and Requirements, and to enforce them in the event of noncompliance by Industrial Users;

(2) A copy of any statutes, ordinances, regulations, agreements, or other authorities relied upon by the POTW for its administration of the Program. This Submission shall include a statement reflecting the endorsement or approval of the local boards or bodies responsible for supervising and/or funding the POTW Pretreatment Program if approved;

(3) A brief description (including organization charts) of the POTW organization which will administer the Pretreatment Program. If more than one agency is responsible for administration of the Program the responsible agencies should be identified, their respective responsibilities delineated, and their procedures for coordination set forth; and

(4) A description of the funding levels and full and part-time manpower available to implement the Program;

(c) Conditional POTW program approval. The POTW may request conditional approval of the Pretreatment Program pending he acquisition of funding and personnel for certain elements of the Program. The request for conditional approval must meet the requirements set forth in paragraph (b) of this section except that the requirements of paragraph (b) of this section may be relaxed if the Submission demonstrates that:

(1) A limited aspect of the Program does not need to be implemented immediately;

(2) The POTW had adequate legal authority and procedures to carry out those aspects of the Program which will not be implemented immediately; and

(3) Funding and personnel for the Program aspects to be implemented at a later date will be available when needed. The POTW will describe in the Submission the mechanism by which this funding will be acquired. Upon receipt of a request for conditional approval, the Department will establish a fixed date for the acquisition of the needed funding and personnel. If funding is not acquired by this date, the conditional approval of the POTW Pretreatment Program and any removal allowances granted to the POTW, may be modified or withdrawn.

(d) Content of removal allowance submission. The request for authority to revise categorical Pretreatment Standards must contain the information requested in section 403.7(d).

(e) Department action. Any POTW requesting POTW Pretreatment Program approval shall submit to the Department three copies of the Submission described in paragraph (b), and if appropriate, (d) of this section. Within 60 days after receiving the Submission, the Department shall make a preliminary determination of whether the Submission meets the requirements of paragraph (b) and (c) of this section. If the Department makes the preliminary determination that the Submission meets these requirements, the Department shall:

(1) Notify the POTW that the Submission has been received and is under review; and

(2) Commence the public notice and evaluation activities set forth in section 403.11.

(f) Notification where submission is defective. If, after review of the Submission as provided for in paragraph (e) of this section, the Department determines that the Submission does not comply with the requirements of paragraph (b) or (c) of this section, and, if appropriate, paragraph (d) of this section, the Department shall provide notice in writing to the applying POTW and each person who has requested individual notice. This notification shall identify any defects in the Submission and advise the POTW and each person who has requested individual notice of the means by which the POTW can comply with the applicable requirements of paragraphs (b), (c) of this section, and if appropriate, paragraph (d) of this section.

(g) Consistency with water quality management plans.

(1) In order to be approved the POTW Pretreatment Program shall be consistent with any approved water quality management plan developed in accordance with 40 CFR Parts 130 and 131, as revised, where such 208 plan includes Management Agency designations and addresses pretreatment in a manner consistent with 40 CFR Part 403 and this regulation. In order to assure such consistency, the Department shall solicit the review and comment of the appropriate 208 Planning Agency during the public comment period provided for in section 403.11(b)(1)(ii) prior to approval or disapproval of the Program.

(2) Where no 208 plan has been approved or where a plan has been approved but lacks Management Agency designations and/or does not address pretreatment in a manner consistent with this regulation, the Department shall nevertheless solicit the review and comment of the appropriate 208 planning agency.

**403.10**

(a) [Reserved.]

(b) [Reserved.]

(c) [Reserved.]

(d) [Reserved.]

(e) State Program in lieu of POTW Program. Notwithstanding the provision of section 403.8(a), the State may assume responsibility for implementing the POTW Pretreatment Program requirements set forth in section 403.8(f) in lieu of requiring the POTW to develop a Pretreatment Program. However, this does not preclude POTWs from independently developing Pretreatment Programs.

**403.11 Approval procedures for POTW pretreatment programs and POTW granting of removal credits.**

The following procedures shall be adopted in approving or denying requests for approval of POTW Pretreatment Programs and applications for removal credit authorization:

(a) Deadline for review of submission. The Department shall have 90 days from the date of public notice of any Submission complying with the requirements of section 403.9(b) and, where removal credit

authorization is sought with section 403.7(e) and section 403.9(d), to review the Submission. The Department shall review the Submission to determine compliance with the requirements of section 403.8(b) and (f), and, where removal credit authorization is sought, with section 403.7. The Department may have up to an additional 90 days to complete the evaluation of the Submission if the public comment period provided for in paragraph (b)(1)(ii) of this section is extended beyond 30 days or if a public hearing is held as provided for in paragraph (b)(2) of this section. In no event, however, shall the time for evaluation of the Submission exceed a total of 180 days from the date of public notice of a Submission meeting the requirements of section 403.9(b) and, in the case of a removal credit application, section 403.7(e) and section 403.9(b).

(b) Public notice and opportunity for hearing. Upon receipt of a Submission, the Department shall commence its review. After making a determination that a Submission meets the requirements of section 403.9(b) the Department shall:

(1) Issue a public notice of request for approval of the Submission;

(i) This public notice shall be circulated in a manner designed to inform interested and potentially interested persons of the Submission. Procedures for the circulation of public notice shall include:

(A) Mailing notices of the request for approval of the Submission to designated 208 planning agencies, Federal and State fish, shellfish, and wildlife resource agencies (unless such agencies have asked not to be sent the notices); and to any other person or group who has requested individual notice, including those on appropriate mailing lists; and

(B) Publication of a notice of request for approval of the Submission in a newspaper(s) of general circulation within the jurisdiction(s) served by the POTW that provides meaningful public notice.

(ii) The public notice shall provide a period of not less than 30 days following the date of the public notice during which time interested persons may submit their written views on the Submission.

(iii) All written comments submitted during the 30 day comment period shall be retained by the Department and considered in the decision on whether or not to approve the Submission. The period for comment may be extended at the discretion of the Department; and

(2) Provide an opportunity for the applicant, any affected State, any interested State or Federal agency, person or group of persons to request a public hearing with respect to the Submission.

(i) This request for public hearing shall be filed within the 30 day (or extended) comment period described in paragraph (b)(1)(ii) of this section and shall indicate the interest of the person filing such request and the reasons why a hearing is warranted.

(ii) The Department shall hold a hearing if the POTW so requests. In addition, a hearing will be held if there is a significant public interest in issues relating to whether or not the Submission should be approved. Instances of doubt should be resolved in favor of holding the hearing.

(iii) Public notice of a hearing to consider a Submission and sufficient to inform interested parties of the nature of the hearing and the right to participate shall be published in the same newspaper

as the notice of the original request for approval of the Submission under paragraph (b)(1)(i)(B) of this section. In addition, notice of the hearing shall be sent to those persons requesting individual notice.

(c) Department decision. At the end of the 30 day (or extended) comment period and within the 90 day (or extended) period provided for in paragraph (a) of this section, the Department shall approve or deny the Submission based upon the evaluation in paragraph (a) of this section and taking into consideration comments submitted during the comment period and the record of the public hearing, if held. Where the Department makes a determination to deny the request, the Department shall so notify the POTW and each person who has requested individual notice. The notification shall include suggested modifications and the Department may allow the requestor additional time to bring the Submission into compliance with applicable requirements.

(d) EPA objection to Department's decision. No POTW pretreatment program shall be approved by the Department if following the 30 day (or extended) evaluation period provided for in paragraph (b)(1)(ii) of this section and any hearing held pursuant to paragraph (b)(2) of this section the Regional Administrator sets forth in writing objections to the approval of such Submission and the reasons for such objections. A copy of the Regional Administrator's objections shall be provided to the applicant, and each person who has requested individual notice. The Regional Administrator shall provide an opportunity for written comments and may convene a public hearing on his or her objections. Unless retracted, the Regional Administrator's objections shall constitute a final ruling to deny approval of a POTW pretreatment program 90 days after the date of the objections are issued.

(e) Notice of decision. The Department shall notify those persons who submitted comments and participated in the public hearing, if held, of the approval or disapproval of the Submission. In addition, the Department shall cause to be published a notice of approval or disapproval in the same newspapers as the original notice of request for approval of the Submission was published.

(f) Public access to submission. The Department shall ensure that the Submission and any comments upon such Submission are available to the public for inspection and copying.

**Section 403.12 Reporting requirements for POTW's and industrial users.**

(a) [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 section 403(6)(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 paragraph (b)(1)-(7) of this section. 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 paragraphs (b)(1)-(5) of this section. 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 paragraphs (b)(4) and (5) of this section:

(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:

(i) Regulated process streams; and

(ii) Other streams as necessary to allow use of the combined waste stream formula of section 403.6(f). (See paragraph (b)(5)(iv) of this section.)

The Control Authority may allow for verifiable estimates of these flows where justified by cost or feasibility considerations.

(5) Measurement of pollutants.

(i) The user shall identify the Pretreatment Standards applicable to each regulated process;

(ii) 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;

(iii) The User shall take a minimum of one representative sample to compile that data necessary to comply with the requirements of this paragraph.

(iv) Samples should 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 should measure the flows and concentrations necessary to allow use of the combined waste stream formula of section 403.6(f), in order to evaluate compliance with the Pretreatment Standards. Where an alternate concentration or mass limit has been calculated in accordance with section 403.6(f) this adjusted limit along with supporting data shall be submitted to the Control Authority;

(v) Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto. Where 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the Administrator or Department 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 or Department.

(vi) 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;

(vii) 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 paragraph (l) 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 & M. The completion date in this schedule shall not be later than the compliance date established for the applicable Pretreatment Standard.

(i) Where the Industrial User's categorical Pretreatment Standard has been modified by the combined waste stream formula (section 403.6(f)), and/or a Fundamentally Different Factors variance (section 403.13) at the time the User submits the report required by paragraph (b) of this section, the information required by paragraphs (b)(6) and (7) of this section shall pertain to the modified limits.

(ii) If the categorical Pretreatment Standard is modified by a removal allowance (section 403.7), the combined waste stream formula (section 403.6(f)), and/or a Fundamentally Different Factors variance (section 403.13) at the time the User submits the report required by paragraph (b) of this section, the information required by paragraphs (b)(6) and (7) of this section shall be submitted by the Industrial 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 paragraph (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 paragraph (c)(1) of this section shall exceed 9 months.

(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 paragraphs (b)(4)-(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 section 403.6(d), 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 (except a Non-Significant Categorical User as defined in section 403.3(o)(2)), 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 a during the months of June and December, unless required more frequently in the Pretreatment Standard or by the Control Authority or the Department, 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 paragraph (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 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 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 modify the months during which the above reports are to be submitted.

(2) The Control Authority may with prior Department approval 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 the intake water and without any increase in the pollutant due to activities of the Industrial User. This may authorization is subject to the following conditions:

(i) The Control Authority may with prior Department approval 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 any applicable categorical Standard and otherwise includes no process wastewater and the POTW does not have an effluent NPDES limit for the pollutant.

(ii) 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 with prior Department approval be granted for each subsequent control mechanism.

(iii) 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 (l) of this section and include the certification statement in section 403.6(b)(2)(ii). 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, or at the lowest Practical Quantitation Limit specified by the Department, whichever is lower.

(iv) 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.

(v) 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_____[list pollutant(s)] in the waste streams due to the activities at the facility since filing of the last periodic report under S.C. R.61-9.403.12(e)(1).

(vi) 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 and the Department.

(vii) 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 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 Department, where the Industrial User meets all of the following conditions:

(i) The Industrial User's total categorical wastewater flow does not exceed any of the following:

(A) 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;

(B) 0.01 percent of the design dry weather organic treatment capacity of the POTW; and

(C) 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 section 403.5(c) and paragraph (d) of this section;

(ii) The Industrial User has not been in significant noncompliance, as defined in section 403.8(f)(2)(vii), for any time in the past two years;

(iii) 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;

(iv) 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)(i) or (ii) of this section. Upon notification, the Industrial User must immediately begin complying with the minimum reporting in paragraph (e)(1) of this section; and

(v) 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.

(4) For Industrial Users subject to equivalent mass or concentration limits established by the Control Authority in accordance with the procedures in section 403.6(d), the report required by paragraph (e)(1) 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 paragraph (e)(1) 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 section 403.5(b), by the Industrial User.

(g) Monitoring and analysis to demonstrate continued compliance.

(1) Except in the case of Non-Significant Categorical Users, the reports required in paragraphs (b), (d), (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 section 403.12(b)(6) and section 403.12(d). 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. 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:

(i) The Control Authority performs sampling at the Industrial User at a frequency of at least once per month; or

(ii) The Control Authority performs sampling at the User between the time when the 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 paragraphs (b), (d), (e) and (h) of this section shall be based upon data obtained through appropriate sampling and analysis performed during the period covered by the report, which data is 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-proportional composite sampling or grab sampling is authorized by the Control Authority with approval by the Department, the samples 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 with approval by the Department 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.

(5) All analyses shall be performed in accordance with procedures established by the Administrator pursuant to section 304(h) of CWA contained in 40 CFR Part 136 and amendments thereto or with any other test procedures approved by the Administrator. (See, section 136.4 and section 136.5) Sampling shall be performed in accordance with the techniques approved by the Department. Where 40 CFR Part 136 does not include sampling or analytical techniques for the pollutants in question, or where the Administrator 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 the Administrator.

(6) If an Industrial User subject to the reporting requirement in paragraphs (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 paragraph (g)(5) of this section, 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 must require appropriate reporting from those Industrial Users with Discharges that are not subject to categorical Pretreatment Standards. Significant Non-categorical Industrial Users 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 must be based on sampling and analysis performed in the period covered by the report, and in accordance with the techniques described in part 136 and amendments thereto. This sampling and analysis may be performed by the Control Authority in lieu of the significant non-categorical Industrial User.

(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 the 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 Users are Non-Significant Categorical Industrial Users;

(2) A summary of the status of Industrial User compliance over the reporting period;

(3) 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 Department;

(j) Notification of changed discharge. All Industrial Users shall promptly notify the 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 section 403.12(p).

(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 section 403.8.

(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 paragraph (k)(l) of this section shall exceed nine months;

(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 paragraphs (b), (d), and (e) of this section shall include the certification statement as set forth in section 403.6(b)(2)(ii), and shall be signed as follows:

(1) By a responsible corporate officer, if the Industrial User submitting the reports required by paragraphs (b), (d), and (e) of this section is a corporation. For the purpose of this paragraph, 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 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 paragraphs (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 paragraph (l)(1) or (l)(2) of this section if:

(i) The authorization is made in writing by the individual described in paragraph (l)(1) or (l)(2);

(ii) 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

(iii) The written authorization is submitted to the Control Authority.

(4) If an authorization under paragraph (l)(3) of this section 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 paragraph (l)(3) of this section 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 paragraph (i) of this section must be signed by a principal executive officer,

ranking elected official, or other duly authorized employee. 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 Department prior to or together with the report being submitted.

(n) Provisions 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 U.S.C. section 1001 relating to fraud and false statements;

(2) The provisions of section 309(c)(4) of CWA, as amended, governing false statements, representation or certification; and

(3) The provisions of section 309(c)(6) 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:

(i) The date, exact place, method, and time of sampling and the names of the person or persons taking the samples;

(ii) The dates analyses were performed;

(iii) Who performed the analyses;

(iv) The analytical techniques/methods used; and

(v) 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 Department 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 discharge of pollutants by the Industrial User or the operation of the POTW Pretreatment Program or when requested by the Department or the Regional Administrator.

(3) Any POTW to which reports are submitted by an Industrial User pursuant to paragraphs (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 Department 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 Department or the Regional Administrator.

(p) Provisions governing hazardous waste.

(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 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, 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 waste stream discharged during that calendar month, and an estimation of the mass of constituents in the waste stream expected to be discharged during the following twelve months. All notifications must take place within 180 days of the effective date of this regulation. Industrial users who commence discharging after the effective date of this regulation shall provide the notification no later than 180 days after the discharge of the listed or characteristic hazardous waste. Any notification under this paragraph need be submitted only once for each hazardous waste discharged. However, notifications of changed discharges must be submitted under section 403.12(j). The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements of section 403.12(b), (d), and (e).

(2) Dischargers are exempt from the requirements of paragraph (p)(1) of this section 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 261.30(d) and 261.33(e). Discharge of more than fifteen kilograms of non-acute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), 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 paragraph (p) of this section, 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 section 403.3(o)(2) must annually submit the following certification statement, signed in accordance with the signatory requirements in paragraph (l) of this section. This certification must accompany any alternative report required by the Control Authority:

Based on my inquiry of the person or persons directly responsible for managing compliance with the categorical Pretreatment Standards under 40 CFR_I certify that, to the best of my knowledge and belief that during the period from_____,_____to_____, _____[month, day, year]:

(a) The facility described as_____[facility name] met the definition of a non-significant categorical Industrial User as described in section 403.3(o)(2); (b) the facility complied with

all applicable Pretreatment Standards and requirements during this reporting period; and (c) the facility never discharged more than a total of 100 gallons of categorical wastewater on any given day during this reporting period. This compliance certification is based upon the following information:

_____

_____

**Section 403.13 Variances from categorical pretreatment standards for fundamentally different factors.**

(a) Definition. The term "Requester" means an Industrial User or a POTW or other interested person seeking a variance from the limits specified in a categorical Pretreatment Standard.

(b) Purpose and scope. In establishing categorical Pretreatment Standards for existing sources, the EPA will take into account all the information it can collect, develop and solicit regarding the factors relevant to pretreatment standards under section 307(b). In some cases, information which may affect these Pretreatment Standards will not be available or, for other reasons, will not be considered during their development. As a result, it may be necessary on a case-by-case basis to adjust the limits in categorical Pretreatment Standards, making them either more or less stringent, as they apply to a certain Industrial User within an industrial category or subcategory. This will only be done if data specific to that Industrial User indicates it presents factors fundamentally different from those considered by EPA in developing the limit at issue. Any interested person believing that factors relating to an Industrial User are fundamentally different from the factors considered during development of a categorical Pretreatment Standard applicable to that User and further, that the existence of those factors justifies a different discharge limit than specified in the applicable categorical Pretreatment Standard, may request a fundamentally different factors variance under this section or such a variance request may be initiated by the EPA.

(c) Criteria.

(1) General criteria. A request for a variance based upon fundamentally different factors shall be approved only if:

(i) There is an applicable categorical Pretreatment Standard which specifically controls the pollutant for which alternative limits have been requested; and

(ii) Factors relating to the discharge controlled by the categorical Pretreatment Standards are fundamentally different from the factors considered by EPA in establishing the Standards; and

(iii) The request for a variance is made in accordance with the procedural requirements in paragraphs (g) and (h) of this section.

(2) Criteria applicable to less stringent limits. A variance request for the establishment of limits less stringent than required by the Standard shall be approved only if:

(i) The alternative limit requested is no less stringent than justified by the fundamental difference;

(ii) The alternative limit will not result in a violation of prohibitive discharge standards

prescribed by or established under section 403.5;

(iii) The alternative limit will not result in a non-water quality environmental impact (including energy requirements) fundamentally more adverse than the impact considered during development of the Pretreatment Standards; and

(iv) Compliance with the Standards (either by using the technologies upon which the Standards are based or by using other control alternatives) would result in either:

(A) A removal cost (adjusted for inflation) wholly out of proportion to the removal cost considered during development of the Standards; or

(B) A non-water quality environmental impact (including energy requirements) fundamentally more adverse than the impact considered during development of the Standards.

(3) Criteria applicable to more stringent limits. A variance request for the establishment of limits more stringent than required by the Standards shall be approved only if:

(i) The alternative limit request is no more stringent than justified by the fundamental difference; and

(ii) Compliance with the alternative limit would not result in either:

(A) A removal cost (adjusted for inflation) wholly out of proportion to the removal cost considered during development of the Standards; or

(B) A non-water quality environmental impact (including energy requirements) fundamentally more adverse than the impact considered during development of the Standards.

(d) Factors considered fundamentally different. Factors which may be considered fundamentally different are:

(1) The nature or quality of pollutants contained in the raw waste load of the User's process wastewater;

(2) The volume of the User's process wastewater and effluent discharged;

(3) Non-water quality environmental impact of control and treatment of the User's raw waste load;

(4) Energy requirements of the application of control and treatment technology;

(5) Age, size, land availability, and configuration as they relate to the User's equipment or facilities; processes employed; process changes; and engineering aspects of the application of control technology;

(6) Cost of compliance with required control technology.

(e) Factors which will not be considered fundamentally different. A variance request or portion of such a request under this section may not be granted on any of the following grounds:

(1) The feasibility of installing the required waste treatment equipment within the time CWA allows;

(2) The assertion that the Standards cannot be achieved with the appropriate waste treatment facilities installed, if such assertion is not based on factors listed in paragraph (d) of this section;

(3) The User's ability to pay for the required waste treatment; or

(4) The impact of a Discharge on the quality of the POTW's receiving waters.

(f) State or local law. Nothing in this section shall be construed to impair the right of the State of South Carolina or any locality under section 510 of CWA to impose more stringent limitations than required by Federal law.

(g) Application deadline.

(1) Requests for a variance and supporting information must be submitted in writing to the Department or to the Administrator (or his delegate), as appropriate.

(2) In order to be considered, a request for a variance must be submitted no later than 180 days after the date on which a categorical Pretreatment Standard is published in the Federal Register.

(3) Where the User has requested a categorical determination pursuant to section 403.6(b), the User may elect to await the results of the category determination before submitting a variance request under this section. Where the User so elects, he or she must submit the variance request within 30 days after a final decision has been made on the categorical determination pursuant to section 403.6(b)(4).

(h) Contents submission. Written submissions for variance requests, whether made to the Administrator (or his delegate) or the Department, must include:

(1) The name and address of the person making the request;

(2) Identification of the interest of the Requester which is affected by the categorical Pretreatment Standard for which the variance is requested;

(3) Identification of the POTW currently receiving the waste from the Industrial User for which alternative discharge limits are requested;

(4) Identification of the categorical Pretreatment Standards which are applicable to the Industrial User;

(5) A list of each pollutant or pollutant parameter for which an alternative discharge limit is sought;

(6) The alternative discharge limits proposed by the Requester for each pollutant or pollutant parameter identified in paragraph (h)(5) of this section;

(7) A description of the Industrial User's existing water pollution control facilities;

(8) A schematic flow representation of the Industrial User's water system including water supply, process wastewater systems, and points of Discharge; and

(9) A Statement of facts clearly establishing why the variance request should be approved, including detailed support data, documentation, and evidence necessary to fully evaluate the merits of the request, e.g., technical and economic data collected by the EPA and used in developing each pollutant discharge limit in the Pretreatment Standard.

(i) Deficient requests. The Administrator (or his delegate) or the Department will only act on written requests for variances that contain all of the information required. Persons who have made incomplete submissions will be notified by the Administrator (or his delegate) or the Department that their requests are deficient and unless the time period is extended, will be given up to thirty days to remedy the deficiency. If the deficiency is not corrected within the time period allowed by the Administrator (or his delegate) or the Department, the request for a variance shall be denied.

(j) Public notice. Upon receipt of a complete request, the Administrator (or his delegate) or the Department will provide notice of receipt, opportunity to review the submission, and opportunity to comment.

(1) The public notice shall be circulated in a manner designed to inform interested and potentially interested persons of the request. Procedures for the circulation of public notice shall include mailing notices to:

(i) The POTW into which the Industrial User requesting the variance discharges;

(ii) Adjoining States whose waters may be affected; and

(iii) Designated 208 planning agencies, Federal and State fish, shellfish and wildlife resource agencies; and to any other person or group who has requested individual notice, including those on appropriate mailing lists.

(2) The public notice shall provide for a period not less than 30 days following the date of the public notice during which time interested persons may review the request and submit their written views on the request.

(3) Following the comment period, the Administrator (or his delegate) or the Department will make a determination on the request taking into consideration any comments received. Notice of this final decision shall be provided to the requester (and the Industrial User for which the variance is requested if different), the POTW into which the Industrial User discharges and all persons who submitted comments on the request.

(k) Review of requests by state.

(1) Where the Department finds that fundamentally different factors do not exist, he may deny the request and notify the requester (and Industrial User where they are not the same) and the POTW of the denial.

(2) Where the Department finds that fundamentally different factors do exist, he shall forward the request, with a recommendation that the request be approved, to the Administrator (or his delegate).

(l) Review of requests by EPA.

(1) Where the Administrator (or his delegate) finds that fundamentally different factors do not exist, he shall deny the request for a variance and send a copy of his determination to the Department, to the POTW, and to the requester (and to the Industrial User, where they are not the same).

(2) Where the Administrator (or his delegate) finds that fundamentally different factors do exist, and that a partial or full variance is justified, he will approve the variance. In approving the variance, the Administrator (or his delegate) will:

(i) Prepare recommended alternative discharge limits for the Industrial User either more or less stringent than those prescribed by the applicable categorical Pretreatment Standards to the extent warranted by the demonstrated fundamentally different factors;

(ii) Provide the following information in his written determination:

(A) The recommended alternative discharge limits for the Industrial User concerned;

(B) The rationale for the adjustment of the Pretreatment Standard (including the reasons for recommending that the variance be granted) and an explanation of how the recommended alternative discharge limits were derived;

(C) The supporting evidence submitted to the Administrator (or his delegate); and

(D) Other information considered by the Administrator (or his delegate) in developing the recommended alternative discharge limits;

(iii) Notify the Department and the POTW of his determination; and

(iv) Send the information described in paragraphs (l)(2)(i) and (ii) of this section to the Requester (and to the Industrial User where they are not the same).

(m) Request for hearing.

(1) Within 30 days following the date of receipt of the notice of the decision of the Administrator's delegate on a variance request, the requester or any other interested person may submit a petition to the Regional Administrator for a hearing to reconsider or contest the decision. If such a request is submitted by a person other than the Industrial User, the person shall simultaneously serve a copy of the request on the Industrial User.

(2) If the Regional Administrator declines to hold a hearing and the Regional Administrator affirms the findings of the Administrator's delegate, the requester may submit a petition for a hearing to the Environmental Appeals Board (which is described in section 1.25 of 40 CFR Part 1.25) within 30 days of the Regional Administrator's decision.

**Section 403.14 Confidentiality.**

(a) EPA authorities. In accordance with 40 CFR Part 2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. 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 "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA 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 40 CFR Part 2 (Public Information).

(b) Effluent data. Information and data provided to the Control Authority pursuant to this part which is effluent data shall be available to the public without restriction.

(c) State or POTW. All other information which is submitted to the State of South Carolina or the POTW shall be available to the public at least to the extent provided by 40 CFR 2.302 and S.C. Code Ann. section 30-4-10 et seq.

**Section 403.15 Net/Gross calculation.**

(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 paragraph (b) of this section are met.

(b) Criteria.

(1) Either:

(i) The applicable categorical Pretreatment Standards contained in 40 CFR subchapter N specifically provide that they shall be applied on a net basis or

(ii) The Industrial User demonstrates 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.

(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 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.

**Section 403.16 Upset provision.**

(a) Definition. For the purposes of this section, "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with categorical Pretreatment Standards because of factors beyond the reasonable control of the Industrial User. 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.

(b) Effect of an upset. An Upset shall constitute an affirmative defense to an action brought for noncompliance with categorical Pretreatment Standards if the requirements of paragraph (c) are met.

(c) Conditions necessary for a demonstration of upset. An Industrial User who wishes to establish the affirmative defense of Upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An Upset occurred and the Industrial User can identify the cause(s) of the Upset;

(2) The facility was at the time being operated in a prudent and workmanlike manner and in compliance with applicable operation and maintenance procedures;

(3) The Industrial User has submitted the following information to the POTW and Control Authority within 24 hours of becoming aware of the Upset (if this information is provided orally, a written submission must be provided within five days):

(i) A description of the Indirect Discharge and cause of noncompliance;

(ii) The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue;

(iii) Steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

(d) Burden of proof. In any enforcement proceeding the Industrial User seeking to establish the occurrence of an Upset shall have the burden of proof.

(e) Reviewability of agency consideration of claims of upset. In the usual exercise of prosecutorial discretion, Agency enforcement personnel should review any claims that non-compliance was caused by an Upset. No determinations made in the course of the review constitute final Agency action subject to judicial review. Industrial Users will have the opportunity for a judicial determination on any claim of Upset only in an enforcement action brought for noncompliance with categorical Pretreatment Standards.

(f) User responsibility in case of upset. The Industrial User shall control production or all Discharges to the extent necessary to maintain compliance with categorical Pretreatment Standards upon reduction, loss, or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

**Section 403.17 Bypass.**

(a) Definitions.

(1) "Bypass" means the intentional diversion of waste streams from any portion of an Industrial User's treatment facility.

(2) "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.

(b) Bypass not violating applicable pretreatment standards or requirements. An Industrial User may allow any bypass to occur which does not cause Pretreatment Standards or Requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (c) and (d) of this section.

(c) Notice.

(1) If an Industrial User knows in advance of the need for a bypass, it shall submit prior notice to the Control Authority, if possible at least ten days before the date of the bypass.

(2) An Industrial User shall submit oral notice of an unanticipated bypass that exceeds applicable Pretreatment Standards to the Control Authority within 24 hours from the time the Industrial User becomes aware of the bypass. A written submission shall also be provided within 5 days of the time the Industrial User becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass. The Control Authority may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

(d) Prohibition of bypass.

(1) Bypass is prohibited, and the Control Authority may take enforcement action against an Industrial User for a bypass, unless;

(i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

(iii) The Industrial User submitted notices as required under paragraph (c) of this section.

(2) The Control Authority may approve an anticipated bypass, after considering its adverse effects, if the Control Authority determines that it will meet the three conditions listed in paragraph (d)(1)

of this section.

**Section 403.18 Modification of POTW Pretreatment Programs.**

(a) General. Either the Department or a POTW with an approved POTW Pretreatment Program may initiate program modification at any time to reflect changing conditions at the POTW. Program modification is necessary whenever there is a significant change in the operation of a POTW Pretreatment Program that differs from the information in the POTW's Submission, as approved under section 403.11.

(b) Substantial modifications defined. Substantial modifications include:

(1) Modifications that relax POTW legal authorities [as described in section 403.8(f)(1)], except for modifications that directly reflect a revision to this Part 403 or to 40 CFR chapter I, subchapter N, and are reported pursuant to paragraph (d) of this section;

(2) Modifications that relax local limits, except for the modifications to local limits for pH and reallocations of the Maximum Allowable Industrial Loading of a pollutant that do not increase the total industrial loadings for the pollutant, which are reported pursuant to paragraph (d) of this section. Maximum Allowable Industrial Loading means the total mass of a pollutant that all Industrial Users of a POTW (or a subgroup of Industrial Users identified by the POTW) may discharge pursuant to limits developed under section 403.5(c);

(3) Changes to the POTW's control mechanism, as described in section 403.8(f)(1)(iii);

(4) A decrease in the frequency of self-monitoring or reporting required of industrial users;

(5) A decrease in the frequency of industrial user inspections or sampling by the POTW;

(6) Changes to the POTW's confidentiality procedures; and

(7) Other modifications designated as substantial modifications by the Department on the basis that the modification could have a significant impact on the operation of the POTW's Pretreatment Program; could result in an increase in pollutant loadings at the POTW; or could result in less-stringent requirements being imposed on Industrial Users of the POTW.

(c) Approval procedures for substantial modifications.

(1) The POTW shall submit to the Department a statement of the basis for the desired program modification, a modified program description [see section 403.9(b)], or such other documents the Department determines to be necessary under the circumstances.

(2) The Department shall approve or disapprove the modification based on the requirements of section 403.8(f) and using the procedures in sections 403.11(b) through (f), except as provided in paragraphs (c)(3) and (4) of this section. The modification shall become effective upon approval by the Department.

(3) The Department need not publish a notice of decision under section 403.11(e) provided the notice of request for approval under section 403.11(b)(1) states that the request will be approved if no comments are received by a date specified in the notice; no substantive comments are received; and the

request is approved without change.

(4) Notices required by section 403.11 may be performed by the POTW provided that the Department finds that the POTW notice otherwise satisfies the requirements of section 403.11.

(d) Approval procedures for non-substantial modifications.

(1) The POTW shall notify the Department of any non-substantial modification at least 45 days prior to implementation by the POTW, in a statement similar to that provided for in paragraph (c)(1) of this section.

(2) Within 45 days after the submission of the POTW's statement, the Department shall notify the POTW of its decision to approve or disapprove the non-substantial modification.

(3) If the Department does not notify the POTW within 45 days of its decision to approve or deny the modification, or to treat the modification as substantial under paragraph (b)(7) of this section, the POTW may implement the modification.

(e) Incorporation in permit. All modifications shall be incorporated into the POTW's NPDES permit upon approval. The permit will be modified to incorporate the approved modification in accordance with section R.61-9.122.63(g).

Authority:

33 U.S.C. 1251, et seq.; section 54(c)(2) of the Clean Water Act of 1977, (Pub.L.95-217) sections 204(b)(1)(C), 208(b)(2)(C)(iii), 301(b)(1)(A)(ii), 301(b)(2)(A)(ii), 301(b)(2)(C), 301(h)(5), 301(i)(2), 304(e), 304(g), 307, 308, 309, 402(b), 405 and 501(a) of the Federal Water Pollution Control Act (Pub. L.92-500) as amended by the Clean Water Act of 1977 and the Water Quality Act of 1987 (Pub. L.100-4); secs. 2002 and 3018(d) of the Solid Waste Disposal Act as amended; 40 CFR 403, 43 FR 27746, June 26, 1978; Effective August 25, 1978; Amended by 44 FR 32854, June 7, 1979; Effective August 13, 1979; 45 FR 72945, November 3, 1980; Revised by 46 FR 6439, January 28, 1981; Amended by 47 FR 4521, February 1, 1982; 47 FR 42688, September 28, 1982; 48 FR 2776, January 21, 1983; 49 FR 5132, February 10, 1984; 49 FR 21037, May 17, 1984; 49 FR 28059, July 10, 1984; 40 FR 31221, August 3, 1984; 50 FR 38811, September 25, 1985; 51 FR 16030, April 30, 1986; 51 FR 20430, June 4, 1986; Corrected by 51 FR 23759, July 1, 1986, Amended by 51 FR 36372, October 9, 1986; 52 FR 1600, January 14, 1987; 52 FR 42435, November 5, 1987; 53 FR 40610, October 17, 1988; 54 FR 254, January 4, 1989; 55 FR 142, July 24, 1990; 62 FR 38406, July 17, 1997; 64 FR 42554, August 4, 1999.

**Appendix A [Reserved]**

**Appendix B**
**65 Toxic Pollutants**

Acenaphthene
Acrolein
Acrylonitrile
Aldrin/Dieldrin
Antimony and compounds
Arsenic and compounds
Asbestos

Benzene
Benzidine
Beryllium and compounds
Cadmium and compounds
Carbon tetrachloride
Chlordane (technical mixture and metabolites)
Chlorinated benzenes (other than dichlorobenzenes)
Chlorinated ethanes (including 1,2-dichloroethane,1,1,1-trichloroethane, and hexachloroethane)
Chloroalkyl ethers (chloroethyl and mixed ethers)
Chlorinated naphthalene
Chlorinated phenols (other than those listed elsewhere; includes trichlorophenols and chlorinated cresols)
Chloroform
2-chlorophenol
Chromium and compounds
Copper and compounds
Cyanides
DDT and metabolites
Dichlorobenzenes (1,2-, 1,3-, and 1,4-dichlorobenzenes)
Dichlorobenzidine
Dichloroethylenes (1,1- and 1,2-dichloroethylene)
2,4-dichlorophenol
Dichloropropane and dichloropropene 2,4-dimethylphenol
Dinitrotoluene
Diphenylhydrazine
Endosulfan and metabolites
Endrin and metabolites
Ethylbenzene
Fluoranthene
Haloethers (other than those listed elsewhere; includes chlorophenylphenyl ethers, bromophenylphenyl ether, bis-(dichloroisopropyl) ether, bis-(chloroethoxy) methane and polychlorinated diphenyl ethers)
Halomethanes (other than those listed elsewhere; includes methylene chloride, methylchloride, methylbromide, bromoform, dichlorobromomethane)
Heptachlor and metabolites
Hexachlorobutadiene
Hexachlorocyclohexane
Hexachlorocyclopentadiene
Isophorone
Lead and compounds
Mercury and compounds
Naphthalene
Nickel and compounds
Nitrophenols (including 2,4-dinitrophenol, dinitrocresol)
Nitrosamines
Pentachlorophenol
Phenol
Phthalate esters
Polychlorinated biphenyls (PCBs)
Polynuclear aromatic hydrocarbons (including benzanthracenes, benzopyrenes, benzofluoranthene, chrysenes, dibenzanthracenes, and indenopyrenes)
Selenium and compounds

Silver and compounds
2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)
Tetrachloroethylene
Thallium and compounds
Toluene
Toxaphene
Trichloroethylene
Vinyl chloride
Zinc and compounds

## Appendix C
## Industrial Categories Subject to National Categorical Pretreatment Standards

Aluminum Forming
Asbestos Manufacturing
Battery Manufacturing
Builder's Paper
Carbon Black
Cement Manufacturing
Centralized Waste Treatment
Coil Coating
Copper Forming
Dairy Products Processing
Electrical and Electronic Components
Electroplating
Feedlots
Ferroalloy Manufacturing
Fertilizer Manufacturing
Fruits and Vegetables Processing Manufacturing
Glass Manufacturing
Grain Mills
Ink Formulating
Inorganic Chemicals
Iron and Steel Manufacturing
Leather Tanning and Finishing
Meat Processing
Metal Finishing
Metal Molding and Casting
Nonferrous Metals Forming and Metal Powders
Nonferrous Metals Manufacturing
Oil and Gas Extraction
Organic Chemicals, Plastics, and Synthetic Fibers
Paint Formulating
Paving and Roofing (Tars and Asphalt)
Pesticides
Petroleum Refining
Pharmaceuticals
Phosphate Manufacturing
Plastics Molding and Forming
Porcelain Enameling

Pulp, Paper, and Paperboard
Rubber Manufacturing
Seafood Processing
Soaps and Detergents Manufacturing
Steam Electric
Sugar Processing
Textile Mills
Timber Products Manufacturing
Transportation Equipment Cleaning
Waste Combustors

## Appendix D
## Selected Industrial Subcategories Considered Dilute for Purposes of the Combined Wastestream Formula

The following industrial subcategories are considered to have dilute waste streams for purposes of the combined waste stream formula. They either were or could have been excluded from categorical pretreatment standards pursuant to paragraph 8 of the Natural Resources Defense Council, Inc., et al. v. Costle Consent Decree for one or more of the following four reasons:

1) The pollutants of concern are not detectable in the effluent from the industrial user (paragraph 8(a)(iii);

2) the pollutants of concern are present only in trace amounts and are neither causing nor likely to cause toxic effects (paragraph 8(a)(iii);

3) the pollutants of concern are present in amounts too small to be effectively reduced by technologies known to the Administrator (paragraph 8(a)(iii); or

4) the waste stream contains only pollutants which are compatible with the POTW (paragraph 8(b)(i)). In some instances, different rationales were given for exclusion under paragraph 8. However, EPA has reviewed these subcategories and has determined that exclusion could have occurred due to one of the four reasons listed above.

Auto and Other Laundries (40 CFR Part 444)
Carpet and Upholstery Cleaning
Coin-Operated Laundries and Dry Cleaning
Diaper Services
Dry Cleaning Plants except Rug Cleaning
Industrial Laundries
Laundry and Garment Services, Not Elsewhere Classified
Linen Supply
Power Laundries, Family and Commercial
Electrical and Electronic Components (40 CFR Part 469) (The Paragraph 8 exemption for the manufacture of products in the Electrical and Electronic Components Category is for operations not covered by Electroplating/ Metal Finishing pretreatment regulations (40 CFR Parts 413/433)).
Capacitors (Fluid Fill)
Carbon and Graphite Products
Dry Transformers

Ferrite Electronic Devices
Fixed Capacitors
Fluorescent Lamps
Fuel Cells
Incandescent Lamps
Magnetic Coatings
Mica Paper Dielectric
Motors, Generators, Alternators
Receiving and Transmitting Tubes
Resistance Heaters
Resistors
Switchgear
Transformer (Fluid Fill)
Metal Molding and Casting (40 CFR Part 464)
Nickel Casting
Tin Casting
Titanium Casting
Gum and Wood Chemicals (40 CFR Part 454)
Char and Charcoal Briquets
Inorganic Chemicals Manufacturing (40 CFR Part 415)
Ammonium Chloride
Ammonium Hydroxide
Barium Carbonate
Calcium Carbonate
Carbon Dioxide
Carbon Monoxide and Byproduct Hydrogen
Hydrochloric Acid
Hydrogen Peroxide (Organic Process)
Nitric Acid
Oxygen and Nitrogen
Potassium Iodide
Sodium Chloride (Brine Mining Process)
Sodium Hydrosulfide
Sodium Hydrosulfite
Sodium Metal
Sodium Silicate
Sodium Thiosulfate
Sulfur Dioxide
Sulfuric Acid
Leather (40 CFR Part 425)
Gloves
Luggage
Paving and Roofing (40 CFR Part 443)
Asphalt Concrete
Asphalt Emulsion
Linoleum
Printed Asphalt Felt
Roofing
Pulp, Paper, and Paperboard, and Builders' Paper and Board Mills (40 CFR Parts 430 and 431)
Groundwood-Chemi-Mechanical

Rubber Manufacturing (40 CFR Part 428)
Tire and Inner Tube Plants
Emulsion Crumb Rubber
Solution Crumb Rubber
Latex Rubber
Small-sized General Molded, Extruded & Fabricated Rubber Plants1
Medium-sized General Molded Extruded and Fabricated Rubber Plants1
Large-sized General Molded Extruded and Fabricated Rubber Plants1
Wet Digestion Reclaimed Rubber
Pan, Dry Digestion, and Mechanical Reclaimed Rubber
Latex Dipped, Latex-Extruded, and Latex-Molded Rubber2
Latex Foam3
Soap and Detergent Manufacturing (40 CFR Part 417)
Soap Manufacture by Batch Kettle
Fatty Acid Manufacture by Fat Splitting
Soap Manufacture by Fatty Acid Neutralization
Glycerine Concentration
Glycerine Distillation
Manufacture of Soap Flakes and Powders
Manufacture of Bar Soaps
Manufacture of Liquid Soaps
Manufacture of Spray Dried Detergents
Manufacture of Liquid Detergents
Manufacture of Dry Blended Detergents
Manufacture of Drum Dried Detergents
Manufacture of Detergent Bars and Cakes
Textile Mills (40 CFR 410)
Apparel manufacturing
Cordage and Twine
Padding and Upholstery Filling
Timber Products Processing (40 CFR part 429)
Barking Process
Finishing Processes
Hardboard-Dry Process

1 Except for production attributed to lead-sheathed hose manufacturing operations.
2 Except for production attributed to chromic acid form-cleaning operations.
3 Except for production that generates zinc as a pollutant in discharge.

## Appendix E
## Sampling Procedures

I. Composite Method

A. It is recommended that influent and effluent operational data be obtained through 24-hour flow proportional composite samples. Sampling may be done manually or automatically, and discretely or continuously. If discrete sampling is employed, at least 12 aliquots should 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 should be flow proportional to either the stream flow at the time of collection of the 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.

B. Effluent sample collection need not be delayed to compensate for hydraulic detention unless the POTW elects to include detention time compensation or unless the Department requires detention time compensation. The Department may require that each effluent sample is 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 should be based on a 24-hour average daily flow value. The average daily flow should in turn be based on the average of the daily flows during the same month of the previous year.

II. Grab Method

If composite sampling is not an appropriate technique, grab samples should be taken to obtain influent and effluent operational data. A grab sample is an individual sample collected over a period of time not exceeding 15 minutes. The collection of influent grab samples should precede the collection of effluent samples by approximately one detention period except that where the detention period is greater than 24 hours such staggering of the sample collection may not be necessary or appropriate. The detention period should be based on a 24-hour average daily flow value. The average daily flow should in turn be based upon the average of the daily flows during the same month of the previous year. Grab sampling should be employed where the pollutants being evaluated are those, such as cyanide and phenol, which may not be held for an extended period because of biological, chemical, or physical interactions which take place after sample collection and affect the results.

**Appendix F [Reserved.]**

**Appendix G**
**Pollutants Eligible for a Removal Credit**

I. Regulated Pollutants in R.61-9.503 Eligible for a Removal Credit

| Pollutant | Use or Disposal Practice | | | |
|---|---|---|---|---|
| | LA | Surface Disposal | | I |
| | | Unlined[1] | Lined[2] | |
| Arsenic | X | X | | X |
| Beryllium | | | | X |
| Cadmium | X | | | X |
| Chromium | | X | | X |
| Copper | X | | | |
| Lead | X | | | X |
| Mercury | X | | | X |
| Molybdenum | X | | | |
| Nickel | X | X | | X |
| Selenium | X | | | |
| Zinc | X | | | |
| Total hydrocarbons | | | | X(1) |

KEY: LA - land application

SD - surface disposal site without a liner and leachate collection system I - firing of sewage sludge in a sewage sludge incinerator

(1) The following organic pollutants are eligible for a removal credit if the requirements for total hydrocarbons in subpart E in R.61-9.503 and other requirements in R.61-62 are met when sewage sludge is fired in a sewage sludge incinerator:

Acrylonitrile, Aldrin/Dieldrin (total), Benzene, Benzidine, Benzo(a)pyrene, Bis(2-chloroethyl)ether, Bis(2-ethylhexyl)phthalate, Bromodichloromethane, Bromoethane, Bromoform, Carbon tetrachloride, Chlordane, Chloroform, Chloromethane, DDD,DDE,DDT Dibromochloromethane, Dibutyl phthalate, 1,2-dichloroethane, 1,1-dichloroethylene, 2,4-dichlorophenol, 1,3-dichloropropene, Diethyl phthalate, 2,4-dinitrophenol, 1,2-diphenylhydrazine, Di-n-butyl phthalate, Endosulfan, Endrin, Ethylbenzene, Heptachlor, Heptachlor epoxide, Hexachlorobutadiene, Alpha-hexachlorocyclohexane, Beta-hexachlorocyclohexane, Hexachlorocyclopentadiene, Hexachloroethane, Hydrogen cyanide, Isophorone, Lindane, Methylene chloride, Nitrobenzene, N-Nitrosodimethylamine, N-Nitrosodi-n-propylamine, Pentachlorophenol, Phenol, Polychlorinated biphenyls, 2,3,7,8-tetrachlorodibenzo-p-dioxin, 1,1,2,2-tetrachloroethane, Tetrachloroethylene, Toluene, Toxaphene, Trichloroethylene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, and 2,4,6-Trichlorophenol.

I. Additional Pollutants Eligible for a Removal Credit (milligrams per kilogram - dry weight basis)

| Pollutants | Use or Disposal Practice | | | |
|---|---|---|---|---|
| | LA | Surface Disposal | | I |
| | | Lined | Unlined | |
| Arsenic | - | - | 100[3] | - |
| Aldrin/Dieldrin (Total) | 2.7 | - | - | - |
| Benzene | 16[3] | 140 | 3400 | - |
| Benzo(a)pyrene | 15 | 100[3] | 100[3] | - |
| Bis(2-ethylhexyl)phthalate | - | 100[3] | 100[3] | - |
| Cadmium | - | 100[3] | 100[3] | - |
| Chlordane | 86 | 100[3] | 100[3] | - |
| Chromium (total) | 100[3] | - | 100[3] | - |
| Copper | - | 46[3] | 100 | 1400 |
| DDD, DDE, DDT (Total) | 1.2 | 2000 | 2000 | - |
| 2,4-Dichlorophenoxy-acetic acid | - | 7 | 7 | - |
| Fluoride | 730 | - | - | - |
| Heptachlor | 7.4 | - | - | - |
| Hexachlorobenzene | 29 | - | - | - |
| Hexachlorobutadiene | 600 | | | |
| Iron | 78[3] | - | - | - |
| Lead | - | 100[3] | 100[3] | - |

| | | | | |
|---|---|---|---|---|
| Lindane | 84 | 28[3] | 28[3] | |
| Malathion | - | 0.63 | 0.63 | - |
| Mercury | - | 100[3] | 100[3] | - |
| Molybdenum | - | 40 | 40 | - |
| Nickel | - | - | 100[3] | - |
| N-Nitrosodimethylamine | 2.1 | 0.088 | 0.088 | - |
| Pentachlorophenol | 30 | - | - | - |
| Phenol | - | 82 | 82 | - |
| Polychlorinated biphenyls | 4.6 | <50 | <50 | - |
| Selenium | - | 4.8 | 4.8 | 4.8 |
| Toxaphene | 10 | 26[3] | 26[3] | - |
| Trichloroethylene | 10[3] | 9500 | 10[3] | - |
| Zinc | - | 4500 | 4500 | 4500 |

KEY: LA - land application I - incineration

1 - Sewage sludge unit without a liner and leachate collection system.
2 - Sewage sludge unit with a liner and leachate collection system.
3 - Value expressed in grams per kilogram - dry weight basis.
4 - Value to be determined on a case-by case basis.

# 61-9.503
# Standards for the Use or Disposal of Sewage Sludge

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## Part A
## General Provisions

### Section 503.1 Purpose and Applicability

(a) Purpose.

(1) This part establishes standards, which consist of general requirements, pollutant limits, management practices, and operational standards, for the final use or disposal of sewage sludge generated during the treatment of domestic sewage in a treatment works. Standards are included in this part for sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are pathogen and alternative vector attraction reduction requirements for sewage sludge applied to the land or placed on a surface disposal site.

(2) In addition, the standards in this part include the frequency of monitoring and recordkeeping requirements when sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are reporting requirements for Class I sludge management facilities, publicly owned treatment works (POTWs) with a design flow rate equal to or greater than one million gallons per day, POTWs that serve 10,000 people or more, and all sewage sludge disposal when sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

(b) Applicability.

(1) This part applies to any person who prepares sewage sludge, applies sewage sludge to the land, or fires sewage sludge in a sewage sludge incinerator and to the owner/operator of a surface disposal site.

(2) This part applies to sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

(3) This part applies to the exit gas from a sewage sludge incinerator stack.

(4) This part applies to land where sewage sludge is applied, to a surface disposal site, and to a sewage sludge incinerator.

### Section 503.2 Compliance period.

(a) Compliance with the standards in this part shall be achieved as expeditiously as practicable, but in no case later than February 19, 1994. When compliance with the standards requires construction of new pollution control facilities, compliance with the standards shall be achieved as expeditiously as practicable, but in no case later than February 19, 1995.

(b) The requirements for frequency of monitoring, recordkeeping, and reporting in this part for total hydrocarbons in the exit gas from a sewage sludge incinerator are effective February 19, 1994 or, if compliance with the operational standard for total hydrocarbons in this part requires the construction of

new pollution control facilities, February 19, 1995.

(c) All other requirements for frequency of monitoring, recordkeeping, and reporting in this part are effective on July 20, 1993.

(d) Unless otherwise specified in subpart E, compliance with the requirements in sections 503.41 (c) through (r), 503.43(c), (d), and (e), 503.45(a)(1) and (b) through (f), 503.46(a)(1), (a)(3), and (c), and 503.47(f) that were revised on September 3, 1999, shall be achieved as expeditiously as practicable, but in no case later than September 5, 2000. When new pollution control facilities must be constructed to comply with the revised requirements in subpart E, compliance with the revised requirements shall be achieved as expeditiously as practicable but no later than September 4, 2001.

**Section 503.3 Permits.**

(a) The requirements in this part shall be implemented through a permit:

(1) issued to a "treatment works treating domestic sewage," as defined in R.61-9.122.2, in accordance with R.61-9.122, 124, and 505, by the State in accordance with 40 CFR 123 or,

(2) issued to any person who prepares, generates, or disposes of sewage sludge when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator, or

(3) issued under subtitle C of the Solid Waste Disposal Act; subpart C of the Safe Drinking Water Act; the Marine Protection, Research, and Sanctuaries Act of 1972; or the Clean Air Act. "Treatment works treating domestic sewage" shall submit a permit application in accordance with R.61-9.122.21.

(4) A person who derives a bulk or bag material from sewage sludge shall not be required to obtain a permit if: (1) the sewage sludge meets the ceiling concentrations in Table 1 of section 503.13; the pollutant concentration limits in Table 3 of section 503.13; the Class A pathogen requirements of section 503.32(a); one of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8), and (2) there is a permit in effect for either the preparer, generator and/or applier of the sewage sludge.

(b) [Reserved.]

(c) The requirements under this part may be addressed in permits issued to land appliers.

**Section 503.4 Relationship to other regulations.**

(a) Disposal of sewage sludge in a municipal solid waste landfill unit, as defined in 40 CFR 258.2 and R.61-107, that complies with the requirements in 40 CFR Part 258 and R.61-107 constitutes compliance with section 405(d) of the CWA. Any person who prepares sewage sludge that is disposed in a municipal solid waste landfill unit shall ensure that the sewage sludge meets the requirements in 40 CFR Part 258 and R.61-107 concerning the quality of materials disposed in a municipal solid waste landfill unit.

(b) The disposal of sewage sludge involving the composting or co-composting of the sewage sludge with yard trash, land-clearing debris, or a combination of yard trash and land clearing debris shall comply with the requirements established in R.61-107. The submission and information requirements shall be determined by the Department.

(c) The disposal of sewage sludge utilizing an innovative and experimental solid waste management technology or process shall comply with the requirements addressed in R.61-107.

(d) The disposal of sewage sludge involving firing of sewage sludge in a sewage sludge incinerator or the heat drying/heat conditioning of the sewage sludge shall comply with the requirements addressed in 40 CFR Part 60, 40 CFR Part 61, and R.61-62.

(e) The processing of wastewater or the disposal of effluent from the processing of wastewater shall comply with the requirements addressed in R.61-62. Any activity covered by the Clean Air Amendments of 1990, shall comply within the time frame specified in the Clean Air Amendment or applicable federal regulations.

**Section 503.5 Additional or more stringent requirements.**

(a) On a case-by-case basis, the Department may impose requirements for the use or disposal of sewage sludge in addition to or more stringent than the requirements in this part when necessary to protect public health and the environment from any adverse effect of a pollutant in the sewage sludge.

(b) Nothing in this part precludes a State or political subdivision thereof or interstate agency from imposing requirements for the use or disposal of sewage sludge more stringent than the requirements in this part or from imposing additional requirements for the use or disposal of sewage sludge.

(c) Sludge generated at an industrial facility. See R.61-9.504 for permit requirements for Industrial sludges.

(d) Commercial and mixed Domestic/Commercial septage. See R.61-9.504 for permit requirements.

**Section 503.6 Exclusions.**

(a) Treatment processes. This part does not establish requirements for processes used to treat domestic sewage or for processes used to treat sewage sludge prior to final use or disposal, except as provided in section 503.32 and section 503.33.

(b) Selection of a use or disposal practice. This part does not require the selection of a sewage sludge use or disposal practice. The determination of the manner in which sewage sludge is used or disposed is a local determination.

(c) Co-firing of sewage sludge. This part does not establish requirements for sewage sludge co-fired in an incinerator with other wastes or for the incinerator in which sewage sludge and other wastes are co-fired.

(1) Domestic Sludge. Other wastes do not include auxiliary fuel, as defined in section 503.41(b),

fired in a domestic sewage sludge incinerator.

(2) Industrial Sludge. See R.61-9.504 for permit requirements for Industrial sludges.

(d) Sludge generated at an industrial facility. This part (R.61-9.503) does not establish requirements for the use or disposal of sludge generated at an industrial facility during the treatment of industrial wastewater, including sewage sludge generated during the treatment of industrial wastewater combined with domestic sewage See R.61-9.504 for permit requirements for Industrial sludges and industrial sewage sludge generated during the treatment of industrial wastewater combined with domestic sewage.

(e) Hazardous sewage sludge. This part does not establish requirements for the use or disposal of sewage sludge determined to be hazardous in accordance with 40 CFR Part 261.

(f) Sewage sludge with high PCB concentration. This part does not establish requirements for the use or disposal of sewage sludge with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry weight basis).

(g) Incinerator ash. This part does not establish requirements for the use or disposal of ash generated during the firing of sewage sludge in a sewage sludge incinerator.

(h) Grit and screenings. This part does not establish requirements for the use or disposal of grit (e.g., sand, gravel, cinders, or other materials with a high specific gravity) or screenings (e.g., relatively large materials such as rags) generated during preliminary treatment of domestic sewage in a treatment works.

(i) Drinking water treatment sludge. This part does not establish requirements for the use or disposal of sludge generated during the treatment of either surface water or ground water used for drinking water.

(j) Commercial and Industrial septage. This part (R.61-9.503) does not establish requirements for the use or disposal of commercial septage, industrial septage, a mixture of domestic septage and commercial septage, or a mixture of domestic septage and industrial septage. See R.61-9.504 for any permit requirements.

(k) Coal ash. This part does not establish requirements for the use or disposal of coal ash.

**Section 503.7 Requirement for a person who prepares sewage sludge.**

Any person who prepares sewage sludge shall ensure that the applicable requirements in this part are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

**Section 503.8 Sampling and analysis.**

(a) Sampling. Representative samples of sewage sludge that is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator shall be collected and analyzed. The

Department may establish minimum requirements in permits for the proper method of sampling and analysis of sewage sludge.

(b) Methods. The materials listed below are incorporated by reference in this part. The materials are incorporated as they exist on the date of approval, and notice of any change in these materials will be published in the Federal Register. They are available for inspection at the Office of the Federal Register, 7th Floor, suite 700, 800 North Capitol Street, NW, Washington, DC, and at the Office of Water Docket, room L-102, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC. Copies may be obtained from the standard producer or publisher listed in the regulation. Methods in the materials listed below shall be used to analyze samples of sewage sludge.

(1) Enteric viruses. ASTM Designation: D 4994-89, "Standard Practice for Recovery of Viruses From Wastewater Sludges," 1992 Annual Book of ASTM Standards: Section 11 - Water and Environmental Technology, ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

(2) Fecal coliform. Part 9221 C and E. or Part 9222 D., "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW, Washington, DC, 20005.

(3) Helminth ova. Yanko, W.A., "Occurrence of Pathogens in Distribution and Marketing Municipal Sludges," EPA 600/1-87-014, 1987. National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (PB 88-154273/AS).

(4) Inorganic pollutants. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, Second Edition (1982) with Updates I (April 1984) and II (April 1985) and Third Edition (November 1986) with Revision I (December 1987), II, IIA and IIB. Second Edition and Updates I and II are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (PB-87-120-291). Third Edition and Revision I are available from Superintendent of Documents, Government Printing Office, 941 North Capitol Street, NE., Washington, DC, 20002 (Document Number 955-001-00000-1).

(5) Salmonella sp. bacteria. Part 9260 D., "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW, Washington, DC, 20005; or Kenner, B.A. and H.P. Clark, "Detection and enumeration of Salmonella and Pseudomonas aeruginosa," Journal of the Water Pollution Control Federation, Vol. 46, no. 9, September 1974, pp. 2163-2171. Water Environment Federation, 601 Wythe Street, Alexandria, Virginia 22314.

(6) Specific oxygen uptake rate. Part 2710 B., "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW, Washington, DC, 20005.

(7) Total, fixed, and volatile solids. Part 2540 G., "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW, Washington, DC, 20005.

**Section 503.9 General definitions.**

All terms not defined herein have the meaning given them in R.61-9.122, R.61-9.124, R.61-9.129, R.61-9.133, R.61-9.403, or R.61-9.505.

(a) "Apply sewage sludge or sewage sludge applied to the land" means land application of sewage sludge.

(b) "Base flood" is a flood that has a one percent chance of occurring in any given year (i.e., a flood with a magnitude equalled once in 100 years).

(c) "Class I sludge management facility" is any publicly owned treatment works (POTW), as defined in 40 CFR 501.2, required to have an approved pretreatment program under R.61-9.403.8(a) (including any POTW located in a State that has elected to assume local program responsibilities pursuant to R.61- 9.403.10(e)) and any treatment works treating domestic sewage, as defined in R.61-9.122.2, classified as a Class I sludge management facility by the EPA Regional Administrator, or, in the case of approved State programs, the Regional Administrator in conjunction with the Department, because of the potential for its sewage sludge use or disposal practice to affect public health and the environment adversely.

(d) "Cover crop" is a small grain crop, such as oats, wheat, or barley; grasses; or other crop grown for agronomic use.

(e) "CWA" see R.61-9.122.2(b)Definitions.

(f) "Domestic septage" is either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

(g) "Domestic sewage" is waste and wastewater from humans, or household operations that is discharged to or otherwise enters a treatment works.

(h) "Dry weight basis" means calculated on the basis of having been dried at 105 degrees Celsius until reaching a constant mass (i.e., essentially 100 percent solids content).

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

(j) "Feed crops" are crops produced primarily for consumption by animals.

(k) "Fiber crops" are crops such as flax and cotton.

(l) "Food crops" are crops consumed by humans. These include, but are not limited to, fruits, vegetables, and tobacco.

(m) "Ground water" is water below the land surface in the saturated zone.

(n) “Industrial wastewater” is wastewater generated in a commercial or industrial process. See R.61-9.504 for additional definitions.

(o) “Municipality” see R.61-9.122.2(b) Definitions. The definition includes under section 503 of this regulation a special district created under State law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201(e) of the CWA, as amended, that has as one of its principal responsibilities the treatment, transport, use, or disposal of sewage sludge.

(p) “Permitting authority” means the Department.

(q) “Person” see definition in R.61-9.122.2(b)Definitions.

(r) “Person who prepares sewage sludge” is either the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge.

(s) “Place sewage sludge or sewage sludge placed” means disposal of sewage sludge on a surface disposal site.

(t) “Pollutant” is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the Department, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

(u) “Pollutant limit” is a numerical value that describes the amount of a pollutant allowed per unit amount of sewage sludge (e. g., milligrams per kilogram of total solids); the amount of a pollutant that can be applied to a unit area of land (e. g., kilograms per hectare); or the volume of a material that can be applied to a unit area of land (e.g., gallons per acre).

(v) “Runoff” is rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off of the land surface.

(w) “Sewage sludge” is solid, semi-solid, or liquid residue generated during the treatment of municipal wastewater or domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic or industrial sewage in a treatment works. See R.61-9.504 for Industrial sludge definition.

(x) “State” means the State of South Carolina.

(y) “Store or storage of sewage sludge” is the placement of sewage sludge on land on which the

sewage sludge remains for two years or less. This does not include the placement of sewage sludge on land for treatment.

(z) "Treat or treatment of sewage sludge" is the preparation of sewage sludge for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of sewage sludge. This does not include storage of sewage sludge.

(aa) "Treatment works" is either a Federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

(bb) "Wetlands" see R.61-9.122.2(b)

Definitions. (cc) [Reserved].

(dd) "Person who applies sewage sludge" may be the generator, preparer, or a land applier.

## Part B
## Land Application

**503.10 Applicability.**

(a) This part applies to any person who prepares sewage sludge that is applied to the land, to any person who applies sewage sludge to the land, to sewage sludge applied to the land, and to the land on which sewage sludge is applied.

(b) Bulk sewage sludge.

(1) [Reserved].

(2) The Department, may apply any or all of the general requirements in section 503.12 and the management practices in section 503.14 to bulk sewage sludge meeting the pollutant concentrations in section 503.13(b)(3), the Class A pathogen requirements in section 503.32(a), and one of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8), on a case-by-case basis after determining that the general requirements or management practices are needed to protect public health and the environment from any reasonably anticipated adverse effect that may occur from any pollutant in the bulk sewage sludge.

(c) (1) [Reserved].

(2) The Department, may apply any or all of the general requirements in section 503.12 or the management practices in section 503.14 to derived bulk material meeting the pollutant concentrations in section 503.13(b)(3), the Class A pathogen requirements in section 503.32(a), and one of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8), on a case-by-case basis after determining that the general requirements or management practices are needed to protect public health and the environment from any reasonably anticipated adverse effect that may occur from any pollutant in the bulk sewage sludge.

(d) The requirements in this part may be applied by the Department, on a case-by-case basis, when a bulk material derived from sewage sludge is applied to the land if the sewage sludge from which the bulk material is derived meets the ceiling concentrations in Table 1 of section 503.13 and the pollutant concentrations in Table 3 of section 503.13; the Class A pathogen requirements in section 503.32(a); and one of the vector attraction reduction requirements in section 503.33(b)(1) through (b)(8).

(e) Sewage sludge sold or given away in a bag or other container for application to the land. The general requirements in section 503.12 and the management practices in section 503.14 do not apply, except for section 503.12(o), section 503.12(p), section 503.12(q), and section 503.14(e), when sewage sludge is sold or given away in a bag or other container for application to the land if the sewage sludge sold or given away in a bag or other container for application to the land meets the ceiling concentrations in Table 1 of section 503.13 and the pollutant concentrations in Table 3 of section 503.13; the Class A pathogen requirements in section 503.32(a); and one of the vector attraction reduction requirements in section 503.33(b)(1) through (b)(8).

(f) The general requirements in section 503.12 and the management practices in section 503.14 do not apply, except for section 503.12(o), section 503.12(p), section 503.12(q), and section 503.14(e), when a material derived from sewage sludge is sold or given away in a bag or other container for application to the land if the derived material meets the ceiling concentrations in Table 1 of section 503.13 and the pollutant concentrations in Table 3 of section 503.13; the Class A pathogen requirements in section 503.32(a); and one of the vector attraction reduction requirements in section 503.33(b)(1) through (b)(8).

(g) The requirements in this part do not apply, except for section 503.14(e), when a material derived from sewage sludge is sold or given away in a bag or other container for application to the land if the sewage sludge from which the material is derived meets the ceiling concentrations in Table 1 of section 503.13 and the pollutant concentrations in Table 3 of section 503.13; the Class A pathogen requirements in section 503.32(a); and one of the vector attraction reduction requirements in section 503.33(b)(1) through (b)(8).

(h) If other materials are mixed with the sewage sludge, the final product must meet the applicable requirements related to pollution limits (in section 503.13), pathogen reduction (in section 503.15(a)), and vector attraction reduction (in section 503.15(c)) after the materials have been added to the sewage sludge.

**503.11 Special definitions.**

(a) "Agricultural land" is land on which a food crop, a feed crop, or a fiber crop is grown. This includes range land and land used as pasture.

(b) "Agronomic rate" is the whole sludge application rate (dry weight basis) designed: (1) to provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land and (2) to minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the ground water and (3) to provide the amount of other organic and inorganic plant nutrients which promote crop or vegetative growth, such as calcium-carbonate equivalency.

(c) “Annual pollutant loading rate” is the maximum amount of a pollutant that can be applied to a unit area of land during a 365 day period.

(d) “Annual whole sludge application rate” is the maximum amount of sewage sludge (dry weight basis) that can be applied to a unit area of land during a 365 day period.

(e) “Bulk sewage sludge” is sewage sludge that is not sold or given away in a bag or other container for application to the land.

(f) “Cumulative pollutant loading rate” is the maximum amount of an inorganic pollutant that can be applied to an area of land.

(g) “Forest” is a tract of land thick with trees and underbrush.

(h) “Land application” is the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

(i) “Monthly average” is the arithmetic mean of all measurements taken during the month.

(j) “Other container” is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.

(k) “Pasture” is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

(l) “Public contact site” is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

(m) “Range land” is open land with indigenous vegetation.

(n) “Reclamation site” is drastically disturbed land that is reclaimed using sewage sludge. This includes, but is not limited to, strip mines and construction sites.

**503.12 General requirements.**

(a) No person shall apply sewage sludge to the land except in accordance with the requirements in this part.

(b) No person shall apply bulk sewage sludge subject to the cumulative pollutant loading rates in section 503.13(b)(2) to agricultural land, forest, a public contact site, or a reclamation site if any of the cumulative pollutant loading rates in section 503.13(b)(2) has been reached.

(c) No person shall apply domestic septage to agricultural land, forest, or a reclamation site during a 365 day period if the annual application rate in section 503.13(c) has been reached during that period.

(d) The person who prepares bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall provide the person who applies the bulk sewage sludge written notification of the concentration of total nitrogen (as N on a dry weight basis) in the bulk sewage sludge.

(e) (1) The person or the permittee who applies sewage sludge to the land shall obtain information needed to comply with the requirements in this part.

(2) (i) Before bulk sewage sludge subject to the cumulative pollutant loading rates in section 503.13(b)(2) is applied to the land, the person who proposes to apply the bulk sewage sludge shall contact the Department or the permitting authority for the State in which the bulk sewage sludge will be applied to determine whether bulk sewage sludge subject to the cumulative pollutant loading rates in section 503.13(b)(2) has been applied to the site.

(ii) If bulk sewage sludge subject to the cumulative pollutant loading rates in section 503.13(b)(2) has not been applied to the site, the cumulative amount for each pollutant listed in Table 2 of section 503.13 may be applied to the site in accordance with section 503.13(a)(2)(i).

(iii) If bulk sewage sludge subject to the cumulative pollutant loading rates in section 503.13(b)(2) has been applied to the site and the cumulative amount of each pollutant applied to the site in the bulk sewage sludge is known, the cumulative amount of each pollutant applied to the site shall be used to determine the additional amount of each pollutant that can be applied to the site in accordance with section 503.13(a)(2)(i).

(iv) If bulk sewage sludge subject to the cumulative pollutant loading rates in section 503.13(b)(2) has been applied to the site since July 20, 1993 and the cumulative amount of each pollutant applied to the site in the bulk sewage sludge since that date is not known, an additional amount of each pollutant shall not be applied to the site in accordance with section 503.13(a)(2)(i).

(f) When a person who prepares bulk sewage sludge provides the bulk sewage sludge to a person who applies the bulk sewage sludge to the land, the person who prepares the bulk sewage sludge shall provide the person who applies the sewage sludge notice and necessary information to comply with the requirements in this part.

(g) When a person who prepares sewage sludge provides the sewage sludge to another person who prepares the sewage sludge, the person who provides the sewage sludge shall provide the person who receives the sewage sludge notice and necessary information to comply with the requirements in this part.

(h) The person who applies bulk sewage sludge to the land shall provide the owner or lease holder of the land on which the bulk sewage sludge is applied notice and necessary information to comply with the requirements in this part.

(i) Any person who prepares bulk sewage sludge that is applied to land in a State other than the State in which the bulk sewage sludge is prepared shall provide written notice, prior to the initial application of bulk sewage sludge to the land application site by the applier, to the Department or the permitting authority for the State in which the bulk sewage sludge is proposed to be applied. The notice shall include:

(1) The location, by either street address or latitude and longitude, of each land application site.

(2) The approximate time period bulk sewage sludge will be applied to the site.

(3) The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who prepares the bulk sewage sludge.

(4) The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk sewage sludge.

(j) Any person who applies bulk sewage sludge subject to the cumulative pollutant loading rates in section 503.13(b)(2) to the land shall provide written notice, prior to the initial application of bulk sewage sludge to a land application site by the applier, to the Department or permitting authority for the State in which the bulk sewage sludge will be applied and the Department or permitting authority for the State shall retain and provide access to the notice. The notice shall include:

(1) The location, by either street address or latitude and longitude, of the land application site.

(2) The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) of the person who will apply the bulk sewage sludge.

(k) The Department may establish categories of land application sites and develop separate permitting requirements for each category as deemed necessary.

(1) The Department may establish requirements in permits for site selection regarding appropriate conditions for land application of sewage sludge.

(2) The Department may establish additional permitting restrictions based upon soil and groundwater conditions to insure protection of the groundwater and surface water of the State. Criteria may include but is not limited to soil permeability, clay content, and depth to groundwater.

(l) The Department may establish in permits the application buffer setbacks for property boundaries, roadways, residential developments, dwellings, water wells, drainageways, and surface water as deemed necessary to protect public health and the environment. Factors taken into consideration in the establishment of setbacks would indicate sludge application method, adjacent land usage, public access, aerosols, runoff prevention, and adjacent groundwater usage.

(m) The Department may establish permit conditions to require that sludge application remain consistent with the lime and fertilizer requirements for the cover, feed, food, and fiber crops based on published lime and fertilizer recommendations (such as “Nutrient Management for South Carolina”, Cooperative Extension Service, Clemson University, EC 476).

(n) The Department may establish minimum requirements in permits for soil and/or groundwater monitoring, for bulk application sites, to verify compliance with this Regulation. Factors taken into consideration in the establishment of soil and groundwater monitoring will include groundwater depth, operation flexibility, application frequency, type of sludge, size of application area, and loading rate.

(1) The Department may establish pre-application and post-application site monitoring requirements in permits for limiting nutrients or limiting pollutants as determined by the Department.

(2) The Department may establish permit conditions which require the permittee to reduce, modify, or eliminate the sludge applications based on the results of this data.

(3) The Department may modify or revoke and reissue the permit based on this data.

(o) Any person who prepares bulk sewage sludge and applies it to the land, or provides the bulk sewage sludge to a person who applies the bulk sewage sludge, or provides the bulk sewage sludge to another person who treats or processes the bulk sewage sludge prior to land applying it, shall apply to the Department for a permit to land apply the bulk sewage sludge and shall receive an approved permit from the Department prior to the actual application. Any person who prepares sewage sludge and sells or gives it away in a bag or other container, or provides the sewage sludge to a person who sells or gives it away in a bag or other container, or provides the sewage sludge to another person who treats, mixes, alters or processes the sewage sludge for sale or gives it away in a bag or other container shall receive an approved permit from the Department prior to the sale or distribution of the material. The application for land applying, or bagging, or selling, or giving away sludges will be in the form of a report prepared by a qualified Professional Engineer, qualified soil scientist, qualified agronomist, or other qualified individual. This report shall at a minimum contain:

(1) Sludge generator information shall be included as follows:

(i) Facility name, address, telephone number, county, and NPDES or other permit number(if applicable).

(ii) Plant discharge capacity in millions of gallons per day (MGD) (if applicable), amount of sludge generated per year (dry weight basis), description of sludge storage and amount of stockpiled sludge (if applicable), description of sludge treatment, and current method of disposal.

(2) Sludge analysis information shall be included as follows:

(i) Test results or rationale that demonstrates the non-hazardous nature of the sludge to the satisfaction of the Department.

(ii) Name, address, lab certification number, and telephone number of the laboratory conducting the analyses.

(iii) Sludge shall be analyzed for:

(A) Total solids (mg/l) and volatile solids (mg/kg).

(B) Nutrients (on a dry weight basis).

(1) Total Kjeldahl Nitrogen (mg/kg).
(2) Total inorganic nitrogen (mg/kg).

(3) Total ammonia nitrogen (mg/kg) and Total nitrate nitrogen (mg/kg).
(4) Total phosphorus (mg/kg).
(5) Total potassium (mg/kg).
(6) Calcium Carbonate Equivalency (if sewage sludge is alkaline stabilized).

(C) Pollutants (on a dry weight basis).

(1) Arsenic (mg/kg).
(2) Cadmium (mg/kg).
(3) Copper (mg/kg).
(4) Lead (mg/kg).
(5) Mercury (mg/kg).
(6) Molybdenum (mg/kg).
(7) Nickel (mg/kg).
(8) Selenium (mg/kg).
(9) Zinc (mg/kg).
(10) Other compounds required by the permit or any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471)) may be required to be monitored for in the sewage sludge (if applicable).

(D) If an analysis must be performed on the sludge to document compliance with pathogen reduction requirements and vector attraction reduction requirements, these analyses shall be submitted in the report along with an explanation.

(iv) Sludge handling and application information shall be included as follows:

(A) Description of method of transport (if applicable).

(B) The time of year of the sludge application and how it relates to crop planting and harvesting schedule (if applicable).

(C) Name, address, and telephone number of the contractor applying the sludge (if applicable).

(D) Type of equipment used to spread the sludge (if applicable).

(v) Application site information shall be included (as appropriate):

(A) Name and address of landowner and location of application site(s).

(B) Name and address of the party managing the site(s) (if different than the owner).

(C) Previous years when sludge was applied under permits by the Department and application amounts.

(D) Additional soil additives applied on the site(s).

(E) Description of method to control access to the site(s).

(F) Method of odor control (if applicable).

(G) Site location(s) on maps including:

(1) Topography and drainage characteristics.
(2) Adjacent land usage and location of inhabited dwellings.
(3) All water supply wells on adjacent property.
(4) Adjacent surface water bodies.
(5) Sludge use or disposal boundaries and buffer zones.
(6) Location of proposed groundwater monitoring wells (if applicable).
(7) Right-of-Ways
(8) Soil test, description of soil types, and boring locations (if applicable).

(vi) Site Monitoring Plan information shall be included as follows (when required):

(A) Groundwater monitoring information (if applicable).

(B) Soil monitoring methods and locations (if applicable).

(C) Surface water sampling methods and locations (if applicable).

(D) Metals testing, if required, due to previous application(s) (if applicable).

(E) Method to insure that the soil pH will remain within agronomic ranges during the life of the site (e.g. alkaline stabilized sludge projects).

(vii) The Department, at its discretion, may identify specific application information that may be excluded from a submission if the applicant has an alternate permitted method of disposal for the bulk sewage sludge (e.g. a municipal solid waste landfill disposal permit). The Department, may allow an applicant to exclude application information from a submission of a modified application or addition to a previously permitted activity.

(p) The Department, at its discretion, may request of an applicant any additional information deemed necessary to complete or correct deficiencies in the sludge disposal permit application before processing the application or issuing or denying the issuance of a permit.

(q) Applicants for land application of sludge must submit their applications on permit application forms if designated by the Department.

(r) If a deleterious impact to the groundwaters of the State from sewage sludge use or disposal practices is documented, through groundwater monitoring levels exceeding the standards set forth in R.61-68 or a significant adverse trend occurs, then it will be the obligation of the generator/preparer of the sewage sludge as directed by the Department to conduct an investigation to determine the vertical and horizontal extent of groundwater impact. The Department may require remediation of the groundwater to within acceptable levels for groundwater as set forth in R.61-68.

**503.13 Pollutant limits.**

(a) Sewage sludge.

(1) Bulk sewage sludge or sewage sludge sold or given away in a bag or other container shall not be applied to the land if the concentration of any pollutant in the sewage sludge exceeds the ceiling concentration for the pollutant in Table 1 of section 503.13.

(2) If bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site, either:

(i) the cumulative loading rate for each pollutant shall not exceed the cumulative pollutant loading rate for the pollutant in Table 2 of section 503.13; or

(ii) the concentration of each pollutant in the sewage sludge shall not exceed the concentration for the pollutant in Table 3 of section 503.13.

(3) If bulk sewage sludge is applied to a lawn or a home garden, the concentration of each pollutant in the sewage sludge shall not exceed the concentration for the pollutant in Table 3 of section 503.13.

(4) If sewage sludge is sold or given away in a bag or other container for application to the land, either:

(i) the concentration of each pollutant in the sewage sludge shall not exceed the concentration for the pollutant in Table 3 of section 503.13, or

(ii) the product of the concentration of each pollutant in the sewage sludge and the annual whole sludge application rate for the sewage sludge shall not cause the annual pollutant loading rate for the pollutant in Table 4 of section 503.13 to be exceeded. The procedure used to determine the annual whole sludge application rate is presented in appendix A of this part.

(b) Pollutant concentrations and loading rates - sewage sludge.

(1) Ceiling concentrations.

TABLE 1 OF SECTION 503.13 -- CEILING CONCENTRATIONS

| Pollutant | Ceiling Concentration (milligrams per kilogram) Dry weight basis |
|---|---|
| Arsenic | 75 |
| Cadmium | 85 |
| Copper | 4300 |

| | |
|---|---|
| Lead | 840 |
| Mercury | 57 |
| Molybdenum | 75 |
| Nickel | 420 |
| Selenium | 100 |
| Zinc | 7500 |

(2) Cumulative pollutant loading rates.

TABLE 2 OF SECTION 503.13 -- CUMULATIVE POLLUTANT LOADING RATES

| Pollutant | Cumulative Pollutant Loading Rate (kilograms per hectare) |
|---|---|
| Arsenic | 41 |
| Cadmium | 39 |
| Copper | 1500 |
| Lead | 300 |
| Mercury | 17 |
| Nickel | 420 |
| Selenium | 100 |
| Zinc | 2800 |

(3) Pollutant concentrations.

TABLE 3 OF SECTION 503.13 -- POLLUTANT CONCENTRATIONS

| Pollutant | Monthly Average Concentrations (milligrams per kilogram) Dry weight basis |
|---|---|
| Arsenic | 41 |
| Cadmium | 39 |
| Copper | 1500 |
| Lead | 300 |
| Mercury | 17 |
| Nickel | 420 |
| Selenium | 100 |
| Zinc | 2800 |

(4) Annual pollutant loading rates.

TABLE 4 OF SECTION 503.13 -- ANNUAL POLLUTANT LOADING RATES

| Pollutant | Annual Pollutant Loading Rate (kilograms per hectare per 365 day period) |
|---|---|

| | |
|---|---|
| Arsenic | 2.0 |
| Cadmium | 1.9 |
| Copper | 75 |
| Lead | 15 |
| Mercury | 0.85 |
| Nickel | 21 |
| Selenium | 5.0 |
| Zinc | 140 |

(c) Domestic septage. The annual application rate for domestic septage applied to agricultural land, forest, or a reclamation site shall not exceed the annual application rate calculated using equation (1), or the agronomic rate.

$$AAR = \frac{N}{0.0026} \quad \text{(Equation 1)}$$

Where :

AAR = Annual application rate in gallons per acre per 365 day period.

N = Amount of nitrogen in pounds per acre per 365 day period needed by the crop or vegetation grown on the land.

(d) Additional parameters may be required, from the application information or subsequent monitoring in a permit thereafter, but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR 136; Subchapter N (40 CFR Part 400 through 402 and 404 through 471)) may be required (in a permit) to be monitored for in the sewage sludge.

**503.14 Management practices.**

(a) Bulk sewage sludge shall not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under section 4 of the Endangered Species Act or its designated critical habitat.

(b) Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters of the State, as defined in R.61-9.122.2, except as provided in a permit issued pursuant to section 402 or 404 of the CWA.

(c) Bulk sewage sludge shall not be applied to agricultural land, forest, or a reclamation site that is 10 meters or less from waters of the State, as defined in R.61-9.122.2, unless otherwise specified by the Department.

(d) Bulk sewage sludge shall be applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that is equal to or less than the agronomic rate for the bulk sewage sludge, unless, in the case of a reclamation site, otherwise specified by the Department.

(e) Either a label shall be affixed to the bag or other container in which sewage sludge that is sold or given away for application to the land, or an information sheet shall be provided to the person who receives sewage sludge sold or given away in an other container for application to the land. The label or information sheet shall contain the following information:

(1) The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.

(2) A statement that application of the sewage sludge to the land is prohibited except in accordance with the instructions on the label or information sheet.

(3) The annual whole sludge application rate for the sewage sludge that does not cause any of the annual pollutant loading rates in Table 4 of section 503.13 to be exceeded.

(4) The annual whole sludge application rate for the sewage sludge that does not cause the agronomic rate for appropriate crops to be exceeded (to be presented in tons/acre or other units approved by the Department).

(f) Screening of septage is required prior to land application. The screenings must be disposed of properly (e.g. municipal waste landfill).

**503.15 Operational standards - pathogens and vector attraction reduction.**

(a) Pathogens - sewage sludge.

(1) The Class A pathogen requirements in section 503.32(a) or the Class B pathogen requirements and site restrictions in section 503.32(b) shall be met when bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site.

(2) The Class A pathogen requirements in section 503.32(a) shall be met when bulk sewage sludge is applied to a lawn or a home garden.

(3) The Class A pathogen requirements in section 503.32(a) shall be met when sewage sludge is sold or given away in a bag or other container for application to the land.

(b) Pathogens - domestic septage. The requirements in either section 503.32(c)(2), or section 503.32(c)(3) shall be met when domestic septage is applied to agricultural land, forest, or a reclamation site.

(c) Vector attraction reduction - sewage sludge.

(1) One of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(10) shall be met when bulk sewage sludge is applied to agricultural land, forest, a

public contact site, or a reclamation site.

(2) One of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8) shall be met when bulk sewage sludge is applied to a lawn or a home garden.

(3) One of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8) shall be met when sewage sludge is sold or given away in a bag or other container for application to the land.

(d) Vector attraction reduction - domestic septage. The vector attraction reduction requirements in section 503.33(b)(9), section 503.33(b)(10), or section 503.33(b)(12) shall be met when domestic septage is applied to agricultural land, forest, or a reclamation site.

**503.16 Frequency of monitoring.**

(a) Sewage sludge.

(1) The frequency of monitoring for the pollutants listed in Table 1, Table 2, Table 3 and Table 4 of section 503.13; the pathogen density requirements in section 503.32(a) and section 503.32(b)(2) and the vector attraction reduction requirements in section 503.33(b)(1) through (b)(4) and sections 503.33(b)(7) and (b)(8) shall be the frequency in Table 1 of section 503.16. Facilities which generate less than 290 metric tons of sludge per year and dispose of the sludge once per year or less, may request a reduction in monitoring to a frequency of once per year. The Department will review these requests on a case-by-case basis.

| TABLE 1 0F SECTION 503.16 - FREQUENCY OF MONITORING - LAND APPLICATION | |
|---|---|
| Amount of Sewage Sludge[1] (metric tons per 365-day period | Frequency |
| Greater than zero but less than 1,500 | Once per quarter (four times per year) |
| Equal to or greater than 1,500 but less than 15,000 | Once per 60 days (six times per year) |
| Equal to or greater than 15,000. | Once per month (12 times per year) |

1Either the amount of bulk sewage sludge applied to the land or the amount of sewage sludge prepared for sale or give-away in a bag or other container for application to the land (dry weight basis).

(2) After the sewage sludge has been monitored for two years at the frequency in Table 1 of section 503.16, the Department may reduce the frequency of monitoring for pollutant concentrations and for the pathogen density requirements in section 503.32(a)(5)(ii) and section (a)(5)(iii), but in no case shall the frequency of monitoring be less than once per year when sewage sludge is applied to the land.

(b) Domestic septage. If either the pathogen requirements in section 503.32(c)(1) and section 503.32(c)(2) or section 503.32(c)(3) and the vector attraction reduction requirements in section 503.33(b)(12) are met when domestic septage is applied to agricultural land, forest, or a reclamation site, each container of domestic septage applied to the land shall be monitored for compliance with those

requirements.

**503.17 Recordkeeping.**

(a) Sewage sludge.

(1) The person who prepares the sewage sludge in section 503.10(b)(2) or in section 503.10(e) shall develop the following information and shall retain the information for five years:

(i) The concentration of each pollutant listed in Table 3 of section 503.13 in the sewage sludge.

(ii) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the Class A pathogen requirements in section 503.32(a) and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in section 503.33(b)(1) through 503.33(b)(8)] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(iii) A description of how the Class A pathogen requirements in section 503.32(a) are met.

(iv) A description of how one of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8) is met.

(2) The person who derives the material in section 503.10(c)(2) or in section 503.10(f) shall develop the following information and shall retain the information for five years:

(i) The concentration of each pollutant listed in Table 3 of section 503.13 in the material.

(ii) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the Class A pathogen requirements in section 503.32(a) and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in section 503.33(b)(1) through (b)(8)] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(iii) A description of how the Class A pathogen requirements in section 503.32(a) are met.

(iv) A description of how one of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8) is met.

(3) If the pollutant concentrations in section 503.13(b)(3), the Class A pathogen requirements in section 503.32(a), and the vector attraction reduction requirements in either section 503.33(b)(9) or section 503.33(b)(10) are met when bulk sewage sludge is applied to agricultural land, forest, a public

contact site, or a reclamation site:

(i) The person who prepares the bulk sewage sludge shall develop the following information and shall retain the information for five years.

(A) The concentration of each pollutant listed in Table 3 of section 503.13 in the bulk sewage sludge.

(B) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the Class A pathogen requirements in section 503.32(a) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(C) A description of how the pathogen requirements in section 503.32(a) are met.

(ii) The person who applies the bulk sewage sludge shall develop the following information and shall retain the information for five years.

(A) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in section 503.14 and the vector attraction reduction requirement in [insert either section 503.33(b)(9) or (b)(10)] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(B) A description of how the management practices in section 503.14 are met for each site on which bulk sewage sludge is applied.

(C) A description of how the vector attraction reduction requirements in either section 503.33(b)(9) or section 503.33(b)(10) are met for each site on which bulk sewage sludge is applied.

(4) If the pollutant concentrations in section 503.13(b)(3) and the Class B pathogen requirements in section 503.32(b) are met when bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site:

(i) The person who prepares the bulk sewage sludge shall develop the following information and shall retain the information for five years:

(A) The concentration of each pollutant listed in Table 3 of section 503.13 in the bulk sewage sludge.

(B) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the Class B pathogen requirements in section 503.32(b) and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in section 503.33(b)(1) through (b)(8), if one of those requirements is met] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified

personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(C) A description of how the Class B pathogen requirements in section 503.32(b) are met.

(D) When one of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8) is met, a description of how the vector attraction reduction requirement is met.

(ii) The person who applies the bulk sewage sludge shall develop the following information and shall retain the information for five years.

(A) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in section 503.14, the site restrictions in section 503.32(b)(5), and the vector attraction reduction requirements in [insert either section 503.33(b)(9) or (b)(10), if one of those requirements is met] was prepared for each site on which bulk sewage sludge is applied under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(B) A description of how the management practices in section 503.14 are met for each site on which bulk sewage sludge is applied.

(C) A description of how the site restrictions in section 503.32(b)(5) are met for each site on which bulk sewage sludge is applied.

(D) When the vector attraction reduction requirement in either section 503.33(b)(9) or section 503.33(b)(10) is met, a description of how the vector attraction reduction requirement is met.

(E) The date bulk sewage sludge is applied to each site.

(5) If the requirements in section 503.13(a)(2)(i) are met when bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site:

(i) The person who prepares the bulk sewage sludge shall develop the following information and shall retain the information for five years.

(A) The concentration of each pollutant listed in Table 1 of section 503.13 in the bulk sewage sludge.

(B) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the pathogen requirements in [insert either section 503.32(a) or 503.32(b)] and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in section 503.33(b)(1) through (b)(8), if one of those requirements is met] was prepared under my direction and supervision in accordance with the system designed to ensure

that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(C) A description of how the pathogen requirements in either section 503.32(a) or section 503.32(b) are met.

(D) When one of the vector attraction requirements in section 503.33(b)(1) through section 503.33(b)(8) is met, a description of how the vector attraction requirement is met.

(ii) The person who applies the bulk sewage sludge shall develop the following information, retain the information in section 503.17(a)(5)(ii)(A) through section 503.17(a)(5)(ii)(G) indefinitely, and retain the information in section 503.17(a)(5)(ii)(H) through section 503.17(a)(5)(ii)(M) for five years.

(A) The location, by either street address or latitude and longitude, of each site on which bulk sewage sludge is applied.

(B) The number of hectares in each site on which bulk sewage sludge is applied.

(C) The date bulk sewage sludge is applied to each site.

(D) The cumulative amount of each pollutant (i.e., kilograms) listed in Table 2 of section 503.13 in the bulk sewage sludge applied to each site, including the amount in section 503.12(e)(2)(iii).

(E) The amount of sewage sludge (i.e., metric tons) applied to each site.

(F) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the requirements to obtain information in section 503.12(e)(2) was prepared for each site on which bulk sewage sludge was applied under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(G) A description of how the requirements to obtain information in section 503.12(e)(2) are met.

(H) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in section 503.14 was prepared for each site on which bulk sewage sludge was applied under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(I) A description of how the management practices in section 503.14 are met for each site on which bulk sewage sludge is applied.

(J) The following certification statement when the bulk sewage sludge meets the Class B pathogen requirements in section 503.32(b): "I certify, under penalty of law, that the information that

will be used to determine compliance with the site restrictions in section 503.32(b)(5) for each site on which Class B sewage sludge was applied was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(K) A description of how the site restrictions in section 503.32(b)(5) are met for each site on which Class B bulk sewage sludge is applied.

(L) The following certification statement when the vector attraction reduction requirement in either section 503.33(b)(9) or (b)(10) is met: "I certify, under penalty of law, that the information that will be used to determine compliance with the vector attraction reduction requirement in [insert either section 503.33(b)(9) or 503.33(b)(10)] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(M) If the vector attraction reduction requirements in either section 503.33(b)(9) or section 503.33(b)(10) are met, a description of how the requirements are met.

(6) If the requirements in section 503.13(a)(4)(ii) are met when sewage sludge is sold or given away in a bag or other container for application to the land, the person who prepares the sewage sludge that is sold or given away in a bag or other container shall develop the following information and shall retain the information for five years:

(i) The annual whole sludge application rate for the sewage sludge that does not cause the annual pollutant loading rates in Table 4 of section 503.13 to be exceeded.

(ii) The concentration of each pollutant listed in Table 4 of section 503.13 in the sewage sludge.

(iii) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the management practice in section 503.14(e), the Class A pathogen requirement in section 503.32(a), and the vector attraction reduction requirement in [insert one of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8)] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(iv) A description of how the Class A pathogen requirements in section 503.32(a) are met.

(v) A description of how one of the vector attraction requirements in section 503.33(b)(1) through section 503.33(b)(8) is met.

(b) Domestic septage. When domestic septage is applied to agricultural land, forest, or a reclamation site, the person who applies the domestic septage shall develop the following information

and shall retain the information for five years:

(1) The location, by either street address or latitude and longitude, of each site on which domestic septage is applied.

(2) The number of acres in each site on which domestic septage is applied.

(3) The date domestic septage is applied to each site.

(4) The nitrogen requirement for the crop or vegetation grown on each site during a 365 day period.

(5) The rate, in gallons per acre per 365 day period, at which domestic septage is applied to each site.

(6) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the pathogen requirements in [insert either section 503.32(c)(1) or section 503.32(c)(2)] and the vector attraction reduction requirements in [insert section 503.33(b)(9), section 503.33(b)(10), or section 503.33(b)(12)] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(7) A description of how the pathogen requirements in either section 503.32(c)(1) or (c)(2) are met.

(8) A description of how the vector attraction reduction requirements in section 503.33(b)(9), section 503.33(b)(10), or section 503.33(b)(12) are met.

**503.18 Reporting.**

(a) Any generator of sewage sludge that is applied to the land, any person who prepares sewage sludge that is applied to the land, or any person who applies sewage sludge to the land, including Class I sludge management facilities, POTWs (as defined in 40 CFR 501.2) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more shall submit the following information to the Department:

(1) The information in section 503.17(a), except the information in section 503.17(a)(3)(ii), section 503.17(a)(4)(ii) and in section 503.17(a)(5)(ii), for the appropriate requirements on or before February 19 of each year, for the period of January 1 through December 31 of the previous calendar year.

(2) The information in section 503.17(a)(5)(ii)(A) through (a)(5)(ii)(G) on or before February 19th of each year, for the period of January 1 through December 31 of the previous calendar year when 90 percent or more of any of the cumulative pollutant loading rates in Table 2 of section 503.13 is reached at a land application site.

(b) [Reserved.]

## Part C
## Surface Disposal

**503.20 Applicability.**

(a) This part applies to any person who prepares sewage sludge that is placed on a surface disposal site, to the owner/operator of a surface disposal site, to sewage sludge placed on a surface disposal site, and to a surface disposal site.

(b) This part does not apply to sewage sludge stored on the land or to the land on which sewage sludge is stored. It also does not apply to sewage sludge that remains on the land for longer than two years when the person who prepares the sewage sludge demonstrates that the land on which the sewage sludge remains is not an active sewage sludge unit. The demonstration shall include the following information, which shall be retained by the person who prepares the sewage sludge for the period that the sewage sludge remains on the land:

(1) The name and address of the person who prepares the sewage sludge.

(2) The name and address of the person who either owns the land or leases the land.

(3) The location, by either street address or latitude and longitude, of the land.

(4) An explanation of why sewage sludge needs to remain on the land for longer than two years prior to final use or disposal.

(5) The approximate time period when the sewage sludge will be used or disposed.

(c) This part does not apply to sewage sludge treated on the land or to the land on which sewage sludge is treated.

**503.21 Special definitions.**

(a) "Active sewage sludge unit" is a sewage sludge unit that has not closed.

(b) "Aquifer" is a geologic formation, group of geologic formations, or a portion of a geologic formation capable of yielding ground water to wells or springs.

(c) "Contaminate an aquifer" means to introduce a substance that causes the maximum contaminant level for nitrate in 40 CFR 141.62(b) or R.61-68 (Water Classifications and Standards) to be exceeded in the ground water or that causes the existing concentration of nitrate in ground water to increase when the existing concentration of nitrate in the ground water exceeds the maximum contaminant level for nitrate in 40 CFR 141.62(b) or R.61-68 (Water Classifications and Standards).

(d) "Cover" is soil or other material used to cover sewage sludge placed on an active sewage sludge unit.

(e) “Displacement” is the relative movement of any two sides of a fault measured in any direction.

(f) “Fault” is a fracture or zone of fractures in any materials along which strata on one side are displaced with respect to strata on the other side.

(g) “Final cover” is the last layer of soil or other material placed on a sewage sludge unit at closure.

(h) “Holocene time” is the most recent epoch of the Quaternary period, extending from the end of the Pleistocene epoch to the present.

(i) “Leachate collection system” is a system or device installed immediately above a liner that is designed, constructed, maintained, and operated to collect and remove leachate from a sewage sludge unit.

(j) “Liner” is soil or synthetic material that has a hydraulic conductivity of 1 x 10-7 centimeters per second or less.

(k) “Lower explosive limit” for methane gas is the lowest percentage of methane gas in air, by volume, that propagates a flame at 25 degrees Celsius and atmospheric pressure.

(l) “Qualified ground-water scientist” is an individual with a baccalaureate or post-graduate degree in the natural sciences or engineering who has sufficient training and experience in ground-water hydrology and related fields, as may be demonstrated by State registration, professional certification, or completion of accredited university programs, to make sound professional judgments regarding ground-water monitoring, pollutant fate and transport, and corrective action.

(m) “Seismic impact zone” is an area that has a 10 percent or greater probability that the horizontal ground level acceleration of the rock in the area exceeds 0.10 gravity once in 250 years.

(n) “Sewage sludge unit” is land on which only sewage sludge is placed for final disposal. This does not include land on which sewage sludge is either stored or treated. Land does not include waters of the State, as defined in R.61-9.122.2. Does not include beneficial use activities covered under Part B, which comply with agronomic rate requirements and metals limitations.

(o) “Sewage sludge unit boundary” is the outermost perimeter of an active sewage sludge unit.

(p) “Surface disposal site” is an area of land that contains one or more active sewage sludge units.

(q) “Unstable area” is land subject to natural or human-induced forces that may damage the structural components of an active sewage sludge unit. This includes, but is not limited to, land on which the soils are subject to mass movement.

**503.22 General requirements.**

(a) No person shall place sewage sludge on an active sewage sludge unit unless the requirements in this part are met.

(1) The following activities or conditions constitute surface disposal (unless the Department has issued a permit for the specific activity):

(i) Storage of sewage sludge, excluding sludge treatment, for more than two (2) years constitutes surface disposal.

(ii) The design storage capacity of sewage sludge will not be permitted to exceed two (2) years at the treatment plant design conditions, or

(iii) Accumulation of sewage sludge in a wastewater treatment unit to greater than fifty (50) percent of the capacity of the unit or to an average depth of greater than design depth constitutes surface disposal of sludge under this regulation, or

(iv) Storage of sewage sludge that adversely impacts the overall facility operation and maintenance or results in an excessive sludge inventory, may result in a facility being identified as a surface disposal site.

(2) For any facility, except a landfill or a sludge only monofill, meeting the definition of a surface disposal site on or after the date of this regulation, a report detailing the final closure of the site must be submitted to the Bureau of Water Pollution Control, Department of Health and Environmental Control, within one (1) year after the date of this regulation. The facility must be closed within five (5) years after the date of this regulation, and a plan must provide a schedule showing how the closure will be accomplished.

(3) Surface disposal of sewage sludge to existing active surface disposal facilities that are not permitted under R.61-258 must cease within three (3) years after the date of this regulation, or sufficient amounts of sludge must be removed from the facility in order to change the facility's classification.

(b) An active sewage sludge unit located within 60 meters of a fault that has displacement in Holocene time; located in an unstable area; or located in a wetland, except as provided in a permit issued pursuant to section 402 or 404 of the CWA, shall close byMarch 22, 1994, unless, in the case of an active sewage sludge unit located within 60 meters of a fault that has displacement in Holocene time, otherwise specified by the Department.

(c) The owner/operator of an active sewage sludge unit shall submit a written closure and post closure plan to the Department 180 days prior to the date that the active sewage sludge unit closes. The plan shall describe how the sewage sludge unit will be closed and, at a minimum, shall include:

(1) A discussion of how the leachate collection system will be operated and maintained for three years after the sewage sludge unit closes if the sewage sludge unit has a liner and leachate collection system.

(2) A description of the system used to monitor for methane gas in the air in any structures within the surface disposal site and in the air at the property line of the surface disposal site, as required in section 503.24(j)(2).

(3) A discussion of how public access to the surface disposal site will be restricted for three

years after the last sewage sludge unit in the surface disposal site closes.

(d) The owner of a surface disposal site shall provide written notification to the subsequent owner of the site that sewage sludge was placed on the land.

(e) Surface disposal of sludge in a landfill, including sludge only monofills, shall comply with State Solid Waste regulations and requirements in permits.

(f) Surface disposal of sludge by land application may be considered if the proposed application rates are at or below the agronomic rates as defined in section 503.11(b); additional requirements as defined in section 503.12 may be applied on a case-by-case basis.

(g) If a deleterious impact to the groundwaters of the State from sewage sludge use or disposal practices is documented, through groundwater monitoring levels exceeding the standards set forth in R.61-68 or a significant adverse trend occurs, then it will be the obligation of the generator/preparer of the sewage sludge as directed by the Department to conduct an investigation to determine the vertical and horizontal extent of groundwater impact. The Department may require remediation of the groundwater to within acceptable levels for groundwater as set forth in R.61-68.

**503.23 Pollutant limits (other than domestic septage).**

(a) Active sewage sludge unit without a liner and leachate collection system

(1) Except as provided in section 503.23(a)(2) and section 503.23(b), the concentration of each pollutant listed in Table 1 of section 503.23 in sewage sludge placed on an active sewage sludge unit shall not exceed the concentration for the pollutant in Table 1 of section 503.23.

TABLE 1 OF SECTION 503.23 -- POLLUTANT CONCENTRATIONS - ACTIVE SEWAGE SLUDGE UNIT WITHOUT A LINER AND LEACHATE COLLECTION

| Pollutant | Concentration (milligrams per kilograms) Dry weight basis |
|---|---|
| Arsenic | 73 |
| Chromium | 600 |
| Nickel | 420 |

(2) Except as provided in section 503.23(b), the concentration of each pollutant listed in Table 1 of section 503.23 in sewage sludge placed on an active sewage sludge unit whose boundary is less than 150 meters from the property line of the surface disposal site shall not exceed the concentration determined using the following procedure.

(i) The actual distance from the active sewage sludge unit boundary to the property line of the surface disposal site shall be determined.

(ii) The concentration of each pollutant listed in Table 2 of section 503.23 in the sewage sludge shall not exceed the concentration in Table 2 of section 503.23 that corresponds to the actual distance in section 503.23(a)(2)(i).

TABLE 2 OF SECTION 503.23 -- POLLUTANT CONCENTRATIONS - ACTIVE SEWAGE SLUDGE UNIT WITHOUT A LINER AND LEACHATE COLLECTION SYSTEM THAT HAS A UNIT BOUNDARY TO PROPERTY LINE DISTANCE LESS THAN 150 METERS

| | Pollutant concentration (Dry weight Basis) | | |
|---|---|---|---|
| Unit boundary to property line distance. (meters) | Arsenic (mg/kg) | Chromium (mg/kg) | Nickel (mg/kg) |
| 0 to less than 25 | 30 | 200 | 210 |
| 25 to less than 50 | 34 | 220 | 240 |
| 50 to less than 75 | 39 | 260 | 270 |
| 75 to less than 100 | 46 | 300 | 320 |
| 100 to less than 125 | 53 | 360 | 390 |
| 125 to less than 150 | 62 | 450 | 420 |

(b) Active sewage sludge unit without a liner and leachate collection system - site-specific limits

(1) At the time of permit application, the owner/operator of a surface disposal site may request site-specific pollutant limits in accordance with section 503.23(b)(2) for an active sewage sludge unit without a liner and leachate collection system when the existing values for site parameters specified by the Department are different from the values for those parameters used to develop the pollutant limits in Table 1 of section 503.23 and when the Department determines that site-specific pollutant limits are appropriate for the active sewage sludge unit.

(2) The concentration of each pollutant listed in Table 1 of section 503.23 in sewage sludge placed on an active sewage sludge unit without a liner and leachate collection system shall not exceed either the concentration for the pollutant determined during a site-specific assessment, as specified by the Department, or the existing concentration of the pollutant in the sewage sludge, whichever is lower.

(c) Additional parameters may be required in the initial analysis and subsequent monitoring thereafter, but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Sub Chapter N (40 CFR Part 400 through 402 and 404 through 471)) may be required (in a permit) to be monitored for in the sewage sludge.

**503.24 Management practices.**

(a) Sewage sludge shall not be placed on an active sewage sludge unit if it is likely to adversely affect a threatened or endangered species listed under section 4 of the Endangered Species Act or its designated critical habitat.

(b) An active sewage sludge unit shall not restrict the flow of a base flood.

(c) When a surface disposal site is located in a seismic impact zone, an active sewage sludge unit shall be designed to withstand the maximum recorded horizontal ground level acceleration.

(d) An active sewage sludge unit shall be located 60 meters or more from a fault that has displacement in Holocene time, unless otherwise specified by the Department.

(e) An active sewage sludge unit shall not be located in an unstable area.

(f) An active sewage sludge unit shall not be located in a wetland, except as provided in a permit issued pursuant to section 402 or 404 of the CWA.

(g) (1) Run-off from an active sewage sludge unit shall be collected and shall be disposed in accordance with National Pollutant Discharge Elimination System permit requirements (see R.61-9.122 and 124) and any other applicable requirements.

(2) The run-off collection system for an active sewage sludge unit shall have the capacity to handle run-off from a 24-hour, 25-year storm event.

(h) The leachate collection system for an active sewage sludge unit that has a liner and leachate collection system shall be operated and maintained during the period the sewage sludge unit is active and for three years after the sewage sludge unit closes.

(i) Leachate from an active sewage sludge unit that has a liner and leachate collection system shall be collected and shall be disposed in accordance with the applicable requirements during the period the sewage sludge unit is active and for three years after the sewage sludge unit closes.

(j) (1) When a cover is placed on an active sewage sludge unit, the concentration of methane gas in air in any structure within the surface disposal site shall not exceed 25 percent of the lower explosive limit for methane gas during the period that the sewage sludge unit is active and the concentration of methane gas in air at the property line of the surface disposal site shall not exceed the lower explosive limit for methane gas during the period that the sewage sludge unit is active.

(2) When a final cover is placed on a sewage sludge unit at closure, the concentration of methane gas in air in any structure within the surface disposal site shall not exceed 25 percent of the lower explosive limit for methane gas for three years after the sewage sludge unit closes and the concentration of methane gas in air at the property line of the surface disposal site shall not exceed the lower explosive limit for methane gas for three years after the sewage sludge unit closes, unless otherwise specified by the Department.

(k) A food crop, a feed crop, or a fiber crop shall not be grown on an active sewage sludge unit, unless the owner/operator of the surface disposal site demonstrates to the Department that through management practices public health and the environment are protected from any reasonably anticipated adverse effects of pollutants in sewage sludge when crops are grown.

(l) Animals shall not be grazed on an active sewage sludge unit, unless the owner/operator of the surface disposal site demonstrates to the Department that through management practices public health and the environment are protected from any reasonably anticipated adverse effects of pollutants in sewage sludge when animals are grazed.

(m) Public access to a surface disposal site shall be restricted for the period that the surface disposal site contains an active sewage sludge unit and for three years after the last active sewage sludge unit in the surface disposal site closes.

(n) (1) Sewage sludge placed on an active sewage sludge unit shall not contaminate an aquifer.

(2) Results of a ground-water monitoring program developed by a qualified ground-water scientist or a certification by a qualified ground-water scientist shall be used to demonstrate that sewage sludge placed on an active sewage sludge unit does not contaminate an aquifer.

**503.25 Operational standards - pathogens and vector attraction reduction.**

(a) Pathogens - sewage sludge (other than domestic septage). The Class A pathogens requirements in section 503.32(a) or one of the Class B pathogen requirements in section 503.32(b)(2) through section 503.32(b)(4) shall be met when sewage sludge is placed on an active sewage sludge unit, unless the vector attraction reduction requirement in section 503.33(b)(11) is met.

(b) Vector attraction reduction - sewage sludge (other than domestic septage). One of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(11) shall be met when sewage sludge is placed on an active sewage sludge unit.

(c) Vector attraction reduction - domestic septage. One of the vector attraction reduction requirement in section 503.33(b)(9) through section 503.33(b)(12) shall be met when domestic septage is placed on an active sewage sludge unit.

**503.26 Frequency of monitoring.**

(a) Sewage sludge (other than domestic septage).

(1) The frequency of monitoring for the pollutants in Tables 1 and 2 of section 503.23; the pathogen density requirements in section 503.32(a) and in section 503.32(b)(2); and the vector attraction reduction requirements in section 503.33(b)(1) through (b)(4) and section 503.33(b)(7) and (b)(8) for sewage sludge placed on an active sewage sludge unit shall be the frequency in Table 1 of section 503.26. Facilities which generate less than 290 metric tons of sludge per year and dispose of the sludge once a year or less, may request a reduction in monitoring to a frequency of once per year. The department will review these requests on a case-by-case basis.

TABLE 1 OF SECTION 503.26 -- FREQUENCY OF MONITORING - SURFACE DISPOSAL

| Amount of sewage sludge1 (metric tons per 365 day period) | Frequency |
|---|---|
| Greater than zero but less than 1,500 | Once per quarter (four times per year) |
| Equal to or greater than 1,500 but less than 15,000 | Once per 60 days (six times per year) |
| Equal to or greater than 15,000 | Once per month (12 times per year) |

1 Amount of sewage sludge placed on an active sewage sludge unit (dry weight basis).

(2) After the sewage sludge has been monitored for two years at the frequency in Table 1 of this section, the Department may reduce the frequency of monitoring for pollutant concentrations and for the pathogen density requirements in section 503.32(a)(5)(ii) and (a)(5)(iii), but in no case shall the frequency of monitoring be less than once per year when sewage sludge is placed on an active sewage sludge unit.

(b) Domestic septage. If the vector attraction reduction requirements in section 503.33(b)(12) are met when domestic septage is placed on an active sewage sludge unit, each container of domestic septage shall be monitored for compliance with those requirements.

(c) Air. Air in structures within a surface disposal site and at the property line of the surface disposal site shall be monitored continuously for methane gas during the period that the surface disposal site contains an active sewage sludge unit on which the sewage sludge is covered and for three years after a sewage sludge unit closes when a final cover is placed on the sewage sludge.

**503.27 Recordkeeping.**

(a) When sewage sludge (other than domestic septage) is placed on an active sewage sludge unit:

(1) The person who prepares the sewage sludge shall develop the following information and shall retain the information for five years.

(i) The concentration of each pollutant listed in Table 1 of section 503.23 in the sewage sludge when the pollutant concentrations in Table 1 of section 503.23 are met.

(ii) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the pathogen requirements in [insert section 503.32(a), section 503.32(b)(2), section 503.32(b)(3), or section 503.32(b)(4), when one of those requirements is met] and the vector attraction reduction requirements in [insert one of the vector attraction reduction requirements in section 503.33(b)(1) through (b)(8), if one of those requirements is

met] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(iii) A description of how the pathogen requirements in section 503.32(a), section 503.32(b)(2), section 503.32(b)(3), or section 503.32(b)(4) are met when one of those requirements is met.

(iv) A description of how one of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8) is met when one of those requirements is met.

(2) The owner/operator of the surface disposal site shall develop the following information and shall retain that information for five years.

(i) The concentration of each pollutant listed in Table 2 of section 503.23 in the sewage sludge when the pollutant concentrations in Table 2 of section 503.23 are met or when site-specific pollutant limits in section 503.23(b) are met.

(ii) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in section 503.24 and the vector attraction reduction requirement in [insert one of the requirements in section 503.33(b)(9) through section 503.33(b)(11), if one of those requirements is met] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(iii) A description of how the management practices in section 503.24 are met.

(iv) A description of how the vector attraction reduction requirements in section 503.33(b)(9) through section 503.33(b)(11) are met if one of those requirements is met.

(b) When domestic septage is placed on a surface disposal site:

(1) If the vector attraction reduction requirements in section 503.33(b)(12) are met, the person who places the domestic septage on the surface disposal site shall develop the following information and shall retain the information for five years:

(i) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the vector attraction reduction requirements in section 503.33(b)(12) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

(ii) A description of how the vector attraction reduction requirements in section 503.33(b)(12) are met.

(2) The owner/operator of the surface disposal site shall develop the following information and shall retain that information for five years:

(i) The following certification statement: "I certify, under penalty of law, that the information that will be used to determine compliance with the management practices in section 503.24 and the vector attraction reduction requirements in [insert section 503.33(b)(9) through section 503.33(b)(11), if one of those requirements is met] was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine or imprisonment."

(ii) A description of how the management practices in section 503.24 are met.

(iii) A description how the vector attraction reduction requirements in section 503.33(b)(9) through section 503.33(b)(11) are met if one of those requirements is met.

**503.28 Reporting.**

(a) Any generator of sewage sludge disposed of at a surface disposal site, any person who prepares sewage sludge that is disposed of at a surface disposal site, or any person who disposes of sewage sludge at a surface disposal site, including Class I sludge management facilities, POTWs (as defined in 40 CFR 501.2) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more shall submit the information in section 503.27(a) to the Department on or before February 19 of each year, for the period of January 1 through December 31 of the previous calendar year.

## Part D
## Pathogens and Vector Attraction Reduction

**503.30 Scope.**

(a) This part contains the requirements for a sewage sludge to be classified either Class A or Class B with respect to pathogens.

(b) This part contains the site restrictions for land on which a Class B sewage sludge is applied.

(c) This part contains the pathogen requirements for domestic septage applied to agricultural land, forest, or a reclamation site.

(d) This part contains alternative vector attraction reduction requirements for sewage sludge that is applied to the land or placed on a surface disposal site.

**503.31 Special definitions.**

(a) "Aerobic digestion" is the biochemical decomposition of organic matter in sewage sludge into carbon dioxide and water by microorganisms in the presence of air.

(b) "Anaerobic digestion" is the biochemical decomposition of organic matter in sewage sludge into

methane gas and carbon dioxide by microorganisms in the absence of air.

(c) "Density of microorganisms" is the number of microorganisms per unit mass of total solids (dry weight) in the sewage sludge.

(d) "Land with a high potential for public exposure" is land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (e.g., a construction site located in a city).

(e) "Land with a low potential for public exposure" is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest, and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

(f) "Pathogenic organisms" are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

(g) "pH" means the logarithm of the reciprocal of the hydrogen ion concentration measured at twenty-five degrees Centigrade or measured at another temperature and then converted to an equivalent value at twenty-five degrees Centigrade.

(h) "Specific oxygen uptake rate (SOUR)" is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the sewage sludge.

(i) "Total solids" are the materials in sewage sludge that remain as residue when the sewage sludge is dried at 103 to 105 degrees Celsius.

(j) "Unstabilized solids" are organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process to include extended aeration, activated sludge or other treatment processes approved by the Department.

(k) "Vector attraction" is the characteristic of sewage sludge that attracts rodents, flies, mosquitos, or other organisms capable of transporting infectious agents.

(l) "Volatile solids" is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air.

**503.32 Pathogens.**

(a) Sewage sludge - Class A.

(1) The requirement in section 503.32(a)(2) and the requirements in either section 503.32(a)(3), section 503.32(a)(4), section 503.32(a)(5), section 503.32(a)(6), section 503.32(a)(7), or section 503.32(a)(8) shall be met for a sewage sludge to be classified Class A with respect to pathogens.

(2) The Class A pathogen requirements in section 503.32(a)(3) through section 503.32(a)(8) shall be met either prior to meeting or at the same time the vector attraction reduction requirements in section 503.33, except the vector attraction reduction requirements in section 503.33(b)(6) through

section 503.33(b)(8), are met.

(3) Class A - Alternative 1.

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in section 503.10(b), section 503.10(c), section 503.10(e), or section 503.10(f).

(ii) The temperature of the sewage sludge that is used or disposed shall be maintained at a specific value for a period of time.

(A) When the percent solids of the sewage sludge is seven percent or higher, the temperature of the sewage sludge shall be 50 degrees Celsius or higher; the time period shall be 20 minutes or longer; and the temperature and time period shall be determined using equation (2), except when small particles of sewage sludge are heated by either warmed gases or an immiscible liquid.

$$D = \frac{131{,}700{,}000}{10^{0.1400t}} \quad \text{(Equation 2)}$$

Where,

D = time in days.

t = temperature in degrees Celsius.

TABLE 1 OF SECTION 503.32 -- If the sewage sludge is 7% solids or higher.

| Temperature (Celsius) | Time |
|---|---|
| 50.0 (minimum) | 13.17 days |
| 60.0 | 12 hours 43 minutes |
| 65.0 | 2 hours 39 minutes |
| 70.0 | 30 minutes |
| 71.3 | 20 minutes (minimum) |

(B) When the percent solids of the sewage sludge is seven percent or higher and small particles of sewage sludge are heated by either warmed gases or an immiscible liquid, the temperature

of the sewage sludge shall be 50 degrees Celsius or higher; the time period shall be 15 seconds or longer; and the temperature and time period shall be determined using equation (2).

TABLE 2 OF SECTION 503.32 -- If the sewage sludge is 7% solids or higher and small particles of sewage sludge are heated by warm gases or an immiscible liquid.

| Temperature (Celsius) | Time |
|---|---|
| 50.0 (minimum) | 13.17 days |
| 65.0 | 2 hours 39 minutes |
| 71.3 | 20 minutes |
| 80.0 | 1 minute 12 seconds |
| 84.9 | 15 seconds (minimum) |

(C) When the percent solids of the sewage sludge is less than seven percent and the time period is at least 15 seconds, but less than 30 minutes, the temperature and time period shall be determined using equation (2).

TABLE 3 OF SECTION 503.32 -- If the sewage sludge is less than 7% solids and the time period is at least 15 seconds, but less than 30 minutes.

| Temperature (Celsius) | Time |
|---|---|
| 70.0 | 30 minutes (Maximum time. See (D) for greater than 30 minutes) |
| 71.3 | 20 minutes |
| 75.0 | 6 minutes |
| 80.0 | 1 minute 12 seconds |
| 84.9 | 15 seconds (minimum) |

(D) When the percent solids of the sewage sludge is less than seven percent; the temperature of the sewage sludge is 50 degrees Celsius or higher; and the time period is 30 minutes or longer, the temperature and time period shall be determined using equation (3).

$$D = \frac{50{,}70{,}000}{10^{0.1400t}} \quad \text{(Equation 3)}$$

Where,

D = time in days.

t = temperature in degrees Celsius.

TABLE 4 OF SECTION 503.32 -- If the sewage sludge is less than 7% solids and the temperature of the sewage sludge is 50 degrees Celsius or higher; and the time period is 30 minutes or longer.

| Temperature (Celsius) | Time |
|---|---|
| 50.0 (minimum) | 5.0 days |
| 55.0 | 1.0 day |
| 60.0 | 4 hours 48 minutes |
| 65.0 | 58 minutes |
| 67.0 | 30 minutes (minimum) |

(iii) The temperature used in equation (2) and equation (3) will be the lowest, continuously measured temperature within the reaction vessel during a 24-hour period or the lowest measured temperature during any 24-hour period, if a continuous treatment process is used. If a batch treatment process is used, the temperature used in the equation (2) and equation (3) will be the lowest temperature measured during the batch treatment.

(iv) For design temperatures measuring greater than 70 degrees Celsius, continuous temperature monitoring shall be required.

(4) Class A - Alternative 2.

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in section 503.10(b), section 503.10(c), section 503.10(e), or section 503.10(f).

(ii)(A) The pH of the sewage sludge that is used or disposed shall be raised to above 12 and shall remain above 12 for 72 hours.

(B) The temperature of the sewage sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12.

(C) At the end of the 72 hour period during which the pH of the sewage sludge is above 12, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50 percent.

(5) Class A - Alternative 3.

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in section 503.10(b), section 503.10(c), section 503.10(e), or section 503.10(f).

(ii)(A) The sewage sludge shall be analyzed prior to pathogen treatment to determine whether the sewage sludge contains enteric viruses.

(B) When the density of enteric viruses in the sewage sludge prior to pathogen treatment is less than one Plaque-forming Unit per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to enteric viruses until the next monitoring episode for the sewage sludge.

(C) When the density of enteric viruses in the sewage sludge prior to pathogen treatment is equal to or greater than one Plaque-forming Unit per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to enteric viruses when the density of enteric viruses in the sewage sludge after pathogen treatment is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the sewage sludge that meets the enteric virus density requirement are documented.

(D) After the enteric virus reduction in paragraph (a)(5)(ii)(C) of this subsection is demonstrated for the pathogen treatment process, the sewage sludge continues to be Class A with respect to enteric viruses when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in paragraph (a)(5)(ii)(C) of this subsection.

(iii)(A) The sewage sludge shall be analyzed prior to pathogen treatment to determine whether the sewage sludge contains viable helminth ova.

(B) When the density of viable helminth ova in the sewage sludge prior to pathogen treatment is less than one per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to viable helminth ova until the next monitoring episode for the sewage sludge.

(C) When the density of viable helminth ova in the sewage sludge prior to pathogen treatment is equal to or greater than one per four grams of total solids (dry weight basis), the sewage sludge is Class A with respect to viable helminth ova when the density of viable helminth ova in the sewage sludge after pathogen treatment is less than one per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the sewage sludge that meets the viable helminth ova density requirement are documented.

(D) After the viable helminth ova reduction in paragraph (a)(5)(iii)(C) of this subsection is demonstrated for the pathogen treatment process, the sewage sludge continues to be Class A with respect to viable helminth ova when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in paragraph (a)(5)(iii)(C) of this subsection.

(6) Class A - Alternative 4.

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in section 503.10(b), section 503.10(c), section 503.10(e), or section 503.10(f).

(ii) The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in section 503.10(b), section 503.10(c), section 503.10(e), or section 503.10(f), unless otherwise specified by the Department.

(iii) The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in section 503.10(b), section 503.10(c), section 503.10(e), or section 503.10(f), unless otherwise specified by the Department.

(7) Class A - Alternative 5.

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella, sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in section 503.10(b), section 503.10(c), section 503.10(e), or section 503.10(f).

(ii) Sewage sludge that is used or disposed shall be treated in one of the Processes to Further Reduce Pathogens described in appendix B of this part.

(8) Class A - Alternative 6.

(i) Either the density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella, sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed; at the time the sewage sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the sewage sludge or material derived from sewage sludge is prepared to meet the requirements in section 503.10(b), section 503.10(c), section 503.10(e), or section 503.10(f).

(ii) Sewage sludge that is used or disposed shall be treated in a process that is equivalent to a Process to Further Reduce Pathogens, as determined by the Department.

(b) Sewage sludge - Class B.

(1)(i) The requirements in either section 503.32(b)(2), section 503.32(b)(3), or section 503.32(b)(4) shall be met for a sewage sludge to be classified Class B with respect to pathogens.

(ii) The site restrictions in section 503.32(b)(5) shall be met when sewage sludge that meets the Class B pathogen requirements in section 503.32(b)(2), section 503.32(b)(3), or section 503.32(b)(4) is applied to the land.

(2) Class B - Alternative 1.

(i) Seven representative samples of the sewage sludge that is used or disposed shall be collected.

(ii) The geometric mean of the density of fecal coliform in the samples collected in (b)(2)(i) of this subsection shall be less than either 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

(3) Class B - Alternative 2. Sewage sludge that is used or disposed shall be treated in one of the Processes to Significantly Reduce Pathogens described in appendix B of this part.

(4) Class B - Alternative 3. Sewage sludge that is used or disposed shall be treated in a process that is equivalent to a Process to Significantly Reduce Pathogens, as determined by the Department.

(5) Site Restrictions.

(i) Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.

(ii) Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for four months or longer prior to incorporation into the soil.

(iii) Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than four months prior to incorporation into the soil.

(iv) Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge.

(v) Animals shall not be grazed on the land for 30 days after application of sewage sludge.

(vi) Turf grown on land where sewage sludge is applied shall not be harvested for one year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the Department.

(vii) Public access to land with a high potential for public exposure shall be restricted for one year after application of sewage sludge.

(viii) Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

(ix) The Department may establish in permits the required application buffer setbacks for property boundaries, roadways, residential developments, dwellings, water wells, drainageways, and surface water as deemed necessary to protect public health.

(x) The Department may establish minimum requirements in permits for soil and/or groundwater monitoring, for bulk application sites, to verify compliance with the Regulation.

(c) Domestic septage.

(1) Reserved.

(2) The pH of domestic septage applied to agricultural land, forest, or a reclamation site shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 30 minutes and the site restrictions in section 503.32(b)(5)(i) through section 503.32(b)(5)(iv) shall be met.; or

(3) Any pathogen reduction process described in appendix B of this part and the site restrictions in section 503.32(b)(5)(i) through section 503.32(b)(5)(iv) shall be met.

**503.33 Vector attraction reduction.**

(a) (1) One of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(10) shall be met when bulk sewage sludge is applied to agricultural land, forest, a public contact site, or a reclamation site.

(2) One of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8) shall be met when bulk sewage sludge is applied to a lawn or a home garden.

(3) One of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(8) shall be met when sewage sludge is sold or given away in a bag or other container for application to the land.

(4) One of the vector attraction reduction requirements in section 503.33(b)(1) through section 503.33(b)(11) shall be met when sewage sludge (other than domestic septage) is placed on an active sewage sludge unit.

(5) One of the vector attraction reduction requirements in section 503.33(b)(9), section 503.33(b)(10), or section 503.33(b)(12) shall be met when domestic septage is applied to agricultural land, forest, or a reclamation site and one of the vector attraction reduction requirements in section 503.33(b)(9) through section 503.33(b)(12) shall be met when domestic septage is placed on an active sewage sludge unit.

(6) [Reserved].

(b) (1) The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent (see calculation procedure in "Environmental Regulations and Technology-Control of Pathogens and Vector Attraction in Sewage Sludge," EPA-625/R-92/013, 1992, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268).

(2) When the 38 percent volatile solids reduction requirement in section 503.33(b)(1) cannot be met for an anaerobically digested sewage sludge, vector attraction reduction can be demonstrated by digesting a portion of the previously digested sewage sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. When at the end of the 40 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 17 percent, vector attraction reduction is achieved.

(3) When the 38 percent volatile solids reduction requirement in section 503.33(b)(1) cannot be met for an aerobically digested sewage sludge, vector attraction reduction can be demonstrated by digesting a portion of the previously digested sewage sludge that has a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. When at the end of the 30 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 15 percent, vector attraction reduction is achieved.

(4) The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.

(5) Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.

(6) The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours.

(7) The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials.

(8) The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials.

(9) (i) Sewage sludge shall be injected below the surface of the land.

(ii) No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.

(iii) When the sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(10)(i) Sewage sludge applied to the land surface or placed on an active sewage sludge unit shall be incorporated into the soil within six hours after application to or placement on the land, unless otherwise specified by the Department.

(ii) When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

(11) Sewage sludge placed on an active sewage sludge unit shall be covered with soil or other material at the end of each operating day.

(12) The pH of domestic septage shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 30 minutes.

(13) The vector attraction reduction requirement may be met through an alternative method to be determined by the Department on a case-by-case basis, if the sludge is not covered by 40 CFR 503.

## Part E
## Incineration

**503.40 Applicability.**

(a) This part applies to a person who fires sewage sludge in a sewage sludge incinerator, to a sewage sludge incinerator, and to sewage sludge fired in a sewage sludge incinerator.

(b) This part applies to the exit gas from a sewage sludge incinerator stack.

**503.41 Special definitions.**

(a) "Air pollution control device" is one or more processes used to treat the exit gas from a sewage sludge incinerator stack.

(b) "Auxiliary fuel" is fuel used to augment the fuel value of sewage sludge. This includes, but is not limited to, natural gas, fuel oil, coal, gas generated during anaerobic digestion of sewage sludge, and municipal solid waste (not to exceed 30 percent of the dry weight of sewage sludge and auxiliary fuel together). Hazardous wastes are not auxiliary fuel.

(c) "Average daily concentration" is the arithmetic mean of the concentrations of a pollutant in milligrams per kilogram of sewage sludge (dry weight basis) in the samples collected and analyzed in a month.

(d) "Control efficiency" is the mass of a pollutant in the sewage sludge fed to an incinerator minus the mass of that pollutant in the exit gas from the incinerator stack divided by the mass of the pollutant in the sewage sludge fed to the incinerator.

(e) "Dispersion factor" is the ratio of the increase in the ground level ambient air concentration for a pollutant at or beyond the property line of the site where the sewage sludge incinerator is located to the mass emission rate for the pollutant from the incinerator stack.

(f) "Fluidized bed incinerator" is an enclosed device in which organic matter and inorganic matter in sewage sludge are combusted in a bed of particles suspended in the combustion chamber gas.

(g) "Hourly average" is the arithmetic mean of all measurements taken during a hour. At least two measurements must be taken during the hour.

(h) "Incineration" is the combustion of organic matter and inorganic matter in sewage sludge by high temperatures in an enclosed device.

(i) "Incinerator operating combustion temperature" is the arithmetic mean o f the temperature readings in the hottest zone of the furnace recorded in a day (24 hours) when the temperature is averaged and recorded at least hourly during the hours the incinerator operates in a day.

(j) "Monthly average" is the arithmetic mean of the hourly averages for the hours a sewage sludge incinerator operates during the month.

(k) "Performance test combustion temperature" is the arithmetic mean of the average combustion temperatures in the hottest zone of the furnace for each of the runs in a performance test.

(l) "Risk specific concentration" is the allowable increase in the average daily ground level ambient air concentration for a pollutant from the incineration of sewage sludge at or beyond the property line of the site where the sewage sludge incinerator is located.

(m) "Sewage sludge feed rate" is either the average daily amount of sewage sludge fired in all sewage

sludge incinerators within the property line of the site where the sewage sludge incinerators are located for the number of days in a 365 day period that each sewage sludge incinerator operates, or the average daily design capacity for all sewage sludge incinerators within the property line of the site where the sewage sludge incinerators are located.

(n) "Sewage sludge incinerator" is an enclosed device in which only sewage sludge and auxiliary fuel are fired.

(o) "Stack height" is the difference between the elevation of the top of a sewage sludge incinerator stack and the elevation of the ground at the base of the stack when the difference is equal to or less than 65 meters. When the difference is greater than 65 meters, stack height is the creditable stack height determined in accordance with 40 CFR 51.100 (ii).

(p) "Total hydrocarbons" means the organic compounds in the exit gas from a sewage sludge incinerator stack measured using a flame ionization detection instrument referenced to propane.

(q) "Wet electrostatic precipitator" is an air pollution control device that uses both electrical forces and water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

(r) "Wet scrubber" is an air pollution control device that uses water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

**503.42 General Requirements.**

No person shall fire sewage sludge in a sewage sludge incinerator except in compliance with the requirements in this part.

**503.43 Pollutant limits.**

(a) Firing of sewage sludge in a sewage sludge incinerator shall not violate the requirements in the National Emission Standard for Beryllium in subpart C of 40 CFR Part 61.

(b) Firing of sewage sludge in a sewage sludge incinerator shall not violate the requirements in the National Emission Standard for Mercury in subpart E of 40 CFR Part 61.

(c) Pollutant limit - lead.

(1) The average daily concentration for lead in sewage sludge fed to a sewage sludge incinerator shall not exceed the concentration calculated using Equation (4).

$$C = \frac{0.1 \times NAAQS \times 86{,}400}{DF \times SF \times [1 - CE]} \quad \text{(Equation 4)}$$

Where:

C = Average daily concentration of lead in sewage sludge.

NAAQS= National Ambient Air Quality Standard for lead in micrograms per cubic meter.

DF= Dispersion factor in micrograms per cubic meter per gram per second.

CE= Sewage sludge incinerator control efficiency for lead in hundredths.

SF= Sewage sludge feed rate in metric tons per day (dry weight basis).

(2) The dispersion factor (DF) in equation (4) shall be determined from an air dispersion model in accordance with section 503.43(e).

(i) When the sewage sludge stack height is 65 meters or less, the actual sewage sludge incinerator stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (4).

(ii) When the sewage sludge incinerator stack height exceeds 65 meters, the creditable stack height shall be determined in accordance with 40 CFR 51.100 (ii) and the creditable stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (4).

(3) The control efficiency (CE) for equation (4) shall be determined from a performance test of the sewage sludge incinerator, in accordance with section 503.43(e).

(d) Pollutant limit - arsenic, cadmium, chromium, and nickel.

(1) The average daily concentration for arsenic, cadmium, chromium, and nickel in sewage sludge fed to a sewage sludge incinerator each shall not exceed the concentration calculated using equation (5).

$$C = \frac{RSC \times 86{,}400}{DF \times SF \times [1 - CE]} \quad \text{(Equation 5)}$$

Where:

C = Average daily concentration of arsenic, cadmium, chromium, or nickel in sewage sludge.

CE = Sewage sludge incinerator control efficiency for arsenic, cadmium, chromium, or nickel in hundredths.

DF = Dispersion factor in micrograms per cubic meter per gram per second.

RSC = Risk specific concentration for arsenic, cadmium, chromium, or nickel in micrograms per cubic meter.

SF = Sewage sludge feed rate in metric tons per day (dry weight basis).

(2) The risk specific concentrations for arsenic, cadmium, and nickel used in equation (5) shall be obtained from Table 1 of section 503.43.

TABLE 1 OF SECTION 503.43 -- RISK SPECIFIC CONCENTRATION FOR ARSENIC, CADMIUM, AND NICKEL

| Pollutant | Risk Specific Concentration (micrograms per cubic meter) |
|---|---|
| Arsenic | 0.023 |
| Cadmium | 0.057 |
| Nickel | 2.0 |

(3) The risk specific concentration for chromium used in equation (5) shall be obtained from Table 2 of section 503.43 or shall be calculated using equation (6).

TABLE 2 OF SECTION 503.43 -- RISK SPECIFIC CONCENTRATION FOR CHROMIUM

| Type of Incinerator | Risk Specific Concentration (micrograms per cubic meter) |
|---|---|
| Fluidized bed with wet scrubber | 0.65 |
| Fluidized bed with wet scrubber and wet electrostatic precipitator | 0.23 |
| Other types with wet scrubber | 0.064 |
| Other types with web scrubber and wet electrostatic precipitator | |

$$RSC = \frac{0.0085}{r} \quad \text{(Equation 6)}$$

Where:

RSC= risk specific concentration for chromium in micrograms per cubic meter used in equation (5).

r= decimal fraction of the hexavalent chromium concentration in the total chromium concentration measured in the exit gas from the sewage sludge incinerator stack in hundredths.

(4) The dispersion factor (DF) in equation (5) shall be determined from an air dispersion model in accordance with section 503.43(e).

(i) When the sewage sludge incinerator stack height is equal to or less than 65 meters, the actual sewage sludge incinerator stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (5).

(ii) When the sewage sludge incinerator stack height is greater than 65 meters, the creditable stack height shall be determined in accordance with 40 CFR 51.100 (ii) and the creditable stack height shall be used in the air dispersion model, as specified by the Department, to determine the dispersion factor (DF) for equation (5).

(5) The control efficiency (CE) for equation (5) shall be determined from a performance test of the sewage sludge incinerator in accordance with section 503.43(e).

(e) Air dispersion modeling and performance testing.

(1) The air dispersion model used to determine the dispersion factor in section 503.43.(c)(2) and (d)(4) shall be appropriate for the geographical, physical, and population characteristics at the sewage sludge incinerator site. The performance test used to determine the control efficiencies in section 503.43(c)(3) and (d)(5) shall be appropriate for the type of sewage sludge incinerator.

(2) For air dispersion modeling initiated after September 3, 1999, the modeling results shall be submitted to the Department thirty (30) days after completion of the modeling. In addition to the modeling results, the submission shall include a description of the air dispersion model and the values used for the model parameters.

(3) The following procedures, at a minimum, shall apply in conducting performance tests to determine the control efficiencies in section 503.43(c)(3) and (d)(5) after September 3, 1999:

(i) The performance test shall be conducted under representative sewage sludge incinerator conditions at the highest expected sewage sludge feed rate within the design capacity of the sewage sludge incinerator.

(ii) The Department shall be notified at least thirty (30) days prior to any performance test so the Department may have the opportunity to observe the test. The notice shall include a test protocol with incinerator operating conditions and a list of test methods to be used.

(iii) Each performance test shall consist of three separate runs using the applicable test method. The control efficiency for a pollutant shall be the arithmetic mean of the control efficiencies for the pollutant from the three runs.

(4) The pollutant limits in section 503.43(c) and (d) of this section shall be submitted to the permitting authority no later than thirty (30) days after completion of the air dispersion modeling and performance test.

(5) Significant changes in geographical or physical characteristics at the incinerator site or in

incinerator operating conditions require new air dispersion modeling or performance testing to determine a new dispersion factor or a new control efficiency that will be used to calculate revised pollutant limits.

(f) Additional parameters may be required in the initial analysis and subsequent monitoring thereafter, but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471)) may be required (in a permit) to be monitored for in the sewage sludge.

**503.44 Operational standard - total hydrocarbons.**

(a) The total hydrocarbons concentration in the exit gas from a sewage sludge incinerator shall be corrected for zero percent moisture by multiplying the measured total hydrocarbons concentration by the correction factor calculated using equation (7).

$$\text{Correction factor (percent moisture)} = \frac{1}{(1 - X)} \qquad \text{(Equation 7)}$$

Where:

X = decimal fraction of the percent moisture in the sewage sludge incinerator exit gas in hundredths.

(b) The total hydrocarbons concentration in the exit gas from a sewage sludge incinerator shall be corrected to seven percent oxygen by multiplying the measured total hydrocarbons concentration by the correction factor calculated using equation (8).

$$\text{Correction fact (oxygen)} = \frac{14}{(21 - Y)} \qquad \text{(Equation 8)}$$

Where:

Y = Percent oxygen concentration in the sewage sludge incinerator stack exit gas (dry volume/dry volume).

(c) The monthly average concentration for total hydrocarbons in the exit gas from a sewage sludge incinerator stack, corrected for zero percent moisture using the correction factor from equation (7) and to seven percent oxygen using the correction factor from equation (8), shall not exceed 100 parts per million on a volumetric basis when measured using the instrument required by section 503.45(a).

**503.45 Management practices.**

(a) (1) An instrument that measures and records the total hydrocarbons concentration in the sewage sludge incinerator stack exit gas continuously shall be installed, calibrated, operated, and maintained for a sewage sludge incinerator, as specified by the Department.

(2) The total hydrocarbons instrument shall employ a flame ionization detector; shall have a heated sampling line maintained at a temperature of 150 degrees Celsius or higher at all times; and shall

be calibrated at least once every 24-hour operating period using propane.

(b) An instrument that continuously measures and records the oxygen concentration in the sewage sludge incinerator stack exit gas shall be installed, calibrated, operated, and maintained for a sewage sludge incinerator.

(c) An instrument that continuously measures and records information used to determine the moisture content in the sewage sludge incinerator stack exit gas shall be installed, calibrated, operated, and maintained for a sewage sludge incinerator.

(d) An instrument that continuously measures and records combustion temperatures shall be installed, calibrated, operated, and maintained for a sewage sludge incinerator.

(e) Operation of a sewage sludge incinerator shall not cause the operating combustion temperature for the sewage sludge incinerator to exceed the performance test combustion temperature by more than twenty (20) percent.

(f) An air pollution control device shall be appropriate for the type of sewage sludge incinerator, and the operating parameters for the air pollution control device shall be adequate to indicate proper performance of the air pollution control device. For sewage sludge incinerators subject to the requirements in subpart O of 40 CFR part 60, operation of the air pollution control device shall not violate the requirements for the air pollution control device in subpart O of 40 CFR part 60. For all other sewage sludge incinerators, operation of the air pollution control device shall not cause a significant exceedance of the average value for the air pollution control device operating parameters from the performance test required by section 503.43(c)(3) and (d)(5).

(g) Sewage sludge shall not be fired in a sewage sludge incinerator if it is likely to adversely affect a threatened or endangered species listed under section 4 of the Endangered Species Act or its designated critical habitat.

(h) The instruments required in section 503.45(a) through (d) shall be appropriate for the type of sewage sludge incinerator.

**503.46 Frequency of monitoring.**

(a) Sewage sludge.

(1) The frequency of monitoring for beryllium shall be as required in subpart C of 40 CFR part 61, and for mercury as required in subpart E of 40 CFR part 61.

(2) The frequency of monitoring for arsenic, cadmium, chromium, lead, and nickel in sewage sludge fed to a sewage sludge incinerator shall be the frequency in Table 1 of section 503.46. Facilities which generate less than 290 metric tons of sludge per year and dispose of the sludge once per year or less, may request a reduction in monitoring to a frequency of once per year. The Department will review these requests on a case-by-case basis.

TABLE 1 OF SECTION 503.46 -- FREQUENCY OF

MONITORING - INCINERATION

| Amount of sewage sludge* (metric tons per 365 day period) | Frequency |
|---|---|
| Greater than zero but less than 1,500 | Once per quarter (four times per year) |
| Equal to or greater than 1,500 but less than 15,000 | Once per 60 days (six times per year) |
| Equal to or greater than 15,000 | Once per month (12 times per year) |

* Amount of sewage sludge fired in a sewage sludge incinerator (dry weight basis).

(3) After the sewage sludge has been monitored for two years at the frequency in Table 1 of section 503.46, the Department may reduce the frequency of monitoring for arsenic, cadmium, chromium, lead, and nickel.

(b) Total hydrocarbons, oxygen concentration, information to determine moisture content, and combustion temperatures. The total hydrocarbons concentration and oxygen concentration in the exit gas from a sewage sludge incinerator stack, the information used to measure moisture content in the exit gas, and the combustion temperatures for the sewage sludge incinerator shall be monitored continuously.

(c) Air pollution control device operating parameters. The frequency of monitoring for the sewage sludge incinerator air pollution control device operating parameters shall be specified by the Department. For sewage sludge incinerators subject to the requirements in subpart O of 40 CFR part 60, the frequency of monitoring for the appropriate air pollution control device operating parameters shall be the frequency of monitoring in subpart O of 40 CFR part 60. For all other sewage sludge incinerators, the appropriate air pollution control device operating parameters shall be monitored at least daily.

**503.47 Recordkeeping.**

(a) The person who fires sewage sludge in a sewage sludge incinerator shall develop the information in section 503.47(b) through section 503.47(n) and shall retain that information for five years.

(b) The concentration of lead, arsenic, cadmium, chromium, and nickel in the sewage sludge fed to the sewage sludge incinerator.

(c) The total hydrocarbons concentrations in the exit gas from the sewage sludge incinerator stack.

(d) Information that indicates the requirements in the National Emission Standard for beryllium in subpart C of 40 CFR Part 61 are met.

(e) Information that indicates the requirements in the National Emission Standard for mercury in

subpart E of 40 CFR Part 61 are met.

(f) The operating combustion temperatures for the sewage sludge incinerator.

(g) Values for the air pollution control device operating parameters.

(h) The oxygen concentration and information used to measure moisture content in the exit gas from the sewage sludge incinerator stack.

(i) The sewage sludge feed rate.

(j) The stack height for the sewage sludge incinerator.

(k) The dispersion factor for the site where the sewage sludge incinerator is located.

(l) The control efficiency for lead, arsenic, cadmium, chromium, and nickel for each sewage sludge incinerator.

(m) The risk specific concentration for chromium calculated using equation (6), if applicable.

(n) A calibration and maintenance log for the instruments used to measure the total hydrocarbons concentration and oxygen concentration in the exit gas from the sewage sludge incinerator stack, the information needed to determine moisture content in the exit gas, and the combustion temperatures.

**503.48 Reporting.**

(a) Any generator of sewage sludge when sewage sludge is incinerated, any person who prepares sewage sludge that is incinerated, or any person who incinerates sewage sludge, including Class I sludge management facilities, POTWs (as defined in 40 CFR 501.2) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve a population of 10,000 people or greater shall submit the information in section 503.47(b) through section 503.47(h) to the Department on or before February 19 of each year, for the period of January 1 through December 31 of the previous calendar year. Reports required by this regulation do not exclude any person from submitting reports required by other Department regulations or by other applicable EPA regulations.

**503.50 Odor Control Requirements.**

The permit holder shall use best management practices normally associated with the proper operation and maintenance of a sludge wastewater treatment site, any sludge storage or lagoon areas, transportation of sludges, and all individual activities permitted under R.61-9.503 to ensure that an undesirable level of odor does not exist.

(a) The permittee shall prepare an odor abatement plan for the sewage sludge treatment sites, any sludge storage or lagoon areas, and land application or surface disposal sites. Permittees that land-apply sludge must prepare the plan within 180 days of the effective date of this regulation (effective date of June 26, 2003). Permittees that have facilities described above that require plans have one (1) year from the June 26, 2003 effective date to prepare the plan. Odor abatement plans must be submitted for new

projects with the submission of permit applications. The plan must include the following topics:

(1) Operation and maintenance practices which are used to eliminate or minimize undesirable odor levels in the form of best management practices for Odor Control;

(2) Use of treatment processes for the reduction of undesirable odors;

(3) Use of setbacks;

(4) Contingency plans and methods to address odor problems for the different type of disposal/application methods used.

(b) Unless otherwise requested, prior to issuance of a new or expanded land application disposal permit (either NPDES or Land Application), the Department may review the odor abatement plan for compliance with this Part (503.50). The Department may require changes to the plan as appropriate.

(c) No permittee may cause, allow, or permit emission into the ambient air of any substance or combinations of substances in quantities that an undesirable level of odor is determined to result unless preventative measures of the type set out below are taken to abate or control the emission to the satisfaction of the Department. When an odor problem comes to the attention of the Department through field surveillance or specific complaints, the Department may determine, in accordance with section 48-1- 120 of the Pollution Control Act, if the odor is at an undesirable level by considering the character and degree of injury or interference to:

(1) The health or welfare of the people;

(2) Plant, animal, freshwater aquatic, or marine life;

(3) Property; or

(4) Enjoyment of life or use of affected property.

(d) After determining that an undesirable level of odor exists, the Department may require:

(1) the permittee to submit a corrective action plan to address the odor problem,

(2) remediation of the undesirable level of odor within a reasonable timeframe, and

(3) in an order, specific methods to address the problem.

(e) If the permittee fails to control or abate the odor problems addressed in this section within the specified timeframe, the Department may revoke disposal/application activities associated with the site or the specific aspect of the sludge management program.

**APPENDIX A**

**Procedure to Determine the Annual Whole Sludge Application Rate for a Sewage Sludge**

Section 503.13(a)(4)(ii) requires that the product of the concentration for each pollutant listed in Table 4 of section 503.13 in sewage sludge sold or given away in a bag or other container for application to the land and the annual whole sludge application rate (AWSAR) for the sewage sludge not cause the annual pollutant loading rate for the pollutant in Table 4 of section 503.13 to be exceeded. This appendix contains the procedure used to determine the AWSAR for a sewage sludge that does not cause the annual pollutant loading rates in Table 4 of section 503.13 to be exceeded.

The relationship between the annual pollutant loading rate (APLR) for a pollutant and the annual whole sludge application rate (AWSAR) for a sewage sludge is shown in equation (1).

APLR = C x AWSAR X 0.001 (1)

Where:

APLR = Annual pollutant loading rate in kilograms per hectare per 365 day period.

C = Pollutant concentration in milligrams per kilogram of total solids (dry weight basis).

AWSAR = Annual whole sludge application rate in metric tons per hectare per 365 day period (dry weight basis).

0.001 = A conversion factor.

To determine the AWSAR, equation (1) is rearranged into equation (2):

$$\text{ASWAR} = \frac{\text{APLR}}{(\text{C} \times 0.001)} \quad (2)$$

The procedure used to determine the AWSAR for a sewage sludge is presented below.

PROCEDURE:

1. Analyze a sample of the sewage sludge to determine the concentration for each of the pollutants listed in Table 4 of section 503.13 in the sewage sludge.

2. Using the pollutant concentrations from Step 1 and the APLRs from Table 4 of section 503.13, calculate an AWSAR for each pollutant using equation (2) above.

3. The AWSAR for the sewage sludge is the lowest AWSAR calculated in Step 2.

**APPENDIX B**
**Pathogen Treatment Processes**

A. PROCESSES TO SIGNIFICANTLY REDUCE PATHOGENS (PSRP)

1. Aerobic digestion. Sewage sludge is agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 40 days at 20 degrees Celsius and 60 days at 15 degrees Celsius.

2. Air drying. Sewage sludge is dried on sand beds or on paved or unpaved basins. The sewage sludge dries for a minimum of three months. During two of the three months, the ambient average daily temperature is above zero degrees Celsius.

3. Anaerobic digestion. Sewage sludge is treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35 to 55 degrees Celsius and 60 days at 20 degrees Celsius.

4. Composting. Using either the within-vessel, static aerated pile, or windrow composting methods, the temperature of the sewage sludge is raised to 40 degrees Celsius or higher and remains at 40 degrees Celsius or higher for five days. For four hours during the five days, the temperature in the compost pile exceeds 55 degrees Celsius.

5. Lime stabilization. Sufficient lime is added to the sewage sludge to raise the pH of the sewage sludge to 12 after two hours of contact.

B. PROCESSES TO FURTHER REDUCE PATHOGENS (PFRP)

1. Composting. Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the sewage sludge is maintained at 55 degrees Celsius or higher for three days.

Using the windrow composting method, the temperature of the sewage sludge is maintained at 55 degrees or higher for 15 days or longer. During the period when the compost is maintained at 55 degrees or higher, there shall be a minimum of five turnings of the windrow.

2. Heat drying. Sewage sludge is dried by direct or indirect contact with hot gases to reduce the moisture content of the sewage sludge to 10 percent or lower. Either the temperature of the sewage sludge particles exceeds 80 degrees Celsius or the wet bulb temperature of the gas in contact with the sewage sludge as the sewage sludge leaves the dryer exceeds 80 degrees Celsius.

3. Heat treatment. Liquid sewage sludge is heated to a temperature of 180 degrees Celsius or higher for 30 minutes.

4. Thermophilic aerobic digestion. Liquid sewage sludge is agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the sewage sludge is 10 days at 55 to 60 degrees Celsius.

5. Beta ray irradiation. Sewage sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20 degrees Celsius).

6. Gamma ray irradiation. Sewage sludge is irradiated with gamma rays from certain isotopes,

such as Cobalt 60 and Cesium 137, at dosages of at least 1.0 megarad at room temperature (ca. 20 degrees Celsius).

7. Pasteurization. The temperature of the sewage sludge is maintained at 70 degrees Celsius or higher for 30 minutes or longer.

# 61-9.504
# Standards for the Use or Disposal of Industrial Sludge

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## Part A
## General Provisions

### 504.1 Purpose and applicability.

(a) Purpose

(1) This part establishes standards, which consist of general requirements, pollutant limits, management practices, and operational standards, for the final use or disposal of industrial sludge generated during the treatment of industrial wastewater in a treatment works. Standards are included in this part for industrial sludge applied to the land. Also included in this part are pathogen and alternative vector attraction reduction requirements for industrial sludge applied to the land.

(2) In addition, the standards in this part include the frequency of monitoring and recordkeeping requirements when industrial sludge is applied to the land. Also included in this part are reporting requirements for industrial sludge disposal when the sludge is applied to the land.

(b) Applicability

(1) This part applies to any person who prepares industrial sludge or applies industrial sludge to the land. This part also applies to any person who sells, or gives away industrial sludge or materials derived from industrial sludge.

(2) This part applies to industrial sludge applied to the land.

(3) [Reserved].

(4) This part applies to land where industrial sludge is applied and land disposal sites.

### 504.2 Compliance period.

(a) Compliance with the standards in this part shall be implemented in permits issued subsequent to the effective date of the regulation.

(b) [Reserved.]

(c) [Reserved.]

(d) [Reserved.]

### 504.3 Permits.

(a) The requirements in this part shall be implemented through a permit:

(1) [Reserved].

(2) issued to any person who prepares, generates, or disposes of industrial sludge when the industrial sludge is applied to land, or

(3) issued under subtitle C of the Solid Waste Disposal Act; subpart C of the Safe Drinking Water Act; the Marine Protection, Research, and Sanctuaries Act of 1972; or the Clean Air Act.

(4) [Reserved].

(b) [Reserved.]

(c) The requirements under this part may be addressed in permits issued to land appliers.

**504.4 Relationship to other regulations.**

(a) Disposal of industrial sludge in a municipal solid waste landfill unit permitted under R.61-107 constitutes compliance with this regulation. Any person who prepares industrial sludge that is disposed in a municipal solid waste landfill unit shall ensure that the industrial sludge meets the requirements in R.61- 107 concerning the quality of materials disposed in a municipal solid waste landfill unit. Disposal of industrial sludge in an industrial solid waste landfill unit complying with State Solid Waste regulations and requirements in permits constitutes compliance with this regulation.

(b) The disposal of industrial sludge involving the composting or co-composting of the industrial sludge with yard trash, land-clearing debris, or a combination of yard trash and land clearing debris shall comply with the requirements established by the Department in R.61-107.4. The submission and information requirements shall be determined by the Department.

(c) The disposal of industrial sludge utilizing an innovative and experimental solid waste management technology or process shall be permitted under R.61-107.

(d) The disposal of industrial sludge involving firing of industrial sludge in an industrial sludge incinerator or the heat drying/heat conditioning of the industrial sludge shall be permitted under R.61-107.

(e) [Reserved.]

**504.5 Additional or more stringent requirements.**

(a) On a case-by-case basis, the Department may impose requirements in permits for the use or disposal of industrial sludge in addition to or more stringent than the requirements in this part when necessary to protect public health and the environment from any adverse effect of a pollutant in the industrial sludge.

(b) [Reserved.]

(c) [Reserved.]

(d) [Reserved.]

**504.6 Exclusions.**

(a) Treatment processes. This part does not establish requirements for processes used to treat industrial wastewater or for processes used to treat industrial sludge prior to final use or disposal, except as provided in section 504.32 and section 504.33.

(b) Selection of a use or disposal practice. This part does not require the selection of an industrial sludge use or disposal practice. The determination of the manner in which industrial sludge is used or disposed is a determination by the permittee.

(c) Incineration of industrial sludge. This part does not establish requirements for industrial sludge that is incinerated, including industrial sludge incinerated with other wastes, or with fuels or other materials or for the incinerator in which industrial sludge and other wastes are co-fired.

(c)(1) [Reserved].

(c)(2) [Reserved].

(d) [Reserved.]

(e) Hazardous industrial sludge. This part does not establish requirements for the use or disposal of industrial sludge determined to be hazardous in accordance with 40 CFR Part 261.

(f) Industrial sludge with high PCB concentration. This part does not establish requirements for the use or disposal of industrial sludge with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry weight basis).

(g) Incinerator ash. This part does not establish requirements for the use or disposal of ash generated during the firing of industrial sludge in an industrial sludge incinerator.

(h) Grit and screenings. This part does not establish requirements for the use or disposal of grit (e.g., sand, gravel, cinders, or other materials with a high specific gravity) or screenings (e.g., relatively large materials such as rags) generated during preliminary treatment of industrial wastewater in a treatment works.

(i) Drinking water treatment sludge. This part does not establish requirements for the use or disposal of sludge generated during the treatment of either surface water or ground water used for drinking water.

(j) [Reserved.]

(k) Coal ash. This part does not establish requirements for the use or disposal of coal ash.

(l) Grease. This part does not establish requirements for the use or disposal of grease removed from grease traps at restaurants or other similar establishments.

**504.7 Requirement for a person who prepares industrial sludge.**

Any person who prepares industrial sludge shall ensure that the applicable requirements in this part are met when the industrial sludge is applied to the land.

**504.8 Sampling and analysis.**

(a) Sampling. Representative samples of industrial sludge that is applied to the land shall be collected and analyzed. The Department may establish minimum requirements in permits for the proper method of sampling and analysis of industrial sludge.

(b) Methods. The materials listed below are incorporated by reference in this part. The materials are incorporated as they exist on the date of approval, and notice of any change in these materials will be published in the Federal Register. Methods in the materials listed below shall be used to analyze samples of industrial sludge, as appropriate.

(1) Enteric viruses. ASTM Designation: D 4994-89, "Standard Practice for Recovery of Viruses From Wastewater Sludges," 1992 Annual Book of ASTM Standards: Section 11 - Water and Environmental Technology, ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

(2) Fecal coliform. Part 9221 C and E. or Part 9222 D., "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW, Washington, DC, 20005.

(3) Helminth ova. Yanko, W.A., "Occurrence of Pathogens in Distribution and Marketing Municipal Sludges," EPA 600/1-87-014, 1987. National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (PB 88-154273/AS).

(4) Inorganic pollutants. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, Second Edition (1982) with Updates I (April 1984) and II (April 1985) and Third Edition (November 1986) with Revision I (December 1987), II, IIA and IIB. Second Edition and Updates I and II are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (PB-87-120-291). Third Edition and Revision I are available from Superintendent of Documents, Government Printing Office, 941 North Capitol Street, NE., Washington, DC, 20002 (Document Number 955-001-00000-1).

(5) Salmonella sp. bacteria. Part 9260 D., "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW, Washington, DC, 20005; or Kenner, B.A. and H.P. Clark, "Detection and enumeration of Salmonella and Pseudomonas aeruginosa," Journal of the Water Pollution Control Federation, Vol. 46, no. 9, September 1974, pp. 2163-2171. Water Environment Federation, 601 Wythe Street, Alexandria,

Virginia 22314.

(6) Specific oxygen uptake rate. Part 2710 B., "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW, Washington, DC, 20005.

(7) Total, fixed, and volatile solids. Part 2540 G., "Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW, Washington, DC, 20005.

**504.9 General definitions.**

All terms not defined herein have the meaning given them in R.61-9.122, R.61-9.124, R.61-9.129, R.61-9.133, R.61-9.403, or R.61-9.505.

(a) "Apply industrial sludge or industrial sludge applied to the land" means land application of industrial sludge. Disposal of industrial sludge in a permitted solid waste unit or in accordance with a wastewater facility closeout plan approved pursuant to Regulation 61-82 is not land application.

(b) "Base flood" is a flood that has a one percent chance of occurring in any given year (i.e., a flood with a magnitude equalled once in 100 years).

(c) "Cover crop" is a small grain crop, such as oats, wheat, or barley; grasses; or other crop grown for agronomic use.

(d) "CWA" see R.61-9.122.2(b) Definitions.

(e) "Domestic septage" is either liquid or solid material removed from a septic tank, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives industrial wastewater and does not include grease removed from a grease trap at a restaurant.

(f) "Domestic sewage" is waste and wastewater from humans, which is generated from industrial, commercial, or household operations that is discharged to or otherwise enters a treatment works.

(g) "Dry weight basis" means calculated on the basis of having been dried at 105 degrees Celsius until reaching a constant mass (i.e., essentially 100 percent solids content).

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

(i) "Feed crops" are crops produced primarily for consumption by animals.

(j) "Fiber crops" are crops such as flax and cotton.

(k) “Food crops” are crops consumed by humans. These include, but are not limited to, fruits, vegetables, and tobacco.

(l) “Ground water” is water below the land surface in the saturated zone.

(m) “Industrial wastewater” is wastewater generated in a commercial or industrial process (including waste and wastewater from humans when combined with commercial or industrial wastewater). By definition, waste or wastewater from humans not combined with commercial or industrial wastewater will be considered domestic sewage covered under R.61-9.503.

(n) “Industrial Septage” is either liquid or solid material removed from a septic tank that receives industrial wastewater. This does not include grease removed from grease traps at restaurants or other similar establishments.

(o) “Industrial Sludge” is solid, semi-solid, or liquid residue generated during the treatment of industrial wastewater in a treatment works. Industrial sludge includes, but is not limited to, industrial septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from industrial sludge. Industrial sludge does not include ash generated during the firing of industrial sludge in an industrial sludge incinerator or grit and screenings generated during preliminary treatment of industrial wastewater in a treatment works. Industrial sludge by definition does not include sludge covered under 40 CFR Part 503 or R.61-9.503.

(p) “Municipality” see R.61-9.122.2(b) Definitions. The definition includes under R.61-9.503 a special district created under State law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201(e) of the CWA, as amended, that has as one of its principal responsibilities the treatment, transport, use, or disposal of sewage sludge.

(q) “Permitting authority” means the Department.

(r) “Person” see definition in R.61-9.122.2(b) Definitions.

(s) “Person who prepares industrial sludge” is the person who generates industrial sludge during the treatment of industrial wastewater in a treatment works and/or the person who derives a material from industrial sludge when the industrial sludge does not meet the ceiling concentrations in Table 1 of section 504.13; the pollutant concentrations Table 3 of section 504.13; the Class A pathogen requirements in section 504.32(a); one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement (as determined by the Department), or the sludge contains other pollutants that may cause a public health or environmental problem.

(t) “Place industrial sludge or industrial sludge placed” means disposal of industrial sludge on a land disposal site.

(u) “Pollutant” is an organic substance, an inorganic substance, a combination of organic and

inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the Department, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

(v) "Pollutant limit" is a numerical value that describes the amount of a pollutant allowed per unit amount of industrial sludge (e. g., milligrams per kilogram of total solids); the amount of a pollutant that can be applied to a unit area of land (e. g., kilograms per hectare); or the volume of a material that can be applied to a unit area of land (e.g., gallons per acre).

(w) "Runoff" is rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off of the land surface.

(x) "State" means the State of South Carolina.

(y) "Store or storage of industrial sludge" is the placement of industrial sludge on land on which the industrial sludge remains for two years or less. This does not include the placement of industrial sludge on land for treatment.

(z) "Treat or treatment of industrial sludge" is the preparation of industrial sludge for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of industrial sludge. This does not include storage of industrial sludge.

(aa)"Treatment works" is either a commercially, or privately owned device or system used to treat (including recycle and reclaim) either industrial, commercial sewage or a combination of domestic sewage and industrial waste of a liquid nature.

(bb) "Wetlands" see R.61-9.122.2(b) Definitions.

(cc) "Commercial Wastewater" is any other wastewater (other than process wastewater) which is not included under industrial wastewater and does not include domestic sewage (e.g. centralized special waste collection and processing).

(dd) "Person who applies industrial sludge" may be the generator, preparer, or a land applier.

## Part B
## Land Application

### 504.10 Applicability.

(a) This part applies to any person who prepares industrial sludge that is applied to the land, to any person who applies industrial sludge to the land, to industrial sludge applied to the land, and to the land

on which industrial sludge is applied.

(b) Bulk industrial sludge

(1) [Reserved].

(2) The Department may apply any or all of the general requirements in section 504.12 and the management practices in section 504.14 to bulk industrial sludge meeting the ceiling concentrations in Table 1 of section 504.13 and the pollutant concentrations in Table 3 of section 504.13; the Class A pathogen requirements in section 504.32(a), and one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement (as determined by the Department), on a case-by-case basis after determining that the general requirements or management practices are needed to protect public health and the environment from any reasonably anticipated adverse effect that may occur from any pollutant in the bulk industrial sludge.

(c) (1) [Reserved].

(2) The Department may apply any or all of the general requirements in section 504.12 and the management practices in section 504.14 to a derived bulk material meeting the ceiling concentrations in Table 1 of section 504.13 and the pollutant concentrations in Table 3 of section 504.13; the Class A pathogen requirements in section 504.32(a) and one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement (as determined by the Department), on a case-by-case basis after determining that the general requirements or management practices are needed to protect public health and the environment from any reasonably anticipated adverse effect that may occur from any pollutant in the bulk industrial sludge.

(d) The requirements in this part may be applied by the Department, on a case-by-case basis, when a bulk material derived from industrial sludge is applied to the land if the industrial sludge from which the bulk material is derived meets the ceiling concentrations in Table 1 of section 504.13; the pollutant concentrations in Table 3 of section 504.13; the Class A pathogen requirements in section 504.32(a); one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement (as determined by the Department), and does not contain other pollutants that may cause a public health or environmental problem.

(e) Industrial sludge sold or given away in a bag or other container for application to the land. The general requirements in section 504.12 and the management practices in section 504.14 do not apply, except for section 504.12(o), section 504.12(p), section 504.12(q), and section 504.14(e), when industrial sludge is sold or given away in a bag or other container for application to the land if the industrial sludge sold or given away in a bag or other container for application to the land meets the ceiling concentrations in Table 1 of section 504.13; the pollutant concentrations Table 3 of section 504.13; the Class A pathogen requirements in section 504.32(a), and one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement (as determined by the Department).

(f) The general requirements in section 504.12 and the management practices in section 504.14 do not apply, except for section 504.12(o), section 504.12(p), section 504.12(q), and section 504.14(e), when a material derived from industrial sludge is sold or given away in a bag or other container for application to the land if the derived material meets the ceiling concentrations in Table 1 of section 504.13; the pollutant concentrations in Table 3 of section 504.13; the Class A pathogen requirements in section 504.32(a), and one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement (as determined by the Department).

(g) The requirements in this part do not apply, except for section 504.14(e), when a material derived from industrial sludge is sold or given away in a bag or other container for application to the land if the industrial sludge from which the material is derived meets the ceiling concentrations in Table 1 of section 504.13; the pollutant concentrations in Table 3 of section 504.13; the Class A pathogen requirements in section 504.32(a); one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8)or an equivalent vector attraction reduction requirement (as determined by the Department), and does not contain other pollutants that may cause a public health or environmental problem.

(h) If other materials are mixed with the industrial sludge, the final product must meet the applicable requirements related to pollution limits (in section 504.13), pathogen reduction (in section 504.15(a)) when pathogens are expected to be present and vector attraction reduction (in section 504.15(c)) when the industrial sludge is expected to attract vectors, after the materials have been added to the industrial sludge.

**504.11 Special definitions.**

(a) "Agricultural land" is land on which a food crop, a feed crop, or a fiber crop is grown. This includes range land and land used as pasture.

(b) "Agronomic rate" is the whole sludge application rate (dry weight basis) designed: (1) to provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land and (2) to minimize the amount of nitrogen in the industrial sludge that passes below the root zone of the crop or vegetation grown on the land to the ground water and (3) to provide the amount of other organic and inorganic plant nutrients which promote crop or vegetative growth, such as calcium-carbonate equivalency.

(c) "Annual pollutant loading rate" is the maximum amount of a pollutant that can be applied to a unit area of land during a 365 day period.

(d) "Annual whole sludge application rate" is the maximum amount of industrial sludge (dry weight basis) that can be applied to a unit area of land during a 365 day period.

(e) "Bulk industrial sludge" is industrial sludge that is not sold or given away in a bag or other container for application to the land.

(f) "Cumulative pollutant loading rate" is the maximum amount of an inorganic pollutant that can be applied to an area of land.

(g) "Forest" is a tract of land thick with trees and underbrush.

(h) "Land application" is the spraying or spreading of industrial sludge onto the land surface; the injection of industrial sludge below the land surface; or the incorporation of industrial sludge into the soil so that the industrial sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

(i) "Monthly average" is the arithmetic mean of all measurements taken during the month.

(j) "Other container" is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.

(k) "Pasture" is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

(l) "Public contact site" is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

(m) "Range land" is open land with indigenous vegetation.

(n) "Reclamation site" is drastically disturbed land that is reclaimed using industrial sludge. This includes, but is not limited to, strip mines and construction sites.

**504.12 General requirements.**

(a) No person shall apply industrial sludge to the land except in accordance with the requirements in this part.

(b) No person shall apply bulk industrial sludge subject to the cumulative pollutant loading rates in section 504.13(b)(2) to agricultural land, forest, a public contact site, or a reclamation site if any of the cumulative pollutant loading rates in section 504.13(b)(2) has been reached.

(c) [Reserved.]

(d) The person who prepares bulk industrial sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall provide the person who applies the bulk industrial sludge written notification of the concentration of total nitrogen (as N on a dry weight basis) in the bulk industrial sludge.

(e) (1) The person or the permittee who applies industrial sludge to the land shall obtain information needed to comply with the requirements in this part.

(2) (i) Before bulk industrial sludge subject to the cumulative pollutant loading rates in section 504.13(b)(2) is applied to the land, the person who proposes to apply the bulk industrial sludge shall contact the Department to determine whether bulk industrial sludge subject to the cumulative pollutant loading rates in section 504.13(b)(2) has been applied to the site.

(ii) If bulk industrial sludge subject to the cumulative pollutant loading rates in section 504.13(b)(2) has not been applied to the site, the cumulative amount for each pollutant listed in Table 2 of section 504.13 may be applied to the site in accordance with section 504.13(a)(2)(i).

(iii) If bulk industrial sludge subject to the cumulative pollutant loading rates in section 504.13(b)(2) has been applied to the site and the cumulative amount of each pollutant applied to the site in the bulk industrial sludge is known, the cumulative amount of each pollutant applied to the site shall be used to determine the additional amount of each pollutant that can be applied to the site in accordance with section 504.13(a)(2)(i).

(iv) If bulk industrial sludge subject to the cumulative pollutant loading rates in section 504.13(b)(2) has been applied to the site since July 20, 1993 and the cumulative amount of each pollutant applied to the site in the bulk industrial sludge since that date is not known, an additional amount of each pollutant shall not be applied to the site in accordance with section 504.13(a)(2)(i).

(f) When a person who prepares bulk industrial sludge provides the bulk industrial sludge to a person who applies the bulk industrial sludge to the land, the person who prepares the bulk industrial sludge shall provide the person who applies the industrial sludge notice and necessary information to comply with the requirements in this part.

(g) When a person who prepares industrial sludge provides the industrial sludge to another person who prepares the industrial sludge, the person who provides the industrial sludge shall provide the person who receives the industrial sludge notice and necessary information to comply with the requirements in this part.

(h) The person who applies bulk industrial sludge to the land shall provide the owner or lease holder of the land on which the bulk industrial sludge is applied notice and necessary information to comply with the requirements in this part.

(i) Any person who prepares outside the State bulk industrial sludge that is applied to land in South Carolina or who prepares in the State bulk industrial sludge that is applied to land in another state shall provide written notice, prior to the initial application of bulk industrial sludge to the land application site by the applier, to the Department. For bulk industrial sludge prepared outside the State and applied to land in the state, the notice shall include:

(1) The location, by either street address or latitude and longitude, of each land application site.

(2) The approximate time period bulk industrial sludge will be applied to the site.

(3) The name, address, telephone number, and National Pollutant Discharge Elimination System

permit number (if appropriate) for the person who prepares the bulk industrial sludge.

(4) The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk industrial sludge.

For use or land disposal outside the state, the notice shall include information showing the acceptance of the bulk industrial sludge for land application by the appropriate person(s). This information may be in the form of copies of permits or approvals, letters from the appropriate permitting authority, or an acceptance letter from the person agreeing to land apply the bulk industrial sludge.

(j) Any person who applies bulk industrial sludge subject to the cumulative pollutant loading rates in section 504.13(b)(2) to the land shall provide written notice, prior to the initial application of bulk industrial sludge to a land application site by the applier, to the Department and the Department shall retain and provide access to the notice. The notice shall include:

(1) The location, by either street address or latitude and longitude, of the land application site.

(2) The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) of the person who will apply the bulk industrial sludge.

(k) The Department may establish additional restrictions in permits based upon soil and groundwater conditions to insure protection of the groundwater and surface water of the State. Criteria may include but is not limited to soil permeability, clay content, and depth to groundwater.

(l) The Department may establish in permits the application buffer setbacks for property boundaries, roadways, residential developments, dwellings, water wells, drainageways, and surface water as deemed necessary to protect public health and the environment. Factors taken into consideration in the establishment of setbacks would indicate sludge application method, adjacent land usage, public access, aerosols, runoff prevention, and adjacent groundwater usage.

(m) The Department may establish permit conditions to require that the agronomic rate of sludge application remain consistent with the lime and fertilizer requirements for the cover, feed, food, and fiber crops based on published lime and fertilizer recommendations (such as "Nutrient Management for South Carolina", Cooperative Extension Service, Clemson University, EC 476).

(n) The Department may establish minimum requirements in permits for soil and/or groundwater monitoring, for bulk application sites, to verify compliance with this Regulation. Factors taken into consideration in the establishment of soil and groundwater monitoring will include groundwater depth, operation flexibility, application frequency, type of sludge, size of application area, and loading rate.

(1) The Department may establish pre-application and post-application site monitoring requirements in permits for limiting nutrients or limiting pollutants as determined by the Department.

(2) The Department may establish permit conditions which require the permittee to reduce, modify, or eliminate the sludge applications based on the results of this data.

(3) The Department may modify or revoke and reissue or revoke the permit based on this data.

(o) Any person who prepares bulk industrial sludge and applies it to the land, or provides the bulk industrial sludge to a person who applies the bulk industrial sludge, or provides the bulk industrial sludge to another person who treats or processes the bulk industrial sludge prior to land applying it, shall apply to the Department for a permit to land apply the bulk industrial sludge and shall receive a valid permit from the Department prior to the actual application. Any person who prepares industrial sludge and sells or gives it away in a bag or other container, or provides the industrial sludge to a person who sells or gives it away in a bag or other container, or provides the industrial sludge to another person who treats, mixes, alters or processes the industrial sludge for sale or gives it away in a bag or other container shall receive a valid permit from the Department prior to the sale or distribution of the material. The application for land applying sludges, or bagging, or selling, or giving away sludges will be in the form of a report prepared by a qualified Professional Engineer, qualified soil scientist, qualified agronomist, or other qualified individual. This report shall at a minimum contain:

(1) Sludge generator information shall be included as follows:

(i) Facility name, address, telephone number, county, and NPDES or other permit number (if applicable).

(ii) Plant discharge capacity in millions of gallons per day (MGD) (if applicable), amount of sludge generated per year (dry weight basis), description of sludge storage and amount of stockpiled sludge (if applicable), description of sludge treatment, and current method of disposal.

(2) Sludge analysis information shall be included as follows:

(i) Test results or rationale that demonstrates the non-hazardous nature of the sludge to the satisfaction of the Department.

(ii) Name, address, lab certification number, and telephone number of the laboratory conducting the analyses.

(iii) Sludge shall be analyzed for:

(A) Total solids (mg/l) and volatile solids (mg/kg).

(B) Nutrients (dry weight basis).

(1) Total Kjeldahl Nitrogen (mg/kg).
(2) Total inorganic nitrogen (mg/kg).
(3) Total ammonia nitrogen (mg/kg) and Total nitrate nitrogen (mg/kg).
(4) Total phosphorus (mg/kg).
(5) Total potassium (mg/kg).
(6) Calcium Carbonate Equivalency (if industrial sludge is alkaline stabilized).

(C) Pollutants (dry weight basis).

(1) Arsenic (mg/kg).
(2) Cadmium (mg/kg).
(3) Copper (mg/kg).
(4) Lead (mg/kg).
(5) Mercury (mg/kg).
(6) Molybdenum (mg/kg).
(7) Nickel (mg/kg).
(8) Selenium (mg/kg).
(9) Zinc (mg/kg).
(10) Other compounds required by the permit or any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471)) may be required to be monitored for in the industrial sludge (if applicable).

(D) If an analysis must be performed on the sludge to document compliance with pathogen reduction requirements and vector attraction reduction requirements, these analyses shall be submitted in the report along with an explanation.

(iv) Sludge handling and application information shall be included as follows:

(A) Description of method of transport (if applicable).

(B) The time of year of the sludge application and how it relates to crop planting and harvesting schedule (if applicable).

(C) Name, address, and telephone number of the contractor applying the sludge (if applicable).

(D) Type of equipment used to spread the sludge (if applicable).

(v) Application site information shall be included (as appropriate):

(A) Name and address of landowner and location of application site(s).

(B) Name and address of the party managing the site(s) (if different than the owner).

(C) Previous years when sludge was applied and application amounts (when sludge was applied under permits issued by the Department).

(D) Additional soil additives applied on the site(s).

(E) Description of method to control access to the site(s).

(F) Method of odor control (if applicable).

(G) Site location(s) on maps including:

(1) Topography and drainage characteristics.
(2) Adjacent land usage and location of inhabited dwellings.
(3) All water supply wells on adjacent property.
(4) Adjacent surface water bodies.
(5) Sludge use boundaries and buffer zones.
(6) Location of proposed groundwater monitoring wells (if applicable).
(7) Right-of-Ways
(8) Soil test, description of soil types, and boring locations (if applicable).

(vi) Site Monitoring Plan information shall be included as follows (when required):

(A) Groundwater monitoring information (if applicable).

(B) Soil monitoring methods and locations (if applicable).

(C) Surface water sampling methods and locations (if applicable).

(D) Metals testing, if required, due to previous application(s) (if applicable).

(E) Method to insure that the soil pH will remain within agronomic ranges during the life of the site (e.g. alkaline stabilized sludge projects).

(vii) The Department, at its discretion, may identify specific application information that may be excluded from a submission if the applicant has an alternate permitted method of disposal for the bulk industrial sludge (e.g. a municipal or industrial solid waste landfill disposal permit). The Department, may allow an applicant to exclude application information from a submission of a modified application or addition to a previously permitted activity.

(p) The Department, at its discretion, may request of an applicant any additional information deemed necessary to complete or correct deficiencies in the sludge disposal permit application before processing the application or issuing or denying the issuance of a permit.

(q) Applicants for land application of sludge must submit their applications on permit application forms if designated by the Department.

(r) If a deleterious impact to the groundwaters of the State from industrial sludge use or disposal practices is documented, through groundwater monitoring levels exceeding the standards set forth in R.61-68 or a significant adverse trend occurs, then it will be the obligation of the generator/preparer of the industrial sludge as directed by the Department to conduct an investigation to determine the vertical and horizontal extent of groundwater impact. The Department may require remediation of the

groundwater to within acceptable levels for groundwater as set forth in R.61-68.

**504.13 Pollutant limits.**

(a) Industrial sludge

(1) Bulk industrial sludge or industrial sludge sold or given away in a bag or other container shall not be applied to the land if the concentration of any pollutant in the industrial sludge exceeds the ceiling concentration for the pollutant in Table 1 of section 504.13. However, the Department may allow, on a case-by-case basis, the application of bulk industrial sludge to the land when the concentration of any pollutant in the industrial sludge exceeds the ceiling concentration for the pollutant in Table 1 of section
504.13 provided the application rate is at or below the agronomic rates as defined by section 504.11(b). It must be clearly demonstrated to the Department's satisfaction that no adverse impact to public health or the environment will occur in these situations. Additional requirements in permits on management, operational standards, site restrictions, frequency of monitoring, recordkeeping, and reporting may be imposed in the these situations.

(2) If bulk industrial sludge is applied to agricultural land, forest, a public contact site, or a reclamation site, either:

(i) the cumulative loading rate for each pollutant shall not exceed the cumulative pollutant loading rate for the pollutant in Table 2 of section 504.13; or

(ii) the concentration of each pollutant in the industrial sludge shall not exceed the concentration for the pollutant in Table 3 of section 504.13.

(3) If bulk industrial sludge is applied to a lawn or a home garden, the concentration of each pollutant in the industrial sludge shall not exceed the concentration for the pollutant in Table 3 of section 504.13.

(4) If industrial sludge is sold or given away in a bag or other container for application to the land, either:

(i) the concentration of each pollutant in the industrial sludge shall not exceed the concentration for the pollutant in Table 3 of section 504.13, or

(ii) the product of the concentration of each pollutant in the industrial sludge and the annual whole sludge application rate for the industrial sludge shall not cause the annual pollutant loading rate for the pollutant in Table 4 of section 504.13 to be exceeded. The procedure used to determine the annual whole sludge application rate is presented in appendix A of this part.

(5) The Department may determine on a case-by-case basis that an industrial sludge due to its pollutant content or pollutant concentration may not be land applied or sold or given away.

(b) Pollutant concentrations and loading rates - industrial sludge.

(1) Ceiling concentrations

TABLE 1 OF SECTION 504.13 -- CEILING CONCENTRATIONS

| Pollutant | Ceiling Concentration (milligrams per kilogram) Dry weight basis |
|---|---|
| Arsenic | 75 |
| Cadmium | 85 |
| Copper | 4300 |
| Lead | 840 |
| Mercury | 57 |
| Molybdenum | 75 |
| Nickel | 420 |
| Selenium | 100 |
| Zinc | 7500 |

(2) Cumulative pollutant loading rates

TABLE 2 OF SECTION 504.13 -- CUMULATIVE POLLUTANT LOADING RATES

| Pollutant | Cumulative Pollutant Loading Rate (kilograms per hectare) |
|---|---|
| Arsenic | 41 |
| Cadmium | 39 |
| Copper | 1500 |
| Lead | 300 |
| Mercury | 17 |
| Nickel | 420 |
| Selenium | 100 |
| Zinc | 2800 |

(3) Pollutant concentrations

TABLE 3 OF SECTION 504.13 -- POLLUTANT CONCENTRATIONS

| | Monthly Average Concentrations (milligrams per kilogram) |
|---|---|

| Pollutant | Dry weight basis |
|---|---|
| Arsenic | 41 |
| Cadmium | 39 |
| Copper | 1500 |
| Lead | 300 |
| Mercury | 17 |
| Nickel | 420 |
| Selenium | 100 |
| Zinc | 2800 |

(4) Annual pollutant loading rates

TABLE 4 OF SECTION 504.13 -- ANNUAL POLLUTANT LOADING RATES

| Pollutant | Annual Pollutant Loading Rate (kilograms per hectare per 365 day period) |
|---|---|
| Arsenic | 2.0 |
| Cadmium | 1.9 |
| Copper | 75 |
| Lead | 15 |
| Mercury | 0.85 |
| Nickel | 21 |
| Selenium | 5.0 |
| Zinc | 140 |

(c) [Reserved.]

(d) Additional parameters may be required, from the application information or subsequent monitoring, in a permit thereafter, but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR 136; Subchapter N (40 CFR Part 400 through 402 and 404 through 471)) may be required to be monitored (in permits) for in the industrial sludge.

**504.14 Management practices.**

(a) [Reserved.]

(b) Bulk industrial sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk industrial sludge enters a wetland or other waters of the State, as defined in R.61-9.122.2, except as provided in a permit issued pursuant to section 402 or 404 of the CWA.

(c) Bulk industrial sludge shall not be applied to agricultural land, forest, or a reclamation site that

is 10 meters or less from waters of the State, as defined in R.61-9.122.2, unless otherwise specified by the Department.

(d) Bulk industrial sludge shall be applied to agricultural land, forest, a public contact site, or a reclamation site at a whole sludge application rate that is equal to or less than the agronomic rate for the bulk industrial sludge, unless, in the case of a reclamation site, otherwise specified by the Department.

(e) Either a label shall be affixed to the bag or other container in which industrial sludge that is sold or given away for application to the land, or an information sheet shall be provided to the person who receives industrial sludge sold or given away in an other container for application to the land. The label or information sheet shall contain the following information:

(1) The name and address of the person who prepared the industrial sludge that is sold or given away in a bag or other container for application to the land.

(2) A statement that application of the industrial sludge to the land is prohibited except in accordance with the instructions on the label or information sheet.

(3) The annual whole sludge application rate for the industrial sludge that does not cause any of the annual pollutant loading rates in Table 4 of section 504.13 to be exceeded.

(4) The annual whole sludge application rate for the industrial sludge that does not cause the agronomic rate for appropriate crops to be exceeded (to be presented in tons/acre or other units approved by the Department).

(f) Screening of industrial septage is required prior to land application. The screenings must be disposed of properly (e.g. municipal waste landfill).

**504.15 Operational standards - pathogens and vector attraction reduction.**

(a) Pathogens - industrial sludge

(1) If pathogens are expected to be present, the Class A pathogen requirements in section 504.32(a) or the Class B pathogen requirements and site restrictions in section 504.32(b) shall be met when bulk industrial sludge is applied to agricultural land, forest, a public contact site, or a reclamation site.

(2) If pathogens are expected to be present, the Class A pathogen requirements in section 504.32(a) shall be met when bulk industrial sludge is applied to a lawn or a home garden.

(3) If pathogens are expected to be present, the Class A pathogen requirements in section 504.32(a) shall be met when industrial sludge is sold or given away in a bag or other container for application to the land.

(b) [Reserved.]

(c) Vector attraction reduction - industrial sludge

(1) When the industrial sludge is expected to attract vectors, one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8); a requirement that is equivalent to one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504(b)(8), as determined by the Department; or the vector attraction reduction requirements in section 504.33(b)(9) or (b)(10) shall be met when bulk industrial sludge is applied to agricultural land, forest, a public contact site, or a reclamation site.

(2) When the industrial sludge is expected to attract vectors, one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement, as determined by the Department, shall be met when bulk industrial sludge is applied to a lawn or a home garden.

(3) When the industrial sludge is expected to attract vectors, one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement, as determined by the Department, shall be met when industrial sludge is sold or given away in a bag or other container for application to the land.

(d) [Reserved.]

**504.16 Frequency of monitoring.**

(a) Industrial sludge

(1) The frequency of monitoring for the pollutants listed in Table 1, Table 2, Table 3 and Table 4 of section 504.13 and other pollutants listed in a NPDES or land application permit; when pathogens are expected to be present, the pathogen density requirements in section 504.32(a) and in section 504.32(b)(2) through section 504.32(b)(4); and when the industrial sludge is expected to attract vectors, the vector attraction reduction requirements section 504.33(b)(1) through section 504.33(b)(4) and section 504.33(b)(6) through section 504.33(b)(8) shall be the frequency in Table 1 of section 504.16.

TABLE 1 OF SECTION 504.16 -- FREQUENCY OF MONITORING - LAND APPLICATION

| Amount of industrial sludge* (metric tons per 365 day period) | Frequency |
|---|---|
| Greater than zero but less than 1,500. | Once per quarter** (four times per year) |

| | |
|---|---|
| Equal to or greater than 1,500 but less than 15,000. | Once per 60 days (six times per year) |
| Equal to or greater than 15,000. | Once per month (12 times per year) |

* Either the amount of bulk industrial sludge applied to the land or the amount of industrial sludge received by a person who prepares industrial sludge that is sold or given away in a bag or other container for application to the land (dry weight basis).

** Facilities which generate less than 290 metric tons of sludge per year and land apply the sludge once per year or less only have to monitor once per year.

(2) After the industrial sludge has been monitored for two years at the frequency in Table 1 of section 504.16, the Department may reduce the frequency of monitoring for pollutant concentrations, for the pathogen density requirements in section 504.32(a)(5)(ii) and section 504.32(a)(5)(iii), if applicable, and for the vector attraction reduction requirements section 504.33(b)(1) through section 504.33(b)(8), if applicable.

(b) [Reserved.]

**504.17 Recordkeeping.**

(a) Industrial sludge

(1) The person who prepares the industrial sludge in section 504.10(b)(2) or in section 504.10(e) shall develop the following information and shall retain the information for five years:

(i) The concentration of each pollutant listed in Table 3 of section 504.13 and other pollutants listed in a NPDES or land application permit in the industrial sludge.

(ii) [Reserved].

(iii) If pathogens are expected to be present, a description of how the Class A pathogen requirements in section 504.32(a) are met.

(iv) When the industrial sludge is expected to attract vectors, a description of how one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement, as determined by the Department, is met.

(2) The person who derives the material in section 504.10(f) shall develop the following information and shall retain the information for five years:

(i) The concentration of each pollutant listed in Table 3 of section 504.13 and other pollutants listed in a NPDES or land application permit in the material.

(ii) [Reserved].

(iii) If pathogens are expected to be present, a description of how the Class A pathogen requirements in section 504.32(a) are met.

(iv) When the industrial sludge is expected to attract vectors, a description of how one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement, as determined by the Department, is met.

(3) If the pollutant concentrations in section 504.13(b)(3), the Class A pathogen requirements in section 504.32(a), and the vector attraction reduction requirements in either section 504.33(b)(9) or section 504.33(b)(10) are met when bulk industrial sludge is applied to agricultural land, forest, a public contact site, or a reclamation site:

(i) The person who prepares the bulk industrial sludge shall develop the following information and shall retain the information for five years.

(A) The concentration of each pollutant listed in Table 3 of section 504.13 and other pollutants listed in a NPDES or land application permit in the bulk industrial sludge.

(B) [Reserved].

(C) If pathogens are expected to be present, a description of how the pathogen requirements in section 504.32(a) are met.

(ii) The person who applies the bulk industrial sludge shall develop the following information and shall retain the information for five years.

(A) [Reserved].

(B) A description of how the management practices in section 504.14 are met for each site on which bulk industrial sludge is applied.

(C) If the industrial sludge is expected to attract vectors, a description of how the vector attraction reduction requirements in either section 504.33(b)(9) or section 504.33(b)(10) are met for each site on which bulk industrial sludge is applied.

(4) If the pollutant concentrations in section 504.13(b)(3) and the Class B pathogen requirements in section 504.32(b) are met when bulk industrial sludge is applied to agricultural land, forest, a public contact site, or a reclamation site:

(i) The person who prepares the bulk industrial sludge shall develop the following information and shall retain the information for five years:

(A) The concentration of each pollutant listed in Table 3 of section 504.13 and other pollutants listed in a NPDES or land application permit in the bulk industrial sludge.

(B) [Reserved].

(C) If pathogens are expected to be present, a description of how the Class B pathogen requirements in section 504.32(b) are met.

(D) When one of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8) is met, a description of how the vector attraction reduction requirement is met.

(ii) The person who applies the bulk industrial sludge shall develop the following information and shall retain the information for five years.

(A) [Reserved].

(B) A description of how the management practices in section 504.14 are met for each site on which bulk industrial sludge is applied.

(C) A description of how the site restrictions in section 504.32(b)(5) are met for each site on which bulk industrial sludge is applied.

(D) When the vector attraction reduction requirement in either section 504.33(b)(9) or section 504.33(b)(10) is met, a description of how the vector attraction reduction requirement is met.

(5) If the requirements in section 504.13(a)(2)(i) are met when bulk industrial sludge is applied to agricultural land, forest, a public contact site, or a reclamation site:

(i) The person who prepares the bulk industrial sludge shall develop the following information and shall retain the information for five years.

(A) The concentration of each pollutant listed in Table 1 of section 504.13 and other pollutants listed in a NPDES or land application permit in the bulk industrial sludge.

(B) [Reserved].

(C) If pathogens are expected to be present, a description of how the pathogen requirements in either section 504.32(a) or section 504.32(b) are met.

(D) When one of the vector attraction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement, as determined by the Department, is met, a description of how the vector attraction requirement is met.

(ii) The person who applies the bulk industrial sludge shall develop the following information, retain the information in section 504.17(a)(5)(ii)(A) through section 504.17(a)(5)(ii)(G)

indefinitely, and retain the information in section 504.17(a)(5)(ii)(H) through section 504.17(a)(5)(ii)(M) for five years.

(A) The location, by either street address or latitude and longitude, of each site on which bulk industrial sludge is applied.

(B) The number of hectares in each site on which bulk industrial sludge is applied.

(C) The date bulk industrial sludge is applied to each site.

(D) The cumulative amount of each pollutant (i.e., kilograms) listed in Table 2 of section 504.13 in the bulk industrial sludge applied to each site, including the amount in section 504.12(e)(2)(iii).

(E) The amount of industrial sludge (i.e., metric tons) applied to each site.

(F) [Reserved].

(G) A description of how the requirements to obtain information in section 504.12(e)(2) are met.

(H) [Reserved].

(I) A description of how the management practices in section 504.14 are met for each site on which bulk industrial sludge is applied.

(J) [Reserved].

(K) A description of how the site restrictions in section 504.32(b)(5) are met for each site on which Class B bulk industrial sludge is applied.

(L) [Reserved].

(M) If the vector attraction reduction requirements in either section 504.33(b)(9) or section 504.33(b)(10) are met, a description of how the requirements are met.

(6) If the requirements in section 504.13(a)(4)(ii) are met when industrial sludge is sold or given away in a bag or other container for application to the land, the person who prepares the industrial sludge that is sold or given away in a bag or other container shall develop the following information and shall retain the information for five years:

(i) The annual whole sludge application rate for the industrial sludge that does not cause the annual pollutant loading rates in Table 4 of section 504.13 to be exceeded.

(ii) The concentration of each pollutant listed in Table 4 of section 504.13 and other

pollutants listed a NPDES or land application permit in the industrial sludge.

(iii) [Reserved].

(iv) If pathogens are expected to be present, a description of how the Class A pathogen requirements in section 504.32(a) are met.

(v) When the industrial sludge is expected to attract vectors, a description of how one of the vector attraction requirements in section 504.33(b)(1) through section 504.33(b)(8) or an equivalent vector attraction reduction requirement, as determined by the Department, is met.

(b) [Reserved].

**504.18 Reporting.**

(a) Any generator of industrial sludge that is applied to the land, any person who prepares industrial sludge that is applied to the land, or any person who applies industrial sludge to the land shall submit the following information to the Department:

(1) The information in section 504.17(a), except the information in section 504.17(a)(3)(ii), section 504.17(a)(4)(ii) and in section 504.17(a)(5)(ii), for the appropriate requirements on or before February 19 of each year, for the period of January 1 through December 31 of the previous calendar year.

(2) The information in section 504.17(a)(5)(ii)(A) through section 504.17(a)(5)(ii)(G) on or before February 19 of each year, for the period of January 1 through December 31 of the previous calendar year when 90 percent or more of any of the cumulative pollutant loading rates in Table 2 of section 504.13 is reached at a site.

(b) [Reserved.]

## Part C
## Land Disposal

**504.20 Applicability.**

(a) This part applies to any person who prepares industrial sludge that is placed on a land disposal site, to the owner/operator of a land disposal site, to industrial sludge placed on a land disposal site, and to a land disposal site.

(b) This part does not apply to industrial sludge stored on the land or to the land on which industrial sludge is stored. It also does not apply to industrial sludge that remains on the land for longer than two years when the person who prepares the industrial sludge demonstrates that the land on which the industrial sludge remains is not an active industrial sludge unit. The demonstration shall include the following information, which shall be retained by the person who prepares the industrial sludge for the period that the industrial sludge remains on the land:

(1) The name and address of the person who prepares the industrial sludge.

(2) The name and address of the person who either owns the land or leases the land.

(3) The location, by either street address or latitude and longitude, of the land.

(4) An explanation of why industrial sludge needs to remain on the land for longer than two years prior to final use or disposal.

(5) The approximate time period when the industrial sludge will be used or disposed.

(c) This part does not apply to industrial sludge treated on the land or to the land on which industrial sludge is treated.

(d) This part does not apply to industrial sludge that is allowed to remain in a closed wastewater treatment facility when the facility is closed in accordance with Regulation 61-82. For example, this part does not apply when the Department has approved a wastewater treatment lagoon closure which includes draining the lagoon and then leaving the sludge in place and disking it into the soil, and then filling the lagoon with suitable material or leveling the dikes.

**504.21 Special definitions.**

(a) "Active industrial sludge unit" is an industrial sludge unit that has not closed.

(b) "Industrial sludge unit" is land on which industrial sludge is placed for final disposal. This does not include land on which industrial sludge is either stored or treated. Land does not include waters of the State, as defined in R.61-9.122.2 and does not include beneficial use activities covered under Part B, which comply with agronomic rate requirements and metals limitations or other bulk industrial sludge land application activities permitted on a case-by-case basis under Part B (504.13(a)(1)).

(c) "Land disposal site" is an area of land that contains one or more active industrial sludge units.

**504.22 General requirements.**

(a) No person shall place industrial sludge on an active industrial sludge unit unless the requirements in this part are met.

(1) The following activities or conditions constitute land disposal (unless the Department has issued a permit or granted approval for the specific activity):

(i) Storage of industrial sludge in sludge storage units, excluding sludge treatment, for more than two (2) years constitutes land disposal.

(ii) The design storage capacity of industrial sludge storage units will not be permitted to

exceed two (2) years at the treatment plant design conditions, or

(iii) Accumulation of industrial sludge in a treatment works to greater than fifty (50) percent of the capacity of the unit or to an average depth of greater than design depth constitutes land disposal of sludge under this regulation, or

(iv) Accumulation of industrial sludge that adversely impacts the overall treatment works operation and maintenance or results in an excessive sludge inventory, may result in a facility being identified as a land disposal site.

(2) For any facility, except a landfill or a sludge only monofill, meeting the definition of a land disposal site on the date of this regulation, either sufficient amount of sludge must be removed from the facility in order to change the facility's classification, or a report detailing final closure must be submitted to the Bureau of Water, Department of Health and Environmental Control or an application for permitting under Solid Waste Regulations must be submitted to the Bureau of Land and Waste Management, Department of Health and Environmental Control. Either the sludge removal must be accomplished within one year after the date of this regulation or the closeout report or permit application must be submitted to the Department within one (1) year after the date of this regulation. If closure is the selected option, the plan must provide a schedule showing how the closure will be accomplished. The land disposal site must be either closed under Regulation 61-82 or permitted by Solid Waste Management Regulations by June 28, 2001. Facilities will be in compliance with this section if a timely and complete application for closure or permit is made and through no fault of the applicant a closure approval or permit has not been issued.

(3) [Reserved].

(b) [Reserved.]

(c) [Reserved.]

(d) The owner of a land disposal site in existence on or before the effective date of this regulation and then closed shall provide written notification to the subsequent owner of the site that industrial sludge was placed on the land.

(e) Land disposal of sludge in a landfill, including sludge only monofills, shall comply with State Solid Waste regulations and requirements in permits.

(f) [Reserved.]

(g) [Reserved.]

(h) New land disposal sites must be permitted under the provisions of Solid and Hazardous Waste Regulations prior to operation.

**504.23 [Reserved.]**

**504.24 [Reserved.]**

**504.25 [Reserved.]**

**504.26 [Reserved.]**

**504.27 [Reserved.]**

**504.28 [Reserved.]**

## Part D
## Pathogens and Vector Attraction Reduction

**504.30 Scope.**

(a) This part contains the requirements for an industrial sludge to be classified either Class A or Class B with respect to pathogens when pathogens are expected to be present. Industrial sludge with no pathogens present or expected to be present will be classified as Class A with respect to pathogens.

(b) This part contains the site restrictions for land on which a Class B industrial sludge is applied.

(c)[Reserved.]

(d) This part contains alternative vector attraction reduction requirements for industrial sludge that is applied to the land.

**504.31 Special definitions.**

(a) "Aerobic digestion" is the biochemical decomposition of organic matter in industrial sludge into carbon dioxide and water by microorganisms in the presence of air.

(b) "Anaerobic digestion" is the biochemical decomposition of organic matter in industrial sludge into methane gas and carbon dioxide by microorganisms in the absence of air.

(c) "Density of microorganisms" is the number of microorganisms per unit mass of total solids (dry weight) in the industrial sludge.

(d) "Land with a high potential for public exposure" is land that the public uses frequently. This includes, but is not limited to, a public contact site and a reclamation site located in a populated area (e.g., a construction site located in a city).

(e) "Land with a low potential for public exposure" is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest, and a reclamation site located in an unpopulated

area (e.g., a strip mine located in a rural area).

(f) "Pathogenic organisms" are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

(g) "pH" means the logarithm of the reciprocal of the hydrogen ion concentration measured at 25 degrees C., or measured at another temperature and then converted to an equivalent value at 25 degrees C.

(h) "Specific oxygen uptake rate (SOUR)" is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the industrial sludge.

(i) "Total solids" are the materials in industrial sludge that remain as residue when the industrial sludge is dried at 103 to 105 degrees Celsius.

(j) "Unstabilized solids" are organic materials in industrial sludge that have not been treated in either an aerobic or anaerobic treatment process to include extended aeration, activated sludge or other treatment processes approved by the Department.

(k) "Vector attraction" is the characteristic of industrial sludge that attracts rodents, flies, mosquitos, or other organisms capable of transporting infectious agents.

(l) "Volatile solids" is the amount of the total solids in industrial sludge lost when the industrial sludge is combusted at 550 degrees Celsius in the presence of excess air.

**504.32 Pathogens.**

(a) Industrial sludge - Class A

(1) The requirement in section 504.32(a)(2) and the requirements in either section 504.32(a)(3), section 504.32(a)(4), section 504.32(a)(5), section 504.32(a)(6), section 504.32(a)(7), or section 504.32(a)(8) shall be met for an industrial sludge to be classified Class A with respect to pathogens if pathogens are expected to be present.

(2) When pathogens are expected to be present and the industrial sludge is expected to attract vectors, the Class A pathogen requirements in section 504.32(a)(3) through section 504.32(a)(8) shall be met either prior to meeting or at the same time the vector attraction reduction requirements in section 504.33, except the vector attraction reduction requirements in section 504.33(b)(6) through section 504.33(b)(8), are met.

(3) Class A - Alternative 1 (Not available for composting).

(i) Either the density of fecal coliform in the industrial sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the industrial sludge shall be less than three Most Probable Number per four grams of total solids (dry

weight basis) at the time the industrial sludge is used or disposed; at the time the industrial sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the industrial sludge or material derived from industrial sludge is prepared to meet the requirements in section 504.10(b), section 504.10(e), or section 504.10(f).

(ii) The temperature of the industrial sludge that is used or disposed shall be maintained at a specific value for a period of time.

(A) When the percent solids of the industrial sludge is seven percent or higher, the temperature of the industrial sludge shall be 50 degrees Celsius or higher; the time period shall be 20 minutes or longer; and the temperature and time period shall be determined using equation (2), except when small particles of industrial sludge are heated by either warmed gases or an immiscible liquid.

$$D = \frac{131{,}700{,}000}{10^{0.1400t}} \quad \text{(Equation 2)}$$

Where,

D = time in days.

t = temperature in degrees Celsius.

TABLE 1 OF SECTION 504.32 -- If the industrial sludge is 7% solids or higher.

| Temperature (Celsius) | Time |
|---|---|
| 50.0 (minimum) | 13.17 days |
| 60.0 | 12 hours 43 minutes |
| 65.0 | 2 hours 39 minutes |
| 70.0 | 30 minutes |
| 71.3 | 20 minutes (minimum) |

(B) When the percent solids of the industrial sludge is seven percent or higher and small particles of industrial sludge are heated by either warmed gases or an immiscible liquid, the temperature of the industrial sludge shall be 50 degrees Celsius or higher; the time period shall be 15 seconds or longer; and the temperature and time period shall be determined using equation (2).

TABLE 2 OF SECTION 504.32 -- If the industrial sludge is 7% solids or higher and small particles of industrial sludge are heated by warm gases or an immiscible liquid.

| Temperature (Celsius) | Time |
|---|---|
| 50.0 (minimum) | 13.17 days |
| 65.0 | 2 hours 39 minutes |
| 71.3 | 20 minutes |
| 80.0 | 1 min. 12 seconds |
| 84.9 | 15 seconds (minimum) |

(C) When the percent solids of the industrial sludge is less than seven percent and the time period is at least 15 seconds, but less than 30 minutes, the temperature and time period shall be determined using equation (2).

TABLE 3 OF SECTION 504.32 -- If the industrial sludge is less than 7% solids and the time period is at least 15 seconds, but less than 30 minutes.

| Temperature (Celsius) | Time |
|---|---|
| 70.0 | 30 minutes (Maximum time. See (D) for greater than 30 minutes) |
| 71.3 | 20 minutes |
| 75.0 | 6 minutes |
| 80.0 | 1 minute 12 seconds |
| 84.9 | 15 seconds (minimum) |

(D) When the percent solids of the industrial sludge is less than seven percent; the temperature of the industrial sludge is 50 degrees Celsius or higher; and the time period is 30 minutes or longer, the temperature and time period shall be determined using equation (3).

$$D = \frac{50{,}070{,}000}{10^{0.1400t}} \quad \text{(Equation 3)}$$

Where,

D = time in days.

t = temperature in degrees Celsius.

TABLE 4 OF SECTION 504.32 -- If the industrial sludge is less than 7% solids an the temperature of the industrial sludge is 50 degrees Celsius or higher; and the time period is 30 minutes or longer.

| Temperature (Celsius) | Time |
|---|---|
| 50.0 (minimum) | 5.0 days |
| 55.0 | 1.0 day |
| 60.0 | 4 hours 48 minutes |
| 65.0 | 58 minutes |
| 67.0 | 30 minutes (minimum) |

(iii) The temperature used in equation (2) and equation (3) will be the lowest, continuously measured temperature within the reaction vessel during a 24-hour period or the lowest measured temperature during any 24-hour period, if a continuous treatment process is used. If a batch treatment process is used, the temperature used in the equation (2) and equation (3) will be the lowest temperature measured during the batch treatment.

(iv) For design temperatures measuring greater than 70 degrees Celsius, continuous temperature monitoring shall be required.

(4) Class A - Alternative 2

(i) Either the density of fecal coliform in the industrial sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the industrial sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the industrial sludge is used or disposed; at the time the industrial sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the industrial sludge or material derived from industrial sludge is prepared to meet the requirements in section 504.10(b), section 504.10(e), or section 504.10(f).

(ii)(A) The pH of the industrial sludge that is used or disposed shall be raised to above 12 and shall remain above 12 for 72 hours.

(B) The temperature of the industrial sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the industrial sludge is above 12.

(C) At the end of the 72 hour period during which the pH of the industrial sludge is above 12, the industrial sludge shall be air dried to achieve a percent solids in the industrial sludge greater than 50 percent.

(5) Class A - Alternative 3

(i) Either the density of fecal coliform in the industrial sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in industrial sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the industrial sludge is used or disposed; at the time the industrial sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the industrial sludge or material derived from industrial sludge is prepared to meet the requirements in section 504.10(b), section 504.10(e), or section 504.10(f).

(ii)(A) The industrial sludge shall be analyzed prior to pathogen treatment to determine whether the industrial sludge contains enteric viruses.

(B) When the density of enteric viruses in the industrial sludge prior to pathogen treatment is less than one Plaque-forming Unit per four grams of total solids (dry weight basis), the industrial sludge is Class A with respect to enteric viruses until the next monitoring episode for the industrial sludge.

(C) When the density of enteric viruses in the industrial sludge prior to pathogen treatment is equal to or greater than one Plaque-forming Unit per four grams of total solids (dry weight basis), the industrial sludge is Class A with respect to enteric viruses when the density of enteric viruses in the industrial sludge after pathogen treatment is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the industrial sludge that meets the enteric virus density requirement are documented.

(D) After the enteric virus reduction in paragraph (a)(5)(ii)(C) of this subsection is demonstrated for the pathogen treatment process, the industrial sludge continues to be Class A with respect to enteric viruses when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in paragraph (a)(5)(ii)(C) of this subsection.

(iii)(A) The industrial sludge shall be analyzed prior to pathogen treatment to determine whether the industrial sludge contains viable helminth ova.

(B) When the density of viable helminth ova in the industrial sludge prior to pathogen treatment is less than one per four grams of total solids (dry weight basis), the industrial sludge is Class A with respect to viable helminth ova until the next monitoring episode for the industrial sludge.

(C) When the density of viable helminth ova in the industrial sludge prior to pathogen treatment is equal to or greater than one per four grams of total solids (dry weight basis), the industrial sludge is Class A with respect to viable helminth ova when the density of viable helminth ova in the

industrial sludge after pathogen treatment is less than one per four grams of total solids (dry weight basis) and when the values or ranges of values for the operating parameters for the pathogen treatment process that produces the industrial sludge that meets the viable helminth ova density requirement are documented.

(D) After the viable helminth ova reduction in paragraph (a)(5)(iii)(C) of this subsection is demonstrated for the pathogen treatment process, the industrial sludge continues to be Class A with respect to viable helminth ova when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in paragraph (a)(5)(iii)(C) of this subsection.

(6) Class A - Alternative 4

(i) Either the density of fecal coliform in the industrial sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the industrial sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the industrial sludge is used or disposed; at the time the industrial sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the industrial sludge or material derived from industrial sludge is prepared to meet the requirements in section 504.10(b), section 504.10(e), or section 504.10(f).

(ii) The density of enteric viruses in the industrial sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the industrial sludge is used or disposed; at the time the industrial sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the industrial sludge or material derived from industrial sludge is prepared to meet the requirements in section 504.10(b), section 504.10(e), or section 504.10(f), unless otherwise specified by the Department.

(iii) The density of viable helminth ova in the industrial sludge shall be less than one per four grams of total solids (dry weight basis) at the time the industrial sludge is used or disposed; at the time the industrial sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the industrial sludge or material derived from industrial sludge is prepared to meet the requirements in section 504.10(b), section 504.10(e), or section 504.10(f), unless otherwise specified by the Department.

(7) Class A - Alternative 5

(i) Either the density of fecal coliform in the industrial sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella, sp. bacteria in the industrial sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the industrial sludge is used or disposed; at the time the industrial sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the industrial sludge or material derived from industrial sludge is prepared to meet the requirements in section 504.10(b), section 504.10(e), or section 504.10(f).

(ii) Industrial sludge that is used or disposed shall be treated in one of the Processes to Further Reduce Pathogens described in appendix B of this part if pathogens are expected to be present.

(8) Class A - Alternative 6

(i) Either the density of fecal coliform in the industrial sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella, sp. bacteria in the industrial sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time the industrial sludge is used or disposed; at the time the industrial sludge is prepared for sale or give away in a bag or other container for application to the land; or at the time the industrial sludge or material derived from industrial sludge is prepared to meet the requirements in section 504.10(b), section 504.10(e), or section 504.10(f).

(i) Industrial sludge that is used or disposed shall be treated in a process that is equivalent to a Process to Further Reduce Pathogens, as determined by the Department.

(b) Industrial sludge - Class B

(1)(i) The requirements in either section 504.32(b)(2), section 504.32(b)(3), or section 504.32(b)(4) shall be met for an industrial sludge to be classified Class B with respect to pathogens if pathogens are expected to be present.

(ii) The site restrictions in section 504.32(b)(5) shall be met when industrial sludge that meets the Class B pathogen requirements in section 504.32(b)(2), section 504.32(b)(3), or section 504.32(b)(4) is applied to the land.

(2) Class B - Alternative 1

(i) Seven representative samples of the industrial sludge shall be collected at the time the industrial sludge is used or disposed.

(ii) The geometric mean of the density of fecal coliform in the samples collected in (b)(2)(i) of this subsection shall be less than either 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

(3) Class B - Alternative 2. Industrial sludge that is used or disposed shall be treated in one of the Processes to Significantly Reduce Pathogens described in appendix B of this part.

(4) Class B - Alternative 3. Industrial sludge that is used or disposed shall be treated in a process that is equivalent to a Process to Significantly Reduce Pathogens, as determined by the Department.

(5) Site Restrictions

(i) Food crops with harvested parts that touch the industrial sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of industrial sludge.

(ii) Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of industrial sludge when the industrial sludge remains on the land surface for four months or longer prior to incorporation into the soil.

(iii) Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of industrial sludge when the industrial sludge remains on the land surface for less than four months prior to incorporation into the soil.

(iv) Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of industrial sludge.

(v) Animals shall not be grazed on the land for 30 days after application of industrial sludge.

(vi) Turf grown on land where industrial sludge is applied shall not be harvested for one year after application of the industrial sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the Department.

(vii) Public access to land with a high potential for public exposure shall be restricted for one year after application of industrial sludge.

(viii) Public access to land with a low potential for public exposure shall be restricted for 30 days after application of industrial sludge.

(ix) The Department may establish in permits the required application buffer setbacks for property boundaries, roadways, residential developments, dwellings, water wells, drainageways, and surface water as deemed necessary to protect public health.

(x) The Department may establish minimum requirements in permits for soil and/or groundwater monitoring, for bulk application sites, to verify compliance with the Regulation.

(c) [Reserved.]

(1) [Reserved].

(2) [Reserved].

(3) [Reserved].

**504.30 Vector attraction reduction.**

(a) (1) One of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8); a requirement that is equivalent to one of the vector attraction reduction requirements in section 504.33(b)(1) through (b)(8), as determined by the Department; or the vector attraction reduction requirements in section 504.33(b)(9) or (b)(10) shall be met when bulk industrial sludge is applied to

agricultural land, forest, a public contact site, or a reclamation site when the industrial sludge is expected to attract vectors.

(2) One of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8); or an equivalent requirement, as determined by the Department, shall be met when bulk industrial sludge is applied to a lawn or a home garden when the industrial sludge is expected to attract vectors.

(3) One of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(8); or an equivalent requirement, as determined by the Department, shall be met when industrial sludge is sold or given away in a bag or other container for application to the land when the industrial sludge is expected to attract vectors.

(4) [Reserved].

(5) One of the vector attraction reduction requirements in section 504.33(b)(9), section 504.33(b)(10), or section 504.33(b)(12) shall be met when industrial septage is applied to agricultural land, forest, or a reclamation site when the industrial septage is expected to attract vectors.

(6) One of the vector attraction reduction requirements in section 504.33(b)(1) through section 504.33(b)(10) or section 504.33(b)(13) shall be met when industrial sludge is bulk applied to agricultural land, forest, a public contact site, or a reclamation site when the industrial sludge is expected to attract vectors.

(b) (1) The mass of volatile solids in the industrial sludge shall be reduced by a minimum of 38 percent (see calculation procedure in "Environmental Regulations and Technology-Control of Pathogens and Vector Attraction in Sewage Sludge," EPA-625/R-92/013, 1992, U.S. Environmental Protection Agency, Cincinnati, Ohio 45268).

(2) When the 38 percent volatile solids reduction requirement in section 504.33(b)(1) cannot be met for an anaerobically digested industrial sludge, vector attraction reduction can be demonstrated by digesting a portion of the previously digested industrial sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. When at the end of the 40 days, the volatile solids in the industrial sludge at the beginning of that period is reduced by less than 17 percent, vector attraction reduction is achieved.

(3) When the 38 percent volatile solids reduction requirement in section 504.33(b)(1) cannot be met for an aerobically digested industrial sludge, vector attraction reduction can be demonstrated by digesting a portion of the previously digested industrial sludge that has a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. When at the end of the 30 days, the volatile solids in the industrial sludge at the beginning of that period is reduced by less than 15 percent, vector attraction reduction is achieved.

(4) The specific oxygen uptake rate (SOUR) for industrial sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis)

at a temperature of 20 degrees Celsius. Other values may be allowed by the Department on a case-by-case basis.

(5) Industrial sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the industrial sludge shall be higher than 40 degrees Celsius and the average temperature of the industrial sludge shall be higher than 45 degrees Celsius. Other processes may be allowed by the Department on a case-by-case basis.

(6) The pH of industrial sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours at the time the industrial sludge is used or disposed; at the time the industrial sludge is prepared for sale or given away in a bag or other container for application to the land; or at the time the industrial sludge is prepared to meet the requirements in section 504.10(b), (c), (e), or (f).

(7) The percent solids of industrial sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials, at the time the industrial sludge is used or disposed; at the time the industrial sludge is prepared for sale or given away in a bag or other container for application to the land; or at the time the industrial sludge is prepared to meet the requirements in section 504.10(b), (c), (e), or (f).

(8) The percent solids of industrial sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials, at the time the industrial sludge is used or disposed; at the time the industrial sludge is prepared for sale or given away in a bag or other container for application to the land; or at the time the industrial sludge is prepared to meet the requirements in section 504.10(b), (c), (e), or (f).

(9)(i) Industrial sludge shall be injected below the surface of the land.

(ii) No significant amount of the industrial sludge shall be present on the land surface within one hour after the industrial sludge is injected.

(iii) When the industrial sludge that is injected below the surface of the land is Class A with respect to pathogens, the industrial sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(10)(i) Industrial sludge applied to the land surface shall be incorporated into the soil within six hours after application to or placement on the land, unless otherwise specified by the Department.

(ii) When industrial sludge that is incorporated into the soil is Class A with respect to pathogens, the industrial sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

(11) [Reserved].

(12) The pH of industrial septage shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 30 minutes.

(13) The vector attraction reduction requirement may be met through an alternative method to be determined by the Department on a case-by-case basis.

## Part E
## 504.40 to 504.49 (Reserved)

### 504.50 Odor Control Requirements.

The permit holder shall use best management practices normally associated with the proper operation and maintenance of a sludge wastewater treatment site, any sludge storage or lagoon areas, transportation of sludges, and all individual activities permitted under R.61-9.504 to ensure that an undesirable level of odor does not exist.

(a) The permittee shall prepare an odor abatement plan for the industrial sludge treatment sites, any sludge storage or lagoon areas, and land application or surface disposal sites. Permittees that land-apply sludge must prepare the plan within 180 days of the effective date of this regulation (effective date of June 26, 2003). Permittees that have facilities described above that require plans have one (1) year from the June 26, 2003 effective date to prepare the plan. Odor abatement plans must be submitted for new projects with the submission of permit applications. The plan must include the following topics:

(1) Operation and maintenance practices which are used to eliminate or minimize undesirable odor levels in the form of best management practices for Odor Control;

(2) Use of treatment processes for the reduction of undesirable odors;

(3) Use of setbacks;

(4) Contingency plans and methods to address odor problems for the different type of disposal/application methods used.

(b) Unless otherwise requested, prior to issuance of a new or expanded land application disposal permit (either NPDES or Land Application), the Department may review the odor abatement plan for compliance with this Part (504.50). The Department may require changes to the plan as appropriate.

(c) No permittee may cause, allow, or permit emission into the ambient air of any substance or combinations of substances in quantities that an undesirable level of odor is determined to result unless preventative measures of the type set out below are taken to abate or control the emission to the satisfaction of the Department. When an odor problem comes to the attention of the Department through field surveillance or specific complaints, the Department may determine, in accordance with section 48-1- 120 of the Pollution Control Act, if the odor is at an undesirable level by considering the character and degree of injury or interference to:

(1) The health or welfare of the people;

(2) Plant, animal, freshwater aquatic, or marine life;

(3) Property; or

(4) Enjoyment of life or use of affected property.

(d) After determining that an undesirable level of odor exists, the Department may require:

(1) the permittee to submit a corrective action plan to address the odor problem,

(2) remediation of the undesirable level of odor within a reasonable timeframe, and

(3) in an order, specific methods to address the problem.

(e) If the permittee fails to control or abate the odor problems addressed in this section within the specified timeframe, the Department may revoke disposal/application activities associated with the site or the specific aspect of the sludge management program.

## Appendix A
## Procedure to Determine the Annual Whole Sludge Application Rate for an Industrial Sludge

Section 504.13(a)(4)(ii) requires that the product of the concentration for each pollutant listed in Table 4 of section 504.13 in industrial sludge sold or given away in a bag or other container for application to the land and the annual whole sludge application rate (AWSAR) for the industrial sludge not cause the annual pollutant loading rate for the pollutant in Table 4 of section 504.13 to be exceeded. This appendix contains the procedure used to determine the AWSAR for an industrial sludge that does not cause the annual pollutant loading rates in Table 4 of section 504.13 to be exceeded.

The relationship between the annual pollutant loading rate (APLR) for a pollutant and the annual whole sludge application rate (AWSAR) for an industrial sludge is shown in equation (1).

APLR = C x AWSAR X 0.001 (1)

Where:

APLR = Annual pollutant loading rate in kilograms per hectare per 365 day period.

C = Pollutant concentration in milligrams per kilogram of total solids (dry weight basis).

AWSAR = Annual whole sludge application rate in metric tons per hectare per 365 day period (dry weight basis).

0.001 = A conversion factor.

To determine the AWSAR, equation (1) is rearranged into equation (2):

$$AWSAR = \frac{APLR}{(C \times 0.001)} \quad (2)$$

The procedure used to determine the AWSAR for an industrial sludge is presented below.

PROCEDURE:

1. Analyze a sample of the industrial sludge to determine the concentration for each of the pollutants listed in Table 4 of section 504.13 in the industrial sludge.

2. Using the pollutant concentrations from Step 1 and the APLRs from Table 4 of section 504.13, calculate an AWSAR for each pollutant using equation (2) above.

3. The AWSAR for the industrial sludge is the lowest AWSAR calculated in Step 2.

## Appendix B
## Pathogen Treatment Processes

A. PROCESSES TO SIGNIFICANTLY REDUCE PATHOGENS (PSRP)

1. Aerobic digestion. Industrial sludge is agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 40 days at 20 degrees Celsius and 60 days at 15 degrees Celsius.

2. Air drying. Industrial sludge is dried on sand beds or on paved or unpaved basins. The industrial sludge dries for a minimum of three months. During two of the three months, the ambient average daily temperature is above zero degrees Celsius.

3. Anaerobic digestion. Industrial sludge is treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35 to 55 degrees Celsius and 60 days at 20 degrees Celsius.

4. Composting. Using either the within-vessel, static aerated pile, or windrow composting methods, the temperature of the industrial sludge is raised to 40 degrees Celsius or higher and remains at 40 degrees Celsius or higher for five days. For four hours during the five days, the temperature in the compost pile exceeds 55 degrees Celsius.

5. Lime stabilization. Sufficient lime is added to the industrial sludge to raise the pH of the industrial sludge to 12 after two hours of contact.

6. Industrial sludge. Industrial sludge may meet the PSRP requirement through an alternate

procedure to be determined by the Department on a case-by-case basis.

B. PROCESSES TO FURTHER REDUCE PATHOGENS (PFRP)

1. Composting. Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the industrial sludge is maintained at 55 degrees Celsius or higher for three days.

Using the windrow composting method, the temperature of the industrial sludge is maintained at 55 degrees or higher for 15 days or longer. During the period when the compost is maintained at 55 degrees or higher, there shall be a minimum of five turnings of the windrow.

2. Heat drying. Industrial sludge is dried by direct or indirect contact with hot gases to reduce the moisture content of the industrial sludge to 10 percent or lower. Either the temperature of the industrial sludge particles exceeds 80 degrees Celsius or the wet bulb temperature of the gas in contact with the industrial sludge as the industrial sludge leaves the dryer exceeds 80 degrees Celsius.

3. Heat treatment. Liquid industrial sludge is heated to a temperature of 180 degrees Celsius or higher for 30 minutes.

4. Thermophilic aerobic digestion. Liquid industrial sludge is agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the industrial sludge is 10 days at 55 to 60 degrees Celsius.

5. Beta ray irradiation. Industrial sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20 degrees Celsius).

6. Gamma ray irradiation. Industrial sludge is irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at room temperature (ca. 20 degrees Celsius).

7. Pasteurization. The temperature of the industrial sludge is maintained at 70 degrees Celsius or higher for 30 minutes or longer.

8. Industrial sludge. Industrial sludges may meet the PFRP requirement through an alternate procedure to be determined by the Department on a case-by-case basis.

## Appendix C
## PCB. Polychlorinated Biphenyls

(1) Beginning with the effective date of this appendix, sludges for land application (including sewage sludge, sludges and septage that may be mixed with grease trap waste) must be sampled at least quarterly (based on calendar year quarters) for PCBs using EPA SW-846 Method 8082A with an appropriate sample preparation method approved for use by the Department based on the matrix of the sample. This includes but is not limited to: bulk sewage sludge applied to agricultural land, forests or public contact sites; sewage sludge sold or given away in a bag or other container for application to the land; domestic septage; reclamation sites; or other materials mixed with sludge

before application. Reporting the above information, in addition to requirements specified later in this appendix, should be included in annual reports required by permits.

(2) If levels of PCBs are greater than or equal to one (1) milligram per kilogram (mg/kg dry weight basis), but less than ten (10) milligrams per kilogram (mg/kg dry weight basis), confirmation sludge sampling must be done as soon as practicable and the results provided to the Department within five (5) calendar days of receipt by the permittee.

(3) If levels of PCBs are greater than or equal to ten (10) milligrams per kilogram (mg/kg dry weight basis), confirmation sludge sampling must be done as soon as practicable and the results provided to the Department within five (5) calendar days of receipt of the results by the permittee. In addition, representative soil sampling of land application sites that may have received sludge during the monitoring period must be conducted within 30 days of knowledge of the confirmation sampling that confirms sludge PCB levels equal to or greater than ten (10) milligrams per kilogram (mg/kg dry weight basis). The results of the soil sampling must be provided to the Department within five (5) calendar days of receipt by the permittee. The Department may require any further action as deemed necessary and consistent with applicable laws.

# 61-9.505
# Land Application Permits and State Permits

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## Part A
## Definitions and General Program Requirements

**Section 505.1 Purpose and scope.**

(a) Coverage.

(1) These regulations contain provisions for the Land Application permit and State permit Program under the South Carolina Pollution Control Act (PCA), S.C. Code Ann. section 48-1-10 et seq.

(2) These regulations contain provisions for other permits issued for subsurface distribution systems (such as tile fields or drip irrigation systems).

(b) Scope of the Land Application permit and State permit requirement.

(1) The Land Application permit and State permit program requires permits for the discharge of pollutants from any source directly or indirectly into groundwaters of the State and to the land of the State. The terms "Land Application permit," " State permit," "pollutant," "source," "groundwaters of the State," and the "land of the State" are defined in section 505.2.

(2) The following are additional sources that may require Land Application permits or State permits for discharges:

(i) Recirculated Process Wastewater. The submission and information requirements shall be determined by the Department.

(ii) Wastewater Evaporation Systems for Process Wastewater. The submission and information requirements shall be determined by the Department.

(iii) Agricultural Waste Facilities, except those regulated under South Carolina R.61-43. The submission and information requirements shall be determined by the Department.

(iv) [Reserved].

(3) The permit program established under this regulation also applies to owners or operators of any treatment works treating domestic sewage, whether or not the treatment works is otherwise required to obtain a Land Application permit or State permit in accordance with this section, unless all requirements implementing section 405(d) of the CWA applicable to the treatment works treating domestic sewage are included in a permit issued under the appropriate provisions of subtitle C of the Solid Waste Disposal Act; Part C of the Safe Drinking Water Act; the Marine Protection, Research, and Sanctuaries Act of 1972; the Clean Air Act; or under an NPDES permit (R.61-9.122) approved by the Department as adequate to assure compliance with section 405 of the Clean Water Act (CWA).

(4) The Department may designate any person subject to the standards for sewage sludge use and disposal as a "treatment works treating domestic sewage" as defined in R.61-9.122.2, where it finds that an NPDES permit is necessary to protect public health and the environment from the adverse effects

of sewage sludge or to ensure compliance with the technical standards for sludge use and disposal developed under the CWA section 405(d). Any person owning or operating a facility designated as "treatment works treating domestic sewage" shall submit an application for a permit under R.61-9.122.21 within 120 days of being notified by the Department that a permit is required.

(5) See South Carolina R.61-67, Standards for Wastewater Facility Construction, section 300.G, Pump and Haul Operations, related to requirements for transporting wastewater for disposal.

(c) Compliance Period.

(1) [Reserved].

(2) All provisions of this Regulation for facilities that are in operation shall be achieved in accordance with a schedule of compliance or other conditions that may be in a reissued permit. For modifications of existing facilities that require construction, the Department may modify or revoke and reissue existing Land Application and State permits to include specific provisions of this Regulation.

(3) All Land Application permits, State permits or other permits for new facilities or expansions of existing facilities issued on or after the effective date of this regulation shall be required to comply with this regulation. Land Application or State permits issued on or after the effective date of this regulation for new land application sites, land application sites approved for an increase (either quantity or loading) in pollutant disposal, or expansions of existing land application sites shall be required to comply with the regulation.

(d) Relation to other requirements.

(1) Permit application forms. Applicants for permits shall submit their applications on permit application forms designated by the Department. The basic information required in the general form (Form 1) and all or part of the additional information required by NPDES applications (Forms 2 A through E) listed in R.61-9.122.21 may be required by the Department for Land Application permits and State permits. In addition, the Department may identify specific information necessary for the Land Application permit and State permit activities.

(2) Technical Regulations. The Permit program has separate additional regulations. These separate regulations are used by the Department to determine what requirements must be placed in permits if they are issued. These separate regulations are located in R.61-9.122, 125, 129, 133, 403, 503 and 504. Additional items under 40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471) may be placed in permits if they are issued.

(e) Public participation. R.61-9.124 (Procedures for Decision Making) establishes the requirements for public participation in Land Application Permit issuance and enforcement and related variance proceedings.

(f) Environmental Protection Fees. R.61-30 establishes the requirements for the submission of specific fees for the activities regulated by the Department.

(g) Authority.

(1) Section 48-1-90(a), S.C. Code of Laws (1976), provides that "it shall be unlawful for any person, directly or indirectly, to throw, drain, run, allow to seep, or otherwise discharge into the environment of the State organic or inorganic matter, including sewage, industrial wastes and other wastes, except as in compliance with a permit issued by the Department."

(2) Section 48-1-100(a), S.C. Code of Laws (1976), provides that "if, after appropriate public comment procedures, as defined by Department regulations, the Department finds that the discharge from the proposed outlet ... will not be in contravention of provisions of Chapter 1, Title 48, S.C. Code of Laws, a permit to construct and a permit to discharge must be issued to the applicant."

(3) [Reserved].

(4) Section 405 of the CWA provides, in part, that "Where the disposal of sewage sludge resulting from the operation of a treatment works as defined in section 212 of this Act (including the removal of in-place sewage sludge from one location and its deposit at another location) would result in any pollutant from such sewage sludge entering the [waters of the State], such disposal is prohibited except in accordance with a[n NPDES] permit issued by the [Department] under section 402 of this Act."

(5) Section 405(d)(4) of the CWA requires the Department, prior to promulgation of standards for sewage sludge use and disposal, to "impose conditions in [NPDES] permits issued to publicly owned treatment works under section 402 of this Act, or take such other measures as the [Department] deems appropriate to protect public health and the environment from any adverse effects which may occur from toxic pollutants in sewage sludge."

(6) Section 405(f) of the CWA provides that permits must include requirements implementing the standards for sludge use and disposal (40 CFR Part 503) "unless such requirements have been included in a permit issued under the appropriate provisions of subtitle C of the Solid Waste Disposal Act; part C of the Safe Drinking Water Act, the Marine Protection, Research, and Sanctuaries Act of 1972; the Clean Air Act; or under State [of South Carolina] permit programs approved by the Administrator...." Section 405(f) also authorizes the Department to issue permits with requirements for sludge use or disposal that assure compliance with 40 CFR Part 503 to any treatment works treating domestic sewage that is not subject to NPDES (i.e., has no point source discharge) and has not been issued a permit that includes applicable 40 CFR Part 503 standards under the other permit programs listed in section 405(f)(1) of the CWA.

(7) Sections 405(c) and (f) of the CWA authorize EPA approval of State [of South Carolina] permit programs for use and disposal of sewage sludge.

(8) Section 48-1-50(22), S.C. Code of Laws (1976), requires the owner or operator of any source or disposal system to establish and maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods, at locations, intervals, and procedures as the Department shall prescribe; and

provide such other information as the Department reasonably may require.

(9) Section 48-1-40, S.C. Code of Laws (1976), authorizes the Department "after public hearing as herein provided, [to] adopt standards and determine what qualities of water ... shall indicate a polluted condition and these standards shall be promulgated and made a part of the rules and regulations of the Department." Section 48-1-50(23) authorizes the Department to "[a]dopt ... effluent control regulations, standards and limitations that are applicable to the entire State, that are applicable only within specified areas or zones of the State, or that are applicable only when a specified class of pollutant is present." Section 501(a) of CWA provides that "The [Department] is authorized to prescribe such regulations as are necessary to carry out [its] functions under this Act."

(10) Section 48-1-100(a), S.C. Code of Laws (1976), requires an opportunity for public comment before issuance of permits to discharge.

(h) Preliminary Engineering Reports and Construction Permit Applications shall be consistent with R.61-67 (Standards for Wastewater Facility Construction).

**Section 505.2 Definitions.**

(a) The definitions contained in R.61-9.122, R.61-9.124, R.61-9.125, R.61-9.129, R.61-9.133, R.61-9.403, R.61-9.503 and R.61-9.504 apply to this regulation. Terms not defined in this section or sections referenced previously have the meaning given by the PCA.

(b) Definitions:

(1) "Agricultural waste facility" means any collection, treatment, disposal or recycling activity involving livestock (such as cattle, poultry, swine and turkeys), dogs, horses, pigeons, quail, or other birds and animals including any activity with the production of manures, dead birds or litter.

(2) "Aquifer" means a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield usable quantities of groundwater to springs or wells.

(3) "Background groundwater analysis" means the chemical or biological quality of groundwater before application of wastewater or sludge; or the groundwater chemistry or biological quality up- gradient to the site of concern.

(4) "Basin or lagoon" means any in-ground or earthen structure designed to receive, treat, store, temporarily retain and/or allow for the infiltration/evaporation of wastewater.

(5) "Down-gradient" means the portion of the water table that is down the hydraulic slope of the water table with respect to a specific area or point of reference.

(6) "Evaporation basin" means a basin designed specifically for the atmospheric or enhanced evaporation of liquid.

(7) “Groundwater” means water below the land surface found in fractured rock or various soil strata.

(8) “Groundwaters of the State” means all sources of groundwater wholly, partially, or bordering the State of South Carolina or within its jurisdiction.

(9) “Hydraulic loading” means the rate at which liquid is applied to the land per unit area. The term “application rate” may be used for “hydraulic loading.”

(10) “Hydrogeologic characteristics” means the physical properties of the subsurface and its interaction with the hydraulic properties of groundwater (e.g., migration or infiltration).

(11) “Infiltration” means the flow of water downward from the land surface into and through the soil.

(12) “Land” for the purpose of this regulation means the soil and rock above the water table aquifer and the ground surface.

(13) “Land Application” means use and/or disposal of treated wastewater, sewage sludge, industrial sludge, septage, or additional sources (see R.61-9.505.1(b)(2)) to the land.

(14) “Land Application Permit” refers to a permit issued by the Department applicable to a treatment system, source or site with no resulting discharge to surface waters of the State.

(15) “Land of the State” means all land surface which is wholly or partially within the State of South Carolina or within its jurisdiction.

(16) “Land slope” means the rate of increase or decrease of elevation over a given linear distance.

(17) “Land surface” means the area of land open to the atmosphere.

(18) [Reserved].

(19) “New or expansions” means a facility or land application site that is: new and has not been permitted (including existing sites such as golf courses that have not been used for effluent disposal); an increase (either in quantity or loading) in pollutant disposal to the facility or land application site; a change in the pollutant disposal to the facility or land application site (such as the introduction of a new pollutant in the effluent); or expansions (in physical size, or hydraulic loading) of existing permitted facilities or land application sites. The term “new or expanding” may also be used.

(20) “Monitoring well” means any well used to sample groundwater for water quality analysis or to measure groundwater levels.

(21) “Percolation pond” means any lagoon, basin or constructed impoundment having a

leakage rate in excess of 500 gallons/day/acre.

(22) "Permeability" means the capacity of soil, rock, or other material to transmit fluids.

(23) "Pollutant":

(i) Means filter backwash, sewage, sewage sludge, industrial sludge, septage, or industrial, municipal, agricultural and domestic waste.

(ii) Does not mean 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 authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of groundwater or surface water resources.

(24) "Potable water well" means a well that supplies drinking water for human consumption.

(25) [Reserved].

(26) "Restrictive soil horizon" means the top of the most impermeable soil layer encountered.

(27) "Seasonal high water table" means the highest water table as determined in the soil profile by the encountered indications of soil mottling or iron concretions or by measuring seasonal fluctuations of the water table in a water table well over a period acceptable to the Department.

(28) "Spray field" means a specified area where properly treated wastes, treated effluent from process, agricultural or domestic wastewater, sewage sludge, industrial sludge or other sources is applied to the land. The terms "application area," "application site," or "spray disposal area" may also be used.

(29) "Soil boring" means any hand- or mechanically-powered method by which samples of the subsurface can be retrieved for characterization or description.

(30) "Source" means any discernible conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, or mobile equipment (such as sludge application truck or device), from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

(31) "State permit" refers to a permit issued by the Department for other sources covered by this regulation (other than Land Application Permits) such as activities covered under R.61-9.505.1(b)(2). The term "State Permit Program" may also be used to describe the entire permit program under R.61-9.505.

(32) "Storage or holding basin" means any basin designed to retain wastewater before, during or after treatment and would not include waters of the State.

(33) "Tile field" means a specific area where a network of soil adsorption trenches is installed below the land surface for the purpose of providing final treatment and disposal of wastewater.

(34) [Reserved].

(35) "Treated wastewater" means properly treated effluent from process or domestic wastewater, treated wastes from other sources (see R.61-9.505.1(b)(2)) or treated effluent from a treatment facility.

(36) "Up-gradient" means the portion of the water table that is up the hydraulic slope of the water table with respect to a specific area or point of reference.

(37) "Vadose zone" means the zone between the land surface and the water table.

(38) "WWTP" means wastewater treatment plant.

(39) "Water table" means the level below the land surface at which all the voids are filled with water at a pressure equal to atmospheric. The depth to the water level in the ground is to be measured at least 24 hours after encountering it in a well.

(40) "Water table mound" means a high point in the seasonal or normal water table which is artificially created by the infiltration of liquid.

(41) "Well" means any excavation which is cored, bored, drilled, jetted, dug, or otherwise constructed and has a depth greater than its largest surface diameter.

(42) "ND" or "No Discharge" means land application. The terms "ND permit" or "No Discharge permit" may be used for "Land Application permit."

**505.3 Exclusions.**

The following discharges do not require Land Application permits or State permits:

(a) The introduction of sewage, industrial wastes or other pollutants into publicly owned treatment works by indirect dischargers. Plans or agreements to switch to this method of disposal in the future do not relieve dischargers of the obligation to have and comply with permits until all discharges of pollutants directly or indirectly to groundwaters of the State and any land surface of the State are eliminated. (See also R.61-9.122.47(b)). This exclusion does not apply to the introduction of pollutants to privately owned treatment works or to other discharges through pipes, sewers, or other conveyances (owned by a State, municipality, or other party) not leading to treatment works.

(b) Any introduction of pollutants from non-point source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but not discharges directly or indirectly to groundwaters of the State and any land surface of the State from both concentrated animal feeding operations as defined in R.61-9.122.23, and from silvicultural point

sources as defined in R.61-9.122.27.

(c) Return flows from irrigated agriculture.

(d) Discharges permitted under Underground Injection Control (61-87). a South Carolina County Health Department or other Department program area.

(e) Individual Sewage Treatment and Disposal Systems serving one piece of deeded property that are permitted under Regulation 61-56. This includes but is not limited to any individual residence or single piece of deeded property using a septic tank system if a permit for the discharge is obtained under the provisions of R.61-56.

(f) Provided the requirements in section 505.8 are met and a permit is issued to Construct an Individual Sewage Treatment and Disposal System under R.61-56, serving more than one piece of deeded property, a Land Application or State Permit will not be required. This exclusion may not apply if industrial wastes or other pollutants are discharged.

**505.4 Prohibitions.**

No State or Land Application permit may be issued:

(a) When the conditions of the permit do not provide for compliance with the applicable requirements of the CWA, State regulations, or regulations promulgated under the PCA;

(b) When the applicant is required to obtain a State or other appropriate certification under section 401 of the CWA and that certification has not been obtained or waived;

(c) When the imposition of conditions cannot ensure compliance with the applicable surface or groundwater quality requirements of all affected States;

(d) For the discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste;

(e) (1) For any Land Application Permit or State permit activity which is inconsistent with a plan or plan amendment approved under section 208(b) of the CWA, unless the Department finds such variance necessary to protect the public health, safety, and welfare;

(2) In reissuance of a Land Application Permit or State permit which requires connection to a regional sewer system or other treatment facilities under the water quality management plan under section 208 of the CWA, once the permittee is notified by the Department that the regional sewer system is operational.

(f) To a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of groundwater or surface water quality standards. The Department may issue a permit if the owner or operator of a new source or new discharger proposing to discharge,

which does not currently meet applicable groundwater or surface water quality standards or is not expected to meet those standards even after the application of the effluent limitations, demonstrates that the existing dischargers are subject to compliance schedules designed to bring the area into compliance with applicable ground or surface water quality standards.

**505.5 Effect of a Land Application permit or State permit.**

(a) (1) Except for "standards for sewage sludge use or disposal" under 405(d) of the CWA, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with the Pollution Control Act. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in section 505.62 and section 505.64.

(2) Compliance with a permit condition which implements a particular "standard for sewage sludge use or disposal" shall be an affirmative defense in any enforcement action brought for a violation of that "standard for sewage sludge use or disposal."

(b) The issuance of a Land Application permit or State permit does not convey any property rights of any sort, nor any exclusive privilege.

(c) The issuance of a Land Application permit or State permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

(d) If a deleterious impact to the groundwaters of the State from the permitted use or disposal practices is documented through groundwater monitoring levels exceeding the standards set forth in R.61- 68 or a significant adverse trend occurs, then it will be the obligation of the permittee as directed by the Department to conduct an investigation to determine the vertical and horizontal extent of groundwater impact. The Department may require remediation of the groundwater to within acceptable levels for groundwater as set forth in R.61-68.

**505.6 Continuation of expiring Land Application permits or State permits.**

(a) The conditions of an expired permit continue in force under S.C. Code section 1-23-370(b) until the effective date of a new permit (see R.61-9.124.15), except when the permit requires connection to a regional sewer system or other treatment facilities under the water quality management plan under section 208 of the CWA and the permittee has been notified by the Department that the regional sewer system is operational, if:

(1) The permittee has submitted a timely application under section 505.21 which is a complete (under section 505.21(e)) application for a new permit; and

(2) The Department, through no fault of the permittee, does not issue a new permit with an effective date under R.61-9.124.15 on or before the expiration date of the previous permit (for example, when issuance is impracticable due to time or resource constraints); or

(3) The permittee has submitted a timely application under section 505.21 which is a complete application for a new permit and makes a timely appeal of the new permit.

(b) Effect. Permits continued under this section remain fully effective and enforceable.

(c) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit, the Department may choose to do any or all of the following:

(1) Initiate enforcement action based upon the permit which has been continued;

(2) Issue a notice of intent to deny the new permit under R.61-9.124.6. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(3) Issue a new permit under R.61-9.124 with appropriate conditions; or

(4) Take other actions authorized by these regulations.

**505.7 Confidentiality of information.**

(a) [Reserved.]

(b) Claims of confidentiality for the following information shall be denied:

(1) The name and address of any permit applicant or permittee;

(2) Permit applications, permits, and effluent data.

(c) Information required by permit application forms provided by the Department under section 505.21 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

**505.8 Permit requirements by others.**

For permits issued under R.61-56 to construct an Individual Sewage Treatment and Disposal System serving more than one piece of deeded property the following requirements apply:

(a) A permit activity will not occur which is inconsistent with a plan or plan amendment approved under section 208(b) of the CWA, unless the Department finds such variance necessary to protect the public health, safety, and welfare.

(b) A public entity shall own the system and shall be responsible for the operation, maintenance and replacement of all components unless otherwise approved by the Department. The Department may consider a request for a private entity or person, however the proposal must be evaluated on a case by case basis. The Department can evaluate the capability of reliable system operation in its evaluation.

(c) If the project is owned by a private entity or person, the Department shall require financial assurances for the operation, maintenance, and replacement of the tank and tile field system and relevant pumping components. If residential wastewater is not being managed, the Department may consider waiving this requirement, where justified.

**505.9-505.20 [Reserved.]**

## Part B
## Land Application Permit and State Permit Application and Special Program Requirements

### 505.21 Application for a Land Application Permit and State Permit.

(a) Duty to apply.

(1) Any person who discharges or proposes to discharge pollutants directly or indirectly to groundwaters of the State or to any land of the State, or who owns or operates a "sludge only facility" and who does not have an effective permit, except persons covered by general permits under R.61-9.122.28 excluded under section 505.3, or a user of a privately owned treatment works, unless the Department requires otherwise under section 505.44(m), shall submit a complete application to the Department in accordance with this section and R.61-9.124.

(2) A person discharging or proposing to discharge wastes directly or indirectly to the groundwaters of the State or any land of the State shall promptly make application for and obtain a valid Land Application permit or State Permit and, if required, a valid State Construction Permit;

(3) A person operating or proposing to operate a treatment works from which a discharge does not occur, shall promptly make application for and obtain a valid State Permit (or approval by the Department). The Department may also require the submittal of any additional information or data identified under R.61-9.

(b) [Reserved.]

(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 desired to commence, unless permission for a later date has been granted by the Department. 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 requirements to avoid delay.

(2) Permits required under section 405(f) of the CWA.

(i) POTW's with currently effective Land Application permits shall submit the application information required by paragraph (d)(2)(ii) of this section with the next application submitted in accordance with paragraph (d) of this section or within 120 days after promulgation of a "standard for

sewage sludge use or disposal" applicable to the POTW's sludge use or disposal practice(s), whichever occurs first.

(ii) Any other existing "treatment works treating domestic sewage" not covered under paragraph (c)(2)(i) of this section shall submit an application to the Department within 120 days after promulgation of a "standard for sewage sludge use or disposal" applicable to its sludge use or disposal practice(s) or upon request of the Department prior to promulgation of an applicable "standard for sewage sludge use or disposal," if the Department 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.

(iii) Any "treatment works treating domestic sewage" 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.

(3) A person proposing to operate a treatment works from which no discharge occurs shall apply at least 180 days prior to the anticipated commencement of the activity or in accordance with a schedule determined by the Department in individual cases, for a State construction permit on an appropriate form supplied by the Department.

(d) Duty to reapply.

(1) Any permittee with an 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 Department. The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

(2)(i) All applicants for permits shall complete application forms to apply under section 505.

(ii) In addition to any other applicable requirements in this regulation, all POTWs and other "treatment works treating domestic sewage," including "sludge-only facilities," shall submit with their applications the information listed at section 122.21(q) within the time frames established in paragraph (c)(2) of this section.

(e) Completeness.

(1) The Department shall not issue a permit before receiving a complete application for a permit except for general permits. An application for a permit is complete when the Department receives an application form and any supplemental information which are completed to its satisfaction.

(2) The Department, at its discretion, may request of an applicant any additional information deemed necessary to complete or correct deficiencies in a Land Application permit or State permit application, before processing the application or issuing or denying the issuance of a permit.

(3) The Department may take enforcement action as prescribed by the State law or this

regulation against any person who fails to file a complete application, if deficiencies are not corrected or complete information is not supplied within sixty (60) days to the Department following its request.

(4) The Department may consider an application incomplete if the applicant has not complied with the Environmental Protection Fees Regulation R.61-30.

(f) Information requirements.

(1) [Reserved]

(2) All applicants for Land Application permits and State permits (including permits being reissued or expanded) 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 paragraph (g)):

(i) The activities conducted by the applicant which require it to obtain a Land Application permit or State permit.

(ii) Name, mailing address, and location of the facility for which the application is submitted.

(iii) Up to four Standard Industrial Codes (SIC) which best reflect the principal products or services provided by the facility.

(iv) The operator's name, address, telephone number, ownership status, and status as Federal, State, private, public, or other entity.

(v) [Reserved]

(vi) A listing of all wastewater permits or construction approvals received or applied for related to this facility and/or application.

(vii) 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 any intake and discharge structures; any hazardous waste treatment, storage, or disposal facilities; any 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.

(viii) A brief description of the nature of the business, activity, or project type.

(3) For new facilities, expanding or permit modifications a previously approved or proposed engineering report for the project in accordance with R.61-67.

(4) Project name: Provide the official (legal) name of the WWTP or sludge disposal site.

(5) County: Give county (or counties) where the proposed or existing wastewater treatment

facility and/or site is located.

(6) Owner's name, address and telephone number: Provide the name, mailing address and the area code and telephone number of the owner. If the mailing address of the WWTP or site is different from the owner's mailing address, supply this information on an attached sheet of paper.

(7) Project status: Identify if the project is for a new or existing WWTP, or new or existing site. Provide the Land Application or State permit number and identify whether it is for a proposed expansion of either an existing WWTP or a renewal of an issued (if applicable) land disposal permit.

(8) Project description: Specify the type of project and give a brief description of the WWTP or site operation.

(9) Location of the WWTP and land disposal sites: Provide a map or maps showing the location of the WWTP and land disposal site(s). The map(s) shall be an 8 1/2" x 11" photocopy of the applicable portion of a U.S. Geological Survey 7 1/2 minute quad sheet (or a 15 minute quad if a 7 1/2 minute quad is not available). The quad sheet name shall be provided on the copy submitted to the Department. Give the latitude and longitude of the center of the WWTP site and a brief location description of the WWTP site. If the application is for a sludge or septage land application site owned by an entity that does not or will not have a WWTP, indicate "not applicable." For each disposal site, give the size in acres, the latitude and longitude of the center of the site, and a brief location description of the site.

(10) Description of waste to be land applied: Provide a description of the wastewater or sludge to be land applied. State whether the waste is domestic and/or industrial wastewater. If the wastewater is not strictly domestic, give a detailed characterization of the wastewater. If the detailed characterization is contained in a Preliminary Engineering Report (PER) accompanying this application, then state that the information is in the PER.

(11) Volume and quantity of waste to be land applied: Provide the volume in gallons per day and the quantity in pounds per day of the waste to be land applied to each disposal site.

(12) Frequency of application: Provide the proposed frequency application in times per day, week or other period for each disposal site.

(13) Site application rate(s): Provide the proposed application rate in inches per week, pounds per acre per day (use annual rates for crop uptake) for sludge disposal, or other units as appropriate for each disposal site, whichever is the limiting factor.

(14) Groundwater Quality Monitoring: Identify whether the monitoring is proposed (if required) or existing. Also, provide the number of monitoring wells proposed or existing at each land disposal site.

(15) Residual solids: Identify the proposed or existing sludge disposal method (for wastewater treatment facilities).

(16) Hazardous substances: Identify whether or not the discharge contains a substance that could

be considered hazardous as defined under section 101(14) of CERCLA. Provide the substance name, concentration and source.

(17) For wastewater treatment facilities: Proof of ownership (fee simple title) of any land application site(s) for treated effluent disposal. A contract, lease or other legally binding agreement may be substituted provided that:

(i) The contract, lease or agreement shall be for a period of at least 30 years with an automatic right of renewal for an additional 30 years. Cancellation wording may be included if all parties agree and obtain prior Departmental approval of any cancellation of the agreement. For activities involving limited applications (such as one time sludge or septage land application), the contract, lease or agreement time shall be determined on a project specific basis.

(ii) The contract, lease or agreement shall clearly identify that the use of the land application site is for effluent application and may take precedence over other uses unless there is a permitted secondary year round disposal option (e.g. an NPDES permit).

(iii) The specific quantity of effluent to be applied on a daily or weekly basis shall be provided.

(iv) The contract, lease or agreement shall be binding on all heirs, assignees, and successors.

(v) The applicant shall provide an alternate disposal option for any land application site that does not accept effluent year round. The applicant shall provide for year round disposal for the proposed flow on the land application site unless there is a permitted secondary year round disposal option (e.g. an NPDES permit).

(g) Requirements for manufacturing, commercial and mining activities. Manufacturing, commercial and mining dischargers applying for Land Application permits or State permits shall provide the following information to the Department, using application forms provided by the Department.

(1) Discharge location. The latitude and longitude to the nearest 15 seconds for each discharge location.

(2) NPDES permit application Form 2(C). See R.61-9.122.

**505.22 Signatories to Land Application permit and State permit applications and reports.**

Signatories to permit applications and reports shall be in accordance with R.61-9.122.22.

**505.23 General Land Application permits and State permits.**

(a) Coverage. The Department may issue a general permit in accordance with the following:

(1) Area. The general permit shall be written to cover a category of discharges, sludge use or disposal practices, or facilities described in the permit under paragraph (a)(2)(ii) of this section, except those covered by individual permits, within a geographic area. The area shall correspond to existing geographic or political boundaries.

(2) Sources. The general permit may be written to regulate, within the area described in paragraph (a)(1) of this section.

(i) [Reserved]

(ii) A category of sources (including industrial sludge) or "treatment works treating domestic sewage," if the sources or "treatment works treating domestic sewage":

(A) Involve the same or substantially similar types of operations;

(B) Discharge the same types of wastes or engage in the same types of sludge use or disposal practices;

(C) Require the same effluent limitations, operating conditions, or standards for sewage sludge use or disposal, or industrial sludge use or disposal;

(D) Require the same or similar monitoring; and

(E) In the opinion of the Department are more appropriately controlled under a general permit than under individual permits.

(b) Administration.

(1) General permits may be issued, modified, revoked and reissued, or terminated in accordance with applicable requirements of R.61-9.124.

(2) Authorization to discharge or authorization to engage in sludge use and disposal practices.

(i) Except as provided in paragraphs (b)(2)(v) and (b)(2)(vi) of this section, dischargers (or treatment works treating domestic sewage) seeking coverage under a general permit shall submit to the Department a written notice of intent to be covered by the general permit. A discharger (or treatment works treating domestic sewage) who fails to submit a notice of intent in accordance with the terms of the permit is not authorized to discharge (or, in the case of sludge disposal permit, to engage in a sludge use or disposal practice), under the terms of the general permit unless the general permit, in accordance with paragraph (b)(2)(v) of this section, contains a provision that a notice of intent is not required or the Department notifies a discharger (or treatment works treating domestic sewage) that it is covered by a general permit in accordance with paragraph (b)(2)(vi) of this section. A complete and timely notice of intent (NOI) to be covered, in accordance with general permit requirements, fulfills the requirements for permit applications.

(ii) The contents of the notice of intent shall be specified in the general permit and shall require the submission of information necessary for adequate program implementation, including at a minimum, the legal name and address of the owner or operator, the facility name and address, type of facility or discharges, and the disposal sites. All notices of intent shall be signed in accordance with R.61-9.122.22.

(iii) General permits shall specify the deadlines for submitting notices of intent to be covered and the date(s) when a discharger is authorized to discharge under the permit.

(iv) General permits shall specify whether a discharger (or treatment works treating domestic sewage) that has submitted a complete and timely notice of intent to be covered in accordance with the general permit and that is eligible for coverage under the permit, is authorized to discharge (or, in the case of a sludge disposal permit, to engage in a sludge use or disposal practice) in accordance with the permit either upon receipt of the notice of intent by the Department, after a waiting period specified in the general permit, on a date specified in the general permit, or upon receipt of notification of inclusion by the Department. Coverage may be terminated or revoked in accordance with paragraph (b)(3) of this section.

(v) Dischargers may, at the discretion of the Department, be authorized to discharge under a general permit without submitting a notice of intent where the Department finds that a notice of intent requirement would be inappropriate. The Department shall provide in the public notice of the general permit the reasons for not requiring a notice of intent.

(vi) The Department may notify a discharger (or treatment works treating domestic sewage) that it is covered by a general permit, even if the discharger (or treatment works treating domestic sewage) has not submitted a notice of intent to be covered. A discharger (or treatment works treating domestic sewage) so notified may request an individual permit under paragraph (b)(3)(iii) of this section.

(3) Requiring an individual permit.

(i) The Department may require any person authorized by a general permit to apply for and obtain an individual Land Application permit or State permit. An applicant, any affected State, or interstate agency, or any other interested person may petition the Department to take action under this paragraph. The petition shall indicate specific reasons why an individual permit is requested and the interest in or relationship of the petitioner to the applicant. Cases where an individual Land Application permit or State permit may be required include the following:

(A) The discharger or "treatment works treating domestic sewage" is not in compliance with the conditions of the general Land Application permit or State permit;

(B) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source or treatment works treating domestic sewage;

(C) Effluent limitation guidelines are promulgated for point sources covered by the general Land Application permit or State permit;

(D) A Water Quality Management plan containing requirements applicable to the discharge is approved;

(E) Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;

(F) Standards for sewage sludge use or disposal, or industrial sludge use or disposal have been promulgated for the sludge use and disposal practice covered by the general Land Application permit or State permit.

(ii) [Reserved].

(iii) Any owner or operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. The owner or operator shall submit an application under R.61-9.505.21, with reasons supporting the request, to the Department no later than 90 days after the publication of the general permit in the State Register. The request shall be processed in accordance with R.61-9.124.The request shall be granted by issuing of an individual permit if the reasons cited by the owner or operator are adequate to support the request.

(iv) When an individual Land Application permit or State permit is issued to an owner or operator otherwise subject to a general Land Application permit or State permit, the applicability of the general permit to the individual Land Application permittee or State permittee is automatically terminated on the effective date of the individual permit.

(v) A source excluded from a general permit solely because it already has an individual permit may request that the individual permit be revoked, and that it be covered by the general permit. If the individual permit is revoked by the Department, the general permit shall apply to the source.

(c) Degree of Waste Treatment Required. All pollutants shall receive such treatment or corrective action so as to insure compliance with the terms and conditions of the issued permit.

(d) Submittal and Signatory Requirements.

(1) A Notice of Intent (NOI) shall be on forms as may be prescribed and furnished from time to time by the Department. An NOI shall be accompanied by all pertinent information as the Department may require in order to establish effluent limitations in accordance with this regulation, including, but not limited to, complete engineering reports, schedule of progress, plans, specifications, maps, measurements, quantitative and qualitative determinations, records, and all related materials.

(2) Engineering reports, plans and specifications submitted to the Department's Land Application permit or State permitting divisions shall be signed by a Professional Engineer registered in

the State of South Carolina and competent in the field of sewage and industrial waste treatment.

(3) Material submitted shall be complete and accurate.

(4) Any NOI form submitted to the Department shall be signed in accordance with this Regulation.

(5) All other reports or requests for information required by the Department shall be signed by a person designated in R.61-9.122.22 or a duly authorized representative of such person, if:

(i) The representative so authorized is responsible for the overall operation of the facility from which the discharge originates, e.g., a plant manager, superintendent or person of equivalent responsibility;

(ii) The authorization is made in writing by the person designated under R.61-9.122.22; and

(iii) The written authorization is submitted to the Department.

(6) Any changes in the written authorization submitted to the Department which occur after the issuance of a permit shall be reported to the Department by submitting a copy of a new written authorization that meets the requirements of paragraph (d)(5) above.

(7) Any person signing any document under (d) above shall make the following certification: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in the attached document; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

(e) Other Requirements.

(1) Notice and Public Participation. Public notice and participation requirements for Land Application Permits shall be in accordance with this Regulation (R.61-9).

(2) Terms and Conditions of Permits. General permits issued shall be subject to the terms and conditions contained in this Regulation (R.61-9).

(3) Monitoring, Recording and Reporting Requirements. Monitoring, recording, and reporting requirements shall be in accordance with the permit and this Regulation (R.61-9).

(4) Duration, Continuation, and Transferability of Permits. General permits shall be issued for a fixed term in accordance with this Regulation (R.61-9).

**505.24 - 505.40 [Reserved.]**

## Part C
## Land Application Permit and State Permit Conditions

### 505.41 Conditions applicable to all Land Application permits and State permits.

The following conditions apply to all Land Application permits and State permits. Additional conditions applicable to Land Application permits and State permits are in section 505.42. All conditions applicable to Land Application permit and State permit shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation must be given in the permit.

(a) Duty to comply. The permittee shall comply with all conditions of the permit. Any permit noncompliance constitutes a violation of the Pollution Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. The Department's approval of wastewater facility Plans and Specifications does not relieve the permittee of responsibility to meet permit limits.

(1) [Reserved].

(2) Failure to comply with permit conditions or the provisions of this regulation may subject the permittee to civil penalties under S.C. Code Section 48-1-330 or criminal sanctions under S.C. Code Section 48-1-320. Sanctions for violations of the Federal Clean Water Act may be imposed in accordance with the provisions of R.61-9.122.41(a)(2) and (3).

(3) A person who violates any provision of this regulation, a term, condition or schedule of compliance contained within a valid Land Application permit or State permit is subject to the actions defined in State law and this regulation.

(b) Duty to reapply. If the permittee wishes to continue an activity regulated by its permit after the expiration date of the permit, the permittee must apply for and obtain a new permit.

(c) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of its permit.

(d) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of its permit which has a reasonable likelihood of adversely affecting human health or the environment.

(e) (1) Proper operation and maintenance. The permittee shall at all times properly operate and maintain in good working order and operate as efficiently as possible all facilities and systems including all land disposal sites of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of its permit. Proper operation and maintenance includes effective performance based on design facility removals, adequate funding, adequate operator staffing and training and also includes adequate laboratory controls, appropriate quality assurance procedures and groundwater monitoring wells, if required under the permit. This

provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

(2) The permittee shall develop and maintain at the facility a complete Operations and Maintenance Manual for the waste treatment facilities and/or land application system. The manual shall be made available for on-site review during normal working hours. The manual shall contain operation and maintenance instructions for all equipment and appurtenances associated with the waste treatment facilities and land application system. The manual shall contain a general description of: the treatment process(es), the operational procedures to meet the requirements of (e)(1) above, and the corrective action to be taken should operating difficulties be encountered.

(3)(i) Except as stated in (ii) below, the permittee shall provide for the daily performance of treatment facility inspections by a certified operator of the appropriate grade ("the operator") as defined in the permit for the facility. The inspections shall include, but should not necessarily be limited to, areas which require visual observation to determine efficient operations and for which immediate corrective measures can be taken using the O & M manual as a guide. All inspections shall be recorded and shall include the date, time, and name of the person making the inspection, corrective measures taken, and routine equipment maintenance, repair, or replacement performed. The permittee shall maintain all records of inspections at the permitted facility as required by the permit, and the records shall be made available for on-site review during normal working hours.

(ii) The Department may make exceptions to operating requirements, if stated in the permit, as follows:

(A) Attendance by the operator is normally required only on days when treatment, land application, or discharge occurs.

(B) For performance of daily inspections, permits may allow a reduced grade of operator for limited time periods under specific circumstances when justified by the permittee in a staffing plan and approved by the Department.

(C) Reduced inspection frequency, but in no case less than weekly, may be suitable when specified in the permit, if there is complete telemetry of operating data and there is either a simple treatment system with a low potential for toxicity but requiring pumps or other electrical functions or the ability to stop the discharge for an appropriate period when necessary.

(D) In other circumstances where the permittee demonstrates the capability to evaluate the facility in an alternative manner equivalent to the inspection requirements in subparagraph 3(i).

(E) Any exceptions allowed in (A), (B), (C), and (D) above are subject to compliance with permit conditions.

(4) (i) Purpose. This regulation establishes rules for governing the operation and maintenance of wastewater sewer systems, including gravity or pressure interceptor sewers. It is the purpose of this rule

to establish standards for the management of sewer systems to prevent and/or minimize system failures that would lead to public health or environmental impacts.

(ii) Authority and applicability. Under Section 48-1-30 of the Code of Laws of South Carolina (1976 as amended), the Department is authorized to adopt such rules and regulations as may be necessary to implement the Pollution Control Act. This regulation applies to all sewer systems that have been or would be subject to a DHEC construction permit under Regulation 61-67 and whose owner owns or operates the wastewater treatment system to which the sewer discharges and which discharges under a State permit. Nothing in this regulation supersedes a more stringent requirement that may be imposed by sewer system owners that manage wastewater from satellite systems. This regulation (505.41(e)(4)) is effective when published in the State Register.

(iii) General requirements. The requirements to properly operate and maintain sewer systems are the responsibility of the system owner. General Standards. The sewer system owner must:

(A) Properly manage, operate, and maintain at all times all parts of its sewer system(s), to include maintaining contractual operation agreements to provide services, if appropriate;

(B) Provide adequate capacity to convey base flows and peak flows for all parts of the sewer system or, if capital improvements are necessary to meet this standard, develop a schedule of short and long term improvements;

(C) Take all reasonable steps to stop and mitigate the impact of releases of wastewater to the environment; and

(D) Notify the Department within 30 days of a proposed change in ownership of a sewer system.

(iv) [Reserved.]

(f) Permit actions. A Land Application or State permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(g) Property rights. A Land Application or State permit does not convey any property rights of any sort,

(h) Duty to provide information. The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating its permit or to determine compliance with its permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by its permit.

(i) Inspection and entry. The permittee shall allow the Department, or an authorized representative

(including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the permittee's premises where a regulated facility or activity including all land disposal sites is located or conducted, or where records must be kept under the conditions of its permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of its permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment) including all land disposal sites, practices, or operations regulated or required under its permit;

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Pollution Control Act, any substances or parameters at any location including all land disposal sites.

(j) Monitoring and records.

(1) (i) (A) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(B) Samples shall be reasonably distributed in time, while maintaining representative sampling.

(C) No sampling or analysis, which is otherwise valid, shall be terminated for the purpose of preventing the analysis from showing a permit or water quality violation.

(ii) Flow Measurements.

(A) Where primary flow meters are required, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be present and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of not greater than 10 percent from the true discharge rates throughout the range of expected discharge volumes. The primary flow device, where required, must be accessible to the use of a continuous flow recorder.

(B) Where permits require an estimate of flow, the permittee shall maintain at the permitted facility a record of the method(s) used in "estimating" the discharge flow (e.g., pump curves, production charts, water use records) for the outfall(s) designated on limits pages to monitor flow by an estimate.

(C) Records of any necessary calibrations must also be kept.

(iii) The Department may designate a single, particular day of the month on which any group of parameters listed in the permit must be sampled. When this requirement is imposed in a permit, the Department may waive or alter compliance with the permit requirement for a specific sampling event for extenuating circumstances.

(2) Except for records of monitoring information required by a permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503, R.61-9.503, or R.61-9.504), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by its permit, and records of all data used to complete the application for its permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(3) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(4) Analyses for required monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless other test procedures have been specified in the permit or, in the case of sludge use or disposal, unless otherwise specified in R.61-9.503 or R.61-9.504.

(5) The PCA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under its permit shall be subject to civil and criminal penalties as provided for in the act, law or other appropriate regulations.

(k) Signatory requirement.

(1) All applications, reports, or information submitted to the Department shall be signed and certified (See R.61-9.122.22).

(2) The PCA provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or non-

compliance shall be subject to civil or criminal provisions as provided for in the act, law or other appropriate regulations.

(l) Reporting requirements.

(1) Planned changes. The permittee shall give prior notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility (and obtain a Construction Permit if required under R.61-67). Prior notice is required only when:

(i) [Reserved]

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under R.61-9.122.42(a)(l).

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(2) Anticipated noncompliance. The permittee shall give advance notice as soon as possible to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(3) Transfers. A Land Application or State permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and reissuance of the permit to change the name of permittee and incorporate such other requirements as may be necessary under the Pollution Control Act. (See R.61-9.505.61. In some cases, modification or revocation and reissuance is mandatory.)

(4) Monitoring reports. Monitoring results shall be reported at the intervals specified in the permit.

(i) Monitoring results (with the exception of any Annual Reporting requirements under section 503.18, section 503.28, section 503.48 or section 504.18) must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in R.61-9.503, R.61-9.504, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(5) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of its permit shall be submitted no later than 14 days following each schedule date.

(6) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and, if the noncompliance has not been corrected, the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

(ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See R.61-9.505.44.)

(B) Any upset which exceeds any effluent limitation in the permit.

(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours. (See R.61-9.505.44).

(iii) The Department may waive the written report on a case-by-case basis for reports required under paragraph (l)(6)(ii) of this section, if the oral report has been received within 24 hours.

(7) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.

(8) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

(m) Bypass.

(1) Definitions.

(i) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility including holding basins.

(ii) "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.

(2) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraph (m)(3) and (m)(4) of this section.

(3) Notice.

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour reporting).

(4) Prohibition of bypass

(i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(C) The permittee submitted notices as required under paragraph (m)(3) of this section.

(ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

(n) Upset.

(1) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. 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 including the land disposal sites.

(2) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(3) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, daily operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;

(ii) The permitted facility including the land disposal sites were at the time being properly operated; and

(iii) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour reporting).

(iv) The permittee complied with any remedial measures required under paragraph (d) of this section.

(4) Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

(o) Misrepresentation of Information.

(1) Any person making application for a Land Application permit or State permit or filing any record, report, or other document pursuant to a regulation of the Department, shall certify that all information contained in such document is true. All application facts certified to by the applicant shall be considered valid conditions of the permit issued pursuant to the application.

(2) Any person who knowingly makes any false statement, representation, or certification in any application, record, report, or other documents filed with the Department pursuant to the State law, and the rules and regulations pursuant to that law, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for pursuant to 48-1-320 or 48-1-330.

(p) Other requirements.

(1) No portion of a new or expanding application site for effluent application shall be located in the 100 year flood plain unless there is a permitted secondary year round disposal option (e.g. an NPDES permit).

(2) Effluent application shall not occur during periods when the ground is frozen, ponded, there is standing water on the application site, or the ground is flooded.

(3) New or expanding facilities with basins, storage ponds or other constructed impoundments (except for systems designed to operate in this manner, e.g. infiltration basins) must be appropriately lined as determined by the Department. The Department may consider the level of treatment and, if the basin or structure is existing, the scope of the modifications that may be required in the determination of whether a basin, storage pond or other constructed impoundments must be lined. Storage facilities for Reclaimed water (as described in section 505.45) will not require a liner unless specifically required by the Department.

(4) New or expanding facilities with basins, storage ponds or constructed impoundments shall be constructed in accordance with R.61-67 (if construction is required).

(5) Basins, storage ponds or constructed impoundments (except for systems designed to operate in this manner, e.g. infiltration basins) which are in use may be required to be monitored with groundwater monitoring wells as approved by the Department. The basin, storage pond or constructed impoundment may be considered unlined if the leakage rate is greater than 500 gallons per day per acre, or information available would indicate to the Department that specific hydrological conditions would require groundwater monitoring. The Department may consider the level of treatment, or the type of wastewater (e.g. influent characteristics) in the determination of whether an unlined basin, storage pond or other constructed impoundments must have groundwater monitoring. Storage facilities for reclaimed water (as described in section 505.45) will not require groundwater monitoring unless specifically required by the Department.

(6) There shall be no runoff of any effluent, sludge, treated waste or mixture of pollutants outside the permitted area.

(7) Lined basins, storage ponds, or constructed impoundments may be required by the Department to have groundwater monitoring wells to assure compliance with State Water Quality Standards R.61-68.

(8) [Reserved].

(9) [Reserved].

**505.42 Additional conditions applicable to specified categories of Land Application permits and State permits.**

The following conditions, in addition to those set forth in section 505.41, apply to all Land Application permit or State permits within the categories specified below:

(a) R.61-9.122.42(a) and (b) shall apply.

(b) Irrigation of treated wastewater.

This includes all methods of surface application, including but not limited to, fixed gun application, travelling or mobile gun application, or center pivot application.

(1) Spray field slopes shall not exceed 10 percent unless approved by the Department. The Department may require that slopes be less than 10% based on site conditions.

(2) Effluent distribution systems shall be designed so that the distribution pattern maximizes uniform application. The Department may require the permittee to modify existing land application site(s) distribution systems based on site conditions (e.g., potential for ponding, runoff, or discharges to open ditches).

(3) Soil borings may be required by the Department to depict the lithologic and hydrogeologic characteristics of the subsurface. The requirements of R.61-67 would apply.

(4)(i) At proposed spray sites with satisfactory soil conditions, design application rates for hydraulic loading shall not exceed (with the exception of seasonal application) the rates shown in Table I (unless one of the conditions in (4)(ii)-(vi) apply):

Table I

| Depth to Seasonal High Water Rate (or measured high water depth, e.g. piezometer readings) | Design Application (gallons per day per acre) (gpd/acre) |
|---|---|
| 5 feet or more | 2 inches/week (in/wk), 7,758 gpd/acre |
| 4 feet | 1 in/wk, 3,879 gpd/acre |
| 3 feet | 0.5 in/wk, 1,940 gpd/acre |
| less than 3 feet | no application (unless otherwise approved by the Department) |

(ii) The applicant may request intermediate loading rates, if the seasonal high water table is between the depths shown in the table.

(iii) If the seasonal high water table (or measured high water depth e.g. piezometer readings), is less than three (3) feet, the Department may consider permitting the land application site if the domestic wastewater facilities are designed to meet monthly average effluent limits for 5-day Biochemical Oxygen Demand (BOD5) of 10 mg/l, Ammonia nitrogen (NH3-N) of 2 mg/l and Nitrate (N) of 10 mg/l, or industrial facilities with non-process wastewater or other suitable wastes. The Department may eliminate some or all of the groundwater monitoring requirements for these facilities.

(iv) The application rate may be limited based on pollutant loading including any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471). The applicant for domestic wastewater or other systems with a

nitrate/nitrogen loading may be required to provide the Department, a nitrate to nitogen loading balance to determine if the application rates shown in Table I shall be adjusted.

(v) The Department may consider application rates in excess of two (2) inches per week for sites that meet the depth to groundwater shown in Table I, provided the application period is only for a portion of the year, or the application is for reclaimed water. The applicant must provide sufficient information to the Department to justify a higher application rate (information required may include, but is not limited to a water balance for the summer season).

(vi) For Domestic wastewater facilities designed to meet monthly average effluent limits of a 5-day Biochemical Oxygen Demand (B0D5) of 10 mg/l, NH3-N of 2 mg/l and Nitrate of 10 mg/l, or industrial facilities with non-process wastewater, or other suitable wastes. If the seasonal high water table (or measured high water depth e.g. piezometer readings), for the land application site is three (3) feet or more, the Department may eliminate some or all of the groundwater monitoring requirements for these facilities.

(5) The design application frequency for effluent irrigation shall not exceed a spray to rest ratio suitable for the soil conditions. A spray to rest ratio of 1:20 shall be used unless an alternative rate is approved by the Department. The application frequency for other activities (such as sludge or septage application) would be determined on a site specific basis.

(6) The application site shall be divided into designed spray areas to meet this spray to rest ratio and a continuous application period per defined spray area shall be designed not to exceed 1.2 hours per day, or up to 8 consecutive hours per week (only under those limited conditions when excessive rainfall on the application sites requires application in one day). If the design application rate on a daily basis is exceeded, the Department may require the permittee to provide additional spray application area or alternative disposal methods may be required (e.g. expanding storage capacity for effluent at the facility). Alternative application periods (such as golf course irrigation) may be approved by the Department.

(7) For permitted spray disposal areas which already receive irrigation (e.g. stormwater, potable water or well water), the effluent application rates may be modified by the Department to correspond to the depth to the measured high water table or to the seasonal high water table, whichever is more shallow.

(8) The new or expanding spray field shall be at least 200 feet from surface waters of the State, occupied buildings and potable water wells unless otherwise approved by the Department. The new or expanding spray field shall be at least 100 feet from the property boundary except for golf courses where it shall be at least 75 feet. The Department may require modification to existing permitted spray fields to control the application areas by the addition or expansion of a buffer zone. The applicant may request the buffer zone for specific spray areas be eliminated for sites where the adjacent property owner agree to the elimination of the buffer in writing. The Department may approve an elimination of the buffer zone based on the information provided by the applicant.

(9) A dike or berm around the perimeter of the spray field may be required in specific areas determined by the Department as necessary to prevent potential surface runoff from entering or leaving the spray site. The Department may consider alternate methods of runoff controls that may be proposed

by the applicant.

(10) A system for monitoring the quality of groundwater shall also be established for the proposed spray site (for those systems requiring groundwater monitoring). The location of all the monitor wells shall be approved by the Department. The applicant shall provide at least one monitoring well up-gradient of the spray area and at least two groundwater monitoring wells down-gradient. For larger spray fields, more than three groundwater monitoring wells may be required. For land application on golf courses with secondary effluent limits, nine monitor wells shall be provided for 18 fairways (or one groundwater well per two fairways for differing course sizes). The Department may reduce the number of groundwater monitoring wells required based on site conditions (e.g. a significant number of existing groundwater monitoring wells in a small area with multiple golf courses, or existing groundwater monitoring data).

(11) Groundwater samples for new application sites (for those systems requiring groundwater monitoring) shall be analyzed for the following parameters. Background groundwater sampling data may be required for new sites prior to the use of the site using similar parameters. For existing or expanding sites the Department may eliminate any parameter based on actual site information, wastewater characteristics or the groundwater data from consistent wastewater plant operations. Groundwater sampling may be required for existing sites (with no current groundwater monitoring wells), or expanding sites prior to the permitting of the expansion, to determine actual groundwater conditions.

(i) Water table elevation and water table depth

(ii) [Reserved]

(iii) Chloride

(iv) Ammonia (NH3)

(v) Nitrate (N)

(vi) [Reserved]

(vii) pH (field)

(viii) Sodium

(ix) Total dissolved solids (TDS) This parameter may be added to the continuing groundwater monitoring based on the result of field specific conductance.

(x) Field specific conductance

(12) Additional parameters may be required in the initial background groundwater analysis and subsequent monitoring thereafter, but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR

Parts 400 through 402 and 404 through 471)) may be required (in a permit) to be monitored in groundwater.

(13) The Department may require the applicant provide a nutrient balance which may include, but not be limited to, nutrient uptake of the proposed groundcover, crop or silviculture, design application rates, size and soil conditions present, and the total nutrient loading to the application site. The Department may adjust the application rates to each site based on the nutrient balance.

(c) Rapid Infiltration.

(1) New or expansions.

(i) New or expanding rapid infiltration basins must be limited to sites where the minimum separation of seasonal high groundwater table will remain 15 feet or more below the basin bottom throughout the year. Consideration may be given to separation of the seasonal high water table by less than 15 feet based on an evaluation of the quality of the effluent being applied. Consideration may also be given to a site when the seasonal high water table is less than 15 feet at some times but the actual separation of the water table is at least 15 feet at any time application occurs.

(ii) The annual hydraulic loading rates shall be no greater than fifteen percent (15% ) of the lowest measured basin infiltration rate, unless approved by the Department. Loading rates may also be adjusted by the Department based on the pollutant loading parameters, including any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471). The applicant for domestic wastewater or other systems with a nitrate or nitrogen loading may be required to provide the Department, a nitrate to nitogen loading balance to determine if the application rates shall be adjusted.

(iii) (A) An application to rest cycle shall consist of no less than a 1:4 ratio in the summer period (March-October) and a 1:6 ratio in the winter period (November-February). The Department may consider other information (e.g., temperature data) to modify the design summer and winter periods for specific sites.

(B) The Department may require the permittee whenever the scheduled resting cycle fails to restore infiltration rates to acceptable levels, to recondition the basin surface (e.g. by scraping and/or loosening of the soil surface by discing or harrowing).

(iv) The design hydraulic loading rate to the rapid infiltration basin shall be calculated to include monthly average precipitation rates for the site area. The most restrictive soil horizon shall have a 2 inches/hour infiltration rate or greater.

(v) infiltration basin during effluent application. The Department may require the permittee to modify the application rate to achieve this separation.

(vi) Drinking water supply wells shall be protected from potential groundwater contamination by a minimum buffer zone of at least 1,000 feet beyond the rapid infiltration basin. A

greater distance may be required by the Department in some cases depending on local hydrogeologic conditions.

(vii) The minimum number of groundwater monitoring wells shall be one up-gradient and one down-gradient for each infiltration basin. Additional wells may be required depending on the hydrogeologic conditions and/or basin size and number of basins. There shall be a minimum of two down-gradient wells or one per infiltration basin, whichever is greater.

(viii) Groundwater samples for new rapid infiltration basins shall be analyzed for the following parameters. For expanding rapid infiltration basins, the Department may eliminate any parameter based on actual site information, wastewater characteristics or the groundwater data from consistent wastewater plant operations:

(A) Water table elevation and water table depth

(B) [Reserved]

(C) Chloride

(D) Ammonia (NH3)

(E) Nitrate (N)

(F) [Reserved]

(G) pH (field)

(H) Sodium

(I ) Total dissolved solids (TDS)

(J) [Reserved]

(ix) Additional parameters may be required in the initial background groundwater analysis and subsequent monitoring thereafter, but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471)) may be required (in a permit) to be monitored in groundwater.

(2) All other rapid infiltration facilities.

(i) The minimum number of groundwater monitoring wells shall be one up-gradient and one down-gradient per each infiltration basin. Additional wells may be required depending on the hydrogeologic conditions and/or basin size and number of basins. There shall be a minimum of two down-gradient wells or one per infiltration basin, whichever is greater.

(ii) Groundwater samples for other rapid infiltration basins shall be analyzed for the following parameters. The Department may eliminate any parameter based on actual site information or the groundwater data from consistent wastewater plant operations:

(A) Water table elevation and water table depth

(B) [Reserved]

(C) Chloride

(D) Ammonia (NH3)

(E) Nitrate (N)

(F) [Reserved]

(G) pH (field)

(H) Sodium

(I ) Total dissolved solids (TDS)

(J) [Reserved]

(iii) Additional parameters may be required in the initial background groundwater analysis and subsequent monitoring thereafter, but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471)) may be required (in a permit) to be monitored in groundwater.

(d) Overland Flow.

(1) New or expansions.

(i) Any discharge to Surface Waters of the State shall require an NPDES permit issued in accordance with R.61-9.122.

(ii) Overland flow systems shall be designed so that the surface water and groundwater standards (R.61-68) shall be maintained.

(iii) (A) The applicant must include as part of the design for a new or expanding overland flow project, at least three ring and infiltrometer tests which shall be performed on the most permeable soil type(s) encountered during the soil borings.

(B) If, during the infiltration tests, the soils at the site are found to be more permeable than 0.2 in/hr, groundwater monitoring wells around the system as specified in paragraph (vi)(A) below shall be provided.

(iv) The permittee shall be required to maintain a water-tolerant turf grass that will facilitate the treatment of wastewater. Alternative proposed groundcover, crops or silviculture may be requested by the applicant. The Department may approve alternative covers.

(v) The overland flow design application period shall not exceed 12 hours per day for each terrace or slope or portion thereof. The NPDES or land application permit issued for the overland flow facility shall provide specific discharge flow limits or application rates.

(vi) (A) For those overland flow systems requiring groundwater monitoring, the minimum number of groundwater monitoring wells is one up-gradient of the entire overland flow system and two down-gradient of each area to be monitored.

(B) Groundwater monitoring wells may not be required at overland flow systems containing surficial permeable soils if they are engineered such that partially treated wastewater will not contact groundwater.

(vii) Groundwater monitoring (if required by the Department) for overland flow systems shall be analyzed for the following parameters. The Department may eliminate any parameter based on actual site information, wastewater characteristics or the groundwater data from consistent wastewater plant operations:

(A) Water table elevation and water table depth

(B) [Reserved]

(C) Chloride

(D) Ammonia (NH3)

(E) Nitrate (N)

(F) [Reserved]

(G) pH (field)

(H) Sodium

(I ) Total dissolved solids (TDS)

(J) [Reserved]

(viii) Additional parameters may be required in the initial background groundwater analysis and subsequent monitoring thereafter, but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471)) may be required (in a permit) to be monitored in groundwater.

(2) All other facilities.

(i) (A) The minimum number of monitoring wells is one up-gradient of the entire overland flow system and two down-gradient of each area to be monitored.

(B) Groundwater monitoring wells may not be required at overland flow systems containing surficial permeable soils if they are engineered such that partially treated wastewater will not contact groundwater.

(ii) Groundwater monitoring (if required by the Department) for overland flow systems shall be analyzed for the following parameters. The Department may eliminate any parameter based on actual site information or the groundwater data from consistent wastewater plant operations:

(A) Water table elevation and water table depth

(B) [Reserved]

(C) Chloride

(D) Ammonia (NH3)

(E) Nitrate (N)

(F) [Reserved]

(G) pH (field)

(H) Sodium

(I ) Total dissolved solids (TDS)

(J) [Reserved]

(iii) Additional parameters may be required in the initial background groundwater analysis and subsequent monitoring thereafter, but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471)) may be required to be monitored (in a permit) in groundwater.

(e) Tile Field.

(1) New or expanding.

(i) The submission and information requirements will be determined by the Department.

(ii) A public entity shall own the system and shall be responsible for the operation, maintenance and replacement of all components unless otherwise approved by the Department. The Department may consider a request for a private entity or person, however the proposal must be evaluated on a case by case basis. The Department can evaluate the capability of reliable system operation in its evaluation.

(iii) If the project is owned by a private entity or person, the Department shall require financial assurances for the operation and maintenance of the system. This financial assurance would typically be required for residential or domestic wastewater sources.

(iv) [Reserved]

(v) A program for monitoring the quality of groundwater may be established for domestic systems (having contributions from industrial facilities), for applicable industrial wastewater systems and other systems, if required by the Department.

(vi) Groundwater monitoring (if required by the Department) for tile field systems shall be analyzed for the following parameters. The Department may eliminate any parameter based on actual site information, wastewater characteristics or the groundwater data from consistent wastewater plant operations:

(A) Water table elevation and water table depth

(B) [Reserved]

(C) Chloride

(D) Ammonia (NH3)

(E) Nitrate (N)

(F) [Reserved]

(G) pH (field)

(H) Sodium

(I ) Total dissolved solids (TDS) This parameter may be added to the continuing groundwater monitoring based on the result of field specific conductance.

(J) Field Specific Conductance

(vii) Additional parameters may be required in the initial background groundwater analysis and subsequent monitoring thereafter, but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471)) may be required to be monitored (in a permit) in groundwater.

(2) All other tile field facilities.

(i) A program for monitoring the quality of groundwater may be established for domestic systems (having contributions from industrial facilities), for applicable industrial wastewater systems and other systems, if required by the Department.

(ii) Groundwater monitoring (if required by the Department) for other tile field systems shall be analyzed for the following parameters. The Department may eliminate any parameter based on actual site information or the groundwater data from consistent wastewater plant operations:

(A) Water table elevation and water table depth

(B) [Reserved]

(C) Chloride

(D) Ammonia (NH3)

(E) Nitrate (N)

(F) [Reserved]

(G) pH (field)

(H) Sodium

(I ) Total dissolved solids (TDS) or Field specific conductance

(J) [Reserved]

(iii) Additional parameters may be required in the initial background groundwater analysis and subsequent monitoring thereafter, but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471)) may be required (in a permit) to be monitored in groundwater.

(f) Percolation or Evaporation Basins.

(1) A groundwater monitoring program may be required by the Department for existing systems to determine if there is a need to evaluate the groundwater conditions at the site to assure compliance with State Water Quality Standards R.61-68. If a deleterious impact to the groundwaters of the State from the permitted use or disposal practices is documented, through groundwater monitoring levels exceeding the standards set forth in R.61-68 or a significant adverse trend occurs, then it will be the obligation of the permittee as directed by the Department to conduct an investigation to determine the vertical and horizontal extent of groundwater impact. The Department may require remediation of the groundwater to within acceptable levels for groundwater as set forth in R.61-68.

(2) A program for monitoring the quality of groundwater may be established for domestic systems (having contributions from industrial facilities), for applicable industrial wastewater systems and other systems, if required by the Department. The Department may consider influent characteristics in this determination.

(i) Groundwater monitoring (if required by the Department). for percolation or evaporation basins shall be analyzed for the following parameters. The Department may eliminate any parameter based on actual site information or the groundwater data from consistent wastewater plant operations:

(A) Water table elevation and water table depth

(B) [Reserved]

(C) Chloride

(D) Ammonia (NH3)

(E) Nitrate (N)

(F) [Reserved]

(G) pH (field)

(H) Sodium

(I ) Total dissolved solids (TDS)

(J) [Reserved]

(ii) Additional parameters may be required in the initial background groundwater analysis and subsequent monitoring thereafter but such needs will be assessed on an individual project basis. Any pollutant required for monitoring under effluent guidelines (40 CFR Part 136; Subchapter N (40 CFR Parts 400 through 402 and 404 through 471)) may be required (in a permit) to be monitored in groundwater.

(g)

(1) Spray irrigation or land application of sewage sludge shall be in accordance with R.61-9.503. Spray irrigation or land application of Industrial sludge shall be in accordance with R.61-9.504.

(2) If total suspended solids concentration of the treated wastewater solids or sludge is less than 2000 mg/l the Department may require the facility to comply with the additional requirements for land application of wastewater (R.61-9.505.42(b)).

(h) Reclaimed wastewater systems.

(1) Provided the level of treatment meets the requirement outlined in section 505.45(i), there would not be specific buffer area requirements.

(2) A groundwater monitoring program may be required by the Department for existing or new systems to determine if there is a need to evaluate the background groundwater conditions at the site to assure compliance with State Water Quality Standards R.61-68.

(3) Piping shall be clearly marked to identify reclaimed water lines and the Department may establish specific guidelines for use of reclaimed water systems.

(4) Reclaimed wastewater systems may be required to provide covered storage systems (or other alternative methods) to maintain effluent quality prior to distribution.

**505.43 Establishing Land Application permit and State permit conditions.**

(a) In addition to conditions required in all permits (section 505.41 and section 505.42), the Department shall establish conditions, as required on a case-by-case basis, to provide for and assure compliance with all applicable requirements of the CWA and PCA and regulations. These shall include conditions under section 505.46 (duration of permits), section 505.47(a) (schedules of compliance), and section 505.48 (monitoring).

(b) (1) An "applicable requirement" is a State statutory or regulatory requirement which takes effect prior to final administrative disposition of a permit. At the discretion of the Department, the comment period may be reopened where new requirements become effective during the permitting process and are of sufficient magnitude to make additional proceedings desirable. An applicable requirement is also any requirement which takes effect prior to the modification or revocation and reissuance of a permit, to the extent allowed in section 505.62.

(2) New or reissued permits and, to the extent allowed under section 505.62 modified or revoked and reissued permits shall incorporate each of the applicable requirements referenced in section 505.44 and section 505.45.

(c) Incorporation. All permit conditions shall be incorporated either expressly or by reference.

**505.44 Establishing limitations, standards, and other Land Application permit and State permit conditions.**

In addition to the conditions established under section 505.43(a), each Land Application permit and State permit may include conditions meeting the following requirements when applicable.

(a) [Reserved.]

(b) (1) [Reserved]

(2) Standards for sewage sludge use or disposal under section 405(d) of the CWA, 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; the Clean Air Act; or under regulation R.61-9.503. 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 Department may initiate proceedings under these regulations to modify or revoke and reissue the permit to conform to the standard for sewage sludge use or disposal.

(c) Reopener clause: For any permit issued to a treatment works treating domestic sewage (including "sludge-only facilities"), the Department shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA and R.61-9.503. The Department may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph, 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 (Regulation 61-68) and State requirements:

(1) Achieve surface and groundwater quality standards, including State narrative criteria for water quality.

(i) Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Department determines are or may be discharged at a level which will cause or contribute to an excursion above any State water quality or groundwater standard, including State narrative criteria for water quality.

(ii) Where the Department has not established a surface or groundwater quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes or contributes to an excursion above a narrative criterion within an applicable State water quality standard, the permitting authority may establish effluent limits or other requirements, including indicator parameters for pollutants of concern.

(iii) Conform to the conditions for State certification under R.61-101 and section 401 of

the CWA.

(iv) Conform to applicable water quality requirements under section 401(a)(2) of the CWA when the discharge affects a State other than the certifying State;

(v) Conform to any more stringent limitations, treatment standards, or schedule of compliance requirements established under Federal or State law or regulations;

(vi) Ensure consistency with the requirements of a Water Quality Management plan approved under section 208(b) of the CWA;

(e) [Reserved.]

(f) [Reserved.]

(g) Twenty-four hour reporting. The permittee shall report any non-compliance which may endanger public health or the environment. The permittee shall notify the Department orally within 24 hours of becoming aware of such conditions.

(h) Durations for permits, as set forth in section 505.46.

(i) Monitoring requirements. In addition to section 505.48, the following monitoring requirements apply:

(1) To assure compliance with permit limitations and protection of the environment requirements to monitor:

(i) Each pollutant limited in the permit and as necessary to characterize any other pollutant, which may be in the wastewater, which has a significant potential to have an effect on the environment or operation of treatment or disposal facilities,

(ii) The volume of effluent applied as specified in the permit.

(iii) Other measurements as appropriate including pollutants in internal waste streams under section 505.45(h), frequency, rate of discharge, etc., for noncontinuous discharges under section 505.45(e); pollutants subject to notification requirements under section 505.42(a); and pollutants in sewage sludge or other monitoring as specified in 40 CFR Part 503 or R.61-9.503 or R.61-9.504; or as determined to be necessary on a case-by-case basis pursuant to section 405(d)(4) of the CWA.

(iv) According to test procedures approved under 40 CFR Part 136 or identified in R.61-9.503 or R.61-9.504 for the analyses of pollutants having approved methods under that part, and according to a test procedure specified in the permit for pollutants having no approved methods.

(2) 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.

(3) 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 R.61-9.505.41(l)(1), (4), (5) and (6) 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 the CWA and R.61-9.403.

(2) Submit a local program when required by and in accordance with R.61-9.403 to assure compliance with pretreatment standards to the extent applicable under section 307(b). The local program shall be incorporated into the permit as described in R.61-9.403. The program shall require all indirect dischargers to the POTW to comply with the reporting requirements of R.61-9.403.

(3) For POTWs which are "sludge-only facilities," a requirement to develop a pretreatment program under R.61-9.403 when the Department determines that a pretreatment program is necessary to assure compliance with section 405(d) of the CWA.

(k) Best management practices to control or abate the discharge of pollutants.

(l) [Reserved.]

(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 Department may issue separate permits to the treatment works and to its users, or may require a separate permit application from any user. The Department'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) [Reserved.]

(o) Sewage sludge. Requirements under section 405 of the CWA governing the disposal of sewage sludge from publicly owned treatment works or any other treatment works treating domestic sewage for any use for which regulations have been established, in accordance with any applicable regulations.

**505.45 Calculating Land Application permit and State permit conditions.**

(a) Outfalls and discharge points. Permit effluent limitations, standards and prohibitions shall be established for each outfall or discharge point of the permitted facility, except as otherwise provided under section 505.44(k) (BMPs, where limitations are infeasible) and paragraph (i) of this section (limitations on internal waste streams).

(b) Production-based limitations. Permit effluent limitations, standards, or prohibitions shall be calculated based on design flow, number of units or other methods established by the Department.

(c) Metals. All permit effluent limitations, standards, or prohibitions for a metal shall be expressed in terms of "total recoverable metal" or "total metals" as defined in 40 CFR Part 136, 40 CFR Part 503, or R.61-9.503 unless:

(1) An applicable effluent standard or limitation has been promulgated under the CWA or under R.61-68 which specifies the limitation for the metal in the dissolved or valent or total form; or

(2) In establishing permit limitations on a case-by-case basis under R.61-9.125.3, it is necessary to express the limitation on the metal in the dissolved or valent or total form to carry out the provisions of the CWA; or

(3) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium).

(d) Continuous discharges. For continuous discharges, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, may be stated as:

(1) Maximum daily and average monthly discharge limitations for all dischargers other than publicly owned treatment works and private facilities; and

(2) Average weekly and average monthly discharge limitations for POTWs and private facilities.

(e) Non-continuous discharges. Discharges which are not continuous, as defined in section 122.2, may be particularly described and limited, considering the following factors, as appropriate:

(1) Frequency (for example, a batch discharge shall not occur more than once every 3 weeks);

(2) Total mass (for example, not to exceed 100 kilograms of zinc and 200 kilograms of chromium per batch discharge);

(3) Maximum rate of discharge of pollutants during the discharge (for example, not to exceed 2 kilograms of zinc per minute); and

(4) Prohibition or limitation of specified pollutants by mass, concentration, or other appropriate measure (for example, shall not contain at any time more than 0.1 mg/l zinc nor more than 250 grams (3 kilogram) of zinc in any discharge).

(f) Mass limitations.

(1) All pollutants limited in permits may have limitations, standards, or prohibitions expressed

in terms of mass except:

(i) For pH, temperature, radiation, or other pollutants which cannot appropriately be expressed in mass:

(ii) When applicable standards and limitations are expressed in terms of other units of measurement; or

(iii) If in establishing permit limitations on a case-by-case basis under R.61-9.125.3, limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation (for example, discharges of TSS from certain mining operations), and permit conditions ensure that dilution will not be used as a substitute for treatment.

(2) Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the permittee to comply with both limitations.

(g) Limits for nutrients (e.g., nitrate) may be required based on the information provided by the applicant including but not be limited to, an analysis of the nutrient uptake of the proposed groundcover, crop or silviculture, design application rates, size and soil conditions present, and the total nutrient loading to the site.

(h) Internal waste streams. When permit effluent limitations or standards imposed at the point of discharge are impractical or infeasible, effluent limitations or standards for discharges of pollutants may be imposed on internal waste streams before mixing with other waste streams or cooling water streams. In those instances, the monitoring required by section 505.44(i) shall also be applied to the internal waste streams.

(i) Minimum treatment requirement.

(1) Purpose. This section provides information on the minimum level of effluent quality for specific categories of Land Application permits or State permits.

(2) Definitions. Terms used are defined as follows:

(i) "7-day average." The arithmetic mean of pollutant parameter values of samples collected in a period of 7 consecutive days.

(ii) "30-day average." The arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days.

(iii) "BOD5" The five day measure of the pollutant parameter biochemical oxygen demand (BOD).

(iv) "CBOD5." The five day measure of the pollutant parameter carbonaceous biochemical oxygen demand (CBOD5).

(v) "Effluent concentrations consistently achievable through proper operation and maintenance." For a given pollutant parameter, the 95th percentile value for the 30-day average effluent quality achieved by a treatment works in a period of at least two years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions.

(vi) "Facilities eligible for treatment equivalent to secondary treatment." Treatment works shall be eligible for consideration for effluent limitations described for treatment equivalent to secondary treatment, if:

(A) The effluent BOD5 and TSS concentrations consistently achievable through proper operation and maintenance exceed the minimum level of the effluent quality set forth in section 505.45(i)(3)(i) and section 505.45(i)(3)(ii).

(B) A trickling filter or waste stabilization pond including aerated lagoon is used as the principal process, and

(C) The treatment works provide significant biological treatment of municipal and/or domestic wastewater.

(vii) "mg/l." Milligrams per liter.

(viii) "Percent removal." A percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

(ix) "Significant biological treatment." The use of an aerobic or anaerobic biological treatment process in a treatment works to consistently achieve a 30-day average of at least 65 percent removal of BOD5.

(x) "Reclaimed wastewater systems." A method of advanced wastewater treatment designed to produce an effluent of such a high quality to be suitable for irrigation in areas with public contact such as yard irrigation and public open spaces.

(xi) "TSS." The pollutant parameter total suspended solids.

(3) The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment for municipal and/or domestic wastewater in terms of the parameters BOD5 and TSS.

(i) BOD5. For all facilities except reclaimed wastewater systems, septic tanks, trickling filters and waste stabilization ponds.

(A) The 30-day average shall not exceed 30 mg/l.

(B) The 7-day average shall not exceed 45 mg/l.

(C) At the option of the Department, in lieu of the parameter BOD5 and the levels of the effluent quality specified in paragraphs (3)(i)(A) and (3)(i)(B), the parameter CBOD5 may be substituted with the following levels of the CBOD5 effluent quality provided:

(I) The 30-day average shall not exceed 25 mg/l.

(II) The 7-day average shall not exceed 40 mg/l.

(ii) TSS. For all facilities except reclaimed wastewater systems, septic tanks, trickling filters and waste stabilization ponds.

(A) The 30-day average shall not exceed 30 mg/l.

(B) The 7-day average shall not exceed 45 mg/l.

(iii) Waste stabilization ponds.

(A) The Department may adjust the minimum level of effluent quality set forth for municipal and/or domestic wastewater treatment works subject to this part to conform to the suspended solids concentrations achievable with waste stabilization ponds, provided that:

(I) Waste stabilization ponds, including aerated lagoon systems, are the principal process used for secondary treatment;

(II) (1) The term "TSS concentrations achievable with waste stabilization ponds" means a TSS value, determined by the Department, which is equal to the effluent concentration achieved 90 percent of the time within the State.

(2) Allowable limits:

(i) The 30-day average shall not exceed 90 mg/l.
(ii) The 7-day average shall not exceed 135 mg/l.

(4) Treatment equivalent to secondary treatment. This section describes the minimum level of effluent quality required for facilities eligible for treatment equivalent to secondary treatment.

(i) BOD5. For trickling filters and waste stabilization ponds.

(A) The 30-day average shall not exceed 45 mg/l.

(B) The 7-day average shall not exceed 65 mg/l.

(ii) TSS. For trickling filters.

(A) The 30-day average shall not exceed 45 mg/l.

(B) The 7-day average shall not exceed 65 mg/l.

(iii) CBOD5 limitations: For trickling filters and waste stabilization ponds.

(A) Where data are available to establish CBOD5 limitations for a treatment works subject to this section, the Department may substitute the parameter CBOD5 for the parameter BOD5 on a case-by-case basis provided that the levels of CBOD5 effluent quality are not less stringent than the following:

(1) The 30-day average shall not exceed 40 mg/l.

(2) The 7-day average shall not exceed 60 mg/l.

(B) Where data are available, the parameter CBOD5 may be used for effluent quality limitations established under this section. Where concurrent BOD effluent data are available, they must be submitted with the CBOD data as a part of the approval process.

(5) Chemical oxygen demand (COD) or total organic carbon (TOC) may be substituted with Departmental approval for BOD5 under section 505.45(i)(3) and section 505.45(i)(4), when a long-term BOD:COD or BOD:TOC correlation has been demonstrated.

(6) For reclaimed water systems, with application in areas with a high potential for contact (e.g. residential irrigation systems, multifamily irrigation systems, commercial irrigation systems in common residential areas, public parks, and open spaces).

(i) BOD5 shall not exceed 5 mg/l monthly average and 7.50 mg/l weekly average.

(ii) Total Suspended Solids (TSS) shall not exceed 5 mg/l monthly average and 7.50 mg/l weekly average.

(iii) Turbidity limits may be established in terms of Turbidity Units, or other means similar to the protection of Drinking Water.

(iv) Total Residual Chlorine (TRC) in the effluent shall be maintained in a manner that a detectable residual chlorine level is maintained in the distribution system and the fecal coliform limits are met. The Department may establish specific total residual chlorine limits for reclaimed water systems based on the site conditions and the distribution system design.

(v) Additional parameters may be required based on the permit application but such needs will be assessed on an individual basis. Any pollutant present in the wastewater may be required to be monitored (in a permit) in the effluent or groundwater.

(7) For tile field systems with Land Application or State Permits.

(i) The technical design standards for Individual Waste Disposal Systems R.61-56, may be utilized by the Department for these facilities.

(ii) The Department may require monitoring and reporting and/or specific limitations for any pollutant present in the wastewater. These requirements may be assessed on an individual project basis.

(8) For dischargers other than POTWs and domestic wastewater. Adequate treatment shall be determined by the Department on an individual project basis.

(9) Fecal coliform limitations.

(i) Land application systems. For all POTW and for those other systems including in the influent a significant amount of, or having a significant effect from, domestic sewage, at least as stringent as 200/100 ml monthly average and 400/100 ml daily maximum, or the bacteriological standard from the nearest surface water body as defined in R.61-68 (if this surface water is classified with a more restrictive standard), except where it can be shown that neither storm water nor wastewater will run off the disposal site to a waterway and that the isolation of the disposal site will eliminate exposure of persons to pathogens. A significant amount or effect is related to the effluent having a reasonable potential to violate the above-stated bacteriological requirement. For all other discharges, the Department may use the previously identified limits, or establish other fecal coliform limitations to reflect the specific discharge and site conditions. Domestic sewage is defined at R.61-9.503.9.

(ii) Tile field and rapid infiltration. No limits, unless specifically required by the Department.

(iii) Reclaimed wastewater. Coliform limitations (for those activities covered under the reclaimed water description) similar to the standards in State Primary Regulations (R.61-58) shall be met in the effluent and the distribution system. Other uses of reclaimed water (e.g., golf course irrigation) would be covered under land application systems or for surface water discharges covered under R.61-9.122.

(iv) Overland Flow. Effluent limits for discharge to surface waters of 200/100 ml monthly average and 400/100 ml daily maximum, or fecal coliform standard for the surface water body as defined in R.61-68.

(10) Nitrate monitoring or limitations (as N).

(i) Land application systems. Monitor and Report effluent Nitrate (as N) concentrations. Monitor and Report Nitrate (as N) concentrations for sludge and septage application. No limits, unless specifically required by the Department. The Department may eliminate this requirement for wastes with minimal, or no nitrate loading (such as water plant sludges).

(ii) Tile field and rapid infiltration. No limits, unless specifically required by the Department.

(iii) Reclaimed wastewater. Monitor and Report effluent Nitrate (as N) concentrations. No limits, unless specifically required by the Department.

(iv) Overland Flow. Monitor and Report effluent Nitrate (as N) concentrations. No limits, unless specifically required by the Department. The Department may eliminate this requirement for wastes with minimal, or no nitrate loading.

**505.46 Duration of Land Application permits and State permits.**

(a) A Land Application permit issued (except for permits issued for activities covered under 40 CFR Part 503) pursuant to State law and this regulation shall be effective for a fixed term not to exceed ten
(10) years. A Land Application permit issued for activities covered under 40 CFR Part 503 pursuant to State law and this regulation shall be effective for a fixed term not to exceed five (5) years. An issued State permit shall remain effective until cancelled or revoked by the Department.

(b) Except as provided in R.61-9.505.6, the term of a Land Application permit shall not be extended by modification beyond the maximum duration specified in this section.

(c) The Department may issue any permit for a duration that is less than the full allowable term under this section.

**505.47 Schedules of compliance.**

(a) General. The State or Land Application permit may, when appropriate, specify a schedule of compliance leading to compliance with CWA, PCA, and regulations.

(1) Time for compliance. Any schedules of compliance under this section shall require compliance as soon as possible, or as provided for under section 505.47(c).

(2) The first Land Application permit or State permit issued to a new source or a new discharger shall contain a schedule of compliance only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised after commencement of construction but less than three years before commencement of the relevant discharge. For recommencing dischargers, a schedule of compliance shall be available only when necessary to allow a reasonable opportunity to attain compliance with requirements issued or revised less than three years before recommencement of discharge.

(3) Interim dates. Except as provided in paragraph (b)(1)(ii) of this section, if a permit establishes a schedule of compliance which exceeds nine (9) months from the date of permit issuance, the schedule shall set forth interim requirements and the date for their achievement.

(i) The time between interim dates shall not exceed nine (9) months, except that in the case of a schedule for compliance with standards for sewage sludge use and disposal, the time between interim dates shall not exceed six months.

(ii) If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than nine (9) months and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(4) Reporting. The permit shall be written to require that no later than 14 calendar days following each interim date and the final date of compliance, the permittee shall notify the Department in writing of its compliance or noncompliance with the interim or final requirements, or submit progress reports if paragraph (a)(3)(ii) is applicable.

(b) Alternative schedules of compliance. A State or Land Application permit applicant or permittee may cease conducting regulated activities (by terminating of discharge for State or Land Application permit sources) rather than continuing to operate and meet permit requirements as follows:

(1) If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

(i) The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or

(ii) The permittee shall cease conducting permitted activities before non-compliance with any interim or final compliance schedule requirement already specified in the permit.

(2) If the decision to cease conducting regulated activities is made before issuance of a permit whose term will include the termination date, the permit shall contain a schedule leading to termination which will ensure timely compliance with applicable requirements no later than the statutory deadline.

(3) If the permittee is undecided whether to cease conducting regulated activities, the Department may issue or modify a permit to contain two schedules as follows:

(i) Both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner, if the decision is to continue conducting regulated activities;

(ii) One schedule shall lead to timely compliance with applicable requirements, no later than the statutory deadline;

(iii) The second schedule shall lead to cessation of regulated activities by a date which will ensure timely compliance with applicable requirements no later than the statutory deadline.

(iv) Each permit containing two schedules shall include a requirement that after the permittee has made a final decision under paragraph (b)(3)(i) of this section, it shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination, if the decision is to cease conducting regulated activities.

(4) The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the Department, such as a resolution of the board of directors of a corporation.

(c) Terms and Conditions of Permits: Schedules of Compliance.

(1) A person issued a Land Application permit or State permit by the Department who is not in compliance with applicable effluent standards and limitations or other requirements contained therein at the time the permit is issued, shall be required to achieve compliance within a period of time as set forth by the Department, with effluent standards and limitations, with water quality standards, or with specific requirements or conditions set by the Department. The Department shall require compliance with terms and conditions of the permit in the shortest reasonable period of time as determined thereby or within a time schedule for compliance which shall be specified in the issued permit.

(2) If a time schedule for compliance specified in a Land Application permit or State permit which is established by the Department pursuant to paragraph (c)(1) above, exceeds nine (9) months, the time schedule shall provide for interim dates of achievement for compliance with certain applicable terms and conditions of the permit.

(d) Terms and Conditions of Permits: Compliance Reports by Dischargers.

(1) Within fourteen (14) calendar days after an interim date of compliance or the final date of compliance specified in a Land Application permit or State permit, a permittee shall provide the Department with written notice of his compliance or noncompliance with the requirements or conditions specified to be completed by that date.

(2) Failure to submit the written notice to the Department is just cause for the Department to pursue enforcement action against the discharger pursuant to the State law or this regulation.

(e) Noncompliance. A discharger who fails or refuses to comply with an interim or final date of compliance specified in a State or a Land Application permit, may be deemed by the Department to be in violation of the permit and may be subject to enforcement action prescribed in the State law or this regulation.

**505.48 Requirements for recording and reporting of monitoring results.**

(a) All permits shall specify:

(1) Requirements concerning the proper use, maintenance, and installation, when appropriate,

of monitoring equipment or methods (including biological monitoring methods when appropriate).

(2) Monitoring shall include 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 section 505.44. Reporting shall be no less frequent than specified in the above regulation.

(4) That a permittee required to monitor a waste discharge shall maintain records of all information resulting from such monitoring, including the date, place and time of sampling; the dates analyses were performed; the person performing the analyses; the analytical techniques, procedures or methods used; and the results of such analyses. All records and results of monitoring activities and calibration and maintenance records shall be retained by the permittee a minimum of three (3) years, unless otherwise required or extended by the Department.

(b) Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required by the Department to be maintained as a condition in a permit, or who alters or falsifies the results obtained by such devices or methods, shall be deemed to have violated a permit condition and shall be subject to the penalties provided pursuant to 48-1-320 and 48-1-330 of the Code.

**505.49 - 505.60 [Reserved.]**

## Part D
## Transfer, Modification, Revocation and Reissuance, and Termination of Land Application Permits and State Permits

### 505.61 Transfer of Land Application permits and State permits.

(a) Transfers by modification. Except as provided in paragraph (b) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under section 505.62(e)(2)), or a minor modification made (under section 505.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under PCA.

(b) Other transfers. As an alternative to transfers under paragraph (a) of this section, any Land Application permit or State permit may be transferred to a new permittee if:

(1) The current permittee notifies the Department at least 30 days in advance of the proposed transfer date, and complies with the requirements in paragraph (b)(2) of this section;

(2) The notice includes a written agreement between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

(3) Permits are non-transferable except with prior consent of the Department. A modification under this subparagraph may also be a minor modification under section 505.63.

**505.62 Modification or revocation and reissuance of Land Application permits and State Permits.**

(a) When the Department receives any information (for example, inspects the facility, receives information submitted by the permittee as required in the permit (see section 505.41), receives a request for modification or revocation and reissuance under R.61-9.124.5, or conducts a review of the permit file), it may determine whether or not one or more of the causes listed in paragraphs (d) and (e) of this section for modification or revocation and reissuance or both exist.

(b) If cause exists, the Department may modify or revoke and reissue the permit accordingly, subject to the limitations of R.61-9.124.5(c), and may request an updated application, if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term. See R.61- 9.124.5(c)(2).

(c) If a permit modification satisfies the criteria in section 505.63 for "minor modifications" the permit may be modified without a draft permit or public review. Otherwise, a draft permit must be prepared and other procedures in R.61-9.124 followed.

(d) Causes for modification. The following are causes for modification or revocation and reissuance of permits.

(1) Alterations. There are material and substantial alterations or additions to the permitted facility or activity (including a change or changes in the permittee's sludge use or disposal practice) which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

(2) Information. The Department has received new information.

(3) New regulations. The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued.

(4) Compliance schedules. The Department determines good cause exists for modification of a compliance schedule or terms and conditions of a permit, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonably available remedy. See also section 505.63(c) (minor modifications).

(5) [Reserved]

(6) 307(a) toxics. When required to incorporate an applicable 307(a) of the CWA toxic effluent standard or prohibition (see R.61-9.122(b)(1)).

(7) Reopener. When required by the "reopener" conditions in a permit, or when established in the permit under R.61-403.10(e)(pretreatment program).

(8) [Reserved]

(9) Pretreatment. As necessary under R.61-9.403.8(e) (compliance schedule for development of pretreatment program).

(10) [Reserved]

(11) Non-limited pollutants. When the level of discharge of any pollutant which is not limited in the permit exceeds the level which may cause an adverse impact to surface or groundwaters.

(12) [Reserved]

(13) [Reserved]

(14) [Reserved]

(15) To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions.

(16) When the discharger has installed the treatment technology considered by the permit writer when developing effluent limits and has properly operated and maintained the facilities, but nevertheless has been unable to achieve those effluent limitations.

(17) [Reserved]

(18) Land application plans. When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.

(e) Causes for modification or revocation and reissuance. The following are causes to modify or, alternatively, revoke and reissue a permit:

(1) Cause exists for termination under section 505.64, and the Department determines that modification or revocation and reissuance is appropriate.

(2) The Department has received notification (as required in the permit, see section 505.41(l)(3)) of a proposed transfer of the permit. A permit also may be modified to reflect a transfer after the effective date of an automatic transfer (section 505.61(b)); but it will not be revoked and reissued after the effective date of the transfer, except upon the request of the new permittee.

(3) There is a violation of any terms or conditions of the permit, or of a State surface or groundwater standard.

(4) The permittee has obtained a permit by misrepresentation or has failed to disclose all relevant

facts to the Department. This includes providing inaccurate or misleading information to the Department on a permit application, or conditions have changed and the permit application does not reflect the actual conditions.

**505.63 Minor modifications of Land Application permits and State permits.**

The Department may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of R.61-9.124. Any Land Application permit modification not processed as a minor modification under this section must be made for cause and with R.61-9.124 draft permit and public notice as required for Land Application Permits in section 505.62. Minor modifications may only:

(a) Correct typographical errors;

(b) (1) Require more frequent monitoring or reporting by the permittee, change the monitoring day, or make other changes which do not result in the discharge of other or more pollutants;

(2) Change or add a requirement to use an analytical method.

(c) (1) Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement or

(2) Delete schedules of compliance or specific interim limits, if final limits are placed in effect.

(d) Approve permit transfer for a Change in Ownership, as follows:

(1) Allow for a change in ownership or operational control of a facility where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department.

(2) Whenever there occurs a change in the ownership of treatment works which are the subject of a Land Application permit or State permit, the new owner shall notify the Department of this change in ownership within thirty (30) days thereof and shall be bound by all the terms and conditions of said permit or permits.

(3) Change facility name.

(4) Permits are non-transferrable except with the prior consent of the Department.

(e) Delete a discharge when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.

(f) (1) Add intermediate, lower-flow-capacity pages of effluent limits that have no loadings higher

than the current permit (e.g., adding a 0.5 MGD page [requiring secondary treatment] if the permit already has a 1 MGD page [requiring secondary treatment]).

(2) Add or revise CWA section 208 certification requirements.

(3) [Reserved.]

(4) Change sludge disposal sites from one approved landfill to another.

(g) Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in R.61-9.403.11 (or a modification thereto that has been approved in accordance with the procedures in R.61-9.403.18) as enforceable conditions of the POTW's permits.

(h) (1) Change the operator grade or other operator requirements, including revision to frequency of operator visits.

(2) (i) Change a sampling date stated in the permit or add a sampling date,

(ii) Add specific sample locations if unclear in the issued permit,

(iii) Reduce sampling frequency after some period of time, if specifically allowed in an issued permit.

(3) Add the treatment system reliability classification.

(4) Require submittal of closure plans.

(5) Change page numbers of the issued permit.

(6) (a) Comply with 403.8(c) concerning pretreatment programs.

(b) Add a compliance schedule to require development of a new pretreatment program, requiring, where appropriate, that the permittee comply with 403.8(b) Deadline for Program Approval.

**505.64 Termination of Land Application permits and State permits.**

(a) The following are causes for terminating a permit during its term, or for denying a permit renewal application:

(1) Noncompliance by the permittee with any condition of the permit or of a State surface or groundwater standard:

(2) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

(3) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

(4) (i) A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit (for example, plant closure or termination of discharge by connection to a POTW).

(ii) Cessation of substantially all manufacturing operations, which are a basis for effluent limits or which contribute to a discharge, for a period of 180 days or longer.

(5) A permittee with a permit which requires connection to a regional sewer system or other treatment facilities under the water quality management plan under section 208 of the CWA is ineligible for reissuance of a permit once notified by the Department that the regional sewer system is operational.

(6) The permittee's failure to comply with the Environmental Protection Fees Regulation R.61-30.

(b) The Department shall follow the applicable procedures in R.61-9.124 in terminating any Land Application permit under this section.

# 61-9.600
# Viability Requirements

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**600.1 Purpose and Applicability.**

(a) Purpose. This regulation establishes rules to ensure that entities owning wastewater systems demonstrate the technical, managerial and financial means to comply with the regulations as a prerequisite for receiving a wastewater discharge permit (e.g., NPDES), including permit transfers.

(b) Authority and Applicability. This Part (R.61-9.600) applies to owners of wastewater systems, including facilities to collect, transport, treat and discharge wastewater and wastewater residuals, excluding permits under R.61-56 and service connections as defined by R.61-67. This Part (R.61-9.600) does not apply to a single business or industrial site that owns a wastewater system serving only its own operations or property, excluding residences. Provisions under this Part (R.61-9.600) may be waived by the Department to remedy existing public health or environmental problems. This rule applies on the date published in the State Register.

**600.2 Definitions.**

The definitions contained in R.61-9.122, apply to this regulation. Terms not defined in this section or sections referenced previously have the meaning given by the PCA.

"Business plan" means, in the context of R.61-9.600, a document consisting of three sub-plans, a Facilities Plan, a Management Plan, and a Financing Plan, as applicable, which shows how a wastewater system (or group of systems under a common owner) will be self-sustaining and that the owner has the commitment and capability (financial, managerial and technical capability) to consistently comply with applicable laws and regulations governing wastewater collection, treatment and disposal.

"Department" means the South Carolina Department of Health and Environmental Control.

"Viable wastewater system owner" means an owner who has demonstrated the financial, technical and managerial capability to handle all aspects of operation, maintenance and replacement of wastewater systems to reasonably assure compliance with Department laws and regulations.

"Wastewater system" means facilities for the collection, transportation, treatment and disposal of wastewater.

**600.3 General Requirements.**

(a) The system owner or proposed owner is responsible for demonstrating viability in accordance with this Part.

(b) Without a demonstration that the proposed owner is or will be a viable wastewater system owner, or unless otherwise exempted, the Department may deny permit requests under R.61-67 or R.61-9. The Department may take necessary actions to bring an existing owner to the point of being a viable wastewater system owner, including requiring changes that will provide for proper operation, maintenance, and replacement of facilities, and to be in compliance with applicable statutes and regulations concerning sewerage systems.

(c) In determining whether a wastewater system owner is viable, the Department may consider information regarding how the owner has demonstrated viability of any existing operations in the state, information provided in a business plan, plans for setting sewer service rates in accordance with rules of the S.C. Public Service Commission (where applicable), and other relevant information. If an owner owns other wastewater systems, the Department may consider the overall resources of the owner such that an individual wastewater system does not have to be financially self-sustaining.

**600.4. New Wastewater Systems and Transfers of Systems.**

(a) Prior to issuance of a wastewater permit under R.61-9 or R.61-67, including a transfer of a NPDES or Land Application permit, the proposed owner must demonstrate viability per the definition of "Viable wastewater system owner."

(b) If the proposed wastewater system owner does not own other wastewater systems in South Carolina, the demonstration must include the submission of a business plan which demonstrates how the system will be self-sustaining and that the owner has the commitment and capability (financial, managerial, and technical capability) to consistently comply with applicable laws and regulations governing wastewater collection, treatment, and disposal.

(c) If the proposed wastewater system is connecting to an existing system where the ownership will be the same (proposed and existing system having the same owner), this demonstration is not required.

(d) If the proposed wastewater system owner already owns other wastewater systems in South Carolina, the Department may consider financial and managerial information related to the owner's other wastewater system operations in the state.

**600.5 Existing Systems.**

If an existing wastewater system has operation, maintenance or compliance problems warranting a formal enforcement action, the Department may require, in an order, the owner to submit a business plan to facilitate viability by identifying the elements necessary to perform proper operation, maintenance, and improvements and to stay in compliance (or come into compliance) with applicable regulatory requirements.

# 61-9.610
# Operation and Maintenance of Satellite Sewer Systems

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**610.1 Purpose.**

This regulation establishes rules for governing the operation and maintenance of wastewater sewer systems, including gravity or pressure interceptor sewers. It is the purpose of this rule to establish standards for the management of sewer systems to prevent and/or minimize system failures that would lead to public health or environmental impacts.

**610.2 Authority and applicability.**

Under Section 48-1-30 of the Code of Laws of South Carolina (1976 as amended), the Department is authorized to adopt such rules and regulations as may be necessary to implement the Pollution Control Act. This regulation applies to all sewer systems that have been or would be subject to a DHEC construction permit under Regulation 61-67, except for those whose owner owns or operates the wastewater treatment system to which the sewer discharges and which discharges under NPDES or a State permit (see 122.41(e)(4) and 505.41(e)(4)), and to systems approved pursuant to 61-9.505.8. Nothing in this regulation supersedes a more stringent requirement that may be imposed by sewer system owners that manage wastewater from satellite systems. This regulation is effective when published in the State Register.

**610.3. General requirements.**

The requirements to properly operate and maintain sewer systems are the responsibility of the system owner. General Standards. The sewer system owner must:

(a) Properly manage, operate, and maintain at all times all parts of its sewer system(s), to include maintaining contractual operation agreements to provide services, if appropriate;

(b) Provide adequate capacity to convey base flows and peak flows for all parts of the sewer system or, if capital improvements are necessary to meet this standard, develop a schedule of short and long term improvements;

(c) Take all reasonable steps to stop and mitigate the impact of releases of wastewater to the environment; and

(d) Notify the Department within 30 days of a proposed change in ownership of a sewer system.

**610.4 [Reserved.]**

**610.5 [Reserved.]**

**610.6 Permitting of satellite sewer systems.**

The Department may issue permits for the operation of a satellite sewer system in cases where the sewer system owner does not have an NPDES or Land Application discharge permit for the wastewater for that sewer system. Such permits do not supersede or replace the requirement under R.61-67.100.E.7 to obtain an approval to place a system into operation.

(a) Authority for general permits for sewer system operation. The requirements for operation and maintenance of a sewer system may be set forth in a general permit issued by the Department. If a general permit is issued, the Department has the authority to apply general permit coverage to system owners and subsequently enforce the provisions of the general permit. For existing systems, the provisions of the permit will be effective upon notice to individual system owners. For proposed systems, they will obtain coverage upon issuance of a construction permit issued pursuant to R.61-67 if the owner has demonstrated it will be a viable operator in accordance with R.61-9.600.

(b) Authority for individual permit for sewer system operation. If a general permit does not address the circumstances appropriate to a sewerage system proposed for permitting under R.61-67, the Department may require an individual operating permit.

(c) Sewer system permit coverage transfers. If a sewer system is sold, coverage under the permit must be transferred by the Department to a new owner before the previous owner is free of the responsibilities outlined in the permit. A request to transfer the permit may be denied if the new owner or proposed new owner cannot demonstrate that it will be a viable operator in accordance with R.61-9.600.

**610.7 Sewer system permit (general and individual) administration.**

(a) The Department may issue a permit to implement the requirements of R.61-9.610. Once a permit is issued and effective, the Department has the authority to grant or deny coverage or deny transfer of coverage.

(b) Where applicable, applicants for permits must submit their applications on permit application forms designated by the Department.

(c) Permit issuance or modification of a permit shall be preceded by a 30-day public comment period.

(d) Term of permits. Permits issued under R.61-9.610 may be issued without a finite term.