

**STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL**

**REGULATIONS FOR LICENSING OPERATORS
OF WASTEWATER FACILITIES**

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Section 1 - Authority and Purpose

- 1.01 Authority - These regulations are adopted by the Secretary of the Department of Natural Resources and Environmental Control, under and pursuant to, the authorities set forth in 7 Del. C. Chapter 60, Section 6023.
- 1.02 Purpose - The purpose of these regulations is to protect the public health and to conserve and protect the water resources of the State; to provide for the classification of all public and private (including industrial) wastewater treatment facilities; to require the examination of operators and licensing of their competency to operate, on-location, such facilities; to create a Board of Certification; and to provide for reciprocal licensing arrangements with other states.

Section 2 - Definitions

- 2.01 **Association of Boards of Certification For Operating Personnel in Water and Wastewater Utilities (ABC)** - Means that organization which: serves as an information center for certification activities; recommends minimum standards and guidelines for classification of Wastewater Facilities and certification of operators; aids in the establishment of reciprocity between State Programs; and assists authorities in establishing new certification programs and updating existing ones.
- 2.02 **Board** - Means the State Board of Certification for Operators of Wastewater Facilities.
- 2.03 **Department** - Means the Department of Natural Resources and Environmental Control.
- 2.04 **Direct Responsible Charge (DRC)** - Means on-location accountability for, and on-location performance of, active daily operation (including Technical Supervision, Administrative Supervision, or Maintenance Supervision) for a Wastewater Facility, an operating shift of a system or a facility, or a major segment of a system or facility.
- 2.05 **On-Site Wastewater Disposal System** - Means a Wastewater Facility permitted under Delaware's Regulations Governing the Design, Installation, and Operation of On-site Wastewater Treatment and Disposal Systems.
- 2.06 **Operate** - Means the actions necessary for the effective performance of a Wastewater Facility or a major segment of a system or facility.
- 2.07 **Person** - Means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, municipality or any other political subdivision of this State, any interstate body, or any other legal entity.
- 2.08 **Secretary** - Means the Secretary of the Department of Natural Resources and Environmental Control or his/her duly authorized designee.

- 2.09 **Wastewater Facility (Facilities)** - Means the system of pipes, structures, equipment, or processes required to treat any wastewater, and dispose of the effluent; including the treatment, handling, and disposal of residuals and biosolids related thereto.
- 2.10 **Wastewater Operator** - Means an individual, who at a given time, through observation, interpretation, or decision, operates a Wastewater Facility or a segment of a system or facility.

Section 3 - State Board of Certification For Operators of Wastewater Facilities

- 3.01 The Board shall be appointed by the Secretary to advise and assist the Secretary in the administration of the certification program. The Board will consist of three (3) members: One (1) member who is currently certified as a Wastewater Operator or who is eligible to be licensed under these regulations; one (1) member representing the Department, who shall be responsible for maintaining records; and one (1) member-at-large. Board members will serve three (3) year terms which will be staggered so that the term of not more than one (1) member will expire in any single year.
- 3.02 The Board, with the consent of the Secretary, shall establish such procedures and guidelines as may be necessary for the administration of these regulations, and shall include at least the following provisions:
- [a] procedures for examination of applicants and renewal of licenses
 - [b] procedures for the suspension and revocation of licenses
 - [c] guidelines for evaluating equivalency of training and examinations conducted by recognized agencies and institutions
 - [d] guidelines for evaluating equivalency of other certification and/or licensing programs for the purpose of according reciprocal treatment
 - [e] procedures for establishing regularly scheduled meetings
 - [f] procedures for evaluating continuing education requirements, in accordance with Section 8.01(d)
 - [g] procedures for evaluating applications to operate more than one (1) Wastewater Facility.
- 3.03 When taking action pursuant to these regulations, the Board may consider generally applicable criteria and guidelines developed by the Association of Boards of Certification for Operating Personnel in Water and Wastewater Utilities (ABC).

Section 4 - Licensing Requirements

- 4.01 Any Wastewater Facility (except those specifically exempted by the Department), whether publicly or privately owned, used or intended for use by the public or private persons, **shall** be under the supervision of a Wastewater Operator(s) in Direct Responsible Charge, whose competency is licensed by the Secretary in a classification corresponding to, or higher than, the classification of the Wastewater Facility.
- 4.02 No person shall perform the duties of a Wastewater Operator without obtaining a Delaware Wastewater Operator's License.
- 4.03 Any Wastewater Facility (except those specifically exempted by the Department), whether publicly or privately owned, used or intended for use by the public or private persons, **shall** at all times have available, a Delaware Licensed Wastewater Operator(s) capable of operating the Wastewater Facility.
- 4.04. On or before January 31 of each year, any owner of a Wastewater Facility whether publicly or privately owned, used or intended for use by the public or private persons, **shall** register with the Department and list the type of facility, the average daily flow, and the name(s) of all Wastewater Operators in Direct Responsible Charge (DRC). Any personnel changes involving the operator(s) in Direct Responsible Charge (DRC) shall be reported to the Department within 30 days after the change.
- 4.05 On-Site Wastewater Disposal Systems with a design flow less than 2,500 gallons, are exempt from the provisions of these regulations. Other Wastewater Facilities may be granted exemption by the Department under Section 5.02.
- 4.06 All persons must be operating (or have written offer of employment) at a Wastewater Facility in Delaware, in order to be issued a Wastewater Operators License.

Section 5 - Classification of Wastewater Facilities

- 5.01 The Department shall classify Wastewater Facilities which discharge into other wastewater systems, or to receiving bodies of water, or on land surface or subsurface. The classification shall consider the skill, knowledge, and experience required of an operator; and shall be in accordance with the criteria hereby established.
- 5.02 Classification of Wastewater Facilities: Wastewater Facilities shall be classified in one of four classes. These classifications shall be made in accordance with the Point System established in accordance with the "State Board of Certification Point System Classification of Wastewater Facilities" (included as Table 1 of these regulations), and the range of points for each class of facility as shown below:

Class I	11 - 30 Points
Class II	31 - 55 Points
Class III	56 - 75 Points

Class IV 76 Points or greater

Wastewater Facilities other than those with on-site wastewater disposal systems, scoring fifteen (15) points or less, shall be exempt from the requirements of Section 4.01 of these regulations, and the owner shall be so notified by the Department. Wastewater Facilities with on-site wastewater disposal systems only, scoring ten (10) points or less, shall be exempt from the requirements of these regulations (unless otherwise required by the Department), and the owner shall be so notified by the Department.

- 5.03 Any Wastewater Facility may be classified in a group other than indicated by the general criteria after determination by the Secretary. The Secretary may consider special features of design, characteristics or conditions of flow, or use of the receiving waters or combination of such conditions. The owner of the facility shall be given due notice of the Secretary's tentative determinations, and any comments shall be considered before making the final determination.
- 5.04 The classification of any Wastewater Facility may be changed at the discretion of the Secretary by reason of changes in condition or circumstances on which the original classification was predicated. Due notice of any such change shall be given to the owner of the Wastewater Facility.

Section 6 - Operator Qualifications and Classifications

- 6.01 Applicants for Licensing shall be evaluated by the Board as to education, experience, and knowledge. Further, applicants may be required to give evidence of good character, dependability, interest in work, and other pertinent characteristics in relation to responsible operations. Applicants must pass the required written examination, unless the Board determines that an alternate examination format is necessary.
- 6.02 In evaluating an applicant's qualifications, the Board will be guided by the following:
- [a] Experience requiring technical knowledge, and whether or not Direct Responsible Charge (DRC) was included. In large plants where responsibility is divided, operators of important divisions may be credited with having Direct Responsible Charge, as long as the DRC designation appears on the annual Section 4.04 submission.
 - [b] Experience, to be acceptable, must be the result of satisfactory accomplishment of work. Evaluation may be based on reports of the employers, or by state and local agencies having appropriate responsibilities for supervising systems and plants.
 - [c] Partial credit may be given for operating experience in maintenance, laboratories, or other work involving water or wastewater facilities.
 - [d] Where applicable, education may be substituted for a portion of operating experience requirements as specified below:

- [i] Where education or training is substituted for operating experience, it shall not exceed an amount which would reduce the requirement of actual operating experience to less than one year for Class I, or less than two years actual operating experience for Classes II, III, and IV.
 - [ii] Education applied to the operating experience requirement cannot also be applied to the education requirement.
 - [iii] College Level education in engineering or allied subjects, or equivalent, as approved by the Board, may be substituted on a year for year basis for operating experience (any Wastewater Facility Classification).
 - [iv] Specialized operator training courses, correspondence courses, Seminars, workshops, etc., may be substituted for operating experience on a case by case basis; and the equivalency will be determined by the Board.
- [e] Where applicable, operating experience may be substituted for educational requirements as specified below:
- [i] Operating experience applied to educational requirement may not also be applied to the operating experience requirement.
 - [ii] One year of Direct Responsible Charge operating experience may be substituted on a year-for-year basis for one year of college level education.
- [f] Substitutions for formal education may be made as follows:
- [i] Specialized operator training courses, correspondence courses, seminars, workshops, etc., may be substituted for formal education on a case by case basis; and the equivalency will be determined by the Board.
 - [ii] An acceptable High School Equivalency Certificate (GED) may be used to substitute for a High School Diploma.
- [g] Additionally, the Board may be guided by special circumstances, if appropriate.

6.03 Wastewater Operators - Four (4) Classes of operators are hereby established. The qualifications are intended to relate, as nearly as possible, to the corresponding classifications for Wastewater Facilities.

Class IV

- [1] A college degree or completion of four (4) years in a standard curriculum in engineering or allied subjects, **plus**
- [2] Four (4) years of acceptable operating experience in Wastewater Facilities of Class III or higher; two years of which must have been in a position of Direct Responsible Charge (DRC).

Class III

- [1] High School Diploma and two (2) years of approved college level education in engineering or allied subjects, **plus**
- [2] Four (4) years of acceptable operating experience in Wastewater Facilities of Class II or higher; two years of which must have been in a position of Direct Responsible Charge (DRC).

Class II

- [1] High School Diploma, **plus**
- [2] Three (3) years of acceptable operating experience in Wastewater Facilities of Class I or higher.

Class I

- [1] High School Diploma, **plus**
- [2] One (1) year of acceptable operating experience.

6.04 Specialty License - where a Wastewater Facility is of a highly unusual character, requiring skills and techniques other than those indicated by the general criteria, the Board **may**, with the consent of the Secretary, provide a Specialty License to an operator. Such Specialty License shall only be valid for operating the specific Wastewater Facility for which it is issued. The requirements for a Specialty License shall be determined by the Board on a case-by-case basis.

Section 7 - Examination

- 7.01 The Board, or its authorized designee, shall prepare written examinations to be used in determining knowledge, ability, and judgement of the operators.
- 7.02 Examinations shall be held at places and times as set by the Board, with a suitable method of advance announcement made by the Board. Examinations shall be conducted at least semi-annually.
- 7.03 Examinations shall be written, unless the Board determines that an alternate format is necessary. All examinations will be graded by the Board, or by others designated by the Board, and the applicant notified of the outcome. Papers will not be returned to the

applicant. However, a method will be provided to review the results with a member of the Board or its authorized designee on request by the applicant.

- 7.04 Separate examinations shall be prepared to cover each class of operator, as established in Section 6.03.
- 7.05 Any person who has failed the written examination for a particular operator class on three (3) consecutive occasions, shall then satisfactorily complete an approved educational examination review course prior to again being considered to take that particular class of written examination.

Section 8 - Licensing

8.01 Issuance of a License

- [a] Upon satisfactory fulfillment of the requirements provided herein, and based on the recommendation of the Board, the Secretary **may** issue a suitable license to the applicant. This license will indicate the class for which the operator has qualified.
- [b] A license may be issued, without examination, in a comparable classification, to any person who holds a current valid certificate or license in any jurisdiction, if in the judgement of the Board, the requirements under which the person's certification or license was issued, are of a standard not lower than that specified by these regulations.
- [c] A license shall be renewable every two years unless revoked for cause, replaced by one of a higher grade, or invalidated under subsection [d] below.
- [d] An applicant for a license renewal shall submit with the renewal application, proof that the applicant has in the preceding two years, attended or satisfactorily completed a minimum of twenty (20) classroom, seminar, or workshop hours, relating to Wastewater Facility operations or maintenance, that are sponsored by recognized government, educational, or industrial groups, including equipment manufacturers. Failure to do so shall be grounds for invalidation.
- [e] An operator whose license is invalidated, may be issued a new license of like classification, provided appropriate proof of competency is presented to the Board. Successful completion of a written examination shall be required if the license has been invalidated for two (2) or more years.
- [f] Operator-In-Training License - An applicant who desires to become licensed and does not meet the experience or educational requirements may, with the approval of the Board, receive an Operator-In-Training (OIT) license, pending fulfillment of these requirements, providing the appropriate examination has been successfully passed. A holder of an OIT license **may, only with the recommendation of the Board** be allowed to be in Direct Responsible Charge (in accordance with Section 4.01) of a Wastewater Facility on a temporary basis, until the requirements are met; up to a maximum period of two years.

[g] Emergency License - An emergency license may be issued, when it is demonstrated to the satisfaction of the Secretary, that the owner is unable to hire a licensed operator in spite of good faith efforts. The applicant for an Emergency License shall meet specific requirements as set forth by the Board. Such licenses may be issued with special conditions or requirements deemed necessary to protect the public health and the water resources of the State. An emergency license shall be valid only for that plant or system for a period of one (1) year, and may be renewed for a maximum of one (1) additional year, when extreme extenuating circumstances are shown and concurred with by the Board.

8.02 Suspension and Revocation of License - The Secretary may suspend or revoke the license of an operator, after considering the recommendation of the Board, when it is found that the operator has practiced fraud or deception; that reasonable care, judgement, or the application of knowledge or ability, was not used in the performance of the operator's duties; or that the operator is incompetent or unable to perform duties properly. The Board shall act in accordance with the procedures established under Section 3.02[b] of these regulations, and shall hold a hearing before making its recommendations.

8.03 Additional Persons Licensed - The Secretary may determine, due to size of plant, shift operation, or other influencing factors, that more than one (1) operator shall be required to be in Direct Responsible Charge at a given facility.

8.04 Additional Wastewater Facilities

[a] Application may be made to the Secretary to operate more than one Wastewater Facility, and must include justification and capabilities. The Board will evaluate the application in accordance with the procedures established under Section 3.02[g].

[b] Any person considered in Direct Responsible Charge of more than one (1) Wastewater Facility may be required to be licensed in a classification higher than the classification of those facilities in the operator's charge. The degree of operator classification may be further increased depending upon the total number of facilities under the responsible charge of the operator. The Board will recommend, with the consent of the Secretary, the degree of classification in accordance with these factors.

Section 9 - Fees

9.01 The fee schedule for wastewater operator applications, examinations, and licenses, shall be established by the General Assembly.

Section 10 - Prohibited Acts

10.01 It shall be unlawful:

[a] To operate any Wastewater Facility (except those exempted under provisions of these regulations) unless the person(s) in Direct Responsible Charge is (are) duly licensed under the provisions of these regulations; and

[b] For any person to routinely perform the duties of an operator without being duly licensed under the provisions of these regulations.

Section 11 - Penalties

11.01 Any person who knowingly and willfully violates any provision of these regulations shall be subject to enforcement and penalties under 7 Del. C., Subsection 6005.

Section 12 - Reciprocity

12.01 Certification or licensing of operators by any State, as determined by the Secretary, which accepts certifications made or certification requirements determined to be substantially equivalent to the requirements of these regulations or any rules promulgated hereunder, shall be recognized as valid and sufficient within the purview of these regulations.

12.02 In making determination pursuant to subsection 12.01 of this section, the Secretary shall consult with the Board, and may consider any generally applicable criteria and guidelines developed by the Association of Boards of Certification for Operating Personnel in Water and Wastewater Utilities (ABC).

Section 13 - Repealer

13.01 The provisions of these regulations are intended to supersede existing regulations of this State insofar as they relate to the matters included in these regulations.

Section 14 - Severability

14.01 If any part of these regulations, or the application of any part thereof, is held invalid or unconstitutional, the application of such part to other persons or circumstances and the remainder of these regulations shall not be affected thereby, and shall be deemed valid and effective.

Section 15 - Department Contact Point

15.01 Division of Water Resources, Wastewater Board of Certification
Department of Natural Resources and Environmental Control
89 Kings Highway
Dover, DE 19901
Telephone: 302-739-5731

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TABLE 1

STATE BOARD OF CERTIFICATION POINT SYSTEM CLASSIFICATION OF WASTEWATER FACILITIES

TREATMENT DEFINITIONS

Activated Sludge: Wastewater treatment by aeration of suspended organisms, followed by clarification, including extended aeration, Intermittent Cycle Extended Aeration System (ICEAS), and other similar processes. A Sequencing Batch Reactor, with the purpose of providing this form of treatment, would be rated under this category.

Aeration: The process of adding air to water. Air can be added to water by passing air through water or passing water through air.

Biological or Chemical/Biological Advanced Waste Treatment: The advanced treatment of wastewater for nutrient removal, including nitrification, denitrification, or phosphorus removal, utilizing biological or chemical processes or a combination thereof. If the facility is designed to nitrify based solely on detention time in an extended aeration system, only the points for nitrification by designed extended aeration, should be given.

Biological Nutrient Removal: The biological removal of nitrogen and phosphorus from wastewater.

Chemical Addition: The addition of a chemical to wastewater, at an application point for the purposes of adjusting pH or alkalinity, improving solids removal, dechlorinating, removing odors, providing nutrients, or otherwise enhancing treatment, excluding chlorination for disinfection or effluent and the addition of enzymes or any process included in the Tertiary Chemical/Physical Processes. The capability to add a chemical at different application points for the same purpose, should be rated as one (1) application; the capability to add a chemical(s) to dual units, should be rated as one application; and the capability to add a chemical at different application points for different purposes, should be rated as separate applications.

Chemical Pretreatment: The addition of a chemical to wastewater, at an application point for the purposes of adjusting pH or alkalinity, improving solids removal, dechlorinating, removing odors, providing nutrients, or otherwise enhancing treatment, excluding chlorination for disinfection or effluent and the addition of enzymes or any process included in the Tertiary Chemical/Physical Processes. The capability to add a chemical at different application points for the same purpose, should be rated as one (1) application; the capability to add a chemical(s) to dual units, should be rated as one application; and the capability to add a chemical at different application points for different purposes, should be rated as separate applications.

Chemical/Physical Advanced Treatment Following Secondary Treatment: The use of chemical or physical advanced treatment processes following (or in conjunction with) a secondary treatment process. This would include processes such as carbon adsorption, air stripping, chemical coagulation, and precipitation, etc.

Chemical/Physical Advanced Treatment Without Secondary Treatment: The use of chemical or physical advanced treatment processes without the use of a secondary treatment process. This would include processes such as carbon adsorption, air stripping, chemical coagulation, and precipitation, etc.

Dissolved Air Flotation (DAF): Process of solids removal where dissolved air is added to the clarifier from the bottom of the basin, and the air raises suspended particles to the top of the water, where the particles are removed by skimming.

Dissolved Nitrogen Flotation (DNE): Same process as DAF.

Filtration: The advanced treatment of wastewater for removal of solids by sand or other media or mixed media filtration.

Fixed-Film Reactor: Biofiltration by trickling filters or rotating biological contactors, followed by secondary clarification.

Land Treatment and Disposal (surface or subsurface): The ultimate treatment and disposal of the effluent onto the surface of the ground by rapid infiltration or rotary distributor or by spray irrigation. Subsurface treatment and disposal would be accomplished by infiltration gallery, injection, or gravity or pressurized drain field.

Mechanical Dewatering: The removal of water from sludge by any of the following processes, and including the addition of polymers in any of the following: vacuum filtration; frame, belt or plate filter presses; centrifuge; or dissolved air flotation.

Mechanical Post-Aeration: The introduction of air into the effluent by mechanical means such as diffused or mechanical aeration. Cascade aeration would not be assigned points.

Odor Control: Specific devices for reducing odors. Does not include “masking” devices.

Oil and Water Separator: Specific devices for the separation of oil from wastewater.

Operator in Direct Responsible Charge: Means on-location accountability for, and on-site performance of, active daily operation (including Technical Supervision, Administrative Supervision or Maintenance Supervision) for a Wastewater Facility, an operating shift of a system or facility, or a major segment of a system or facility.

P.F.R.P.: Processes to “further” reduce pathogens in bioresiduals, prior to further use. Now currently known as Class A sludge which limits coliform bacteria to a single count of less than one (1) thousand per gram by analysis.

P.S.R.P.: Processes to “significantly” reduce pathogens in bioresiduals, prior to further use. Now currently known as Class B sludge which limits coliform bacteria to an average count of less than two (2) million per gram by analysis.

pH Adjustment: The alteration of the pH of the raw wastewater or pre-finished wastewater by mechanical or chemical procedures, to enhance the performance of the treatment process.

Population Equivalent (P.E.): Means the population computed by relating the total daily weight (W lbs.) of Biochemical Oxygen Demand (BOD) to the daily per capita BOD of 0.17 lb. as shown below:

$$P.E. = \frac{W/0.17}{10,000 \text{ (per capita)}}$$

Reverse Osmosis: Passage of wastewater from a concentrated solution through a semipermeable membrane, to finished water with the application of pressure.

SCADA Instrumentation: The Supervisory Control and Data Acquisition system is a computer-based system that monitors and controls remote wastewater facility sites. A SCADA master control is typically located in a dedicated control center or treatment plant control room. Remote sites are equipped with remote terminal units to gather information and issue controls from the master station.

Secondary Treatment: The process commonly is a type of biological treatment of wastewater followed by secondary clarifiers.

Sequential Batch Reactor (S.B.R.): A process of enhanced biological treatment which also removes both nitrogen and phosphorus.

Solids Composting: Mixing of sludge with decaying organic material for eventual use as a fertilizer.

Solids Stabilization: The processes to oxidize or reduce the organic matter in the sludge, to a more stable form. These processes reduce pathogens or reduce the volatile organic chemicals, and thereby reduce the potential for odor. These processes would include lime (or similar) treatment and thermal conditioning. Other stabilization processes such as aerobic or anaerobic digestion and composting are listed individually.

Tertiary Treatment: Those processes commonly used after secondary treatment to meet water reuse requirements.

Facility: _____ Date: _____
 Address: _____ Classifier: _____
 Permit No. _____ Facility Representative: _____

POINT SYSTEM CLASSIFICATION OF WASTEWATER FACILITIES (Assign points for every item that applies)		
ITEM	Pts.	Pts.
SIZE (2 point minimum to 20 point maximum)		
Maximum Population Equivalent (P.E.) served, peak (lbs. BOD) day, per 10,000 P.E. or part	Per. Calc.	
Design Daily Flow or peak month's daily flow, whichever is larger, per MGD or part	Per. Calc.	
EFFLUENT DISCHARGE		
<i>Receiving Stream Sensitivity</i>		
Slight – “Effluent Limited Segment” in USA EPA Terminology; Secondary Treatment is adequate	2	
Moderate – More than Secondary Treatment is required	4	
Extreme – “Water Quality Limited Segment” in USA EPA Terminology; stream conditions are critical, and a very high degree of treatment is required	6	
Discharge into Treatment System	1	
<i>Land Treatment</i>		
1 - 50,000 gallons per day	2	
50,001 - 250,000 gallons per day	4	
250,001 or greater gallons per day	6	
Rapid Infiltration	6	
Subsurface Disposal	4	
VARIATION IN RAW WASTE (0 point minimum to 6 point maximum)		
Variations do not exceed those normally or typically expected from the design parameters	0	
Variations of 100% to 200% in strength and/or flow	2	
Variations of more than 200% in strength and/or flow	4	
Raw Wastes subject to toxicity	6	

POINT SYSTEM CLASSIFICATION OF WASTEWATER FACILITIES

(Assign points for every item that applies)

Impact of septage or truck-hauled waste (0 point to 4 point maximum)

No septage received	0	
Less than one half of one percent (<0.5%) of the design flow	2	
Equal to or greater than one half of one percent ($\geq 0.5\%$) of the design flow	4	

PRETREATMENT

Preaeration	3	
*Chemical addition (pre-chlorination, pH, peroxide, permanganate, enzymes, etc.)	3	
Collection System (screens and/or comminution, pump and/or lift stations)	3	

PRELIMINARY TREATMENT

Plant pumping of main flow (Maximum of 3 points for an entire wastewater facility)	3	
Oil & Grease removal (trap or skimmer)	3	
Screening	3	
Comminution	3	
Grit Removal	3	
Septage Receiving Station	3	
Equalization with or without aeration	3	
*Chemical Addition	3	

PRIMARY TREATMENT

Settling basin, tanks or lagoons	5	
Primary Clarifier(s)	5	
Combined sedimentation and/or digestion	5	
Oil and Water Separator	4	
DAF Units	8	
DNF Units	8	
*Chemical Addition	3	

POINT SYSTEM CLASSIFICATION OF WASTEWATER FACILITIES

(Assign points for every item that applies)

SECONDARY TREATMENT

Fixed Film w/Secondary Clarifiers	10	
Conventional Activated Sludge, Extended Aeration, Contact Stabilization, Oxidation, Ditches, SBRs, or equivalent with Secondary Clarification	15	
Biological Nutrient Removal	5	
Stabilization ponds without aeration	5	
Aerated lagoon or tanks	8	
Artificial Wetlands	5	
Recirculating Filter	4	
*Chemical Addition	3	

TERTIARY/ADDITIONAL TREATMENT

Polishing Ponds	2	
Chemical/Physical without Secondary Treatment	10	
Physical – following Secondary Treatment (i.e., sand filters, microscreens, etc.)	6	
Carbon Filtration	4	
Cartridge Filtration	2	
Dissolved Air Flotation (DAF)	8	
Biological or Chemical/Biological (including artificial wetland)	10	
Ion Exchange	10	
Reverse Osmosis	15	
Carbon Regeneration	4	
Air/Steam Stripping	3	
Oil and Water Separator	5	
Odor Control	3	
Post Aeration	2	
*Chemical Addition	3	

POINT SYSTEM CLASSIFICATION OF WASTEWATER FACILITIES

(Assign points for every item that applies)

SOLIDS HANDLING		
Aerated solids holding tank	3	
Non-aerated solids holding tank	1	
Thickening by settling methods	3	
Thickening by mechanical methods	5	
Mechanical Dewatering	8	
Anaerobic Digestion	10	
Aerobic Digestion	6	
Biosolids Drying Beds	4	
Evaporative Drying	2	
Solids Reduction (incineration, wet oxidation)	12	
Landfilling of biosolids on permittee property	3	
Land Application by Plant Personnel	8	
P.S.R.P. (Alkaline Stabilization, Composting, Other)	6	
P.F.R.P. (Alkaline Stabilization, Composting, Other)	10	
Reed Beds	2	
*Chemical Addition	3	
DISINFECTION		
<i>Chlorination</i>		
Gas	5	
Liquid	3	
Ultraviolet Disinfection	3	
Ozone Disinfection	8	
<i>Dechlorination</i>		
Gas	5	
Liquid	3	
Aeration	3	

POINT SYSTEM CLASSIFICATION OF WASTEWATER FACILITIES (Assign points for every item that applies)		
LABORATORY CONTROL BY PLANT PERSONNEL (0 point minimum to 15 point maximum)		
Assign one point for each test done (permit required test only)	1 ea.	
INSTRUMENTATION (0 point minimum to 6 point maximum)		
The use of SCADA or similar instrumentation systems to provide data with no process operation	0	
The use of SCADA or similar instrumentation systems to provide data with limited process operation	2	
The use of SCADA or similar instrumentation systems to provide data with moderate process operation	4	
The use of SCADA or similar instrumentation systems to provide data with extensive or total process operation	6	
TOTAL NUMBER OF POINTS		
CLASSIFICATION		
Class I (11 - 30 points)		
Class II (31 - 55 points)		
Class III (56 - 75 points)		
Class IV (76 points or greater)		
<i>Unless otherwise required by permit or regulations</i>		

**Chemical Addition – maximum of nine (9) points for an entire wastewater facility.*

Notes: _____

FACILITY DIAGRAM