

NEBRASKA ADMINISTRATIVE CODE

NEBRASKA DEPARTMENT OF ENVIRONMENT AND ENERGY

TITLE 197

Rules and Regulations for the Certification
Of
Wastewater Treatment Operators in Nebraska

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NEBRASKA DEPARTMENT OF ENVIRONMENT AND ENERGY

TITLE 197 – RULES AND REGULATIONS FOR THE CERTIFICATION OF
WASTEWATER TREATMENT OPERATORS IN NEBRASKA

TABLE OF CONTENTS

<u>CHAPTER</u>	<u>SUBJECT</u>	<u>STATUTORY AUTHORITY</u>
1	Definitions, Applicability	81-15, 129 81-15, 130 (1)(10), and 81-15, 134
2	Classifications of Facilities, Staffing Requirements and Reporting Requirements for Owners of Wastewater Treatment Facilities	81-15,130; 81-15,131; 81-15,134
3	Operator Certification, Types of Certification	81-15,130(1),(3),(9); 81-15,131; 81-15,132; 81-15,133; 81-15,135 81-15,138.
4	Certification Application and Examination Procedures, Expiration, and Renewal	81-15,130(1) thru 15,130(8); 81-15,131; 81-15, 138, 81-15,140.
5	Education, Experience Requirements, And Continuing Education	81-15,130(1)(2)(3)(4); 81-15,131
6	Additional Requirements for Contract Operation	81-15, 130(1); 81-15, 131
Appendix A	Municipal/Commercial Wastewater Treatment Plant Point Rating System Wastewater Treatment Plant Point Rating System (Non-Industrial/Municipal)	81-15,130(2)
Appendix B	Industrial Wastewater Treatment Plant Point Rating System	81-15,130(2)
Appendix C	Fee Schedule	81-15,130(8)

NEBRASKA ADMINISTRATIVE CODE

Title 197 - RULES AND REGULATIONS FOR THE CERTIFICATION OF WASTEWATER TREATMENT OPERATORS

Chapter 1 – DEFINITIONS, APPLICABILITY

001 In addition to the definitions in § 81-15,129, the following definitions will apply.

001.01 Catastrophic Condition is considered a medical condition such as cancer, heart condition, organ transplant, and any other major medical condition that limits an operator's ability to work.

001.02 Classification System or System means the procedure used to classify wastewater treatment facilities including the point rating worksheets and classification tables in Appendix A and B.

001.03 Collection System means the part of the wastewater treatment facility that includes the structures, equipment, and processes required to collect and transport wastewater from its point of origin to a wastewater treatment facility.

001.04 Compatible Industrial Facility means a wastewater treatment facility treating or pretreating wastewater produced by an industry whose wastewater is treated similar to domestic wastewater.

001.05 Continuing Education Unit (CEU) is a standard unit of measurement meaning ten contact hours of participation in, and successful completion of an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction which is approved by the director or some nationally recognized association.

001.06 Contract Operation means operation of a wastewater treatment facility by an individual operator who is not an employee of the owner of the wastewater treatment facility, or by a private firm employing certified operators, authorized to operate a facility through a contract with the owner of the wastewater treatment facility.

001.07 Direct Responsible Charge (DRC) means the person(s) designated by the owner to be the certified operator(s) responsible for making decisions regarding the daily operational activities of a wastewater treatment facility and decisions that will impact compliance with the National Pollutant Discharge Elimination System permit.

001.08 Domestic Wastewater means human body waste and household type wastes including bath and toilet wastes, laundry wastes, kitchen wastes, and other similar wastes from households.

001.09 Exempt Facility means a wastewater treatment facility that is not required to be operated by a certified operator.

001.10 Initiation of Operation means the date on which a new or upgraded wastewater treatment facility is put into operation or is capable of being placed in operation for the purpose for which it was planned, designed, and built.

001.11 National Pollutant Discharge Elimination System (NPDES) means the national system for the issuance, reissuance, modification, suspension, revocation, monitoring, and enforcing of permits pursuant to the Federal Water Pollution Control Act, 33 USC, 1342, as amended, and includes any State program which has been approved by the Administrator of the U.S. Environmental Protection Agency, in whole or in part, pursuant to the Federal Water Pollution Control Act, 33 USC 1251, et seq., as amended.

001.12 Non-compatible Industrial Facility means an wastewater treatment facility treating or pre-treating wastewater produced by an industry whose wastewater is not treated similar to domestic wastewater.

001.13 Non-discharging Lagoon Systems means the shallow earthen basins, used for the treatment of wastewater by natural processes involving the use of both algae and bacteria, which do not discharge to waters of the state.

001.14 Operating Experience means the length of time of service while functioning as a wastewater treatment facility operator.

001.15 Population Equivalent Served means the number of persons that would be required to contribute an equivalent quantity of waste. Biochemical Oxygen Demand (BOD) and Suspended Solids (SS) population equivalents are 0.17 lbs. BOD per person per day and 0.20 lbs. SS per person per day, respectively.

001.16 Wastewater means the combination of the liquid or water- carried wastes removed from residences, institutions, and commercial and industrial establishments, together with such ground water, surface water, and storm water as may be present.

002 The following wastewater treatment facilities are hereby exempted from these regulations.

002.01 pH neutralization system.

002.02 Ash and coal pile runoff retention ponds.

002.03 Storm water retention ponds.

002.04 Non-contact cooling water discharges.

002.05 Construction sand and gravel operations.

002.06 Water treatment plant discharges.

002.07 Equalization Basins

002.08 pH adjustments used to break down oil immersions

002.09 Compatible industrial facilities which are awarded 15 points or less in accordance with the point rating system in Appendix B.

002.10 Non-compatible industrial facilities which are awarded 4 points or less in accordance with the point rating system in Appendix B and are not a Significant Industrial User as defined in Title 119, Chapter 1.

002.11 Livestock waste control facilities as defined in Title 130.

002.12 All onsite wastewater treatment facilities as defined in the Department's Title 124 Rules and Regulations.

003 Lagoon wastewater treatment facilities that land apply effluent or are non-discharging lagoon systems may be exempted for a four year period, by the director. To be eligible for exemption, new or modified wastewater treatment facilities are to notify the department within 90 days of startup and renew the exemption every four (4) years.

004 The department will evaluate other wastewater treatment facilities for exemption on a case by case basis. Exemptions may be granted, by the director, for the life of the wastewater treatment facility or for a four (4) year period, at the discretion of the director. Any modification of the wastewater treatment facility will require re-evaluation by the department.

005 All wastewater treatment facilities, not otherwise exempted, are to meet the requirements of this title in accordance with Neb. Rev. Stat. § 81-15,139.

Enabling Legislation: Neb. Rev. Stat. §81-15, 129 §81-15, 130 (1)(10), and §81-15, 134.

NEBRASKA ADMINISTRATIVE CODE

Title 197 - RULES AND REGULATIONS FOR THE CERTIFICATION OF WASTEWATER TREATMENT OPERATORS

Chapter 2 - CLASSIFICATIONS OF FACILITIES, STAFFING REQUIREMENTS AND REPORTING REQUIREMENTS FOR OWNERS OF WASTEWATER TREATMENT FACILITIES

001 All wastewater treatment facility operators are to be certified by the director. The level of certification required for the operator(s) in direct responsible charge (DRC) of each municipal, commercial, or compatible wastewater treatment facility will correspond to the wastewater treatment facility's classification. A non-compatible industrial treatment facility is to have one operator designated as DRC of the facility.

002 All wastewater treatment facilities will be operated by operators certified at the classification level of the wastewater treatment facility, unless the wastewater treatment facility is exempted under provisions of Chapter 1 or the operator otherwise qualifies under provisions of Chapter 3.

002.01 Wastewater treatment facilities that are not staffed 24 hours a day, may use uncertified individuals to observe the facility during non-staffed times. All process control or operational changes made to the operation of a facility, during non-staffed periods, must be under the direction of and consultation with a certified operator.

003 Each municipal or commercial wastewater treatment facility will be classified by the department as a Class L, Class I, Class II, Class III, or Class IV wastewater treatment facility based upon complexity of treatment, population equivalent served, downstream water course conditions, and potential health hazards in accordance with the point rating system established in Appendix A. The director will determine a wastewater treatment facility's classification if the department is unable to classify using Appendix A. Classifications and level of certification for operators will be as follows:

Points per Appendix A	Facility Classification	DRC Operator Certification: (Municipal/Compatible)	Other Staffing Requirements
15 or less (for Lagoons)	Class L	Class L or higher	N/A
30 or less (if not Class L)	Class I	Class I or higher	N/A
31 through 55	Class II	Class II or higher	Assistant operator at Class I or higher
56 through 75	Class III	Class III or higher	Assistant operator at Class II or higher; all other personnel commensurate with level of responsibility

76 or more	Class IV	Class IV	Class IV for shift supervisors serving as DRC; all other personnel commensurate with level of responsibility
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004 Compatible industrial facilities: Each compatible industrial wastewater treatment facility, will be classified by the department as an Industrial compatible I, II, III, IV, or exempt facility based upon complexity of treatment, downstream water course conditions, and potential health hazards in accordance with the point rating system established in Appendix B. The director will determine a wastewater treatment facility's classification if the department is unable to classify the facility, using Appendix B. Classifications and level of certification for operators will be as follows:

Points per Appendix B	Facility Classification	DRC Operator Certification: (Municipal/Compatible)	Other Staffing Requirements
15 or less	Exempt	Exempt	N/A
16 through 30	Industrial I compatible	Class I or higher	N/A
31 through 55	Industrial II compatible	Class II or higher	Assistant operator at Class I or higher
56 through 75	Industrial III compatible	Class III or higher	Assistant operator at Class II or higher; all other personnel commensurate with level of responsibility
76 or more	Industrial IV compatible	Class IV	Class IV for shift supervisors serving as DRC; all other personnel commensurate with level of responsibility

005 Non-compatible industrial facilities: Each non-compatible industrial wastewater treatment facility, will be classified by the department as an Industrial non-compatible I, II, III, or IV or exempt facility based upon complexity of treatment, downstream water course conditions, and potential health hazards in accordance with the point rating system established in Appendix B. The director will determine a wastewater treatment facility's classification if the department is unable to classify the facility, using Appendix B. Classifications and level of certification for operators will be as follows:

Points per Appendix B	Facility Classification	DRC Operator Certification: (Physical/Chemical Industrial)	Other Staffing Requirements
4 or less	Exempt	Exempt	N/A
5 through 30	Industrial I non-compatible	Industrial I level or higher	N/A
31 through 55	Industrial II non-compatible	Industrial II level or higher	Assistant operator at Industrial I level or higher
56 through 75	Industrial III non-compatible	Industrial III level or higher	Assistant operator at Industrial II level or higher; all other personnel commensurate with level of responsibility
76 or more	Industrial IV non-compatible	Industrial IV level	Industrial IV level for shift supervisors serving as DRC; all other personnel commensurate with level of responsibility

006 Reporting Requirements for wastewater treatment facility owners and operators are as follows:

006.01 The owner of a wastewater treatment facility will:

006.01A notify the department , in writing, within 30 days of when a DRC operator leaves or is hired;

006.01B furnish the department upon request the names, addresses, and positions of all operators; and

006.01C notify the department prior to construction of any process modifications affecting the quality of effluent or plant capacity.

006.02 The DRC operator in overall charge of the entire Class IV or Industrial IV wastewater treatment facility will submit a staffing plan to the department every year by December 31st. Staffing plans will include organizational charts identifying the DRC operator, shift supervisors who are DRC operators of shifts, and other operators working with treatment processes or making process control decisions.

006.02A Staffing plans will also include an emergency plan. The emergency plan will describe how a treatment facility will be monitored during non-staffed

operation, who will be contacted in the event of an emergency, and who will be in DRC of the plant during an emergency situation.

006.02B Prior to initiation of operation, all new or upgraded Class IV or Industrial IV wastewater treatment facilities will submit a staffing plan for approval by the director, outlining levels of certification for all operators.

007 New wastewater treatment facilities or wastewater treatment facilities reclassified due to an upgrade are to have properly certified operator(s) prior to initiation of operation.

008 Operation of wastewater treatment facilities may be allowed from a remote work station by the director when:

008.01 The owner can demonstrate a capability to comply with all NPDES permit requirements and protect the public health and the environment.

008.02 The level of certification of the DRC operator at the remote workstation will be at least at the level of the classification of the facility, which is being operated from a remote workstation.

008.03 Where multiple facilities are operated from a common remote work station the DRC operator and backups will be certified at the Class IV level. Where multiple non-compatible industrial facilities are operated from a common remote work station the DRC operator will be certified at the Industrial IV level.

008.04 The wastewater treatment facility which is being operated remotely will be readily accessible to the certified operator and will be less than one hour travel time away from the location of the DRC operator.

008.05 The owner will provide a staffing plan which includes all the operators who are responsible for operation of the treatment plant(s) which are being remotely operated.

008.06 The owner will provide a back-up emergency operation plan which describes how the plant to be remotely operated will be operated in case of an emergency.

009 Operators certified to operate municipal, commercial, or compatible industrial facilities (Class L and Class I-Class IV) may not operate a non-compatible industrial facility without obtaining the appropriate industrial certification license (Industrial I – Industrial IV).

010 Operators certified to operate a non-compatible industrial facility (Industrial I – Industrial IV) may not operate municipal, commercial, or compatible industrial facilities without obtaining the appropriate certification license (Class L and Class I-Class IV).

Enabling Legislation: Neb. Rev. Stat. §81-15,130; §81-15,131; §81-15,134.

NEBRASKA ADMINISTRATIVE CODE

Title 197 - RULES AND REGULATIONS FOR THE CERTIFICATION OF WASTEWATER TREATMENT OPERATORS

Chapter 3 - OPERATOR CERTIFICATION, TYPES OF CERTIFICATES

001 The director will issue Class L, Class I, Class II, Class III, Class IV, Industrial I, Industrial II, Industrial III, and Industrial IV certificates to operators who pass the respective certification test and also meet the education and experience requirements.

002 Class L and Class I, wastewater treatment facility owners are eligible to obtain temporary certificates for their operators.

002.01 A temporary certificate issued pursuant to Neb. Rev. Stat. § 81-15,135 is valid for a period of one year from the date of hire.

002.02 The Class L temporary certificate and the Class I temporary certificate are operator and site specific and may not be transferred to another facility or operator.

002.03 The director will not issue a temporary certificate at any Class L and Class I wastewater treatment facilities in consecutive years without acceptance of written justification of due cause or extenuating circumstances.

002.04 Owners may request a temporary certificate for their operator within 30 days of hiring the operator.

003 Owners of non-compatible industrial wastewater treatment facilities are eligible to obtain temporary certificates for their uncertified operators.

003.01 The director may issue a temporary certificate to an applicant who is a new operator at an Industrial I wastewater treatment facility in accordance with Neb. Rev. Stat. § 81-15,135.

003.02 The temporary certificate is operator specific and site specific and may not be transferred to another facility or operator.

003.03 The director will not issue a temporary certificate at any wastewater treatment facility in consecutive years without acceptance of written justification of due cause or extenuating circumstances.

003.04 Owners may request a temporary certificate for their operator within 30 days of hiring the operator.

004 Provisional certification will be issued to applicants who pass the certification test for any level of classification but do not meet all of the educational and experience requirements.

Operator(s) may request removal of provisional status upon completion of education and experience requirements.

004.01 The owner of a wastewater treatment facility may request the department to allow an operator with a provisional certificate to be in DRC of their wastewater treatment facility.

004.02 The director may authorize an operator with a provisional certificate to be in DRC of a wastewater treatment facility if the operator has obtained a level of provisional certification which is equivalent to the facility classification.

005 New or promoted employees hired as operators in a wastewater treatment facility will have up to twelve months (from hiring date) to obtain the required level of certification of the position, provided the employee takes the certification exam at least once within six months of hiring or promotion.

Enabling Legislation: Neb. Rev. Stat. §81-15,130(1),(3),(9); §81-15,131; §81-15,132; §81-15,133; §81-15,135 and §81-15,138.

NEBRASKA ADMINISTRATIVE CODE

Title 197 - RULES AND REGULATIONS FOR THE CERTIFICATION OF WASTEWATER TREATMENT OPERATORS

Chapter 4 - CERTIFICATION APPLICATION, EXAMINATION PROCEDURES, EXPIRATION AND RENEWAL

001 Application.

001.01 An applicant is to submit an application which contains information regarding education, and work experience to the department with the respective application fee prescribed in Appendix C. The department will notify applicants if additional information is required.

001.02 When an application for certification is denied, the department will notify the applicant in writing and explain the reason for denial. Upon notice of denial, the applicant may request a hearing following the procedure in Neb. Rev. Stat. § 81-1507.

001.03 All applications received less than 30 days prior to a scheduled examination date may be held for the next scheduled examination date.

001.04 After receipt of the application, the department will review the application and will schedule a date, time and place of examination for the applicant, or notify the applicant otherwise.

001.05 When the applicant is ineligible for certification, due to revocation of prior certification, the department will notify the applicant in writing and explain the reason for ineligibility. Upon notice of ineligibility, the applicant may request a hearing, following the procedure in Neb. Rev. Stat. § 81-1507.

002 Examination

002.01 A minimum of four examinations per year will be scheduled across the state.

002.02 Applicants must attain a minimum grade of seventy percent for passage of an examination. All applicants will be notified regarding the examination results by the department in writing as soon as the results of the examination are available.

002.03 Upon failure to pass an examination, an applicant will be permitted to be re-examined at subsequent examinations. Applicants desiring to be re-examined are to submit their application together with the retesting fee as prescribed in Appendix C. Applicants failing three (3) exams in succession are to obtain a minimum of 1 CEU of applicable training prior to retesting.

002.04 All examination records will be filed and retained by the department for three years.

003 Expiration and Renewal.

003.01 Expiration, notification, and renewal is in accordance with Neb. Rev. Stat. § 81-15,138.

003.02 The department will notify the certified operator regarding expiration at the last known address. Failure of the department to notify the certified operator of expiration does not relieve the certified operator of the responsibility for renewal.

003.03 As a prerequisite for renewal, each certified operator will obtain a minimum of two (2) CEU's of training approved by the department during the two (2) years prior to expiration. Excess CEU's earned in a two (2) year interval may be carried over into the next two (2) year interval up to the maximum amount of one (1) CEU.

003.04 The certificate renewal fee as prescribed in Appendix C is to accompany the renewal application.

003.05 The certificate renewal date may be changed for the convenience of the certified operator with adequate justification, at the discretion of the director. Renewal fees will be prorated in such cases.

003.06 Certification Status during Military Deployment or Catastrophic Conditions. Certified operators may request their certification status be placed temporarily on hold during times of military deployment or a catastrophic condition. Upon request from the operator, in accordance with this section, the Department will place a hold on the certification in such cases until such time as the operator is in a return to work status. The operator, or wastewater facility on behalf of the operator, is to notify the Department within 30 days of a military deployment or catastrophic condition and within 30 days of the operator returning to work. While the certification is placed on hold, the operator will not be required to renew or obtain CEUs. Upon returning to work, the operator will have six (6) months to obtain necessary CEUs and renew certification, as appropriate.

004 Reciprocity. Certificates of an equivalent class may be issued, without examination, to any operator applying for certification who holds a valid certificate from another recognized wastewater operator certification program having requirements for certification which the director considers similar to the standards established in these regulations.

004.01 Applications are to be made to the director as described in this Chapter. The application fee in Appendix C is to accompany the application.

004.02 Certification by reciprocity will not be available for a person whose certification has been denied revoked or suspended.

Enabling Legislation: Neb. Rev. Stat. §81-15,130(1)(3)(4)(5)(6)(7)(8), §81-15,131, §81-15, 138, and §81-15,140.

NEBRASKA ADMINISTRATIVE CODE

Title 197 - RULES AND REGULATIONS FOR THE CERTIFICATION OF WASTEWATER TREATMENT OPERATORS

Chapter 5 – EDUCATION, EXPERIENCE REQUIREMENTS, AND CONTINUING EDUCATION

001 The director will evaluate qualifications of operators based on education, operating experience, knowledge of wastewater characteristics, treatment processes, and wastewater treatment facility operation relating to the classification of wastewater treatment facilities.

002 All applicants for a Class I, Class L, and Industrial I operator's certificate are to meet the following education or experience requirement:

002.01 One year of work experience in a wastewater treatment facility;

002.02 Completion of high school education or the equivalent may be substituted for one year of work experience.

003 All applicants for a Class II or an Industrial II operator's certificate are to meet the following education or experience requirement:

003.01 Two years of work experience in a wastewater treatment facility;

003.02 Completion of high school education or the equivalent may be substituted for one year of work experience;

003.03 Completion of two years of post-high school or equivalent education in a curriculum related to wastewater facility operation and design may be substituted for two years of work experience.

004 All applicants for a Class III, Class IV, Industrial III, or Industrial IV operator's certificate are to meet the following education or experience requirement:

004.01 Four years of work experience in a wastewater treatment facility with at least two years experience in a Class III, Class IV, or an Industrial III, or Industrial IV facility;

004.02 Completion of a college degree majoring in environmental engineering, environmental sciences, or the equivalent (as determined by the director) may be substituted for three years of work experience;

004.03 Completion of two years of post-high school or equivalent education related to the wastewater facility operation and design may be substituted for two years of work experience.

005 Continuing Education. All CEU's for initial qualifications or certificate renewal will be subject to review for approval to insure that the training is applicable to wastewater treatment facility operation and meets CEU criteria. Training records are to be maintained by the operator and submitted to the department as part of application for certificate renewal. The department will verify successful completion of approved training.

005.01 Qualified education programs include all wastewater courses and related technical courses, workshops, correspondence courses, and other education experiences approved by the department.

005.02 Training may be provided by wastewater operator personnel to other operators. This type of training may meet CEU requirements as long as prior approval of training to be provided is obtained from the department. Training submitted to the department for approval is to meet the following criteria:

005.02A Instruction are to be provided by an operator certified at a level equal to or greater than the classification level of the facility whose operator is receiving instruction, or by a trainer that has submitted information demonstrating qualifications for specific training activities.

005.02B An outline of the training to be provided is to be submitted and is to include the time allotted to each main topic.

005.02C A list of the teacher's objectives is to be submitted documenting the essential points of the instruction, need-to-know information and the methods used to illustrate these principles.

005.02D Written evidence of successful completion of the training is to be submitted to the department by the instructor within thirty (30) days following the training and a copy provided to the operator for his/her training record.

Enabling Legislation: Neb. Rev. Stat. §81-15,130(1)(2)(3)(4) and §81-15,131.

NEBRASKA ADMINISTRATIVE CODE

Title 197 - RULES AND REGULATIONS FOR THE CERTIFICATION OF WASTEWATER TREATMENT OPERATORS

Chapter 6 -ADDITIONAL REQUIREMENTS FOR CONTRACT OPERATION

001 The following requirements are applicable to owners who hire contract operators to operate their wastewater treatment facility. The owner of a wastewater treatment facility will:

001.01 notify the department within 30 days of hiring a contract operator; and

001.02 provide the department with a copy of the contract or other information detailing the contract operator's responsibilities and the owner's responsibilities.

002 The following requirements are applicable to contract operators hired to operate a wastewater treatment facility. The contract operator will:

002.01 provide the department with a list of all facilities that they are under contract to operate;

002.02 notify the department within 30 days of entering a contract to operate a wastewater treatment facility;

002.03 provide the department with the names of their employees who are DRC operators and their work assignments for specific wastewater treatment facilities. Information regarding backup or assistant operators for each wastewater treatment facility will also be provided. The contract operator will notify the department within 30 days of any changes to personnel assigned to operate the wastewater treatment facilities that the contract operator is hired to operate;

002.04 provide the department with an emergency operating plan, which describes how the wastewater treatment facility to be operated by the contract operator will be operated in case of an emergency within 90 days of entering into a contract to operate a wastewater treatment facility;

002.05 have a response time to an alarm or emergency at the wastewater treatment facility with less than one hour travel time.

002.06 provide a staffing plan demonstrating compliance with the requirements of Chapter 2.

Enabling Legislation: Neb. Rev. §81-15, 130(1) and §81-15, 131.

APPENDIX A

Municipal/Commercial Wastewater Treatment Plant Point Rating System Wastewater Treatment Plant Point Rating System (Non-Industrial/Municipal)

A wastewater system with only collection, lift stations, and chlorination is considered a collection system and not a wastewater treatment plant. Each unit process will have points assigned only once.

Item	Points	Your Plant
Size (2 point minimum to 20 point maximum)		
Maximum population equivalent (PE) or part served, peak day (1 point minimum to 10 point maximum)	1 pt per 10,000 or part	
Design flow average day or peak month's part flow average day, whichever is larger (1 point minimum to 10 point maximum)	1 pt per MGD or part	
Variation in raw waste (0 point minimum to 6 point maximum)¹		
Variations do not exceed those normally or typically expected	0	
Recurring deviations or excessive variations of 100 to 200% in strength and/or flow	2	
Recurring deviations or excessive variations of more than 200% in strength and/or flow	4	
Raw wastes subject to toxic waste discharges	6	
Impact of septage or truck-hauled waste (0 point minimum to 4 point maximum)		
Preliminary treatment		
Plant pumping of main flow	3	
Screening, comminution	3	
Grit removal	3	
Equalization	1	
Primary Treatment		
Clarifiers	5	
Imhoff tanks or similar	5	
Secondary Treatment		
Fixed-film reactor	10	
Activated sludge	15	
Stabilization ponds without aeration	5	
Stabilization ponds with aeration	8	
Tertiary Treatment		
Polishing ponds for advanced waste treatment	2	
Chemical/physical advanced waste treatment w/o secondary	15	
Chemical/physical advanced waste treatment following secondary	10	
Biological or chemical/biological advanced waste treatment	12	
Nitrification by designed extended aeration only	2	
Ion exchange for advanced waste treatment	10	
Reverse osmosis, electro dialysis and other membrane filtration techniques	15	
Advanced waste treatment chemical recovery, carbon regeneration	4	
Media filtration	5	
Additional Treatment Processes		
Chemical additions (2 points each for a maximum of 6 points)	6	
Dissolved air flotation (for other than sludge thickening)	8	
Intermittent sand filter	2	
Recirculating intermittent sand filter	3	
Microscreens	5	
Generation of oxygen	5	
Solids Handling		
Solids stabilization	5	
Gravity thickening	2	
Mechanical dewatering	8	

Anaerobic digestion of solids	10	
Utilization of digester gas for heating or cogeneration	5	
Aerobic digestion of solids	6	
Evaporative sludge drying	2	
Solids reduction (including incineration, wet oxidation)	12	
On-site landfill for solids	2	
Solids composting	10	
Land application of biosolids by contractor	2	
Land application of biosolids under direction of facility operator in direct responsible charge	10	
Disinfection (0 point minimum to 10 point maximum)		
Chlorination or ultraviolet irradiation	5	
Ozonation	10	
Effluent discharge (0 point minimum to 10 point maximum)		
Mechanical post aeration	2	
Direct recycle and reuse	6	
Land treatment and disposal (surface or subsurface)	4	
Instrumentation (0 point minimum to 6 point maximum)³		
Use of SCADA or similar instrumentation systems to provide data w/ no process operation	0	
Use of SCADA or similar instrumentation systems to provide data w/ limited process operation	2	
Use of SCADA or similar instrumentation systems to provide data w/ moderate process operation	4	
Use of SCADA or similar instrumentation systems to provide data w/ extensive or total process operation	6	
Laboratory control (0 point minimum to 15 point maximum)²		
Bacteriological/biological (0 point minimum to 5 point maximum)		
..Lab work done outside the plant	0	
..Membrane filter procedures	3	
..Use of fermentation tubes or any dilution method; fecal coliform determination	5	
Chemical/physical (0 point minimum to 10 point maximum)		
I.Lab work done outside the plant	0	
II.Push-button or visual methods for simple tests such as pH, settleable solids	3	
III.Additional procedures such as DO, COD, BOD, gas analysis, titrations, solids, volatile content	5	
IV.More advanced determinations such as specific constituents; nutrients, total oils, phenols	7	
V.Highly sophisticated instrumentation such as atomic absorption, gas chromatography	10	
	Total Points	

- 1 The key concept is frequency and/or intensity of deviation or excessive variation from normal or typical fluctuations; such deviation can be in terms of strength, toxicity, shock loads, I/I, with points from 0 to 6.
- 2 The key concept is to credit laboratory analyses done on-site by plant personnel under the direction of the operator in direct responsible charge with points from 0 to 15.
3. Supervisory Control and Data Acquisition (SCADA) system.

APPENDIX B

Industrial Wastewater Treatment Plant Point Rating System

A wastewater system with only collection, lift stations, and chlorination is considered a collection system and not a wastewater treatment plant. Each unit process will have points assigned only once.

Item	Points	Your Plant
Size (1 point minimum to 10 point maximum)		
Design flow average day or peak month's flow average day, whichever is larger (1 point minimum to 10 point maximum)	1 pt/MGD or part	
Preliminary Treatment		
Grease removal	3	
Plant pumping of main flow	3	
Screening, comminution, microscreens	3	
Grit removal	3	
Equalization	1	
Sedimentation/clarification	5	
Primary Treatment		
Dissolved air flotation	3	
Coagulation/flocculation	5	
Secondary Treatment		
Bio-filtration with secondary clarifiers	10	
Activated sludge w/ secondary clarifiers (including extended aeration, oxidation ditches)	15	
Stabilization ponds without aeration	5	
Stabilization ponds with aeration	8	
Tertiary Treatment		
Ion exchange for advanced waste treatment	10	
Reverse osmosis, electrodialysis and other membrane filtration techniques	15	
Chemical recovery, carbon regeneration	4	
Polishing ponds for advanced waste treatment	2	
Chemical/physical advanced waste treatment w/o secondary	15	
Chemical/physical advanced waste treatment following secondary	10	
Biological or chemical/biological advanced waste treatment	12	
Additional Treatment Processes		
pH adjustment	1	
Oil separation	3	
Chemical pretreatment (except chlorination, enzymes)	4	
Filtration	6	
Air stripping	5	
Solids Handling		
Solids conditioning	2	
Solids thickening	5	
Anaerobic digestion of solids	10	
Aerobic digestion of solids	6	

Evaporative sludge drying	2	
Irrigation of solids	5	
Mechanical dewatering	8	
Solids reduction (including incineration, wet oxidation)	12	
On-site landfill for solids	2	
Solids composting	10	
Disinfection (0 point minimum to 10 point maximum)		
No disinfection	0	
Chlorination or comparable	5	
On-site generation of disinfectant	5	
Effluent Discharge (0 point minimum to 21 point maximum)		
Post aeration	4	
Receiving stream sensitivity (0 point minimum to 6 point maximum) ¹		
I."Effluent limited segment" in US EPA terminology; secondary treatment is adequate	0	
II.More than secondary treatment is required	2	
III."Water quality limited segment" in US EPA terminology; stream conditions are very critical (dry run, for example) and a very high degree of treatment is required	3	
IV.Direct recycle and reuse	6	
Land disposal,evaporation	2	
Subsurface disposal	4	
Biological or chemical scrubbers for odor control	5	
Instrumentation (0 point minimum to 6 point maximum)³		
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	
Laboratory control (0 point minimum to 20 point maximum)²		
Bacteriological/biological (0 point minimum to 10 point maximum)		
V.Lab work done outside the plant	0	
VI.Membrane filter procedures	3	
VII.Use of fermentation tubes or any dilution method; fecal coliform determination	5	
VIII.Biological identification	7	
IX.Viral studies or similarly complex work conducted on-site	10	
Chemical/physical (0 point minimum to 10 point maximum)		
X.Lab work done outside the plant	0	
XI.Push-button or visual methods for simple tests (pH, settleable solids)	3	
XII.Additional procedures (DO, COD, BOD gas analysis, titrations, solids, volatile content)	5	
XIII.More advanced determinations (specific constituents; nutrients, total oils, phenols)	7	
XIV.Highly sophisticated instrumentation (atomic absorption, gas chromatography)	10	
Your Plant Total		

1. The key concept is the degree of dilution provided under low flow conditions with points from 0 to 6.

2. The key concept is to credit laboratory analyses done on-site by plant personnel under direct responsible charge with points from 0 to 20.

3. Supervisory Control and Data Acquisition (SCADA) system.

APPENDIX C

FEE SCHEDULE

Application for Certification by Examination	\$150
Application for Retest	\$125
Application for Certification by Reciprocity	\$150
Application for Certificate Renewal	\$150
Application for One Year Temporary Certificate	\$125
Training Courses	Set Prior to Course
Non Discharging Four Year Registration Exemption	\$100