

26.06.01.16

.16 Tables.

**Table 1
CLASSIFICATION OF INDUSTRIAL WASTEWATER WORKS**

<i>Class of Plants</i>	<i>Type of Treatment Systems</i>	<i>Typical Processes Included in the System</i>
1	Basic Treatment	Petroleum base oil separators, liquid cooling, and pH control.
2	Physical Treatment	Sedimentation, screening, pH control, solids removal.
3	Land Treatment	Primary treatment, sedimentation, solids removal, pumping and land treatment.
4	Biological Lagoons	Aerobic or anaerobic waste stabilization lagoons, disinfection, and chemical addition.
5	Activated Sludge	Primary treatment, sedimentation, activated sludge, and sludge handling.
6	Physical Chemical Treatment	Reduction of chemical and toxic substances including but not limited to cyanide and chromium, acid-alkali neutralization, coagulation, and flocculation.
7	Site Specific	Plants not covered under the first six types of treatment yet covered under these regulations.

**Table 2
CLASSIFICATION OF WASTEWATER TREATMENT PLANTS**

<i>Class of Plants</i>	<i>Types of Treatment Systems</i>	<i>Typical Processes Included in the System</i>
1	Lagoons	Aerated or nonaerated lagoons, filtration, disinfection, and land or wetland treatment.
2	Physical/Biological	Primary treatment, sand filter, land or wetland treatment, and disinfection.
3	Package Activated Sludge Plants	Screening, activated sludge, sedimentation, filtration, disinfection, chemical addition, sludge handling, pumping and land or wetland treatment.
4	Trickling Filters Rotating Biological Contractors (RBC)	Preliminary treatment, primary treatment, sedimentation, activated sludge, oxidation ditches, filtration, chemical addition, disinfection, sludge handling, and pumping.
5	Activated Sludge	Preliminary treatment, primary treatment, sedimentation, activated sludge, oxidation ditches, filtration, chemical addition, disinfection, sludge handling, and pumping.
6	Site Specific	Other alternative technology systems not covered under this classification system.
S*	Solids Handling	Chemical conditioning, sludge thickening, sludge digestion, thermal treatment, chlorine treatment, filtration, dewatering, composting, land application.
A**	Advanced Wastewater Treatment	Filtration, activated carbon adsorption, nitrification, denitrification, phosphorus removal, ammonia stripping, chemical feeding and conditioning, coagulation and flocculation.

*Class S will only be required when the specific works is limited to solids handling.

**Class A is used in conjunction with other classes.

**Table 3
CLASSIFICATION OF WATER TREATMENT PLANTS**

<i>Class of Plants</i>	<i>Type of Treatment Systems</i>	<i>Typical Processes Included in the System</i>
1	Disinfection	Chlorination.
2	Chemical Treatment	Chlorination, pH control, and fluoridation.
3	Simple Iron Removal	Chlorination, pH control, fluoridation, filtration, and iron removal utilizing ion exchange or contact oxidation processes.
4	Complete Treatment	Chlorination, pH control, fluoridation, aeration, coagulation, sedimentation, filtration, and complex iron removal.
5	Site Specific	Site specific - any alternative technology plant not covered under the classification system.
G	No chemical treatment	Well, storage tanks, UV disinfection

**Table 4
INDUSTRIAL WASTEWATER WORKS**

A	B	C	D				E			
			Operators				Superintendents			
Class of Plants	Class of Operators and Superintendents	Authorized to Operate or Supervise Plants (Class)	1 Education Requirements	2 Maximum Education Substitution	3 Experience Requirements	4 Maximum Experience Substitution	1 Education Requirements	2 Maximum Education Substitution	3 Experience Requirements	4 Maximum Experience Substitution
1	1	1	Completion of High School OR High School Equivalency	NONE	250 hours or 6 months ¹	NONE	Completion of High School OR High School Equivalency	NONE	NONE	NONE
2	2	2								
3	3	2 and 3								
4	4	2 and 4			500 hours or 1 year ¹	1800 hours or 1 year ³	2 years college ⁴	2 years ⁵	3600 hours or 2 years ⁶	1800 hours or 1 year ³
5	5	1,2,3,4, and 5			5400 hours or 3 years ⁷					
6	6	1,2, and 6			3600 hours or 2 years ⁷	1 year college ⁴	1 year ⁵	1800 hours or 1 year ⁶		
7	7	7			AS DETERMINED BY THE BOARD					

Notes:

1 Whichever is longer, years of experience is based on 1 hour/day operation.

2 Whichever is longer, years of experience is based on 2 hours/day operation.

3 One year of college course work in science or engineering leading toward a degree, for 1 year experience.

4 In science, engineering, or management leading toward a degree.

5 One year experience for 1 year college.

6 Experience obtained as provided in Regulation .06E of this chapter.

7 Whichever is longer (for applications received by the Board before the effective date of these regulations, see Regulation .06 of this chapter).

**Table 5
WASTEWATER TREATMENT PLANTS**

A	B	C	D Operators				E Superintendents			
			1	2	3	4	1	2	3	4
Class of Plants	Class of Operators	Authorized to Operate or Supervise Plants (Class)	Education Requirements	Maximum Education Substitution	Experience Requirements	Maximum Experience Substitution	Education Requirements	Maximum Education Substitution	Experience Requirements	Maximum Experience Substitution
1	1	1	Completion of High School OR High School Equivalency	NONE	500 hours or 1 year ¹	NONE	Completion of High School OR High School Equivalency	NONE	NONE	NONE
2	2	1 and 2			1800 hours or 2 years ²	1800 hours or 1 year ²				
3	3	1,2, and 3					5400 hours or 3 years ⁹	AS DETERMINED BY THE BOARD	2 years college ⁴	2 years ⁵
4	4	1,2, and 4			AS DETERMINED BY THE BOARD	2 years college ⁴				
5	5	1,2,3, and 5					AS DETERMINED BY THE BOARD	2 years college ⁴	2 years ⁵	3600 hours or 2 years ⁶
6	6	6			AS DETERMINED BY THE BOARD	2 years college ⁴				
S ⁷	S ⁷	S ⁷	Completion of High School OR High School Equivalency	NONE			5400 hours or 3 years ⁹	1800 hours or 1 year ³	2 years college ⁴	2 years ⁵
A ⁸	A ⁸	A ⁸			AS DETERMINED BY THE BOARD	2 years college ⁴				

Notes:

1 Whichever is longer, years of experience is based on 2 hours/day operation.

2 Whichever is longer, years of experience is based on 3.5 hours/day operation.

3 One year of college course work in science or engineering leading toward a degree, for 1 year experience.

4 In science, engineering, or management leading toward a degree.

5 One year experience for 1 year college.

6 Experience obtained as provided in Regulation .06E of this chapter.

7 Is limited to solids handling.

8 Class A is used in conjunction with other classes.

9 Whichever is longer (for applications received by the Board before the effective date of these regulations, see Regulation .06 of this chapter).

**Table 6
WASTEWATER COLLECTION SYSTEMS**

A	B	C	D Operators				E Superintendents			
			1	2	3	4	1	2	3	4
Class of Plants	Class of Operators and Superintendents	Authorized to Operate or Supervise Plants (Class)	Education Requirements	Maximum Education Substitution	Experience Requirements	Maximum Experience Substitution	Education Requirements	Maximum Education Substitution	Experience Requirements	Maximum Experience Substitution
1	1	1	Completion of High School OR High School Equivalency	NONE	1800 hours or 1 year ³	NONE	Completion of High School OR High School Equivalency	NONE	NONE	NONE
2	2	2			3600 hours or 2 years ³	1800 hours or 1 year ¹				

Notes:

1 One year of college course work in science or engineering leading toward a degree, for 1 year experience.

2 Experience obtained as provided in Regulation .06E of this chapter.

3 Whichever is longer (for application received by the Board before the effective date of these regulations, see Regulation .06 of this chapter).

**Table 7
WATER TREATMENT PLANTS**

A	B	C	D	E
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Class of Plants	Class of Operators and Superintendents	Authorized to Operate or Supervise Plants (Class)	Operators				Superintendents				
			1 Education Requirements	2 Maximum Education Substitution	3 Experience Requirements	4 Maximum Experience Substitution	1 Education Requirements	2 Maximum Education Substitution	3 Experience Requirements	4 Maximum Experience Substitution	
1	1	1	Completion of High School OR High School Equivalency	NONE	500 hours or 1 year ¹	NONE	Completion of High School	NONE	NONE	NONE	NONE
2	2	1 and 2					OR			High School Equivalency	
3	3	1, 2, and 3			1800 hours or 2 years ²	900 hours or 1 year ^{2,3}	1 year college ⁴	1 year ⁵	900 hours or 1 year ^{2,6}	900 hours or 1 year ³	
4	4	1, 2, 3, and 4			5400 hours or 3 years ⁷	1800 hours or 1 year ³	2 years college ⁴	2 years ⁵	3600 hours or 2 years ⁶	1800 hours or 1 year ³	
5	5	5			AS DETERMINED BY THE BOARD						

Notes:

- 1 Whichever is longer, years of experience is based on 2 hours/day operation.
- 2 Whichever is longer, years of experience is based on a 3.5 hours/day operation.
- 3 One year of college course work in science or engineering leading toward a degree, for 1 year of experience.
- 4 In science, engineering, or management leading toward a degree.
- 5 One year experience for 1 year college.
- 6 Experience obtained as provided in Regulation .06E of this chapter.
- 7 Whichever is longer (for applications received by the Board before the effective date of these regulations, see Regulation .06 of this chapter).

**Table 8
TRAINING REQUIREMENTS FOR OPERATORS AND SUPERINTENDENTS
CERTIFICATE RENEWAL FOR 3-YEAR RENEWAL PERIOD**

Class	INDUSTRIAL WASTEWATER WORKS			WASTEWATER TREATMENT PLANTS			WASTEWATER COLLECTION SYSTEMS			WATER TREATMENT PLANTS			WATER DISTRIBUTION SYSTEMS		
	Operators ⁽⁴⁾	Superintendents ⁽³⁾	Limited and Temporary ⁽⁴⁾	Operators ⁽⁴⁾	Superintendents ⁽³⁾	Limited and Temporary ⁽⁴⁾	Operators ⁽⁴⁾	Superintendents ⁽³⁾	Limited and Temporary ⁽⁴⁾	Operators ⁽⁴⁾	Superintendents ⁽³⁾	Limited, Grandparented, and Temporary ⁽⁴⁾	Operators ⁽⁴⁾	Superintendents ⁽³⁾	Limited, Grandparented, and Temporary ⁽⁴⁾
	UNITS ⁽²⁾			UNITS ⁽²⁾			UNITS ⁽²⁾			UNITS ⁽²⁾			UNITS ⁽²⁾		
1	0	0	0	16	7	24	16	7	24	16	7	24	16	7	24
2	0	0	0	16	7	24	16	7	24	16	7	24	16	7	24
3	16	7	24	30	7	45				30	7	45			
4	16	7	24	30	7	45				30	7	45			
5	30	7	45	30	7	45				(1)					
6	16	7	24	(1)		(1)									
8	(1)		(1)												
S															
A				16	7	24									
G				16		24				7	7	16			

Notes:

- 1 For site-specific operator classifications, training units to be determined by the Board on a case-by-case basis.
- 2 For operators that hold multiple certificates, units of training may be applied to multiple classifications if the training is approved as defined in Regulation .13.
- 3 For superintendents, training units approved by the Board for superintendents are required in addition to their operator's training.
- 4 Effective January 1, 2006, for all operator categories, except WD, C1 and C2, a minimum of 50 percent of the training units submitted for issuance or renewal of a certificate shall be process related.