

Wastewater Operator Certification: NR114 Rule Revision

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Why Change?

- Succession to new generation of operators
 - State apprenticeship program
- New wastewater technologies
- Importance of collection systems/CMOM
- More operator choices for advanced certification
 - Educational delivery methods, especially on-line
 - New training centers at WRWA -Plover and UW-Stevens Point
- Sustainability by WIDNR (Administering and Maintaining)
 - Fewer exams



Major Changes:

- Regrouped/revise subclasses
- New subclasses, including a collection system subclass
- Two levels of plants/operators (basic and advanced)
- Criteria for being an advanced plant
- Advanced operator certification point system

New Subclasses

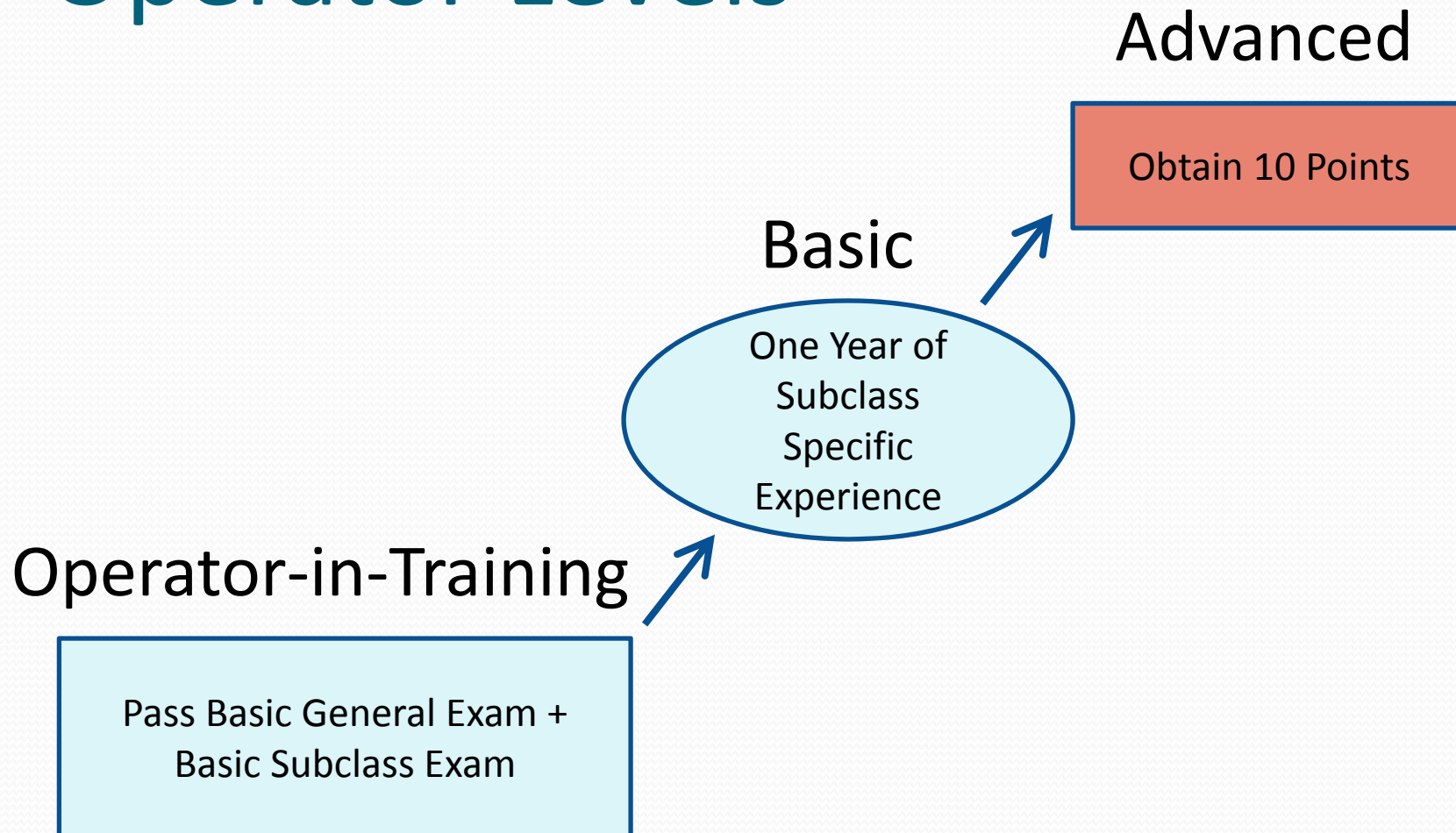
CATEGORY	SUBCLASS	SUBCLASS NAME	DESCRIPTION
Biological treatment	A1	Suspended Growth Processes	Activated sludge and variants
	A2	Attached Growth Processes	Trickling filters, RBCs and biotowers
	A3	Recirculating Media Filters	
	A4	Ponds, Lagoons and Natural Systems	
	A5	Anaerobic Treatment of Liquid Waste	High strength liquid waste treatment system
Solids separation	B	Solids Separation	Clarifiers, membranes, filters, tertiary phosphorus removal, etc
Solids treatment	C	Biological Solids/Sludge – Handling, Processing and Reuse	Aerobic and anaerobic digestion, thickening, dewatering, land application
Nutrient removal	P	Total Phosphorus	
	N	Total Nitrogen	
Disinfection	D	Disinfection	Chlorination, ultraviolet radiation, ozone
Laboratory	L	Laboratory	Registered or certified on-site laboratories
Special	U	Unique Treatment Systems	Unique, special treatment plants that use biological, chemical or physical methods
Collection System	SS	Sanitary Sewer Collection System	



New Collection System Subclass

- Owners of treatment works shall have *at least one operator-in-charge certified in the new collection system subclass*.
- Voluntary certification for satellite sewerage collection systems.
- Once the collection system study guide and exam have been developed by the department, collection system operators will have **5 years** to obtain collection system certification upon issuance of their WPDES permits.

Operator Levels



New Advanced Point System

More flexibility in obtaining Advanced Certification

Type	Description	Points
Hands-on Experience	4 years minimum	4
	5 years	5
	6 years	6
Degree	4-year Undergraduate Degree or Graduate Degree	6
	2-year Water/Wastewater Associates Degree	6
Apprenticeship	State Approved Apprenticeship Program	6
Exam	100 Question Multiple Choice Exam	4
Advanced coursework	80+ hour course	2
	60+ hour course	1.5
	40+ hour course	1
	20+ hour course	0.5

Total Advanced Points = 10



Classification of WWTPs

A facility that meets *any one* of the following criteria will be “Advanced”:

- Is a mechanical plant with an annual average design flow greater than 1.0 MGD
- Has a biochemical oxygen demand (BOD) limit of 10 mg/L or less
- Has surface water limits for total phosphorus or total nitrogen and utilizes a biological nutrient removal process in their removal
- Uses a tertiary phosphorus removal process to achieve ultralow phosphorus limits
- Is a municipal treatment plant that receives wastewater from a major contributing industry
- Is a municipal treatment plant that produces Class A biosolids.

Grandfathering: Subclass conversion

Old Description	Old Subclass		New Description	New Subclass
<i>Primary Treatment</i>	A	→	Solids Separation	B
<i>Trickling Filters and RBCs</i>	B	→	Biological Treatment - Attached Growth	A2
		→	Solids Separation	B
		→	Biological Solids/Sludge Handling and Processing	C
<i>Activated Sludge</i>	C	→	Biological Treatment - Suspended Growth	A1
		→	Solids Separation	B
		→	Biological Solids/Sludge Handling and Processing	C
<i>Stabilization Ponds and Aerated Lagoons</i>	D	→	Ponds, Lagoons and Natural Systems	A4
<i>Disinfection</i>	E	→	Disinfection	D
<i>Anaerobic Digestion</i>	F	→	Biological Solids/Sludge Handling and Processing	C
<i>Mechanical Sludge Dewatering</i>	G	→	Biological Solids/Sludge Handling and Processing	C
<i>Filtration</i>	H	→	Solids Separation	B
<i>Phosphorus Removal</i>	I	→	Nutrient Removal – Total Phosphorus	P
<i>Laboratory</i>	J	→	Laboratory	L
<i>Special K</i>	K	→	Unique Treatment Process or Recirculating Sand/Gravel Filters	U or A3
<i>Electroplating/Metal Finishing</i>	L	→	Unique Treatment Process	U

Grandfathering: Grade levels

Grade T	→	Operator-in-Training (OIT)
Grade 1 & 2	→	Basic*
Grade 3 & 4	→	Advanced

Exception:* Operators who have Grade 3 or Grade 4 in any subclass (except L and K) will receive their 10 points towards Advanced certification. **Having these 10 points, any subclass Grade 1 or higher will transfer to the Advanced level.

Example Conversion:

Current Subclasses/Grades	Converted Subclasses/Grades
Ponds/Aerated Lagoons – Grade T	Ponds, Lagoons, & Natural Systems – OIT
Activated Sludge – Grade 4	Biological Treatment – Attached Growth – Advanced Solids Separation – Advanced Biological Solids/Sludge Handling and Processing – Advanced
Mechanical Sludge – Grade 4	Biological Solids/Sludge Handling and Processing – Advanced
Laboratory – Grade 2	Laboratory – Advanced

Example Conversion:

Current Subclasses/Grades	Converted Subclasses/Grades
Primary Treatment – Grade 2	Solids Separation - Basic
Mechanical Sludge – Grade 2	Biological Solids/Sludge Handling and Processing - Basic
Disinfection – Grade T	Disinfection – OIT

Experience:

If you should be at Grade 3 or 4 in a subclass(es), but just haven't claimed the experience, be sure to submit an experience form before the code goes into effect.

<http://dnr.wi.gov/regulations/opcert/forms.html>

State of Wisconsin
Department of Natural Resources
Operator Certification Program
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Wastewater Operator Certification Experience
Form 3400-066A (R 3/13) Page 1 of 4

Notice: Pursuant to ss. 281.17 and s. 281.98, Wis. Stats., and s. NR 114.14, Wis. Adm. Code, the department may seek penalties, or may revoke, suspend or refuse to renew a certification for reasons such as making false statements on this form. Wastewater operators may use this form to document experience required under s. NR 114.09, Wis. Adm. Code, for a certification grade level. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records Laws (ss. 19.31-19.39, Wis. Stats.).

If this form is incomplete, experience will be denied. Mail completed form to your regional coordinator. Find your regional coordinator online at <http://dnr.wi.gov> and search keywords "Operator certification"

Operator Information			
Last Name	First	MI	Certification Number (WI only)
Street Address (Home)			
City (Home)			State ZIP Code
Work Phone Number	Home Phone Number	Cell Phone Number	E-mail Address
Wastewater Treatment Plant Information – Please use a separate form for each treatment facility where you have been employed			
Wastewater Treatment Plant Name			
Street Address			
City			State ZIP Code
Permit Number (WI Only)	FID Number (WI only)	WWTP Design Population	WWTP Design Flow (MGD)

1.00 in



Timeline

- Currently in final stages of review
- Tentative publish date May 30th
- Tentative effective date: **June 1st, 2015**
- New Study Guides available: June 2015
- First exam day with new exams: Nov 2015



Questions?

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