ENVIRONMENTAL PROTECTION COMMISSION

Adopted and Filed

Rule making related to public water supply systems
and wastewater treatment systems operator certification


Legal Authority for Rule Making

This rule making is adopted under the authority provided in Iowa Code section 455B.222.

State or Federal Law Implemented

This rule making implements, in whole or in part, Iowa Code sections 455B.212, 455B.213, 455B.222 and 455B.223.

Purpose and Summary

Chapter 81 provides for the certification of public water supply and wastewater treatment system operators. The chapter sets forth certification grades, eligibility requirements, and examination and continuing education requirements, among other performance standards. These amendments add a new classification grade that will benefit very small communities. These amendments also simplify and refine the rules by clarifying definitions, better specifying certain operator requirements, and removing references to an obsolete classification grade.

More specifically, these amendments do the following:

- Items 1 and 2 add a new definition for “advanced aerated lagoon system,” revise some existing definitions for clarity, and add a “W” and remove “IIL” from the definition of “grade.”
- Item 3 amends the Wastewater Treatment Plant Classifications table to add a new Grade W for onsite treatment systems, add a new advanced aerated lagoon system treatment type, and remove obsolete Grade IIL. These amendments will ensure that the operator certification grade for smaller facilities and for facilities designed with new technologies can be properly determined using this table.
- Item 4 amends the Water Distribution System Classification table to clarify the certified operator requirements for transient noncommunity water systems not classified as Grade A. These requirements were previously implied in Chapter 81, but were not clearly specified.
- Item 5 amends the Operator Education and Experience Qualifications table to add eligibility requirements for the new Grade W and remove the reference to obsolete Grade 2 Lagoon Classification (IIL).
- Items 6 and 7 similarly remove references to obsolete Grade IIL.

Public Comment and Changes to Rule Making

Notice of Intended Action for this rule making was published in the Iowa Administrative Bulletin on November 17, 2021, as ARC 6039C. A virtual public hearing was held on December 8, 2021, at 1 p.m. via video/conference call. No one attended the public hearing. No public comments were received. No changes from the Notice have been made.

Adoption of Rule Making

This rule making was adopted by the Commission on January 19, 2022.
Fiscal Impact

No fiscal impact is expected from this rule making to either the State of Iowa or to the private sector. A copy of the fiscal impact statement is available from the Department of Natural Resource (Department) upon request.

Jobs Impact

After analysis and review of this rule making, no impact on jobs has been found. A copy of the jobs impact statement is available from the Department upon request.

Waivers

Any person who believes that the application of the discretionary provisions of this rule making would result in hardship or injustice to that person may petition the Department for a waiver of the discretionary provisions, if any, pursuant to 561—Chapter 10.

Review by Administrative Rules Review Committee

The Administrative Rules Review Committee, a bipartisan legislative committee which oversees rule making by executive branch agencies, may, on its own motion or on written request by any individual or group, review this rule making at its regular monthly meeting or at a special meeting. The Committee’s meetings are open to the public, and interested persons may be heard as provided in Iowa Code section 17A.8(6).

Effective Date

This rule making will become effective on March 16, 2022.

The following rule-making actions are adopted:

ITEM 1. Adopt the following new definition of “Advanced aerated lagoon system” in rule 567—81.1(455B):

“Advanced aerated lagoon system” means an aerated lagoon system that has been augmented by adding other treatment processes. Examples include, but are not limited to, covered lagoon systems with enhanced aeration and mixing, the addition of fixed film processes to the lagoon process, or the utilization of algal-based treatment processes.

ITEM 2. Amend rule 567—81.1(455B), definitions of “Activated sludge,” “Aeration,” “Fixed film biological treatment” and “Grade,” as follows:

“Activated sludge system” means a biological wastewater treatment process in which a mixture of wastewater and sludge floc, produced in a raw or settled wastewater by the growth of microorganisms, is agitated and aerated in the presence of a sufficient concentration of dissolved oxygen, followed by sedimentation. Examples include, but are not limited to, conventional activated sludge systems, extended aeration activated sludge systems, oxidation ditches, and sequencing batch reactors.

“Aeration” means the process of initiating contact between air and water. This definition includes Examples include, but is not limited to, spraying the water in the air, bubbling air through the water, or forcing the air into the water by pressure.

“Fixed film biological treatment” means a treatment process in which wastewater is passed over a media onto which are attached biological organisms capable of oxidizing the organic matter, normally followed by sedimentation. This definition includes Examples include, but is not limited to, trickling filters, rotating biological contactors, packed towers and activated filters.

“Grade” means one of seven certification levels, designated as A, W, I, II, III, IV, or V.

ITEM 3. Amend rule 567—81.3(455B) as follows:

567—81.3(455B) Wastewater treatment plant grades.
81.3(1) **Classifications.** The wastewater treatment plant classifications are listed in the following table:

### Wastewater Treatment Plant Classifications

<table>
<thead>
<tr>
<th>Treatment Type</th>
<th>Grade Based on Design Pounds of BOD₅/day</th>
<th>Grade Based on Design Population Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>less than 334</td>
<td>334-835</td>
</tr>
<tr>
<td></td>
<td>less than 2,000</td>
<td>2,000-5,000</td>
</tr>
</tbody>
</table>

1. **Primary Treatment** Onsite Treatment System: I W, I Not Applicable, II Not Applicable, III Not Applicable, IV Not Applicable

2. Waste Stabilization Lagoon System: IIL, IIL, IIL, IIL, IIL

3. Aerated Lagoon System: IIL, IIL, III, IIL, III, IIL


5. Fixed Film Biological Treatment System: II, II, III, III, IV


81.3(2) Unknown design BOD₅ loading BOD₅ loading. When the design BOD₅ loading is unknown, the plant BOD₅ loading shall be determined by using the average pounds of BOD₅ of the 24-hour composite influent samples taken in the last 12 months. If no 24-hour composite influent samples were taken are not available, then grab samples shall be used.

81.3(3) **IL and IIL wastewater operator requirements.** A Grade I, II, III, or IV wastewater treatment certificate will satisfy the certification requirements for a Grade IL plant. A Grade II, III, or IV wastewater treatment certificate will satisfy the certification requirements for a Grade IIL plant.

81.3(4) **Grade W onsite wastewater classification.** Any wastewater treatment plant that discharges to a water of the state and that utilizes onsite wastewater treatment technologies, such as those specified in 567—Chapter 69, but excluding waste stabilization ponds, shall be classified as an onsite treatment system (Grade W).

**ITEM 4.** Amend subrule 81.5(1) as follows:

81.5(1) **Classifications.** The water distribution plant classifications are listed in the following table:

### Water Distribution System Classifications*

<table>
<thead>
<tr>
<th>System Type</th>
<th>Grade** Average Daily Pumpage in MGD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-0.1</td>
</tr>
<tr>
<td>All municipal water systems</td>
<td>I</td>
</tr>
<tr>
<td>Community water systems not classified as a Grade A water system</td>
<td>I</td>
</tr>
<tr>
<td>Nontransient noncommunity water systems not classified as a Grade A water system</td>
<td>I</td>
</tr>
<tr>
<td>Transient noncommunity water systems not classified as a Grade A water system</td>
<td>I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miles of Pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-100</td>
</tr>
</tbody>
</table>

*For rural water districts.*
*Note: A public water system with a well, storage, and a distribution system shall be classified as a water distribution system if no treatment is provided.

**For Grade A water system classification, see subrule 81.6(1).

ITEM 5. Amend subrule 81.7(1) as follows:

81.7(1) Education and experience requirements. All applicants shall meet the education and experience requirements for the grade of certificate shown in the table below prior to being allowed to take the examination. Experience shall be in the same classification for which the applicant is applying except that partial credit may be given in accordance with subrules 81.7(2) and 81.7(3). Directly related post-high school education shall be in the same subject matter as the classification in which the applicant is applying. The director will determine which courses qualify as “directly related” in cases which are not clearly defined. A military service applicant may apply for credit for verified military education, training, or service toward any education or experience requirement for certification, pursuant to subrule 81.7(4).

Operator Education and Experience Qualifications

<table>
<thead>
<tr>
<th>Grade</th>
<th>Education</th>
<th>Substitution for Education</th>
<th>Experience</th>
<th>Substitution for Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>High school diploma or GED</td>
<td>None</td>
<td>Completion of an IDNR-approved training course</td>
<td>None</td>
</tr>
<tr>
<td>W</td>
<td>High school diploma or GED</td>
<td>None</td>
<td>Completion of an IDNR-approved training course</td>
<td>None</td>
</tr>
<tr>
<td>I</td>
<td>High school diploma or GED</td>
<td>None</td>
<td>1 year</td>
<td>See 81.7(3)“b”(1), (3) to (5)</td>
</tr>
<tr>
<td>II</td>
<td>High school diploma or GED</td>
<td>None</td>
<td>1 year</td>
<td>See 81.7(3)“b”(1), (3) to (5)</td>
</tr>
<tr>
<td>II</td>
<td>High school diploma or GED</td>
<td>None</td>
<td>3 years</td>
<td>See 81.7(3)“b”(2) to (5)</td>
</tr>
<tr>
<td>III</td>
<td>High school diploma or GED</td>
<td>None</td>
<td>3 years</td>
<td>See 81.7(3)“b”(2) to (5)</td>
</tr>
<tr>
<td>III</td>
<td>High school diploma or GED and 2 years of post-high school education (1 year must be directly related)</td>
<td>See 81.7(3)“a”(1), (3)</td>
<td>4 years of experience in a Grade I or higher</td>
<td>See 81.7(3)“b”(2), (3)</td>
</tr>
<tr>
<td>IV</td>
<td>High school diploma or GED and 4 years of post-high school education (2 years must be directly related)</td>
<td>See 81.7(3)“a”(2), (3)</td>
<td>4 years of experience including 2 years of DRC in a Grade III or higher</td>
<td>See 81.7(3)“b”(2), (3) and 81.7(3)“c”</td>
</tr>
</tbody>
</table>

ITEM 6. Amend subparagraph 81.7(3)“b”(2) as follows:

(2) Thirty semester hours or 45 quarter hours or 45 CEUs of post-high school education may be substituted for one year of experience up to a maximum of one-half the experience requirement for Grades II, III, III and IV.
ITEM 7. Amend subrule 81.16(1) as follows:

81.16(1) Affidavit allowance. The owner of a plant or distribution system that is required to have a Grade A, I, II, or III certified operator may sign an affidavit with a certified operator of the required classification and grade.

[Filed 1/21/22, effective 3/16/22]
[Published 2/9/22]

EDITOR’S NOTE: For replacement pages for IAC, see IAC Supplement 2/9/22.