

Iowa Wastewater Design Standards Updates & Future Rules Revision Plan

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June 18th 2025

Overview

- Summarize a few of the major changes
- Present plan for ongoing rules revision in the years to come

Executive Order 10

- Signed by Governor Reynolds on January 10, 2023
- Required all state agencies to identify which administrative rule chapters will be retained or rescinded
 - Reduce or remove regulatory burden
 - Remove obsolete, inconsistent, redundant or unnecessary regulations
- Public engagement throughout the process.

Abbreviated Timeline

- EO10 required a relatively quick turnaround for submission of revisions
- Allowed time for “low-hanging fruit” type fixes
 - Tried to focus on sections where waivers are regularly submitted
 - Incorporate changes to specific chapters (11, 12, 13, 14 and 18C) that went through significant stakeholder feedback prior to EO10

Updates to the IWFDS – Overall

- Consolidation into one rule reference document
- Renumber Chapters 11-21 to 1-11
- Definitions moved to Preamble
- Waiver (variance) provisions removed (already explained in 567 IAC 60 (formerly 64))
- Update NFPA classifications & electrical/safety/ventilation requirements
- General Cleanup – fix spelling/grammar errors, deletion of outdated code & rule references

Chapter 1 (11) – Project Submittals

- Electronic submittals
- Exceptions from a permit clarified & expanded
 - Sanitary sewer service connections do not receive exemptions if they are serving multiple connections and connecting to a alternative or innovative technology
 - Ex: Low-pressure system
 - Industrial pretreatment – except lagoons
 - Imminent health and safety emergencies
 - Sanitary Sewer Rehab!!
 - CIPP Lining, Cementitious Manhole Liners & Spot Repairs (with approved standard specs)
 - Holding Tanks (no treatment)

Chapter 2 (12) – Sewer Systems

- Pipe Materials
 - Updated Materials & Joints table
 - Materials & Joints not in table allowed if covered by ANSI, AWWA or ASTM specifications
 - Materials & joints not covered by ANSI, AWW or ASTM specifications allowed (without variance) with certification of manufacturer

Chapter 2 (12) – Sewer Systems

- Unsewered Communities
 - Allow 6” diameter for all laterals/submain (8” still required for main)
 - 1.5 fps slopes allowed without variance
 - Less than 2 fps slope requires documentation of cleaning capability

Chapter 2 (12) – Sewer Systems

- Manholes
 - Modified maximum spacing
 - Up to 600 feet for sewers 30" or less
 - Greater than 600 feet for larger than 30"
 - Documentation of cleaning capability required for lengths in excess of 400 feet for sewers 15" or less, in excess of 500 feet for 16" - 30", or greater than 600 feet for sewers larger than 30"
 - Allow cleanouts at the terminal end of any sewer
 - Lengths greater than 150 feet require documentation of cleaning capability

Chapter 2 (12) – Sewer Systems

- Protection of Water Supplies
 - Added minimum separation distance of 3' for manholes from watermains
 - Consistency with Water Supply Rules
 - Gravity sanitary & force main separation from water mains consolidated in Ch. 43
 - Separation distances consolidated in new Table 1 in Chapter 60
 - Major differences – Mechanical Plants have less stringent separation requirements for public wells
 - Exceptions for remote equalization basins and boiler/cooling tower wastewater

Chapter 2 (12) – Sewer Systems

- Details of Construction – New Section!
- Alternative Installation Methods (Trenchless Technologies)
 - VARIANCES NOT NECESSARY!!!

Ch. 3 (13) – Pumping Stations & Force Mains

- Pumps
 - Trash Basket requirement removed (now listed as “Should”)
 - Exception can be made on 3” minimum opening (**without waiver**) provided equivalent protection from clogging is included
 - Updated electrical/ventilation provisions
- Emergency Operation
 - Additional requirements for portable units

Ch. 4 (14) – Wastewater Treatment Works

- New Definitions
 - Anaerobic Lagoon, Innovative Tech, Outfall, PE, Public Use Area, Tech Not Fully Developed & Treatment Works
- Pilot Studies
 - Submittal recommendations included in Section 4.4.3
- Siting
 - Separation Distances moved to Table 1 - IAC 60
 - Anaerobic Lagoons included

Ch. 4 (14) – Wastewater Treatment Works

- Essential Facilities

- Flow Measurement

- Additional flow measurement required for treatment systems where flow is equalized
 - Magnetic flow meters accepted
 - Elapsed time meters limited to systems serving 500 PE or less

- Sampling Equipment

- Provide as necessary to meet influent & discharge monitoring requirements
 - Influent sampling located to account for all contributing loads and exclude return/recycle streams
 - Composite samplers shall meet electrical requirements in Chapter 3
 - Include provisions to report amount/rate of septage

Ch. 7 (17) – Sludge Handling & Disposal

- Sludge Stabilization and Holding
 - Sludge storage aeration/mixing recommended, not required

Ch 8C (18C) – Wastewater Treatment Lagoons

- Updated Pond Construction Details
 - Liner construction details
 - Percolation Rate

Ch 10 (20) – Disinfection

- Replace UV dosage requirements with 10-States
- Provision for case-by-case review of other disinfection methods (example: peracetic acid)

Going Forward

- The Wastewater Engineering Section is looking to continue to update the remaining Design Standard Chapters
- Initially planning for twice-yearly meetings for stakeholders to submit comments
 - Frequency can be adjusted as-needed
- Complete chapter review and then submit for rule-making
 - Can be a lengthy process
 - Need Stakeholder consensus for IGOV pre-clearance

Next Steps

- Next Meeting: before the end of calendar year 2025.
- Virtual meeting
- Meetings to come every 6 months

Chapters Remaining

- 6 & 8B – Settling & Activated Sludge
- 7 – Sludge Handling & Disposal
- 10 – Disinfection
- 5 – Screening & Grit Removal
- 8A – Fixed Film Media Treatment
- 9 – Supplemental Treatment Processes

Audience Poll

- Preference for Chapter Priority

<https://www.menti.com/alx9q9b1p6td>

Q&A

- Feel free to submit comments related to the chapter under review ahead of time
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