

Proposed Revisions to Water Quality Rules, Chapter 12, Design and Construction Standards for Public Water Systems

Analysis of Written Comments Received by October 17, 2022 for Docket 22-3103



November 8, 2022

Prepared by:

Wyoming Department of Environmental Quality

Water Quality Division

Water and Wastewater Section

Commenters:

Philip Gyr, Nelson Engineering
Richard Cripe, Y2 Consultants
Tammy Reed, Trihydro Corporation

Chapter 12 Comments and Responses

General

Tammy Reed, Trihydro Corporation: Ms. Reed noted “After learning about the proposed WDEQ Chapter 12 revisions, a number of our civil engineers met to discuss. On behalf of Trihydro Corporation, we request that there be an extension of the public comment period to give more time to review and provide thoughtful comment(s).”

Department Response: WDEQ/WQD considered the comment. WDEQ/WQD provided written public comment opportunity from November 5, 2021 to February 14, 2022, and provided notice of public meetings held on December 21, 2021, March 15, 2022, and May 3, 2022 in addition to the formal rulemaking comment period, which began on August 31, 2022 and closed October 17, 2022. Additionally, DEQ held a Chapter 12 Zoom Outreach Session on January 27, 2022 and a Zoom Question and Answer Session on February 1, 2022, and contacted and met with each commenter to discuss their comments. To date, WDEQ/WQD has provided nearly 150 days of public comment opportunity for the Chapter. As the Chapter has been noticed and discussed in public multiple times over the course of the year, WDEQ/WQD has determined that an extension is not warranted.

WDEQ/WQD recommends that anyone interested in WDEQ/WQD rulemaking activities subscribe to our online notifications at <https://public.govdelivery.com/accounts/WYDEQ/subscriber/new> in order to receive immediate notifications when WDEQ seeks public input. WDEQ/WQD publishes notices regarding rulemaking projects in the list called “WATER - General Water Quality Updates.”

Section 11, Table 2

Philip Gyr, Nelson Engineering: Mr. Gyr noted that “increasing the setback for public water supply wells to 500 feet from UIC wastewater facility is arbitrary and capricious, not science or evidenced based. Hydrogeologic studies should be required to ascertain if a well will be affected by infiltrated wastewater, not an arbitrary limit. Many facilities, including State of

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Wyoming WYDOT, State Parks, and others will no longer be in compliance with this regulation. Future build out and development of commercial and governmental facilities will be impacted in a negative way by this regulation—often in instances where the well will clearly be unaffected by wastewater injection due to the underlying hydrogeology.”

Department Response: WDEQ/WQD considered the comment. WDEQ/WQD proposed revisions to the setback requirements in Section 11, Table 2 in response to a comment from the Water and Waste Advisory Board, which requested that the setbacks be evaluated and updated as needed for consistency with existing setback requirements in Water Quality Rules Chapter 25. Setback requirements in Chapter 25 have been in effect since 2016. In addition, based on Water Quality Rules Chapters 3, 12, and 25, an entity, through the permitting process established in Chapter 3, Section 4, can determine setback distances on a case-by-case basis by submitting a hydrogeological study, or the Administrator may require additional information on a case-by-case basis. The passage will remain as written.

Section 15

15(f)(i)(B)

Richard Cripe, Y2 Consultants: Mr. Cripe noted that “I would suggest that DEQ consider using a #16 mesh instead of a #24 mesh. A #16 mesh will keep insects out (per EPA concerns) and is more commonly found than a #24 mesh.”

Department Response: WDEQ/WQD considered the comment. The proposed choices for overflow lines are consistent with current EPA sanitary survey requirements and the 2018 TSS. The proposed revisions balance consistency with EPA requirements with design flexibility. Allowing a coarser mesh puts applicants at risk to incur significant deficiencies during EPA Region 8’s sanitary surveys and costly modifications for correction. Applicants have the option to install #24 mesh or they can install a sealed flap or flapper valve or a duckbill valve instead of installing #24 mesh. The passage will remain as written.

15(f)(iii)

Richard Cripe, Y2 Consultants: Mr. Cripe noted that “For overflow lines that are protected with #24 mesh non-corrodible screen, demonstrate prevention of screen clogging that would lead to structural storage tank damage.’ The overflow pipe needs to be adequately sized to provide a discharge opening (cross sectional area) large enough to accommodate a

restrictive effect (water and air flow) of the screen. Also, the discharge opening (cross sectional area) should consider the percentage of sediment that could deposit on the screen and result in an additional restrictive effect.”

Department Response: WDEQ/WQD considered the comment. The proposed choices for overflow lines are consistent with current EPA sanitary survey requirements and the 2018 TSS. Applicants have the option to install three types of protective devices on overflow lines (i) a flap or flapper valve, (ii) a duckbill valve, or (iii) installing #24 mesh with a less coarse mesh. The flapper valve or duckbill valve can allow the overflow line to operate and flush any potential sediment out of the line. There are options to install a spring-loaded #24 mesh seal on an overflow line allowing for overflow events, line flushing and then resealing at the conclusion of the event. WDEQ agrees that any modification to tank vents and overflow lines needs to (1) demonstrate that it has been sized accordingly by an engineer, (2) be submitted to WDEQ for permit approval, and (3) demonstrate that the necessary airflow calculations have been conducted for the proposed modifications. The passage will remain as written.

15(i)(i)

Richard Cripe, Y2 Consultants: Mr. Cripe noted that “All openings shall be protected with a #24 mesh non-corrodible screen or a combination of #24 mesh and a coarser mesh non-corrodible screen.’ I would suggest that DEQ consider using a #16 mesh instead of a #24 mesh. A #16 mesh will keep insects out (per EPA concerns) and is more commonly found than a #24 mesh. Also, I would suggest that DEQ review the "combination of #24 mesh and a coarser mesh non-corrodible screen" it appears to be too restrictive (water and air flow) and problematic.”

Department Response: WDEQ/WQD considered the comment. The proposed choices for vents are consistent with current EPA sanitary survey requirements and the 2018 TSS. Allowing a coarser mesh puts applicants at risk during EPA Region 8’s sanitary surveys for significant deficiencies and costly modifications for correction. EPA sanitary survey requirements have been requiring #24 mesh on tank vents and overflows since 2014. The EPA requirement for #24 mesh is required in Wyoming and all Tribal systems.

WDEQ/WQD understands the concern that tank vents may be impacted by ice or frost, which is why the requirement at Section 15(i)(ii) is included. Designs may either include #24 mesh on its own or include #24 mesh in combination with a coarser mesh. WDEQ/WQD expects tank designs to employ the use of frost-proof or frost-free tank vents that are

commonly available. Tank designs could also address freezing by including a solar panel with heat tape or heating coils to aid in preventing freeze/frost. Additionally, tanks need to be evaluated to potentially include a pressure or vacuum vent as necessary. The passage will remain as written.