Water and Waste Advisory Board Comments
March 15, 2022 Meeting
Chapter 12

(line numbers based on April 20, 2022 green copy)

General Comments

Lorie Cahn: Ms. Cahn recommended including a description of what would require a permit modification in the response to comments document as the current response is unclear.

> **Department Response:** WDEQ/WQD plans to provide permittee guidance that identifies frequently asked questions and WDEQ/WQD's responses to further clarify what activities require permit modifications. Additionally, WDEQ/WQD encourages applicants to contact our district engineers or the Water and Wastewater Section Manager with questions concerning modifications. WDEQ/WQD also plans to provide training, education opportunities, and outreach to stakeholders about the revised Chapter 12 once it is promulgated; these events will include information and guidance about applying for and modifying permits.

Lorie Cahn: Ms. Cahn recommended verifying the passages in each section that references the TSS and recommends removing redundant language and references that are only titles and that do not contain requirements.

> **Department Response:** WDEQ/WQD reviewed each section that references the TSS 2018 for typographic errors and made additional edits to remove redundant wording throughout the document. WDEQ/WQD is developing a TSS 2018 crosswalk and additional guidance documents to aid users in the implementation of Chapter 12.

Lorie Cahn: Ms. Cahn recommended WDEQ/WQD correct the response to commenter Ty Ross for reference 10(b)(i), as the current answer is incorrect and should be 10(b)(ii),

> **Department Response:** WDEQ/WQD will not revise the response to comments document but notes Ms. Cahn's comment for the record.

Brian Deurloo: Mr. Deurloo recommended that WDEQ/WQD review the punctuation in the chapter and ensure that semi-colons and periods are used consistently.

Department Response: WDEQ/WQD reviewed the chapter as requested and adjusted the punctuation as appropriate.

Section 3

Lorie Cahn: Ms. Cahn requested that WDEQ/WQD rename the section to "applicability of these regulations" instead of "timing" since this term is not used in the section.

Department Response: WDEQ/WQD notes that Section 3 is consistent with other Water Quality Rules because the timing of compliance with a chapter, or grandfathering, is an important topic to permittees. WDEQ/WQD also notes the chapter already contains an applicability section, which describes the facilities that are required to comply with the chapter. WDEQ/WQD has structured both the "timing of compliance" section and the "applicability" section in a manner that is consistent with other Water Quality Rules. As the section clearly describes timing in relation to permit coverage, WDEQ/WQD will leave the title as written.

Section 6

Lorie Cahn: Ms. Cahn noted the title and contents of the section are confusing.

Department Response: As discussed at the meeting, WDEQ/WQD uses the section as written to give the Administrator flexibility in permitting new technologies that are not specifically described in the rule, but which meet the intent of the rule.

Section 7

7(g)(ii) and7(g)(iii)

Lorie Cahn and Brian Deurloo: Ms. Cahn and Mr. Deurloo advised WDEQ/WQD to clarify the passages further and to ensure active language is used to clarify what the Administrator is authorizing and what is being authorized.

Department Response: WDEQ/WQD has revised the section to the following:

(ii) For applications that include wells, the Department will issue one permit with the following phased authorizations:

(A) The issued permit will authorize the well to be constructed, developed, and tested;

(B) Applicants shall then submit well test data and water quality data for Administrator review; and

(C) Upon the Administrator's approval of the well test data and water quality data, the Director shall modify the issued permit to authorize connection of the distribution system to the well.

(iii) Applicants for water storage tanks may follow an alternative procedure when the final plans and specifications for the tank cannot be submitted with the initial permit application due to project bidding constraints. In these instances, the Department will issue a permit through the following phased authorizations:

(A) The issued permit will authorize the project to initiate the bidding process. Applicants shall ensure the project bidding documentation includes a requirement that the final water storage tank design complies with the requirements of this Chapter.

(B) Applicants shall then submit final documentation and specifications for the water storage tank that demonstrate the design is consistent with the requirements of this Chapter. Upon the Administrator's approval of the final tank documentation specifications, the Director shall modify the issued permit to authorize the construction of the water storage tank and foundation.

(iv) Applicants that use the phased authorization procedures in this paragraph (g) shall request a pre-application meeting with the applicable Division district engineer prior to submission of the permit application package to ensure efficient coordination of the submittals of all reports, plans, and specifications, and Division review timelines.

Section 8

8(a)

Lorie Cahn: Ms. Cahn recommends revising the order of the phrasing in the paragraph and removing part of 8(e) if duplicated in the TSS references.

Department Response: WDEQ/WQD has compared paragraph (e) to the incorporated material at paragraph (a) and has stricken the passages that overlap with the subparagraphs under (e).

8(c)(iv)(A)(I-II)

Lorie Cahn: Ms. Cahn recommended reviewing the passage and verifying whether "or" or "and" is correct at the end of (iv)(A)(I).

Department Response: WDEQ/WQD has reviewed the passage and has corrected the end of (iii)(A)(I) to "or". WDEQ/WQD has revised the paragraph as follows:

(A) The bottom of the stream, the elevation of the high- and low-water levels, and other topographical features at points where the water line:

(I) ~~The water line i~~Is located within 10 feet of streams or lakes; ~~and~~ or

(II) ~~The water line c~~Crosses streams or lakes.

8(e)(v)

Lorie Cahn: Ms. Cahn noted the paragraph is missing a word after "total depth of the drilled."

Department Response: WDEQ/WQD has corrected the passage to include the term "borehole".

8(e)(vii) and (viii)

Lorie Cahn: Ms. Cahn noted the well test data may not be available at the time of the application and is likely to be available later in the process.

Department Response: WDEQ/WQD revised the passages as follows:

(vii) The location of any blast charges, if available; and

(viii) Existing well test data, including:

Section 9

9(f)(v)

Lorie Cahn: Ms. Cahn recommended adding a reference to the statutory definition of "aquifer" that WDEQ/WQD referenced in the response to comments.

Department Response:

WDEQ/WQD has considered the recommendation. At this time, the WDEQ/WQD has determined that a reference to the statutory definition of "aquifer" that WDEQ/WQD referenced in the previous response to comments is not necessary to clarify this passage. The WDEQ/WQD will provide guidance on this topic in the training, education, and outreach it plans to conduct following promulgation of the revised Chapter 12. Applicants that are uncertain as to whether they will drill through multiple aquifers should contact the appropriate district engineer for further guidance.

9(f)(iv)

Lorie Cahn: Ms. Cahn recommended adding "if known" to the passage as the information may not be available at the time of application.

Department Response: WDEQ/WQD added "if known" to the passage.

9(g)(ii)

Lorie Cahn: Ms. Cahn noted that the cross-reference to paragraph (e) is incorrect and should be changed to paragraph (f).

Department Response: WDEQ/WQD corrected the cross-reference.

9(j)(ii)

Lorie Cahn: Ms. Cahn recommended adding "if required."

Department Response: WDEQ/WQD has revised the passage to "Hydraulic analysis that demonstrates how peak hour, average day, maximum day, and maximum day plus fire flows, if fire flows are available, will be improved by upsizing; and"

Section 11

Lorie Cahn: Ms. Cahn recommended revising Section 11 by beginning with the source and organizing the rest of the section out from the source.

Department Response: WDEQ/WQD has evaluated and researched the comment. During the drafting phase of the rule, the District Engineers laid out the content of Section 11 in the order of events they thought were the most logical from an engineering standpoint. Section 11 also follows the order of events of the TSS 2018. The order of items in Section 11 will remain unchanged.

11(a), Line 870

Lorie Cahn: Ms. Cahn recommended removing the reference to TSS 3.2.7 as all of 3.2.7 is not incorporated.

Department Response: WDEQ/WQD has removed 3.2.7 from 11(a).

Section 11, Table 1 and 2.

Lorie Cahn and Jim Cochran: - Ms. Cahn and Mr. Cochran noted the setbacks in the tables section are inconsistent with the setbacks in Water Quality Rules Chapter 25. Mr. Cochran recommended making the two chapters consistent or obtaining agreements from landowners related to permit applications to ensure siting conflicts do not occur.

Department Response: WDEQ/WQD has reviewed both the setback tables in Chapters 12 and 25 and has revised the setback distances from public water supply wells to septic tanks to 100 feet, for consistency with Chapter 25.

11(e)(i)

Lorie Cahn: Ms. Cahn notes that there are lots of very small water systems, campgrounds, rest stops, little parks. Ms. Cahn wondered if there is a way of having some kind of deminimus that allows facilities that serve less than a certain number of households, people, or size system to have an exemption from some of the regulations. For instance, if a small system such as campgrounds, rest stops, little parks, are required to have a second well, or a storage tank—they have to have twice as much as the daily demand. Since these are seasonal there can be water aging problems. Ms. Cahn is concerned that a one size fits all doesn't seem to work, and she is concerned about oversizing systems and making them too expensive.

Ms. Cahn wondered if using the definition for small wastewater systems would be a good starting point for assisting small public water systems.

Ms. Cahn noted the current passage seems to indicate that each well has to supply twice the maximum daily demand. The passage does not seem to make sense alongside the passage that follows that requires one well and storage.

> **Department Response:** After reviewing the comment and practices of other states, WDEQ/WQD has revised the paragraph and has added a new passage at (C) as follows:
>
> (i) Proposed designs shall include a minimum of:
>
> (A) Two wells that are each capable of supplying the ~~maximum~~ average daily demand with the largest producing well out of service; or
>
> (B) One well and finished water storage that together equal twice the maximum daily demand; or
>
> (C) For public water supplies that are not community water systems or noncommunity nontransient water systems, as determined by the Administrator, one well that is capable of supplying the maximum daily demand.

11(e)(ii)(C)

Lorie Cahn: Ms. Cahn notes the paragraph requires compliance with Water Quality Rules Chapter 3, Section 17(b), but Chapter 3, Section 17(a) seems to exclude public water supplies from the requirements in the section.

Department Response: As discussed during the meeting and as confirmed with our Attorney General's Office, the passages of Chapter 3, Section 17(b) are the steps that will be required for the subsurface study but the reference to this paragraph does not mean all of Chapter 3, Section 17 applies.

11(e)(iii)(C)

Jim Cochran: Mr. Cochran noted the 10-foot setback is inconsistent with other setbacks in the section and that it may be impractical for future landowners.

Department Response: WDEQ/WQD has reviewed the passage as discussed and has revised it as follows:

Wells shall be located at least ~~10~~ 50 feet from any property line.

11(e)(v)

Lorie Cahn: Ms. Cahn noted that the new requirements for acidizing seem to be regulating for an infrequent event or an event that has not happened yet. Ms. Cahn recalled that in a comment response WDEQ/WQD had declined to make a revision due to a situation not happening in Wyoming. Ms. Cahn recommended striking the acidization requirements and doing a policy instead for consistency with the comment response.

Department Response: WDEQ/WQD was unable to determine to which comment response Ms. Cahn is referring. The WWAB had previously approved the proposed acidization passages at the October 17, 2019 meeting. As the requirements allow WDEQ/WQD to collect information that is needed for the WDEQ/WQD to ensure the acidization activities do not negatively impact underground sources of drinking water, WDEQ/WQD will leave the acidization passages as part of the rule.

11(e)(vii)(C)(I)

Lorie Cahn: Ms. Cahn wondered if TSS 3.2.6.5 conflicts with line [1115] (11(e)(vii)(C)(I)).

Department Response: TSS 3.2.6.5 covers limestone or sandstone wells. However, the passage on line [1115], 11(e)(vii)(C)(I) falls under gravel-packed or artificial filter-packed wells. As noted in the March 15, 2022 Addendum to Analysis of Comments,

WDEQ/WQD will leave the casing requirements at 11(e)(vii)(C)(I) and (II) as written as the current requirements provide stability and frost protection. However, at 11(e)(vii)(D), WDEQ/WQD committed to revising the casing requirement for wells that encounter naturally flowing water for consistency with the State Engineer's Office casing requirements.

11(e)(vii)(D)(I)

Lorie Cahn: Ms. Cahn wondered if the water is not flowing back into the well, why couldn't WDEQ/WQD allow a below-ground vault or some additional way to keep the well from freezing.

Department Response: Buried well discharge lines or below-ground vaults with well discharge have demonstrated contamination when the below-grade discharge line becomes submerged by groundwater. Freezing considerations have been addressed previously in the section. This paragraph has been revised to the following:

"The well discharge or overflow line installations must connect to the well casing at least 12 inches above ground and be valved. The size of the air gap between the overflow line from the well to drainage structure shall be twice the diameter of the well overflow pipe. Overflow water must be drained and diverted to prevent ponding around the well casing."

11(e)(vii)(E) and 11(e)(vii)(E)(II)

Lorie Cahn: Ms. Cahn noted that for mineralized water, one of the commenters wanted 1000. Ms. Cahn explained the total dissolved solids is a secondary drinking water standard and that EPA considers anything over 1000 unfit for human consumption. Ms. Cahn recommended that WDEQ/WQD revise the language referring to 40 CFR 141, as this reference contains both secondary and primary standards. Ms. Cahn recommended rewording the reference to only refer to the primary drinking water standard and to remove the implication that applicants would be required to treat mineralized water.

Department Response: The intent behind the passage at Section 11(e)(vii)(E)(II) is to ensure that if the applicant proposes to use water that meets the definition of "mineralized," then the proposed design will produce water that complies with the applicable standards in Part 141. The mineralized water is a trigger that will require WDEQ/WQD to review any treatment design options that EPA will require to be

installed and operated so that the resulting water meets the drinking water standards that EPA will enforce. The passage does not require systems to comply with specific primary or secondary standards, which falls under the authority of EPA. WDEQ/WQD has clarified the passage as follows:

"(II) Applicants that propose to use mineralized water as a public water supply shall demonstrate ~~the~~ that any necessary treatment will comply with the drinking water quality standards required by 40 CFR Part 141.

11(e)(viii)

Lorie Cahn: Ms. Cahn recommended clarifying the passage to indicate "diameter" and recommends removing extra "shall." Ms. Cahn recommended incorporating all of 3.2.4 and removing all of (viii) and (ix) per Mr. Jordan's comment.

Department Response: WDEQ/WQD has reviewed 2018 TSS Part 3.2.4 against 11(e)(viii) and 11(e)(ix). Part 3.2.4 will be added to 11(a), with the subparts stricken from that paragraph, and 11(e)(viii) and 11(e)(ix) will be stricken, which makes the comments concerning "diameter" and redundant uses of "shall" obsolete.

WDEQ/WQD has reviewed all formal public comments received, including those from Mr. Jordan. We did not receive a specific request to incorporate 2018 TSS 3.2.4 prior to this recommendation being made at the March 15, 2022 meeting. As a reminder, in order for WDEQ/WQD to adhere to rulemaking procedures, all public comments must be received by the WDEQ/WQD according to the instructions provided in each public notice, or the public may read comments into the record during meetings when public comments are being accepted. Executive Order No. 1981-12 outlines actions to take should board members receive additional comments directly from interested parties.

11(e)(x)

Lorie Cahn: Ms. Cahn noted the response to comments document indicates WDEQ/WQD would revise the statement, but the revision is not incorporated into the draft chapter.

Department Response: WDEQ/WQD verified the passage included in Chapter 12 is the language proposed in the response to comments document.

11(e)(xvi)

Lorie Cahn and Jim Cochran: Ms. Cahn wondered why the passage requires each well to measure the total discharge from the whole field and why the applicant couldn't just add the individual well information together. Mr. Cochran noted the chapter already requires a meter.

> **Department Response:** WDEQ/WQD has revised the paragraph to the following: "An instantaneous and totalizing flow meter equipped with nonvolatile memory shall be installed on the discharge line of each well in accordance with the manufacturer's specifications. Meters installed on systems with variable frequency drives shall be capable of accurately reading the full range of flow rates."
>
> WDEQ/WQD has also revised 11(e)(xiv) to: "An accessible check valve, which is not located in the pump column, shall be installed in the discharge line of each well between the pump and the shut-off valve. Additional check valves shall be located in the pump column as necessary to prevent negative pressures on the discharge piping."

11(f)(v)(B)

Lorie Cahn: Ms. Cahn noted the response to comments document indicates WDEQ/WQD would revise the statement, but the revision is not incorporated into the draft chapter.

> **Department Response:** WDEQ/WQD reviewed the passage proposed in the response to comments document and revised the Chapter as follows:
>
> "Made of concrete ~~with a minimum width or wall thickness of six inches~~ or other material that meets the requirements of Section 15(b)(ii) of this Chapter;"

11(f)(xiii)

Lorie Cahn: Ms. Cahn noted the reference to Section 14 is incorrect and the correct reference is Section 15. Ms. Cahn also wondered if springs need to be subject to all of the requirements in Section 15 if they are not providing fire water.

Department Response: WDEQ/WQD corrected the cross-reference as requested and revised the passage as follows: "Spring box~~es~~ designs shall comply with ~~the finished water~~

~~storage requirements of~~ Section 15(a), (b), (f-j), and (l) of this Chapter~~,~~. Combined spring box and finished water storage designs shall comply with Section 15 of this Chapter."

Section 12

12(a)

Lorie Cahn: Ms. Cahn noted the incorporated material is listed out of order, and that "through" is inconsistently used, which leads to confusion as to what applies.

Department Response: WDEQ/WQD reviewed the incorporations of the TSS 2018 and corrected the passage as discussed.

12(k)(ii)(G)(II)

Brian Deurloo: Mr. Deurloo recommends revising the passage from "identical" to "equivalent."

Department Response: WDEQ/WQD revised the passage as requested.

12(j)(i)(C)

Lorie Cahn: Ms. Cahn recommended revising the passage to "the maximum feed point backpressure shall not exceed 100 psi unless a chlorine solution pump is used."

Department Response: WDEQ/WQD revised the passage as requested.

12(n)

Lorie Cahn: Ms. Cahn notes the term "hydrofluosilic" acid is misspelled and should be "hydrofluorosilicic."

Department Response: WDEQ/WQD corrected the term as recommended.

12(o)(i)

Lorie Cahn: Ms. Cahn notes the term “absorb” is used in the passage, but granulated activated carbon “adsorbs.”

Department Response: WDEQ/WQD corrected the passage as requested.

12(q)(i) and (ii)

Lorie Cahn: Ms. Cahn requested the incorporated manual include the phrase“US EPA.”

Department Response: WDEQ/WQD revised the references as requested.

12(r)

Lorie Cahn: Ms. Cahn recommended removing redundancy in paragraph (r) and (r)(i).

Department Response: WDEQ/WQD combined the passages and renumbered the section as needed.

12(r)(xii)

Lorie Cahn: Ms. Cahn noted the response to comments document indicates WDEQ/WQD would revise the statement, but the revision is not incorporated into the draft chapter.

Department Response: WDEQ/WQD corrected the passage to include the language proposed in the response to comments.

12(t)(i)

Lorie Cahn: Ms. Cahn notes the phrase “simple well system” is used in the passage and wonders where is the definition of this term and what the requirements would be for a non-simple well system.

Department Response: WDEQ/WQD removed “simple” from the passage.

Section 13

13(a)

Lorie Cahn: Ms. Cahn identified that "are herein incorporated by reference" was used repeatedly in the passage and recommended striking the unnecessary uses.

Department Response: WDEQ/WQD corrected the passage as requested.

Section 14

14(g)(iv)

Lorie Cahn: Ms. Cahn noted the passage seems unnecessarily prescriptive and does not seem necessary.

Department Response: WDEQ/WQD notes the passage has been in the rule since 1985 and is part of common engineering design practices to determine headloss. WDEQ/WQD has not received comments or feedback from applicants that indicate the passage is unnecessary or burdensome. WDEQ/WQD uses the submitted information to verify the proposed design will meet the requirements of paragraphs (g)(i)-(iii) to ensure the overall design will meet the intent of the Environmental Quality Act. The passage will remain as written.

14(i)(ii)

Lorie Cahn: Ms. Cahn noted the revision does not clarify the requirement.

Department Response: WDEQ/WQD has reviewed the section and determined the section will revert to include original proposed language, which included the term "manifolded". The original term and language is common in the industry, and the language is used by numerous EPA Region 8 and 9 states. WDEQ/WQD will restore the paragraph to :

"Each pump shall either have an individual suction line or the suction lines shall be manifolded such that they demonstrate similar hydraulic and operating conditions."

Section 16

16(g)

Lorie Cahn: Ms. Cahn noted that WDEQ/WQD's response to the public comment on the passage is insufficient. Ms. Cahn notes that manholes are difficult to keep water out—coatings leak, fiberglass can flood, flooding can cause rust/difficult use, safety issues. Ms. Cahn asked WDEQ/WQD to look at valve boxes and the wording on chambers to clarify that these are synonymous.

> **Department Response:** WDEQ/WQD has evaluated the passage and determined it is duplicative with the inclusion of TSS 2018 8.5- Air Relief Valves. WDEQ/WQD will remove Section 16(g).