Proposed Revisions to Water Quality Rules and Regulations, Chapter 24, Class VI Injection Wells and Facilities, Underground Injection Control Program

Environmental Protection Agency Review and WDEQ Response

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Prepared by:
Wyoming Department of Environmental Quality
Water Quality Division
Groundwater Section

Introduction

The Environmental Protection Agency (EPA) Region 8 reviewed the proposed non-substantial program revisions to Water Quality Rules Chapter 24, Class VI Injection Wells and Facilities to ensure the revisions proposed by the Department of Environmental Quality, Water Quality Division (WDEQ/WQD) maintain stringency with the Code of Federal Regulations. WDEQ/WQD has summarized the feedback received from EPA Region 8 and has included our responses, noting the passages where WDEQ/WQD proposes to make additional clarifying non-substantive revisions to Chapter 24.

Comments by Chapter 24 Location

2(l) 1
2(ll)(v) 1
3(f), 9(h), 20(a), 23(b), 24(a), 25(a) 1
4(a)(iv) and subparagraphs 2
4(a)(iv)(D) 3
6(a)(iv) 3
9(b)(ii) and 9(c) 3
9(b)(xxxix)(C) 4
9(h) 4
10(b)(xi)(C) and 10(b)(xx) 4
10(b)(xxxvi) 4
11(c) 5
13(b)(v) 5
15(f)(iii)(B) 6
21(a)(iv) 6
21(a)(vi) 6
22(a)(ii) 7
26(a) and 26(e)(iii)(B) 7

Comments and Responses

Section 2

2(l)

EPA Region 8: EPA noted that if the definition is intended to be consistent with WOGCC's definition, then it should be the same. EPA recommended referencing the WOGCC's regulation if they change their rules. (E.g. – they had a rule change, and the WDEQ definition is no longer the same)**.**

Department Response: WDEQ/WQD will review and revise Chapter 24 accordingly to ensure consistency with the Wyoming Oil and Gas Commission's definition of a Class II well.

2(ll)(v)

EPA Region 8: EPA identified that the Wyoming rule contains a provision to authorize an individual or position that does not meet the requirements to sign associated documents allowed for certain company positions.

Department Response: 1. WDEQ/WQD proposes to restore the definition of "Duly Authorized Representative" to Section 2 – Definitions. This definition will be identified as (r).

2. WDEQ/WQD proposes to revise Section 2(mm) (formerly Section 2(ll)) and renumber due to the addition of 'duly authorized representative'. WDEQ/WQD proposes to move the passage at 2(ll)(v) to Section 9(b)(xiii) and revise the passage to reinstate the steps for authorizing a duly authorized representative.

Section 3

3(f), 9(h), 20(a), 23(b), 24(a), 25(a)

EPA Region 8: EPA noted concern that removing "The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the requirement is a condition of the permit," parallel to 40 CFR §146.84(b), §146.90, §146.92(b),§146.93(a), and §146.94(a) is less stringent.

Department Response: WDEQ/WQD proposes to revise Chapter 24, Section 9(h) as follows: "When they meet the requirements of this Chapter and are approved by the Administrator, all the following plans required by this Chapter shall be incorporated into the permit." Subsections (i) and (ii) will no longer be applicable as the state is requiring all approved plans be incorporated into the permit. Additionally, WDEQ/WQD will restore the noted passage to Section 3(e).

Section 4

4(a)(iv) and subparagraphs

EPA Region 8: EPA noted concern that striking "If the Administrator's final decision is that the tentative decision to deny the permit application was incorrect, he or she shall withdraw the notice of intent to deny and proceed to prepare a draft permit under Section 20(b) of this chapter" makes the section less stringent than 40 CFR 124.6(b), which includes the same phrase. EPA recommends changing "denial" to "notice of intent to deny" to be more clear and recommends that WDEQ include the missing process from 124.5 describing what must occur if the state decides to issue a draft permit after the comment period instead of finalizing a denial. The State's process does not explicitly require the State to withdraw the notice of intent to deny and then proceed to prepare a draft permit as the federal regulations require. The State's regulations do not prevent a permit from being issued as the final decision if the State changes its mind between a notice of intent to deny and the final decision. Federal regulations require that in this situation the intent to deny a draft permit shall be withdrawn before proceeding with a new draft permit.

Department Response: WDEQ/WQD's response is based on the process described in 40 CFR 124.15. Chapter 24, Section 4(a)(iv) and 4(a)(iv)(A) apply to draft permits that the Administrator proposes to deny. Chapter 24, Section 27(f) and (g) include parallel requirements to 124.15, and these passages cover the gap between the draft proposal to deny a permit and a final decision. As draft permits, whether for issuance or denial, are subject to the public participation requirements of Chapter 24, Section 27, WDEQ/WQD proposes to leave the passages as written.

The requirement from 40 CFR 124.6(b) to withdraw the intent to deny before proceeding to a draft permit for issuance is unclear regarding what is meant to "withdraw." However, based on the public notice requirements of Section 27, the WDEQ would consider the process explained in Section 27(f) as the parallel point to 40 CFR 124.6(b), where "the Administrator indicates that the decision to deny the permit application was incorrect":

Section 27 (f) The Administrator shall render a decision on the draft permit within sixty days after completion of the public comment period if no hearing is held. If a hearing is held, the Administrator shall make a decision on any Department hearing as soon as practicable after receipt of the transcript or after the expiration of the time set to receive written comments.

Then Section 27(g) functions as the point where the Administrator would indicate that the permit to deny is withdrawn, via the response to comments received during the

comment period, in the explanation of changes that have been made to the permit and the reasons behind the changes:

(g) At the time a final decision is issued, the Department shall respond in writing to comments received during the public comment period or during the hearing held by the Department. This response shall:

(i) Specify any changes that have been made to the permit and the reasons for the changes; and

(ii) Briefly describe and respond to all comments stating a technical or regulatory concern that is within the authority of the Department to regulate."

WDEQ does not see this as a stringency issue as the intent of the CFR is met through the mechanisms of the public notice permit decision and response to comment processes.

4(a)(iv)(D)

EPA Region 8: EPA noted an incorrect cross-reference. The reference should be 10(b)(xxxvi).

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

Section 6

6(a)(iv)

EPA Region 8: EPA noted concern that striking "The applicant for a permit shall have the burden of showing that the requirements of this paragraph are met" makes the passage less stringent than 40 CFR 144.12(a), which includes the same phrase.

Department Response: The deleted passage is redundant to the requirements of Section 5 and the Wyoming Statutes. However, out of an abundance of caution, WDEQ/WQD will restore the passage to the end of the paragraph located at Section 6(a)(iv).

Section 9

9(b)(ii) and 9(c)

EPA Region 8: EPA noted that Class VI permits do not have expiration dates and noted that Section 9(b)(ii) includes language about permit expiration dates. EPA recommended the removal of references to expiration dates of Class VI permits to avoid confusion.

Department Response: WDEQ/WQD concurs with the recommendation and will remove references to expiration dates from Chapter 24.

9(b)(xxxix)(C)

EPA Region 8: EPA noted concern that removing "Changes in construction plans during construction may be approved by the Administrator as minor modifications" may make the passage less stringent than the parallel passage at 40 CFR 144.52(a)(1), which contains the same phrase.

Department Response: WDEQ/WQD reviewed the comment and in the passage located at Chapter 24, Section 9(b)(xxxix)(C), will restore "Changes in construction plans during construction may be approved by the Administrator as minor modifications." WDEQ/WQD sees that this passage can provide clarity to the allowed process noted at Section 6(a) and (b).

9(h)

EPA Region 8: EPA noted an incorrect cross-reference in the passage. The reference should be to 10(b)(xxxiii).

Department Response: WDEQ/WQD revised the passage to address another comment and the cross-reference is removed.

Section 10

10(b)(xi)(C) and 10(b)(xx)

EPA Region 8: EPA noted that the phrase "comprise containment," included at 40 CFR §146.82(a)(3)(v) and 40 CFR §146.82(a)(9), is changed to "allow fluid movement." EPA asked for WDEQ/WQD to clarify "will not allow fluid movement with respect to what."

Department Response: WDEQ/WQD proposes to revise the text to "out of" rather than "in."

10(b)(xxxvi)

EPA Region 8: Regarding the passage parallel to 40 CFR §146.82(a)(20) EPA believes (a) a provision is missing to notify, in writing, any Tribes within the area of review (AOR) of the geologic sequestration project, (b) direction to the permittee to provide a list of tribal contacts to the state does not address written notification as described in (a), and (c) "the State" was previously omitted. States neighboring Wyoming may be included in a project's AOR and, therefore, notice should be given to these other states.

Department Response: WDEQ/WQD agreed to make the edits as requested.

Section 11

11(c)

EPA Region 8: EPA noted concern that striking "Other than EPA-approved aquifer exemption expansions that meet the criteria set forth in Section 5(c) of this chapter, new aquifer exemptions shall not be issued for Class VI injection wells. Even if an aquifer has not been specifically identified by the Administrator, it is an underground source of drinking water if it meets the definition in Section 2 of this chapter" makes the paragraph less stringent than 40 CFR 144.7(a), which includes *"Other than EPA approved aquifer exemption expansions that meet the criteria set forth in §146.4(d) of this chapter, new aquifer exemptions shall not be issued for Class VI injection wells. Even if an aquifer has not been specifically identified by the Director, it is an underground source of drinking water if it meets the definition in §144.3."* The point of the federal regulation is to say that even if a state hasn't designated it, it is a USDW if it meets the definition. In other words, even if the State has not had an opportunity to review it, it is still a protected resource under the SDWA if it meets the definition (i.e. non-injection zone aquifers that may not been reviewed).

Department Response: WDEQ/WQD proposed to strike the passage because it is redundant to the definition of USDW in Section 2, paragraph (oo), and the processes outlined in the Chapter. WDEQ/WQD will review aquifer information during the permit review process and will determine the groundwater classification and whether the aquifer is a USDW based on the definition in the Chapter. However, WDEQ will restore the redundant passage located in Section 11 (c)(ii) "Even if an aquifer has not been specifically identified by the Administrator, it is an underground source of drinking water if it meets the definition in Section 2 of this chapter."

Section 13

13(b)(v)

EPA Region 8: EPA noted concern that revising the passage parallel to 40 CFR §146.84(d), makes the proposed passage less stringent. If Section 13(b) is meant to parallel 40 §146.84(c) and Section 13(b)(v) parallels 40 §146.84(d), please note that 40 §146.84(c) and 40 §146.84(d) are independent provisions. 40 §146.84(d) requires the operator to perform all required corrective action, including those identified by the operator in 146.84(c).

The phrase "that the owner or operator determines require corrective action" causes confusion for the regulated community and may be construed as contradicting 13(b).

Department Response: WDEQ/WQD will revise Section 13(b)(v) as follows: "Owners or operators of Class VI wells must perform corrective action on all wells in the

area of review that are determined to need corrective action, using methods designed to prevent the movement of fluid into or between USDWs, including use of materials compatible with the carbon dioxide stream, where appropriate."

Section 15

15(f)(iii)(B)

EPA Region 8: EPA noted that Section 15(f)(iii)(B) is confusing and does not meet the intent of the federal regulations. The provision could be interpreted to mean that the operator shall conduct the testing and monitoring in the injection zone(s) to track the CO2 plume, and secondly to determine the presence or absence of pressure using direct and indirect methods.

Department Response: WDEQ/WQD proposes to revise Section 15(f)(iii)(B) as follows: "The owner or operator shall conduct testing and monitoring ~~in the injection zone(s)~~ to track the extent of the carbon dioxide plume and the presence or absence of elevated pressure (e.g., the pressure front) in the injection zone(s) by using: (I) Direct methods, and (II) Indirect methods (e.g., seismic, electrical, gravity, or electromagnetic surveys and down-hole carbon dioxide detection tools) unless the Administrator determines, based on site-specific geology, that such indirect methods are not appropriate;"

Section 21

21(a)(iv)

EPA Region 8: EPA noted that the passage parallel to 40 CFR §146.93(h) is less stringent as the passage must include language "and the records must thereafter be retained at a location designated by the Director for that purpose." This is a regulatory requirement for the state.

Department Response: WDEQ/WQD proposes to revise Section 21(b) as follows: "~~The Administrator may require the owner or operator to deliver the records to the Administrator at the conclusion of the record retention period.~~ The owner or operator must deliver the records to the Administrator at the conclusion of the retention period, and the records must thereafter be retained at a location designated by the Administrator for that purpose."

21(a)(vi)

EPA Region 8: EPA noted the passage parallel to 40 CFR §146.91(f)(2) may be less stringent as the time frame must be at least as long as the CFR.

Department Response: WDEQ/WQD reviewed the comment and in the passage located at Chapter 24, Section 21(a)(ii) will revise the timeframe from three (3) to ten (10) years for consistency with the CFR.

Section 22

22(a)(ii)

EPA Region 8: EPA noted that the passage parallel to 40 CFR §146.91(b) is less stringent since allowing for 30 days from time of receipt of results can be more than 30 days from the event.

Department Response: WDEQ/WQD proposes to revise Section 22(a)(ii) as follows: "Reports, within thirty (30) days, ~~of receiving~~ the results, of:"

Section 26

26(a) and 26(e)(iii)(B)

EPA Region 8: EPA noted the passage that is parallel to 40 CFR 144.52(a)(7)(i)(C) seems to be missing from the financial responsibility (FR) section.

EPA noted that there are two issues of concern if this provision is not included. (1) The federal regulation makes clear that the transferor of a permit must maintain FR until such time as the Director gives them notice that they are released, and (2) the State's regulations do not allow for the transferor to be released from FR obligations due to a transfer. The only way for a permittee to be released is through plugging and abandonment.

Section 26(e)(iii)(B) does not stand for the proposition that Financial Assurance remains in place until the permit is terminated, revoked, or a new permit is denied. That section says that: "(iii)Cancellation, termination, or failure to renew may not occur and the financial instrument shall remain in full force and effect in the event that on or before the date of expiration: The permit is terminated, revoked, or a new permit is denied." The State's regulations indicate that a transfer can only occur by modification and revocation and reissuance. (Section 8(a)). Termination is not an option. There are two issues of concern that reduces stringency:

(1) 144.52(a)(7)(i), 40 CFR 144.52(a)(7)(i)(B) and 40 CFR 144.52(a)(7)(i)(C) are missing from the State rules. The provisions found in 144.52 are permit conditions that must be included when applicable to the activity. Note: 40 CFR 144.52 (c) is provided for reference;

(2) The State's regulations do not allow for the operator requesting conversion or transfer to be released from FR obligations when a well has been converted or transferred to another operator.

Release of FA appears to be only found in Section 26(h)(i)&(ii) and may occur if: conditions of W.S. § 35-11-313(f)(vi)(F) have been met, when a phase of Geological Sequestration is completed (partial release), new FA instrument is provided (previous instrument can be released), or revised financial cost estimates may allow for partial release.

Chapter 24, Section 7 specifies that permit terminations only occur in narrow set of circumstances:

(i) Noncompliance with terms and conditions of the permit;

(ii) Failure in the application or during the issuance process to disclose fully all relevant facts, or misrepresentation of any relevant facts at any time; or

(iii) A determination that the activity threatens human health, safety, or the environment and can only be regulated to acceptable levels by a permit modification or termination.

When a well is converted or transferred, the permit is not terminated as defined above, unless one of the situations listed in Section 7 (above) has also simultaneously occurred.

At Section 8(c) "When a permit transfer occurs pursuant to this section, the permit rights of the previous permittee automatically terminate." "[T]erminate" used here in Section 8(c), is inconsistent with the permit termination definition in Section 7.

Department Response: Per Section 8(a)(i), permit transfers are handled similarly to permit issuance and the transferee agrees to be bound by all of the conditions of the permit. At Section 9(b)(xxix)(H) the permit requires the permittee to demonstrate compliance with Section 26. Section 26(a) requires that "Owners or operators of Class VI wells shall establish, demonstrate, and maintain financial responsibility for all applicable phases of the geologic sequestration project, including complete site reclamation in the event of default." Section 26(e)(iii)(B) requires that financial assurance remains in place until "The permit is terminated, revoked, or a new permit is denied." The transferor would be required to maintain financial assurance until the old permit is terminated. WDEQ/WQD proposes no additional revisions to address this comment.

Additionally, Section 4(d) states: "Permits may be modified, revoked and reissued, or terminated either in response to a petition from any interested person (including the permittee) or upon the Administrator's initiative."

Transfer or conversion will be covered by the new applicant applying for the permit (i.e., transfer) or obtaining a permit through WDEQ for a Class I or V well or WOGCC for a

Class II well (i.e., conversion). The original permittee may request termination of their permit or upon the Administrator's initiative through this section.