RULE MAKING DOCUMENT
Responses to Oral Comments
Received May 7, 2015

Water and Waste Advisory Board Meeting

Wyoming Water Quality Rules and Regulations

Chapter 24

CLASS VI INJECTION WELLS AND FACILITIES

August 11, 2015

List of Commenters

Chairwoman Marjorie Bedessem, Water and Waste Advisory Board
Lorie Cahn, Water and Waste Advisory Board
Klaus Hanson, Water and Waste Advisory Board

Comments and Responses

General Comments

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn noted a number of grammar, formatting, and capitalization errors throughout the chapter.

Response: WDEQ/WQD made the requested edits.

Entity: Klaus Hanson, Water and Waste Advisory Board

Comment: Mr. Hanson requested that WDEQ/WQD add a provision requiring an outside licensed geologist evaluation to avoid a "fox in the henhouse" situation.

Response: WDEQ/WQD considered the request further. As discussed at the May 7, 2015 meeting, the addition of the suggested requirement is redundant. By requiring applicants/owners/operators to submit information submitted to the WQD administrator, we already ensure a thorough review by a party outside of the applicant/owner/operator. We will not add additional language requiring an outside licensed geologist evaluation.

Section 3
3(c)(i)

Entity: Klaus Hanson, Water and Waste Advisory Board

Comment: Mr. Hanson requested that WDEQ/WQD add some language to clarify that the director may, in his best estimate, require the owner/operator of a Class II well to apply for a Class VI permit.

Response: WDEQ/WQD has reworded the passage to "After consultation with the Oil and Gas Conservation Commission Supervisor, the administrator may, <u>in his/her best estimate</u>, require a Class VI permit in consideration of the following."

Section 5
5(b)(xvi) and 5(b)(xviii)

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn noted that it is not clear if the proposed formation testing program results are required in the application and that the arrangement of the two passages within the chapter is confusing.

Response: WDEQ/WQD reviewed the passages. These two passages come directly from 40 CFR 186.82(a)(8) and 186.82(c)(4), respectively. The passage concerning the requirement of the formation testing program results (5(b)(xviii)) is a requirement for the administrator to consider before the permit is issued. When we reviewed the context of the passage within the CFR we realized that this passage is located in a subparagraph in the CFR that corresponds to another subsection in Chapter 24, Section 5. We have moved the requirement concerning the formation testing program results to a more appropriate location in Section 5, in paragraph (d), under items the administrator must consider before granting approval. This will separate the two passages and clarify that 5(b)(xvi) is required of the applicant and that the administrator is required to review the results prior to approving the permit.

Section 6
6(a)(iii)

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn notes the passage is worded in a confusing manner.

Response: WDEQ/WQD reviewed the passage and made a minor edit. The passage now states "Conduct any authorized injection activity in a manner that results in a violation of any permit condition or representations made in the application, <u>or</u> the request for coverage under the individual permit. A permit condition supersedes any application content." We have similar passages in our other UIC program rules. The intent of the passage is to indicate we are prohibiting any authorized injection activity which would violate either a permit condition, a condition noted in the application, or a condition noted in the request for coverage under the individual permit. We unintentionally omitted "or" when we added the passage and we believe the passage is now clearer with the addition of "or."

Section 9
9(a)(iii)
Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn requests that the passage be edited to clarify that the parameter of the monitoring is annulus pressure.

Response: WDEQ/WQD reviewed the passage. This passage is a direct quote from 40 CFR §146.86(a)(3) and has already passed the EPA crosswalk review. The passage will remain as written.

Section 10
10(a)(i)
Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn requests that the passage be edited to simplify all of the pluralization in the passage.

Response: WDEQ/WQD reviewed the passage. EPA requested edits to this passage in the June crosswalk. While we did edit the passage, the edits were more to match the CFR more precisely. This passage is a direct quote from 40 CFR §146.95(a)(1). We will not be adjusting the pluralization as this is how the federal rule is written.

10(a)(ii)

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn requests that the passage be edited to move "confining unit" and to a new subparagraph and requests that the new subparagraph be reworded as confining units aren't demonstrative.

Response: WDEQ/WQD reviewed the passage. This passage is related to 40 CFR §146.95(a)(2). We have edited the passage to more closely match the federal language, which addresses the comment concerning confining units not being demonstrative. We did not split up the paragraph as requested in order to more closely match the federal rule.

10(e)(iii)(A)

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn requests that the passage be edited to remove "first" as it is confusing it terms of the USDW's.

Response: WDEQ/WQD reviewed the passage. This passage is a direct quote from 40 CFR §146.95(f)(4) and has already passed the EPA crosswalk review. The passage will remain as written.

Section 17
17(d)(iv)(A)

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn requests that the passage be edited to remove "the" and "of" from the sentence.

Response: WDEQ/WQD reviewed the passage. This passage is a based on W.S. 35-11-313 (f)(ii)(N)(I). We have corrected the passage to directly quote from the statute and will not be editing the passage further, since it is statutory language.

Section 19

Entity: Chairwoman Marjorie Bedessem, Water and Waste Advisory Board

Comment: Ms. Bedessem wondered where the chapter mentions the special revenue account discussed in the presentation. The chapter requires cost estimates, but it does not mention deposits of money or mechanisms for collection of money. Ms. Bedessem is concerned that based on other passages in the rule, applicants may interpret that they are not responsible for long-term care financial assurance because the special revenue account is not specifically discussed.

Response: WDEQ/WQD has edited passages elsewhere in the chapter that have eliminated the need to clarify the special revenue account. Specifically, we have edited the chapter and removed "long-term care" in the financial assurance section, Section 19. By removing "long-term care" as a phase requiring

financial assurance, we've clarified the misconception that "long-term care" would require financial assurance, and therefore would be subject to the release requirements of financial assurance.

As discussed at the May 7, 2015 meeting, we are still discussing the specific details of the special revenue account and will propose revisions to Chapter 24 at a later date. At this time, we are focusing on achieving primacy of the Class VI program, which is not dependent on the inclusion of details of the special revenue account.

19(d)(i)(A-I)

Entity: Chairwoman Marjorie Bedessem, Water and Waste Advisory Board

Comment: Ms. Bedessem noted that several passages are capitalized without needing to be.

Response: WDEQ/WQD corrected the capitalization errors.

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn pointed out the differences between mineral rights infringement and storage rights infringement are not clear. She wondered if definitions of each term and further discussion in the chapter of each term might add clarity.

Response: WDEQ/WQD reviewed this request. To eliminate confusion we removed the language indicating that storage rights infringement is related to mineral rights infringement. The terms "mineral rights infringement" and "storage rights infringement" are self-explanatory and are legal determinations, which do not lend themselves to regulatory definition.

19(d)(ii)

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn wondered if WDEQ/WQD would provide a guidance document for Appendix A, as the current chapter does not indicate how the table in Appendix A is supposed to be used.

Response: WDEQ/WQD edited the passage, per our discussion at the May 7, 2015 meeting. The passage now states, "The Risk Activity matrix in Appendix A shall be considered or evaluated during the risk assessment process." In the future, we will draft a guidance document if it appears that there is a need for one.

19(d)(iii)

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn wondered if the Monte Carlo simulations are readily available for the industry and what would be the cost. She also wondered if WDEQ/WQD is prepared to review an application that includes a Monte Carlo model.

Response: As discussed at the May 7, 2015 meeting, it is possible to use a Microsoft Excel spreadsheet to create a Monte Carlo model. However, the preferred route for applicants would probably be to use a third-party economic firm to create and analyze a Monte Carlo model. Such work from third party firms such as IEC would cost approximately $50,000.

As Administrator Frederick explained at the same meeting, the Wyoming Legislature authorized WDEQ to hire a qualified individual to assess complicated economic models that would accompany Class VI applications. We will hire such an individual when the need arises.

19(e)

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn noted that the passage contains a typo—"sites" should be "site."

Response: WDEQ/WQD reworded the passage in response to another comment from EPA. The passage now states "The owner or operator must also submit a proposed cost-estimate for measurement, monitoring, and verification of plume stabilization following post-closure certification and release of all other financial assurance instruments."

19(i)(iii)

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn requests that the passage be edited from "remain" to "remains."

Response: WDEQ/WQD reviewed the passage. This passage is a direct quote from 40 CFR §146.85(a)(5)(ii) and has already passed the EPA crosswalk review. The passage will remain as written.

Appendix A

Entity: Chairwoman Marjorie Bedessem and Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Bedessem and Ms. Cahn noted that instances of "contaminate" should be "contaminant."

Response: WDEQ/WQD edited the table as requested.

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn wondered if "seismic events" are stated as an example of "Acts of God" or if it is intentionally separated out as a separate event. Ms. Cahn notes that there are several instances in Appendix A, where items are listed in parentheses but are not clearly noted as examples of the preceding item. She requests that the Appendix be edited to clearly state whether or not items are an "i.e." or an "e.g".

Response: WDEQ/WQD has revised the table to indicate which items in parentheses are "i.e." and which items are "e.g."

Entity: Lorie Cahn, Water and Waste Advisory Board

Comment: Ms. Cahn requests that the last three rows of Appendix A, page A-2, be deleted as they are unnecessary.

Response: WDEQ/WQD edited the table as requested.