



MEMORANDUM

TO: File, Linc Energy Wyoming, UCG R&D Application - **TFN 5 5/128**

THRU: Muthu Kuchanur, Application Coordinator

FROM: Mark Taylor, Geologist - Program Principal

DATE: March 21, 2013

SUBJECT: Review of Section 13.14 Appendix D-12 Statement of Basis Wyodak Coal Aquifer Exemption

The following are my review comments in response to Muthu Kuchanur's request of March 11, 2013.

Review Comments

General

1. Linc needs to provide a new cover insert and spine for Volume III to include Section 13.14.
2. Linc needs to provide a labeled Section 13.14 divider w/tab.
3. Page 13.14-iii: No "Attachment A: DVD of License Application" was provided. Please provide.

Technical

1. Section 13.14.2, Geographic Extent of Aquifer, pg. 13.14-2: The proposed aquifer exemption boundary cannot be "arbitrary" according to the EPA. Linc should provide a discussion of the process used to calculate the proposed aquifer exemption boundary which includes some distance outside the excursion monitoring well ring. See Lost Creek's example attached. Also, Linc should provide LQD with an electronic copy of the proposed aquifer exemption boundary.

Linc Energy R&D Application, TFN 5 5/128
Section 13.14 Aquifer Exemption
Mark Taylor's Review Memorandum

March 21, 2013

Page 1 of 2

2. Section 13.14.5, WDEQ Groundwater Classification, pg. 13.14-6, paragraph 2: Linc must provide analyses of the full list of constituents listed on Table 1 of WQD, R&R, Chapter 8 or provide a reference in this text as to where these analyses may be found in the document.
3. Section 13.14.7.2.3, Hydraulic Containment, pg. 13.14-14, Item 4: Linc should discuss with WDEQ-WQD (Kevin Fredrick) and EPA (Wendy Chung) concerning a potential need to request a separate aquifer exemption for the Overburden aquifer given control of pressures surrounding the gasifier will include injecting groundwater into the Overburden aquifer. Also, please revise this text to include a brief discussion as to the source, quantity and quality of the groundwater to be injected.
4. Section 13.14.7.2.3, Hydraulic Containment, pg. 13.14-14, Item 5: Item 5 was apparently omitted, please provide.

Conclusion

I am not prepared to recommend approval of Section 13.14 at this time.

mt/

Attachments

cc: Cheyenne File w/attach.

R&D_RM_03_21_2013.MT

Linc Energy R&D Application, TFN 5 5/128
Section 13.14 Aquifer Exemption
Mark Taylor's Review Memorandum

March 21, 2013

Page 2 of 2

DEQ Linc 000076