

**Powder River Basin Resource Council
Multicultural Alliance for a Safe Environment
Sierra Club
Western Organization of Resource Councils
Wyoming Outdoor Council**

December 10, 2013

Shaun McGrath
Regional Administrator
U.S. EPA Region 8
1595 Wynkoop St.
Denver, CO 80202
Via electronic mail to: r8eisc@epa.gov and McGrath.shaun@Epa.gov

RE: Linc Energy Aquifer Exemption

Dear Mr. McGrath,

On November 15, 2013, after a contested case hearing requested by Powder River Basin Resource Council, the Wyoming Environmental Quality Council (EQC) affirmed the Department of Environmental Quality's (DEQ) decision to approve an aquifer exemption for Linc Energy's research and development license to carryout underground coal gasification tests in Campbell County, Wyoming. It is our understanding that once the EQC approves its order at its meeting on January 15, 2014, the aquifer exemption will come to EPA for final review and a decision approving or denying the exemption and corresponding revision to Wyoming's state program implementing the Safe Drinking Water Act. 40 C.F.R §§ 144.7, 146.4(b).

Our organizations have serious concerns about the DEQ's and EQC's actions, and we urge EPA to deny the aquifer exemption for Linc Energy's project. As discussed below, we believe this aquifer exemption violates the requirements of federal law in terms of both substance and process. The aquifer cannot be exempted from regulation because it contains high quality groundwater that could be used as a future drinking water source, and Linc's project runs a high risk of contaminating this water. Additionally, Wyoming did not allow public comment or a hearing on these important issues as required by federal law.

Procedural Violations Related to the Aquifer Exemption

Federal regulations require "notice and opportunity for a public hearing" *before* the state can identify "exempted aquifers." 40 C.F.R. § 144.7(b)(3). Additionally, the Memorandum of Agreement between Wyoming and EPA related to state implementation of the Underground Injection Control (UIC) program of the Safe Drinking Water Act requires a "public participation process" for all proposed aquifer reclassifications and exemptions. Wyoming did not meet these public participation requirements in this case, and therefore EPA would violate federal law by approving Wyoming's proposed aquifer exemption absent a public notice and comment process of at least thirty days.

Wyoming's "public participation" process through DEQ and EQC did not afford an opportunity for public comments and a public comment hearing. As shown in the attached public notices, the DEQ invited "written objections" to Linc Energy's license application and the proposed reclassification and exemption of the aquifer. However, DEQ did not invite "public comments." Unlike almost all other public notices issued by DEQ, the Land Quality Division's notice did not specifically use the phrase "public comments." "Objections" are a narrower category of public participation than "comments" as they cannot be neutral or positive. "Comments" are broad and include any views, data, or information submitted by the commenter. Additionally, given the posture of "objections" proceeding to a contested case hearing before the EQC, Wyoming's process automatically starts off in an adversarial position.

The only "public hearing" on the aquifer exemption was a contested case hearing before the EQC. Instead of using the hearing process to solicit public comments to inform its decision, DEQ used it to defend a decision that DEQ staff admitted was made before the public notice requesting "objections" was even published. It is our understanding that neither the EQC nor the DEQ will formally respond to any information received by parties either through the hearing process or outside of it. Equally important is the fact that the contested case hearing – which occurs a mere 20 days after the close of the written objection period – is an incredibly burdensome process and does not afford an accessible opportunity for landowners and other general members of the public to participate. Notably, two citizens showed up at the hearing wanting to offer public comment and the EQC and DEQ told them they could not participate because they were not admitted as parties. Additionally, a group of neighboring landowners sent a letter to the EQC with comments and concerns related to the aquifer exemption, but the EQC did not even open the letter because the written objection period had closed and there was no further opportunity for public participation. DEQ also "strenuously" objected to Powder River Basin Resource Council's request for a post-hearing brief to further clarify the legal and factual issues of the case, and based on that objection the EQC denied the opportunity for briefing.

In light of the lack of an open public comment process in Wyoming, we renew our requests from September for EPA to hold a public comment period for the aquifer exemption. Since September, we have been in touch with local landowners, other members of the public, and other public interest organizations and there is significant concern about the project and specifically the aquifer exemption. Given past attempts at underground gasification that have contaminated groundwater, including, notably the Hoe Creek project, the local community and others are legitimately concerned that the project will contaminate high quality groundwater.

Since the State of Wyoming did not afford a public comment opportunity it is necessary for EPA to have a public notice and comment period of at least thirty days.

In addition to curing procedural deficiencies of the state process, an EPA initiated public comment period is necessary because this aquifer exemption should be considered a substantial revision to the state's program. *See* 40 C.F.R. § 145.32(b)(2). As explained below, the aquifer exemption would be precedent setting and a public comment period is both appropriate and necessary.

Substantive Violations Related to the Aquifer Exemption

The federal Safe Drinking Water Act prevents underground injection of fluids and chemicals that endanger drinking water sources. EPA or state programs cannot permit injections that will endanger drinking water sources. 42 U.S.C. § 1421(b)(1)(B).

This general principle is embraced by EPA's regulations governing aquifer exemptions. According to EPA's regulations, EPA or a delegated state cannot approve an aquifer exemption if the aquifer is currently being used as a drinking water source or has the potential to be used in the future as a drinking water source. The regulations clarify that exempted aquifers "are those which would otherwise qualify as 'underground sources of drinking water' to be protected, but which have no real potential to be used as drinking water sources." 40 C.F.R. § 144.1(g).

Linc and DEQ claim that the aquifer in question can be exempted because the aquifer "cannot now and will not in the future serve as a source of drinking water because" the formation contains minerals that considering their quantity and location are expected to be commercially producible. 40 C.F.R. § 146.4(b)(1). However, none of these criteria have been met.

First, Linc's application does not demonstrate that the formation contains commercially producible minerals. During cross-examination at the hearing, Linc and DEQ testified that the mineral they are considering to be commercially producible is coal. However, at the depth and location, coal is not commercial producible. Instead, Linc proposes to turn coal into a syngas. Unlike aquifer exemptions granted for uranium mining – where uranium is the product that is extracted from the aquifer – here, the mineral in question is admitted to be non-producible. Linc will not be producing coal through its project.

Even if you consider the syngas product to be the "mineral" that will be produced, the research and development project proposed by Linc will not produce that mineral in commercial quantities. Linc plans to flare all syngas produced during the project and will not pay any royalties or taxes on the coal or gas to the state of Wyoming. No previous underground coal gasification projects – including Linc's own multi-year projects in Australia – have reached commercial scale. As admitted by Linc and DEQ during the hearing, underground coal gasification is still an unproven technology and questions remain regarding its commercial and economic feasibility, especially with new market conditions such as a glut of much higher quality gas in the U.S. than the syngas that will be produced by underground coal gasification. A Linc representative at the hearing testified that at this time the company has no plans to develop a commercial-scale project at this location or anywhere in the Powder River Basin.

Second, and more importantly, the mineral in question – coal – does not prevent the aquifer from being a future source of drinking water. Because the Safe Drinking Water Act prevents contamination of underground sources of drinking water, an aquifer exemption can only be approved if the aquifer has no real potential to serve as a drinking water source. *See* 40 C.F.R. § 144.1(g). Federal regulations use the word "because" not "if." Therefore it must be demonstrated that the aquifer cannot be used as a future drinking water source *because* the aquifer contains commercial deposits of minerals. Here, DEQ did not demonstrate that cause/effect relationship. In fact, during testimony at the hearing, DEQ staff admitted that the

quality, quantity, and location of the water make the aquifer a potential future drinking water source, yet DEQ did not consider those facts in assessing whether to propose the aquifer exemption. According to DEQ's own statement of basis for the aquifer exemption, the aquifer could be classified as a Class I drinking water aquifer. To our knowledge, no aquifer of this quality has been exempted in Wyoming before.

Third, Linc has not demonstrated that the underground coal gasification process is safe and effective. For over a decade, Linc has tested its process in Australia but significant questions remain about whether the process and its contamination can be adequately controlled and whether facilities can be safely decommissioned. These questions have led the Australian government to restrict Linc's activities, which led the company to announce that they are leaving the country. We have attached a comprehensive report from an Independent Scientific Panel that was commissioned by the Queensland Government and urge you to review it. This report questioned the maturity of Linc's technology and ultimately found that the project should not be expanded until critical findings can be made, including the ability to safely operate and decommission the project. During the hearing, DEQ staff admitted they were sent a copy of the study from the Queensland government but DEQ did not consider it during their review of Linc's application. Therefore, DEQ did not consider the Australian report's findings regarding if contaminants are left, they could migrate out of the exemption area after Linc's project is decommissioned.

Questions Regarding the Process and EPA's Role

In addition to raising concerns, we would also like to raise a few questions about the process and ask for your clarification regarding EPA's role in reviewing the aquifer exemption proposed by Wyoming.

1. When does EPA anticipate making a decision? Under the MOA with Wyoming, EPA committed to making its decision "within 20 days of the receipt of all of the comments by Region VIII." When does EPA consider the 20 day timeline to start? We urge EPA to ask for an extension of this 20 day period given the complexity of this aquifer exemption request.
2. Related to question 1, what does Region VIII consider to be the "comments" related to the aquifer reclassification and exemption? Will EPA request the complete state administrative record, including the hearing transcript, briefs, and exhibits and consider these "comments"? We urge EPA to consider the full record, and again, to offer a separate comment period in order to allow landowners and other interested members of the public to submit comments that were not considered by DEQ.
3. Outside of a formal comment period, will EPA be open to receiving and considering additional information that our organizations or other interested members of the public wish to submit to the agency? How should such information be submitted to EPA?

Thank you for your time and consideration of these concerns and we look forward to a response.

Sincerely,

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Attachments: 1) DEQ's notice authorizing written objections; 2) EQC's notice of the hearing; 3) Comment letter from Timothy Moore (included in the state administrative record as PRBRC Exhibit 4); 4) Petition from Campbell County landowners (included in the state administrative record as PRBRC Exhibit 5); Comment letter from Mr. and Mrs. Gary Marquiss, *et al.* (not considered as part of the state administrative record); and 5) Queensland Independent Scientific Panel Report on Underground Coal Gasification Pilot Trials, June 2013

cc: Douglas Minter, Wendy Cheung, Sadie Hoskie, Nancy Stoner, Ann Codrington