



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

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MAY 15 2013

Ref: 8P-W-UIC

Mr. Kevin Frederick  
Wyoming Department of Environmental Quality  
Water Quality Division  
Herschler Building  
122 West 25th Street  
Cheyenne, Wyoming 82002

Re: Aquifer Exemption Approval:  
Strata Energy Corporation  
Ross ISR Project  
Upper Lance and Lower Fox Hills - Ore Zone Aquifer  
Crook County, Wyoming

Dear Mr. Frederick:

The U.S. Environmental Protection Agency Region 8 Water Program office has reviewed your aquifer exemption request dated August 3, 2012, including the public notice and supporting information for the proposed Wyoming Department of Environmental Quality (WDEQ) designation of a limited portion of the Upper Lance and Lower Fox Hills, Crook County, Wyoming, as an exempted aquifer. We are also in receipt of the public comments submitted to the Land Quality Division (LQD) and LQD's response to objections as required by WDEQ's Noncoal In Situ Mining rules, Chapter 11, Section 21(c)(3).

This request is in connection with the Class III Ross In-Situ Recovery (ISR) Project proposed by Strata Energy Corporation (Strata) for their ISR mining activities.

**APPROVAL OF PROPOSED AQUIFER EXEMPTION:** Based on review of the supporting information provided by the WDEQ, the EPA hereby approves a non-substantial program revision to include exemption of a portion of the Lower Lance and Upper Fox Hills formations. (See 40 CFR §§ 144.7 & 145.32.) The depth and extent of the aquifer exemption is as follows:

The portions of the Lower Lance and Upper Fox Hills formations identified as the ore zone or OZ aquifer located below the "LC" horizon aquitard and above the Basal Fox Hills lower aquitard, at an approximate depth of 250 to 650 feet below ground surface. It is horizontally described by the monitor well ring plus an additional 100 feet beyond the monitor well ring as shown in Map D12-1 accompanying WDEQ's aquifer exemption request.

Based on our review of the information provided, the EPA concurs with the WDEQ's conclusions concerning the aquifer exemption criteria listed below:

- it does not currently serve as a source of drinking water (40 CFR §146.4(a)), and
- it is mineral producing and can be demonstrated to contain minerals that, considering their quantity and location, are expected to be commercially producible (40 CFR §146.4(b)(1).)


This approval applies to the location and the injection activities described herein. Additional approvals may be required for additional injection activities.

**OVERVIEW:** The OZ aquifer contains uranium mineralization and is in the production zone at the Ross ISR Project. The OZ aquifer produces sufficient quantity of ground water to supply a public water system and the total dissolved solids ranges from 1,140 to 2,070 mg/L. Currently, there are no known domestic drinking water wells completed into the OZ aquifer within one-fourth (¼) mile of the proposed exemption area. Overlying and underlying confining aquitards have been identified to isolate the injection zone. The overlying "LC" horizon aquitard typically ranges from 20 to 89 feet and averages around 43 feet thick within the mine permit area. The underlying Basal Fox Hills lower aquitard is generally between 10 to 50 feet and averages around 32 feet thick within the mine permit area. During the public comment period which provided notice of the mining permit and exemption of the OZ aquifer, thirteen (13) public comments were received by WDEQ, including a request for a hearing. The requestor of the hearing and Strata negotiated an agreement prior to the hearing date. At the pre-hearing conference call with the Environmental Quality Council (EQC) held on October 8, 2012, all other objectors declined to proceed and provide testimony at the hearing and a hearing was never held. Additionally, the LQD has provided written responses to each individual who provided comments during the public comment period.

Should you have questions or concerns, please contact Wendy Cheung of my staff at (303) 312-6242.

Sincerely,



 Derrith R. Watchman-Moore  
Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

cc: Mark Rogaczewski, LQD  
Robert Smith, OGWDW