

Sept 15, 2011

**Public Comments from Ms. Venice Scheurich, Conservation Chair, Coastal Bend Sierra Club, Corpus Christi, TX Sept 13, 2011 2:08 pm (Forwarded by Mr. Tony Nesky, US EPA/ORIA Sept. 15, 2011 2:10 pm)**

From: "Venice Scheurich"  
To: Tony Nesky US EPA/ORIA  
Date: 09/13/2011 02:08 PM  
Subject: Help in forwarding concerns about Sec. 4.2 in the Draft Technical Report to appropriate persons; RE: EPA Review of Uranium and Thorium Standards; Draft technical report available now. Science Advisory Board meetings, 7/12 and 7/18-19, 2011

Mr. Nesky:

You may recall that I made comments on behalf of the Coastal Bend Sierra Club (CBSC) at EPA's public meeting in Corpus Christi, TX, on November 4, 2010. Those comments highlighted my concern about Texas regulations allowing uranium companies to use invalid statistical methodology to estimate baseline pre-mining groundwater quality and post-mining restoration standards. At that time, geologist Loren Setlow, who presided at the meeting and who has since retired from EPA, offered to forward my report to staff at the Office of Water in EPA headquarters who were doing a review of regional practices.

Subsequently, your e-mail of June 30, 2011, arrived with a link to the Draft Technical Report and the announcement that the Science Advisory Board (SAB) would meet to discuss that draft report in July. I have recently completed my reading of the Report and just last week finished reading the August 25, 2011 working draft from the SAB.

Now I need your help in bringing a serious omission in Sec. 4.2 of the Draft Technical Report which I believe has been overlooked in the SAB's working draft--at least to this date-- to the attention of those in a position at EPA to make appropriate and necessary changes in the Draft Technical Report.

While it is encouraging to see that the Report includes several excellent recommendations for applying some well-established inferential statistical procedures, it is nevertheless troubling to discover what appears to be a very significant missing piece in Sec. 4.2 entitled Establishing Baseline Conditions.

Given my statistical background, I am alarmed by this omission since no

inferential statistical procedure should ever be applied to data obtained by a judgmental sample which is subject to this sort of selection bias. Since there is no requirement in the Technical Report that companies use a valid sampling design to determine locations for baseline wells, data from those wells is almost certain to contain selection bias. In fact, cases of such bias are prevalent and easily documented in Texas ISL/ISR permit applications and operations. (If it would be helpful, I'll be happy to send a current example from one of our Texas counties.)

Thus, using any inferential statistical method on such baseline well data would fail to conform to acceptable statistical practice. This is true because using data so obviously subject to selection bias would violate the mathematical assumptions underlying all inferential statistical methodology.

Further, the allowing of "cherry picking" locations for baseline wells--no matter how the data from such wells is analyzed or summarized--will very likely lead to highly misleading conclusions about pre-mining groundwater quality and post-mining restoration standards. Clearly, this matter is at the heart of EPA's making a judgment about whether or not to grant a mining company's request for an Aquifer Exemption. Therefore, it is an important concern in EPA's enforcement of the Safe Drinking Water Act.

As stated above, I am requesting your help in bringing this critical matter to the attention of the appropriate person(s) at EPA or on the SAB so that Sec. 4.2 of the Draft Technical Report of June 2011 will be revised to require that a statistically valid sampling design be used to determine locations for baseline wells.

Thank you for your invaluable assistance in getting this matter addressed.

Sincerely,

Venice Scheurich, Conservation Chair, Coastal Bend Sierra Club  
Corpus Christi, TX

-----Original Message-----

From: Tony Nesky [mailto:Nesky.Tony@epamail.epa.gov] On Behalf Of UraniumReview@epamail.epa.gov

Sent: Thursday, June 30, 2011 4:48 PM

To: UraniumReview@epa.gov

Subject: EPA Review of Uranium and Thorium Standards; Draft technical report

available now. Science Advisory Board meetings, 7/12 and 7/18-19, 2011

EPA Review of Health and Environmental Standards for Uranium and Thorium Milling Facilities, 40 CFR Part 192

Draft Technical Report on Post-Closure Monitoring of ISL/LSR Sites EPA Science Advisory Board Meetings, July 12, and July 18-19, 2011

The U.S. Environmental Protection Agency (EPA) last revised its regulations for uranium and thorium milling in 1995. The Agency is currently reviewing them to determine if revisions are necessary to bring them up-to-date.

As part of this review, EPA has asked the Agency's Science Advisory Board (SAB) to conduct an advisory review of a draft technical report, Considerations Related to Post-Closure Monitoring of Uranium In-Situ Leach/In-Situ Recovery (ISL/ISR) Sites. The draft document addresses considerations involved in establishing groundwater monitoring systems around uranium ISL/ISR operations. The report is available on our website at:

<http://www.epa.gov/radiation/tenorm/pubs.html#technical-report>

As part of its advisory, the SAB will hold a public teleconference on July 12, 2011 and a two-day meeting July 18-19, 2011. The meetings were announced in the Federal Register on June 23, 2011. You can view the Federal Register announcement at:

<http://www.gpo.gov/fdsys/pkg/FR-2011-06-23/pdf/2011-15761.pdf>

## ABOUT THE STANDARDS

The regulations under review establish standards for protection of the public health, safety, and environment from radiological and nonradiological hazards associated with uranium and thorium ore processing, and their associated wastes. The cross-media standards apply to pollution emissions and site restoration. The U.S. Nuclear Regulatory Commission (NRC) and their Agreement States use these standards in their oversight of uranium and thorium facility operations and in issuing licenses for source material. The U.S. Department of Energy (DOE) uses them in their management of closed uranium and thorium mills and in the cleanup of contaminated soil and buildings. More information is available at

<http://www.epa.gov/radiation/tenorm/>

## PUBLIC INPUT WELCOME-JOIN OUR DISCUSSION FORUM

We are discussing the regulations with affected stakeholders, and welcome your participation. You can provide your thoughts in our on-line discussion forum: <http://blog.epa.gov/milltailblog/>

Notes from last year's Public Information Meetings, held in Arizona, Colorado, Texas, and Wyoming, are available on our website. You can download these notes and other materials at:  
<http://blog.epa.gov/milltailblog/library-of-documents/>

## WHAT COMES NEXT?

EPA will review the input received from the public meetings held and the recommendations of the Science Advisory Board, then determine whether to propose changes to the standards or leave them as they are. In the meantime, the on-line Discussion Forum will remain open for your comments.

## CONTACT INFORMATION

Please feel free to contact us with your questions, suggestions, and comments at [UraniumReview@epa.gov](mailto:UraniumReview@epa.gov)

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