

## LSNReviews

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**From:** David Brooks  
**Sent:** Monday, March 10, 2008 11:53 AM  
**To:** 'LSN Reviews'  
**Subject:** Fwd: ACTION: Background Slides for GWPS Presentation and Suggested Change to Slide 2  
**Attachments:** Regulatory Consistency 2008080-08.wpd; Regulatory Consistency Hypothetical 2008-80-09.wpd

>>> William Ford 08/11/2005 1:13 PM >>>  
Keith,

Please find attached two tables that summarize regulatory consistency With 10 CFR 60 & other Groundwater Protection Programs. I have included regulatory consistency with 10 CFR 60, because that is an important part of the issue. Further, I have used the term "consistency" rather than "required", since the debate is not over which method complies with the regulations, but which method is the appropriate or best fit for compliance with the regulations.

I have built two tables. One table addresses the panel's recommendation and the simplified approach in the YMRP. This table does not differ from the first panel's conclusions. This table shows the differences between the two approaches described in the presentation.

The second table describes how a detailed approach for the simplified YMRP method might be written (based on panel interviews of the NRC staff). This table would illustrated that a detailed approach would need the dimensions of a representative volume to perform a concentration calculation, but the different goals would remain (i.e. protection of annual flux and continuous removal as opposed to aquifer concentration and non-removal from aquifer).

In building the table, I struggled with the "non-removal" versus "continuous removal". Especially since Slide Two of our presentation states that Option B "projects concentrations consistent with the maximum amount that might be withdrawn in one year from an aquifer volume of 3000 ac-ft". Since the advocate for the simplified YMRP approach stresses removal while claiming non-removal, I think it needs to be included.

Slide Two is the result of trying to reach agreement from all the parties and panel members. To remove this dichotomy, I suggest that we reword this slide slightly.

"Assuming non-removal of radionuclides from the aquifer, projects yearly concentrations in an aquifer volume of 3000 ac-ft at the compliance point. However, should the representative volume be withdrawn at the compliance point, concentrations would be consistent with the maximum concentration that might be withdrawn in one year."

Thanks,

Bill Ford,  
x6630

**Regulatory Consistency With 10 CFR 60 &  
Other Groundwater Protection Programs**

Criteria	Option A Current Interpretation*	Option B Alternate Interpretation**
<b>NRC HLW Regulations</b>		
Based on 3,000 acre/ft/yr [10CFR60.332(a)]	Yes	Yes
Dimensions of representative volume within the aquifer are <u>required</u> to perform concentration calculation [10CFR60.332(a)(2)&(b)]	No	Yes
<b>EPA and Other NRC Groundwater Protection Programs</b>		
Compliance calculations consistent with non-removal of groundwater from the aquifer.	No	Yes
Regulation of concentration in aquifer	No	Yes
Regulation of concentration along a point or line in aquifer	No	No

\* YMRP Simplified Approach Only

\*\* Concentration in aquifer within the REV at the Site Boundary (Panel Recommendation)

**Regulatory Consistency With 10 CFR 60  
Other Groundwater Protection Programs  
For Hypothetical YMRP Approach**

<i>Criteria</i>	<b>Option A Hypothetical Interpretation*</b>	<b>Option B Alternate Interpretation**</b>
<b>NRC HLW Regulations</b>		
Based on 3,000 acre/ft/yr [10CFR60.332(a)]	Yes	Yes
Dimensions of representative volume within the aquifer are <u>required</u> to perform concentration calculation [10CFR60.332(a)(2)&(b)]	Yes	Yes
<b>EPA and Other NRC Groundwater Protection Programs</b>		
Compliance calculations consistent with non-removal of groundwater from the aquifer.	No	Yes
Regulation of concentration in aquifer	No	Yes
Regulation of concentration along a point or line in aquifer	No	No

\* YMRP Hypothetical Approach (undocumented in YMRP). Detailed version of simplified YMRP approach.

\*\* Concentration in aquifer within the REV at the Site Boundary (Panel Recommendation)