

**From:** "Joel Berwick" <joel.berwick@gjo.doe.gov>  
**To:** <MHF1@nrc.gov>  
**Date:** 07/18/2006 12:44:23 PM  
**Subject:** FW: Notes from NRC RAP Meeting - 6/20/06 - WM-110

>  
Mike,

> Here are some notes I took regarding the NRC comments/questions during the 6/20/06 Moab RAP meeting. [Joel Berwick] Can you have the reviewers take a look at them and let me know if there are any discrepancies? Thanks,

>  
Joel

> Attachment 3 and 4 - Mike Fliegel, Ron Litton, Bill von Till, Rob Luke, Buck Ibrahim commenting

>  
> - question - what is the deepest weathered Mancos encountered at other Mancos sites? (e.g. is it similar to Crescent at approx. 20 feet?)

>  
> - question- what is basis for concluding that water encountered in the 300 foot characterization holes is connate?

> Action - date samples of connate using C-14 age dating method (or other method if C-14 not appropriate)

>  
> - provide geochemistry data on water from the 300 foot holes.  
> M Kautsky provided NRC hard copy of data at meeting. If NRC would like add'l data they can request it and we can get it from SeePro.

>  
> - if transient drainage is an issue for GW Resources Protection DOE can install a stand pipe for water collection / sampling.

>  
> Attachment 1 Mike Fliegel, Rob Luke, Ted Johnson, Dan Rom commenting

>  
> rock size and filter requirement - NRC recommends that we use only the Abt-Johnson method and not Stephenson with the idea of reducing filter layer thicknesses and rock thickness and size on the sideslopes. Ted Johnson feels that perhaps only the South sideslope and the drainage channel(s) may require a filter layer (E,W,N sideslopes may not require filter layer) but a thinner section of filter layer could be used. Also the thickness of the rock does not have to be 2 X D50, but could get by with 1.5 X D50.

>  
> toe protection south slope - the proposed protection of scour depth to 1 foot is too low (Figure 4 Calc 06-00) need to re-evaluate - cited NUREG 1623 pg. D-19. (total thickness of the rock was acceptable.

>  
> N drainage channel - much discussion about how to handle sedimentation from small precip events while maintaining full channel to handle PMP. It was suggested that DOE consider eliminating the N drainage channel and just use toe protection buried below grade as is proposed for South sideslope.

>  
> Cut-off wall at termination of N. drainage channel - If drainage channel is put in, then NRC is ok with the concept of a cut-off wall. But instead of a gabion basket just use rock filled trench. This is because the basket wire will deteriorate during the 1000 year design life.

>  
> Radon Barrier - proposed barrier are highly conservative and DOE can re-evaluate in the interest of reducing layer thicknesses. Major factors influencing radon barrier thickness are Ra-226 concentration of tailings and to a lesser degree moisture content of barrier.

>  
> Burial of debris in cell - NRC feels that placement of contam RR ties in the cell will not pose a problem

- due to the fact that they are creosote treated and will be exposed to very little moisture long term.
- >
  - > Vicinity Properties
  - >
  - > DOE will continue to do gamma screening surveys on 1971 EPA list as time/budget allows.
  - >
  - > If VP remediation is done where contam left in place above 40 CFR 192 standards (Supplemental Standards), NRC will review/approve completion report and application for Supp. Stds. If no Supp. Stds. applied, NRC will not review/approve completion report.
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  - > General
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  - > Regarding Draft vs Final RAP - NRC believes later in the UMTRA program draft and final were merged into one document. NRC explained that ultimately the RAP needs to contain construction specifications and drawings (e.g. the documents that would be bid upon for the remediation work). DOE explained that due to contractual matters regarding conceptual vs final design, there will likely be a distinction in the draft vs final (degree of completeness)
  - >
  - > Next Steps - DOE will deliver the "draft" RAP to NRC by 9/01/06. NRC will make a preliminary review and then make a Moab/ Crecent site visit for groundtruthing. Depending on NRC review of draft - NRC visit may be in the late Sept./ early Oct. timeframe. >
  - >
  - > Ken - I think DOE/Stoller needs to discuss completeness of 9/01/06 submittal to NRC relative to incorporating previous NRC comments - mostly Attachment 2 Geology.
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  - >
  - > Joel Berwick
  - > US Dept Energy
  - > Moab Project Engineer
  - >
  - > 2597 B 3/4 Rd.
  - > Grand Junction Colorado 81503
  - > ph (970) 248-6020
  - > fax (970) 248-6023
  - >
  - >
  - >

CC: "Donald Metzler" <Donald.Metzler@gjo.doe.gov>, "Ken Karp" <Ken.Karp@gjo.doe.gov>, "John Elmer" <John.Elmer@gjo.doe.gov>

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**Created By:** joel.berwick@gjo.doe.gov

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nrc.gov

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MHF1 (Myron Fliegel)

gjo.doe.gov

John.Elmer CC (John Elmer)

Ken.Karp CC (Ken Karp)

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