HLWYM HEmails

From: David Pickett
Sent: Tuesday, February 05, 2008 10:07 AM
To: Hakan Basagaoglu
Subject: RE: first draft - Colloids

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Hakan,

Some comments. You may already have thought of some of these:

1. It would be useful to create an outline now. I know there is one imbedded in this, but it would be good to lay it out separately and see if it makes sense.

2. Bring FEPs discussion up to the front part of the report.

3. In the first section (Colloid Abstraction), include a brief description of how the abstractions work. This could be followed (or preceded?) by the FEPs.

4. Page 1: In what way is "colloid masses formed from waste form degradation" a model input? I thought it was part of the abstraction?

5. Page 2, item 1: I can look at the Th-Pa-Am Kd question. Feel free to remind me. Is it risk-significant?

6. Page 2, item 2: Not sure I follow the logic. If colloids are less stable at high temperature, why is it OK to use high-T data to model low-T? Or are we not talking about concentrations?

7. Page 2, item 4: The models are linked by the concentration of DHLWG colloids; in other ways, they are not linked.

8. Page 2, items 6 & 7: The applicability of meta-autunite and hematite data depends on what parameters are being borrowed. Does it matter? Are they being conservative?

9. Page 4, Zr Oxide Colloids: We can discuss this. Yes, unless they've changed things, they first sample a colloidal Pu concentration, then calculate the colloid concentration from the sampled value. I don't remember the conversion factor.

10. Page 6, Irreversible sorption: Tae is going to want an evaluation of the assumption that there is only a monolayer of Pu permanently attached to colloids - if that is an accurate characterization of the abstraction.

11. Page 7: Yes, Sn = Tin.

12. Page 7, Reversible sorption: Is it really true that there is no reversible sorption to FeOx colloids? For which radionuclides?

13. I think we will want to raise the issue of no irreversible attachment of U to U mineral colloids.

14. Page 8, uranophane: I'll be curious to hear how uranophane colloid sorption is based on McNamara et al. 2005.

15. Page 9: I like the inclusion of immobile corrosion products, because it is linked to colloidal radionuclide mobilization.

David

-----Original Message-----
From: hbasagaoglu [mailto:hbasagaoglu@cnwra.swri.edu]
Sent: Friday, February 01, 2008 3:08 PM
To: David Pickett
Subject: first draft - Colloids

David,

I have attached a very first draft for the write-up summarizing the Colloid tp in EBS. I would like to have your thoughts and feedback on this version especially for what needs to be focused and whether the level of details is sufficient.Please do not pay much attention to grammer at this point, because I am trying to put all the piece together and clarify and hopefuly resolved some issue that were incorrectly mentioned in the last Appendix 7 meeting. Thanks,

Hakan

Hearing Identifier: HLW_YuccaMountain_Hold_EX
Email Number: 576

Mail Envelope Properties (dpickett@cnwra.swri.edu20080205100700)

Subject: RE: first draft - Colloids
Sent Date: 2/5/2008 10:07:08 AM
Received Date: 2/5/2008 10:07:00 AM
From: David Pickett

Created By: dpickett@cnwra.swri.edu

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Tracking Status: None

Post Office:

Files	**Size**	**Date & Time**
MESSAGE	2920	2/5/2008 10:07:00 AM

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