

**Attachment 1 to HEM-12-2 – RAIs and Proposed Resolution
March 2012**

RAI No.	Section	Issue	Regulatory Link	Discussion	Path Forward
1	Section 6.0	Surface sampling only at locations 56-59	10CFR20.1302(a) and 10CFR20.1302(b)	It is indicated that for samples at locations 56-59, the samples were limited to the first ¾ inch based upon information which indicated that contamination was limited to the top concrete layer only. It also indicates that the existing information was that there were no cracks and/or seams evident in the sampling locations. It would seem possible that the seams or crack could not be seen by the eye so that it would have been appropriate to sample deeper.	Subsurface core sampling should be performed at locations 56-59 unless surface samples indicate the absence of radioactivity.
2	Section 6.0	Analysis for Tc-99	10CFR20.1302(a) and 10CFR20.1302(b)	In Section 6.0 it is indicated that a second gamma walkover was conducted on the building slabs to identified contamination. Such an approach would not identify Tc-99 since it is a beta emitter.	Provide basis for the conclusion that the performance of a gamma walkover would identify Tc-99?
3	Section 6.3	Uranium concentrations	10CFR20.1302(a) and 10CFR20.1302(b)	It is stated, "Considering the concentration of uranium at these sample locations, Th-232 is considered to be only present at trace levels, and Th-232 is not carried forward into subsequent inventory calculations." Where are the uranium data that this sentence is referring to? Was it submitted with the 20.2002 request?	Provide the uranium data that the sentence in Section 6.3 is referring or provide where the data is presented in the January 16, 2012 submittal.

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4	Section 6.4	Tc-99 measurements	10CFR20.1302(a) and 10CFR20.1302(b)	As noted above, what is the basis that a gamma walkover would determine the presence of Tc-99 as indicated in Section 6.4?	See RAI No. 2 above.
5	Section 8.1	Scaling Factors for Tc-99	10CFR20.1302(a) and 10CFR20.1302(b)	Reference is made to HDP-TBD-WM-901, <i>Scaling Factors for Radioactive Waste Associated with the Above Slab Portion of the Process Buildings</i> . Subject reference is not provided to permit staff's assessment of the appropriateness of the scailing.	Provide HDP-TBD-WM-901 on the Hematite docket.