

**From:** Terry Brock  
**To:** Philip.stoffey@state.co.us  
**Date:** Fri, Jul 15, 2005 9:20 AM  
**Subject:** Durita - draft CRR rev. 6-6-05 comments

Phil,

Per our conversation this week . . . Below are the team comments for the review of the June 6, 2005 version of the Durita draft Completion Review Report (CRR). We appreciate you using the comment resolution sheet from our Feb. 10, 2005 review letter to cross-reference in this version of the draft CRR where you addressed our comments. I suggest you address the 3 substantive comments below and notify me of the resolution prior to submittal of the final CRR. The editorial comments could be addressed in the final submission of the CRR to NRC. As we've discussed, the groundwater section is still under review.

Please call if you need any clarifications.

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#### Substantive Comments

1) Section 3.1.6 (sixth paragraph, top pf page 22) now states that "The top 0.5 feet of the closure cover has an average radium-226 activity of 1.8 pCi/g. When the thorium-230 and radium-226 activities are decayed for 1,000 years, the radium activity in the upper 0.5 feet of the cell calculates to 6 pCi/g, which is equivalent to the radium activity used as the cutoff for site cleanup. Therefore the cover radium-226 activity is essentially the same as in the surrounding surface soils both currently and in 1,000 years."

In both NRC and CDPHE regulations, Criterion 6 (5) indicates that ".... soils used for near surface cover must be essentially the same, as far as radioactivity is concerned, as that of surrounding surface soils." The NRC staff interprets this to mean background levels of radionuclides, not cleanup levels. CDPHE should indicate if the cover soils contain background levels of thorium-230 and delete the comment on cleanup levels of radium in this paragraph.

2) Section 5.4, under Acid Pit (page 40) now indicates that "All analytical results were well below the cleanup .... with the exception of 4 selenium results."

CDPHE should add a sentence indicating why the four results are acceptable (were they above the goal?), or indicate if additional removal was done.

3) Comment 5 from the original review, which discusses support for the planned frost protection cover, still lacks a technical basis. As noted in the earlier comments, the planned frost protection cover appears to be robust. A suggested approach is to compare the planned frost protection cover with that of other embankments in the region would probably be favorable.

#### Editorial Comments

1) Summary section, we suggest deleting the bolded text in the about the reclamation date and SA-900 published date. This sentence appears to be a note to the reviewers and not an intended sentence to be included in the final CRR.

2) Page 14, under Criterion 6 (second paragraph), says that rock was placed on the top and sides of the leach tanks. However, page 19 (section 3.1.4, end of first paragraph) now states that the leach tanks had rock on the side slopes and a vegetative cover on top. Page 20 (Section 3.1.5, second paragraph) states that the "final cover over the leach tanks had 5H:1V slopes and utilized a vegetative cover." Do pages 14 and 20 need to be changed to indicate that only the side slopes of the leach tanks were covered with

rock? We suggest making these editorial changes based on our knowledge of the site.

**CC:** Dennis Rathbun; Dennis Sollenberger; Paul Lohaus