

TECHLAW MEMORANDUM

ENTERED

To: J. Dreith, Triassic Park file

From: G. Starkebaum

Subject: Fourth meeting with TP Consultant

Date: May 5, 1999

I met with Mr. Corser yesterday to try to finalize resolution of the NOD comments that we discussed in previous meetings (April 15, 19 and 20). Mr. Corser has still not completed his writeup of draft comment resolutions, but has managed to get through the majority of them. He will finish the writeup by Friday (5/7) if possible, then e-mail the file to me to review. I reminded him that the document will become part of the administrative record for the permit, and that it will eventually be available to the public. (It is currently a very rough draft.)

We discussed the (previously missing) Upper Dockum clay permeability data from the last (1997) round of site investigation and clay characterization (Shelby tube samples), and the methods to be used to develop final construction specifications (via test fill construction, taking "Benson-type" large area compacted clay samples [about 12x12 inches] for permeability testing). The last (3) permeability test results were all slightly above the maximum of  $10^{-7}$  cm/sec, which may be why they were "inadvertently" left out of the application. I explained again (this was the fourth or fifth iteration of this discussion) that the lab tests probably underestimate the actual large-scale permeability of the material, so the test fill results (using larger-area samples) may quite possibly show that the clay is not acceptable for constructing the evaporation pond liner system. Bentonite amendment or some other specially selected material may be necessary. (Suitable clay may be present in certain limited strata at the site- but it has not been identified yet.) Mr. Corser is confident that with greater compactive effort and increased water content, the permeabilities can be reduced to below the maximum limit.

We discussed the proposed CQA Plan again, particularly the centralization of responsibility (and potential liability) in the combined Design Engineer (Corser), CQA Engineer (someone else from TerraMatrix-Montgomery Watson), AND the CQC staff AND the QC laboratory (for earthwork). As proposed, all of these people may be from one firm. Corser insisted that the CQA/CQC contract has not been prepared or signed yet, so it may end up that a different engineering firm will do the CQA/CQC, but this appears to me to be unlikely. I again pointed out that this approach is not in agreement with EPA guidance, and Mr. Corser again insisted that the guidance seems to suggest that it may be possible to do it this way. To resolve the issue, I focused on the strongly recommended separation of design and CQA responsibilities, very explicit in the "Waste Containment Facilities" CQA/CQC guidance favored by Mr. Corser (page 25). He agreed to provide for very clear separation of the design and CQA functions in his revised CQA Plan, giving the two positions equal authority and having them report to the Owner separately. (The NMED is to be included at the top of the construction organization chart, as well.)