

Memo

To:	Dale Ortman, P.E.	Date:	May 23, 2011
Copy To:	Chris Garrett, SWCA	From:	Mike Sieber, P.E.
Copy To	SRK, File	Project #:	183101
Subject:	Response to Tetra Tech Memorandum dated 22 April 2011, Infiltration and Seepage Model		

Tetra Tech prepared a technical memorandum *Rosemont Facility Infiltration and Seepage – Response to Comments* dated April 22, 2011. It was prepared in response to a technical review *Infiltration, Seepage, Fate and Transport Modeling, Revision 1- Part 1 Infiltration and Seepage Model Components* prepared by SRK Consulting on February 14, 2011. The Tetra Tech memorandum provided acceptable responses to all questions with the exception of two items below. We request clarification on Items 2 and 3.

1 Input Data – Climate and Site Material Soil

No further questions.

2 Heap Leach Facility Conceptual Model

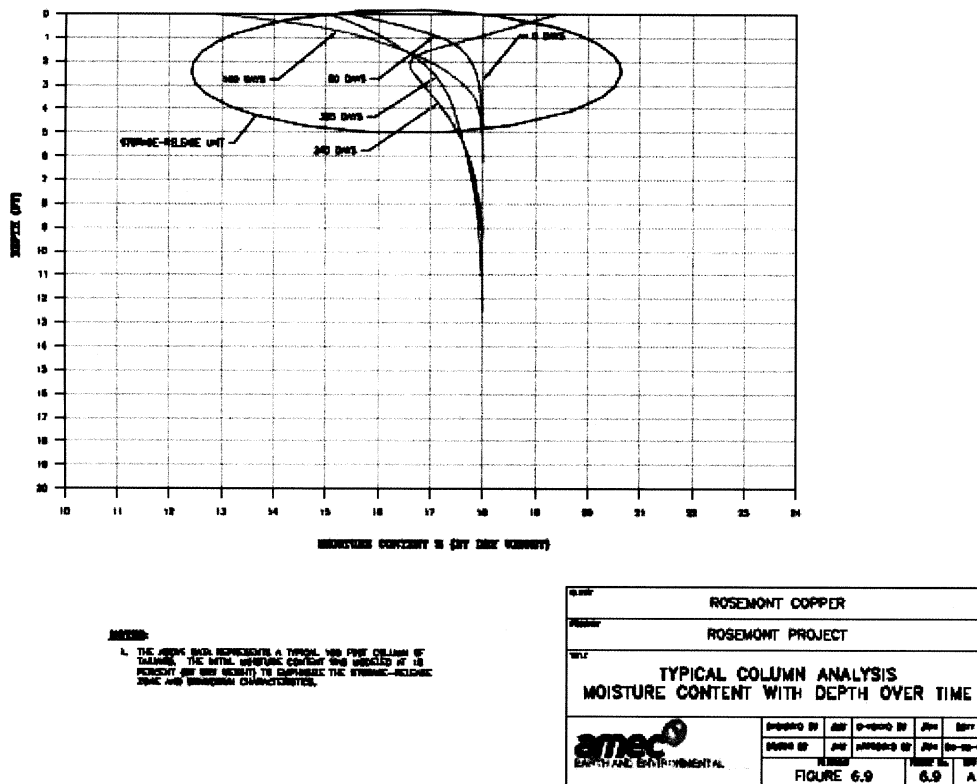
Tetra Tech stated that moisture content and hydraulic properties for site waste materials were provided in the laboratory reports for test work completed by Advanced Terra Testing. The attached laboratory data from Advanced Terra Testing are for geotechnical tests (Atterberg Limits, Proctor, density, sieve analysis etc.). There are no moisture content or hydraulic properties tests in these laboratory reports (porosity, moisture characteristics, saturated hydraulic conductivity, and unsaturated hydraulic properties). Are there are other laboratory reports that provide these data?

3 Steady-State and Transient Solutions

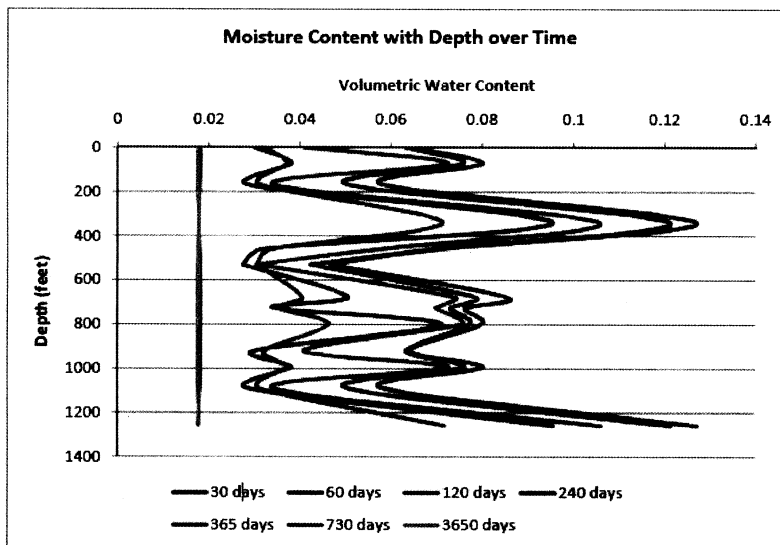
SRK has the following questions about the figure showing moisture content vs. depth:

1. The figure indicates that the heap is 1,400 feet high. Please clarify the depth shown for the height of the Heap.
2. AMEC's Figure 6.9 (2009) (Tetra Tech's Figure 5.26) for the dry stack tailings are what would be expected for an infiltration simulation with one material type, as the Heap Leach simulation was. The drastic change of the slope of the curve seen in the Tetra Tech figure indicates a change in materials with different hydraulic properties. The discontinuity between the first 365 days and 730 and 3650 days indicates that there is something wrong with the model formulation. Again look at Figure 5.26; this illustration is more typical for infiltration models assuming one material type.

Are the results from the simulation for 0 to 365 days used for the model shown for 730 to 3650 days? Was this simulation for the Heap alone or one of the closure options with a waste rock cover?



AMEC, 2009, Figure 6.9 (Tetra Tech, Figure 5.26)



Tetra Tech figure

4 Illustrations and Tables

No further questions.