



environmental management, inc.

**From:** Deni Chambers, CEG, CHG  
Josh Otis, PG

**Date:** May 17, 2010

**To:** Shannon Harbour  
Nevada Division of Environmental Protection (NDEP)

**RE:** Responses to NDEP April 30, 2010 Comments on  
*Interim Groundwater Capture Evaluation and Vertical Delineation Report*, dated:  
March 23, 2010

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Tronox has prepared this memorandum to respond to the above-referenced NDEP comments on the *Interim Groundwater Capture Evaluation and Vertical Delineation Report*, Tronox LLC, Henderson, Nevada, dated March 23, 2010. Tronox's response is given below, and the NDEP comments will be further considered in preparation of the Capture Zone Evaluation Report, which Tronox expects to submit to NDEP on **December 3, 2010**, following implementation of activities described in the *Capture Zone Evaluation Work Plan*, dated May 13, 2010, and the *Hydrogeologic Modeling Work Plan*, dated April 29, 2010.

1. *General comment, TRX should consider the following when preparing the subsequent Groundwater Capture Zone Evaluation Report after the Work Plan has been completed: if the hydraulic conductivity contrast between the alluvial aquifer and the barrier wall is very high (i.e. the barrier wall has very low hydraulic conductivity compared to the alluvial aquifer), then the groundwater equipotential lines should intersect the barrier wall at right angles.*

**Response:** Agreed. Comment noted.

2. *Table 6, the values for hydraulic conductivity listed in this Table for ART-1 and ART-2 do not correspond with the values TRX has provided to McGinley and Associates for the 2007 modeling study. Please address this discrepancy.*

**Response:** A review of correspondence between Kerr-McGee and McGinley in June 2007 shows that one of the reported K values (ART-2) supplied to McGinley for the modeling study was incorrect and that another (ART-1) was correct, but was not used by TRX in Table 6. The correct K value for ART-1 is 299 gpd/ft<sup>2</sup>, not 219, which increases the Q value on Table 6 from 5 to 7 gpm and the ClO<sub>4</sub> amount from 0.05 to 0.07 lbs/day. The correct K value for ART-2 (2662 gpd/ft<sup>2</sup>) appears on Table 6, but is higher than the 2077 gpd/ft<sup>2</sup> value reported to McGinley in 2007. Tronox will revisit and review the pump test data and hydraulic conductivities used in the Athens Road Well Field area for the forthcoming Capture Zone Evaluation Report.

3. *Appendix F, Response-to-comments, TRX should review and revise their response-to-comments letter regarding NDEP's January 6, 2010 letter as necessary after the work approved in the March 25, 2010 Work Plan has been completed.*

**Response:** Tronox will revise and resubmit the referenced response-to-comments letter as an appendix to the Capture Zone Evaluation Report.

