



STATE OF NEVADA
Department of Conservation & Natural Resources
DIVISION OF ENVIRONMENTAL PROTECTION

Jim Gibbons, Governor

Allen Biaggi, Director

Leo M. Drozdoff, P.E., Administrator

May 24, 2010

Matt Paque
Tronox LLC
PO BOX 268859
Oklahoma City, OK 73134

Re: **Tronox LLC (TRX)**
NDEP Facility ID #H-000539
Nevada Division of Environmental Protection (NDEP) Response to:
Capture Zone Evaluation Work Plan, Tronox LLC Henderson, Nevada
Dated: May 13, 2010

Dear Mr. Paque,

The NDEP has received and reviewed TRX's above-identified Deliverable and finds that the document is acceptable with the comments found in Attachment A. These comments should be addressed in the *Groundwater Capture Evaluation and Vertical Delineation Report (Report)*, which is scheduled to be submitted on December 3, 2010. Additionally, TRX should submit an annotated response to comments (RTC) letter **by June 14, 2010**.

Please contact the undersigned with any questions at sharbour@ndep.nv.gov or (702) 486-2850 extension 240.

Sincerely,

Shannon Harbour, P.E.
Staff Engineer III
Bureau of Corrective Actions
Special Projects Branch
NDEP-Las Vegas Office
Fax: 702-486-5733

SH:gl:sh

EC: Jim Najima, NDEP, BCA, Carson City
Greg Lovato, Bureau of Corrective Actions, NDEP, Carson City, NV
Brian Rakvica, McGinley and Associates
Paul Hackenberry, Hackenberry Associates
Brian Giroux, McGinley and Associates

CC: Keith Bailey, Environmental Answers LLC, 3229 Persimmon Creek Drive, Edmond, OK 73013



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Larry Cummings, AMPAC, 3883 Howard Hughes Pkwy, Ste 700, Henderson, NV 89169

Attachment A

1. General comment, TRX should provide the goal(s) for pumping at the Interceptor Well Field (IWF), Athens Road Well Field (AWF), and Seep Well Field (SWF). These goals should be used in support of Step 2, Define Target Capture Zone(s) of the guidance *A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems* (EPA, 2008) with discussion on whether these goals are being attained by each of the well fields.
2. Section 2.2, page 5, please explain why M-73 is not included in the proposal to evaluate the effectiveness of the barrier wall.
3. Figures, NDEP has the following comments:
 - a. Please include groundwater elevation data for all wells associated with the groundwater iso-contours.
 - b. Figure 3, NDEP has the following comments:
 - i. East of the UMCf high, in the area of ART-9/ART-7, TRX should note that there is currently insufficient data to draw a closed, hatched contour at elevation 1585 ft msl around ART-9/ART-7. This contour could just as likely be connected to the 1585 ft msl contour to the north where dashed. Likewise, the contour(s) in question should be dashed. NDEP understands that the proposed well to the north of PC-137 will help clarify this issue.
 - ii. West of the UMCf high, in the area of ART-3, TRX should note that there is currently insufficient data to draw closed, hatched contours. These contours should be dashed.
4. Appendix A, NDEP has the following comments:
 - a. Response-To-Comment (RTC) 3.b.ii, page 2, NDEP requested that UMCF wells be installed in the area east of the barrier wall to delineate the horizontal extent of the deeper contamination and for the quantification of this mass for groundwater capture calculations. Per an NDEP-TRX meeting on May 16, 2010, NDEP has decided that these wells are necessary for groundwater capture evaluation. Two additional UMCF wells should be added in the vicinity of the two proposed shallow extraction wells as shown on Figure 2.
 - b. RTC 4(a)(i), and 4(a)(ii), pages 3-4, NDEP and TRX have met to discuss the use of AquaTrack technology. Please clarify whether this technology is still being considered by TRX for evaluation of the barrier wall. Based on the information provided by WillowStick at a May 16, 2010 meeting, NDEP believes that there is too much potential interference (metal utility corridors, current manufacture operations, etc.) at the Site for the Aquatrack technology to provide meaningful results.