

STATE OF NEVADA

Department of Conservation & Natural Resources
DIVISION OF ENVIRONMENTAL PROTECTION

Jim Gibbons, Governor Allen Biaggi, Director

Leo M. Drozdoff, P.E., Administrator

September 3, 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: Revised Excavation Plan for Phase B Soil Remediation of RZ-B, Addendum to the Removal Action Work Plan, Tronox LLC, Henderson, Nevada

Dated: August 20, 2010

Dear Mr. Paque,

The NDEP has received and reviewed TRX's above-identified Deliverable and finds that the document is acceptable with the conditions and comments found in Attachment A noted for the Administrative Record. Please note that if TRX submits any future versions of this Deliverable, then any comments regarding revisions should be addressed at that time. Additionally, future Deliverables related to remediation and health risk assessment of RZ-B should be responsive to these comments. Please contact the undersigned with any questions at sharbour@ndep.nv.gov or 775-687-9332.

Sincerely

Shannon Harbour, P.E.

Staff Engineer III

Bureau of Corrective Actions

Special Projects Branch

NDEP-Carson City Office

Fax: 775-687-8335

SH:gl:sh

EC: Jim Najima, Bureau of Corrective Actions, NDEP Greg Lovato, Bureau of Corrective Actions, NDEP Brenda Pohlmann, City of Henderson Mitch Kaplan, U.S. Environmental Protection Agency, Region 9 Mike Skromyda, Tronox LLC Michael J. Foster, Tronox LLC

Keith Bailey, Environmental Answers LLC





Susan Crowley, Tronox LLC (Contractor) Deni Chambers, Northgate Environmental Brian Rakvica, McGinley and Associates Joe McGinley, McGinley & Associates Barry Conaty, Holland & Hart LLP Ranajit Sahu, BRC Rick Kellogg, BRC Lee Farris, BRC Mark Paris, Landwell Craig Wilkinson, TIMET Kirk Stowers, Broadbent & Associates Victoria Tyson, Tyson Contracting George Crouse, Syngenta Crop Protection, Inc. Nick Pogoncheff, PES Environmental Lee Erickson, Stauffer Management Company Michael Bellotti, Olin Corporation Curt Richards, Olin Corporation Paul Sundberg, Montrose Chemical Corporation Joe Kelly, Montrose Chemical Corporation of CA Jeff Gibson, AMPAC Larry Cummings, AMPAC Ebrahim Juma, Clean Water Team Joe Leedy, Clean Water Team Kathryn Hoffmann, Clean Water Team Paul Hackenberry, Hackenberry Associates, LLC Paul Black, Neptune and Company, Inc. Kelly Black, Neptune and Company, Inc. Teri Copeland, Neptune and Company, Inc. Kurt Fehling, The Fehling Group, LLC Joanne Otani

CC: Susan Crowley, C/O Tronox LLC, PO Box 55, Henderson, NV 89009 Lee Farris, BRC, 875 W. Warm Springs Road, Henderson, NV 89011 Lee Erickson, Stauffer Management Company

Attachment A

- 1. General comment, comments provided below on the main body of the Deliverable are on the red-line strike-out version of the text.
- 2. Section 2.0, page 7, 2nd paragraph, TRX states that "The final depths will be modified pending receipt of the data." TRX should note that the final depths may be modified pending the receipt of additional data and NDEP's approval. Until NDEP provides approval for any modifications to the approved excavation depths and lateral limits, TRX should proceed with the currently approved limits. This comment should be noted for all future Excavation Plan submittals.
- 3. Section 2.2, page 8, 2nd sentence, NDEP notes that the samples collected at the property boundaries are pre-confirmation samples for the excavation polygons located adjacent to the property boundaries.
- 4. Section 2.1.2, pages 8 and 9, NDEP provides the following comments:
 - a. TRX states that a soil boring was advanced inside Unit Building 2, this is contrary to RTC 13.e. In addition, it is not clear how this one boring represents the overall concern regarding contamination beneath the Unit Buildings. Please clarify.
 - b. Section 2.1.2, page 9 and Section 4.0, page 15, TRX should note that NDEP has responded to the June 9, 2010 Environmental Covenants Deliverable. This Environmental Covenants Deliverable was to be revised and re-submitted to the NDEP by August 6, 2010, which to date has not been submitted to NDEP. This Section should be revised with the current status of the Environmental Covenants Deliverable in any future errata.
- 5. Response-to-comments (RTC), NDEP provides the following comments:
 - a. RTC 4.c, to date, TRX has provided no justification for leaving sample location RSAQ4 in place. TRX states that this will be evaluated in the leaching evaluation; however, NDEP is uncertain that this is productive and is not consistent with NDEP's approval of this Deliverable, which included excavation at this location. RSAQ4 exceeds the NDEP BCL for human health and exceeds the NDEP leaching based BCL by three orders of magnitude. Additionally, there are schedule concerns. TRX may submit additional data, evaluations, and/or discussion for NDEP's consideration but until such time as NDEP approves differently, RSAQ4 should be scheduled for excavation at this time.
 - b. RTC 13.e, it is not clear how the sampling within Unit Building 3 addresses the original concern regarding Unit Buildings 1 and 2, please clarify. See also, comments below.
- 6. Section 3.4, page 13 and Table 1, as NDEP has stated previously, it is not clear how the health risk assessment can be approved if TRX does not backfill the excavations. Based upon Table 1, there are excavations from 0.33 10' that are proposed to <u>not</u> be backfilled. Specifically, RZ-B-06 to a depth of 10' bgs. In addition, this is contrary to the text which states that excavations of 10' or greater will be backfilled. NDEP requests that all excavations greater than 3 fbgs be backfilled unless TRX can provide a technical memorandum which explains on a polygon-by-polygon basis how the health risk assessment exposure point concentrations (EPC) will be calculated. This technical memorandum should present the data for each polygon that demonstrates that sufficient data is available and discuss the protocol for EPC calculation.

- 7. Table 1, NDEP provides the following comments:
 - a. In the Excavation Boundary Modifications/Proposed Pre-Confirmation Sample column, TRX should revise "Preconfirmation samples" to "Pending pre-confirmation samples". This comment should be addressed in all future Excavation Plan submittals.

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- b. RZ-B-06, TRX notes that the final depth will be determined by pre-confirmation sampling. However, no additional samples are being shown for sampling location SSAQ4-03. NDEP provides the following comments:
 - i. TRX should indicate any additional sample depths and either list the results or that the results are pending on Figure 1 and Appendix A Table RZ-B-06. If no additional samples have been collected at this sampling point, then TRX should remove the notation that the depth may be modified.
 - ii. As requested in NDEP's previous response letter for RZ-B, TRX has listed a final depth of 10 fbgs. Table 1 indicates that no backfill is planned for this area even though excavation to 10 fbgs is currently planned. TRX should plan to backfill this area if the excavation is going to be greater than 3 fbgs.
 - iii. TRX should additionally revise Figure 1 and Appendix Table RZ-B-06 to address these comments.
- 8. Figure 1, NDEP provides the following comments:
 - a. All sampling points that have pending data should be marked consistently. The purple markers should be changed to yellow (pending), orange (exceedance), or green (no exceedance) as appropriate. This comment should be applied to all future Excavation Plan submittals.
 - b. RSAQ4, this marker should be orange indicating that there is an exceedance at this sampling location. Additionally, until otherwise approved by NDEP, a remediation polygon should be demarked due to the exceedance at this sampling point. Please see comments above for further direction.

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