



Susan Crowley
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April 22, 2010

Ms. Shannon Harbour
Bureau of Corrective Actions
Nevada Division of Environmental Protection
2030 E. Flamingo Road, # 230
Las Vegas, Nevada 89119-0818

**Subject: Tronox Response to Nevada Division of Environmental Protection (NDEP) April 12, 2010
Comments Regarding: *TRX Letter RE: Tronox Henderson Site Remediation, Modification of the dioxin/furan screening analysis for pre-confirmation sampling from Method 4025 to Method 8290M, dated April 9, 2010.*
Tronox LLC (TRX), Henderson, Nevada: NDEP Facility ID #H-000539**

Dear Ms. Harbour,

Please find attached TRX's Errata for page 6 and 9 of the Final Revised Pre-Confirmation Sampling Work Plan, dated March 25, 2010, showing the highlighted amendments of modified method 8290 for dioxin screening. The hole-punched pages are intended to take the place of those in the Final Revised Pre-Confirmation Sampling work plan, dated March 25, 2010.

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and, to the best of my knowledge, comply with all applicable federal, state and local statutes, regulations and ordinances.

Please contact me with any questions at susan.crowley@tronox.com or at (702) 592-7727. Thank you.

Sincerely,

Susan Crowley
CEM 1428, exp 3-8-11

Tronox. Adding value beyond the product.

CC: Joe McGinley, McGinley and Associates
Jim Najima, NDEP
Paul Black, Neptune
Paul Hackenberry, Hackenberry Associates
Teri Copeland
Kurt Fehling, The Fehling Group
Dave Gratson, Neptune
Joanne Otani-Fehling, Neptune
Matt Paque, Tronox
Roy Widmann, Tronox
Keith Bailey, Environmental Answers
Deni Chambers, Northgate

At locations where perchlorate is found above the BCL at 10 feet bgs, samples will be collected and analyzed for perchlorate at 2 foot intervals in the upper 10 feet (4, 6, and 8 feet bgs⁷) to establish a profile for potential perchlorate flushing.

At locations where dioxin and/or HCB are scheduled for analysis, a subset of these samples will be analyzed using a screening method (EPA 8290m for dioxin and EPA 8081m for HCB). If the sample results from the screening are lower than the BCL or other criteria, the sample will be analyzed by the full suite confirmation methods (EPA 8290 for dioxin confirmation and EPA 8270 for HCB confirmation). Additional deeper confirmation analysis for dioxin or HCB may be necessary if the confirmation result does not pass the BCL or other criteria.

At locations where metals, OCPs, perchlorate, or SVOCs other than HCB are scheduled for collection and analysis, the samples will be submitted to a fixed laboratory and a subset of the samples will be analyzed on an iterative basis to establish cutlines. At least one confirmation sample will be analyzed for each of the constituents scheduled for sampling at a particular location to establish an acceptable cutline.

Analytical data from samples collected at a depth of 10 feet bgs during the previous source identification programs are included in Tables 1 through 5. At select locations, previous analytical results indicate that soil at 2 and 10 feet bgs contains constituents that exceed the risk criteria. This plan includes deeper sampling at a few locations to provide additional information for final grade design.

Horizontal Refinement and Vertical Delineation Sampling at New Locations

Sampling at the new step-out locations (except for asbestos) will start at 1 foot bgs. Samples will be collected at 1-foot depths to a depth of 10 feet bgs. A subset of these 10 samples will be analyzed as necessary to establish an acceptable cutline as described in the previous section.

At step-out locations that are adjacent to an existing boring which has perchlorate above the BCL at 10 feet bgs, samples will be collected at 2 foot intervals in the upper 10 feet (2, 4, 6, 8, and 10 feet bgs). All 2-foot interval samples will be analyzed for perchlorate to establish a profile for potential perchlorate flushing.

⁷ Samples already exist at 2 and 10 feet bgs at existing locations.



- magnesium (6 borings),
- manganese (16 borings),
- Perchlorate (25 borings); and
- OCPs (7 borings).

The chemical constituents to be analyzed at each location are based on the result of the Phase A and B Investigation (see Tables 1 through 5 for specific analyses to be conducted at each boring location).

There are three fundamental analysis programs:

- 1) The asbestos analytical program follows the procedures outlined in SOP-12. This plan requires that a sample collected for asbestos analysis be submitted to the analyzing laboratory for determination of the short and long fiber chrysotile and amphibole content of the sample. The *Phase B Quality Assurance Project Plan (QAPP)*, (AECOM, 2009) and (AECOM/Northgate, 2009), will be used as the applicable quality assurance/quality control (QA/QC) guidance for field and laboratory QA/QC samples and for the reporting of asbestos analytical data. All asbestos samples will be submitted for analysis to the laboratory. At the new locations where samples from two depths are being collected (0-2 inches and 4-6 inches), analysis of the deeper samples will be put on hold pending results of the analysis of the shallow sample. If the risk criterion is exceeded in the shallow sample, the deeper sample will be analyzed and the results reported.
- 2) The dioxin and HCB analysis program incorporates a screening methodology to find the location of a potential depth that passes the risk criteria level for dioxin and HCB. Dioxin screening will be performed using **modified method 8290** and HCB screening using a modified method 8081. Once a screened value falls below the risk criteria, the sample will be analyzed by a fixed laboratory (capable of providing EQuIS™ deliverables) as the compliance sample for full analyses using the applicable laboratory analytical method (8290 for dioxin and 8270C for SVOCs). Results for the full suite of each analytical method will be reported. The screening data will only be used to evaluate the depth of a potential passing sample.
- 3) OCPs, SVOCs other than HCB, perchlorate and metals will not be screened. OCPs samples will be analyzed using method 8081A, SVOCs will be analyzed using method 8270C, perchlorate will be analyzed using method 314.0, and individual metals, as necessary for each location (refer to Tables 1 through 5 for metal to be analyzed at each location), will be analyzed by methods 6010B/6020. Results for the full suite of OCPs, the full suite of SVOCs, perchlorate and the individual metals will be reported with EQuIS™ deliverables.

