

Meeting Minutes

Project: Tronox (TRX)
Location: Tronox Henderson Facility (WebEx Meeting)
Time and Date: 9:00 AM, Thursday, February 14, 2008
In Attendance: NDEP – Brian Rakvica, Shannon Harbour
Neptune – Paul Black, Dave Gratson, Paul Duffy (for NDEP)
Hackenberry Assoc. – Paul Hackenberry (for NDEP)
Teri Copeland (for NDEP)
Tronox – Susan Crowley, Rick Stater
Environmental Answers – Keith Bailey (for TRX)
ENSR – Brian Ho, Carmen Schnell (for TRX)

CC: Jim Najima

1. The meeting was held to discuss the plan forward to review LOU information packages and the Phase B SAP. TRX is looking for NDEP to provide comments on the format and basic content of the LOU packages.
2. TRX stated that the complete set of LOU packages will probably be incorporated into the CSM. They can then be used to help make decisions about sampling location and COPC analysis.
3. TRX submitted five LOU packages (LOUs 1, 4, 20, 43, and 49) for review during the meeting. The five LOUs were chosen to represent the different “types” of LOU scenarios found on the TRX facility.
 - a. TRX added site-wide random sampling on a 4-acre grid to be consistent with the approved sales Parcel SAPs.
 - b. TRX indicated that LOUs with associated piping could be in multiple LOU packages depending on the location of the piping.
 - c. TRX indicated that the current Phase B SAP proposes approximately 300 borings (random and judgmental). Borings will be eliminated as TRX compares the random and judgmental boring locations for duplication of effort.
 - d. NDEP stated that the soil gas borings could be co-located with the Phase B borings to try to limit duplication of effort. TRX stated that Geoprobe technology will be used for the collection of the soil gas samples. TRX stated that sonic drilling technology is seldom used for the collection of soil gas sampled because the sonic technique generates heat which could drive off VOCs, though a sonic rig can push a split spoon ahead of the sonic tube to collect samples unheated by the rig. Connecting to a split spoon for soil gas sampling is difficult.
 - e. TRX stated that only groundwater monitoring wells that are proposed to be sampled in the Phase B SAP are included in the LOU package figures. NDEP suggested that TRX should add all available groundwater monitoring wells to the maps but that the wells not proposed for sampling could be “ghosted”.
 - f. TRX stated that there is repetition between the different LOU packages since some wells could be applicable to several LOUs by characterizing adjacent conditions.
 - g. TRX stated that they will add language addressing adjacent source areas to the LOU packages.

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- h. TRX stated that they do not plan to show other overlapping LOU locations to an individual LOU package map because of readability issues.
 - i. NDEP commented that the asbestos data needed to be reported in useable units. The Phase A asbestos results are currently reported in structures per gram PM10 (s/gPM10). TRX will contact ERM for clarification.
 - j. LOU 1, the black lines on the map indicated the approximate limits of the former Trade Effluent Ponds.
 - k. LOU 1, the seepage area to the north of the former Trade Effluent Ponds has been sampled during the Parcel investigations. TRX stated that they do not plan to further characterize this area.
 - l. LOU 1, TRX stated that the end of the 30-year compliance monitoring for the Hazardous Waste Landfill will end in 2013.
 - m. LOU 1, TRX stated that the disturbed, depression between the former Trade Effluent Ponds and the Hazardous Waste Landfill will be sampled using test pits due to the “soft” nature of the soil.
 - n. LOU 1, TRX will clarify the text in the LOU 1 map to indicate that the “surface conveyance” was not over-ground but within some kind of open-top channel. **ACTION ITEM.**
 - o. LOU 1, NDEP indicated that runoff from the road on the Olin facility could have impacted LOU1 with pesticides.
 - p. LOU 4, NDEP noted that no random borings are located in this LOU.
 - q. LOU 4, TRX stated that they cannot locate much information on the location of the piping between to two areas that comprise this LOU.
 - r. LOU 43 & LOU 61 (Unit Buildings 4 and 5), TRX indicated that Unit 4 has been decommissioned so two borings will be advanced through the basement of this building by constructing ramps for drill rig access. However, Unit 5 is still operational (currently half of the building but TRX indicated that they are considering expanding their manganese dioxide operation into the other half). NDEP indicated that WDC Drilling has a mini sonic drill rig for limited access sites that may help with the access issues for Unit 4.
 - s. LOU 43 & LOU 61, TRX will use data collected from under Unit 4 to extrapolate the approximate conditions under Unit 5. Unit 5 will be assessed after end of service as necessary. (TRX will add text to this LOU package outlining this process.)
 - t. LOU 49, NDEP indicated that the LOUs in the Manganese Leach Plant Area could be combined for reduction of repetition and ease of review.
 - u. List of Tables, TRX stated that the tables that are bolded in the List of Tables in each LOU package indicate constituent classes that were identified as potentially present based on the LOU review.
 - v. Tables, TRX indicated that all SRC data from the closest Phase A borings are included in each LOU package for transparency.
 - w. Figures, TRX stated that they will add the Parcel investigation sample locations to the LOU packages.
 - x. Figures, TRX will add the grid to all LOU area maps included in each LOU data package. **ACTION ITEM.**
4. TRX stated that they are looking to sample for only certain analytical suites based on the LOU packages.

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5. TRX will submit a map of the facility with the 4-acre grid superimposed with the random samples. This will be a large map for clarity. **ACTION ITEM.**
6. TRX stated that their goal was to submit a site-wide risk assessment by the end of 2009.
7. TRX stated that they would like to begin implementation of field work by April 2008.
8. NDEP stated that advance notice of several days to a week prior to the submittal of documents greatly assists in scheduling review and comments.
9. NDEP indicated that TRX could group the LOUs into the Evaluation Areas for the submittal of several SAPs instead of one site-wide Phase B SAP. This would reduce the response time of the NDEP so that TRX could be more likely to meet their anticipated field work commencement date. This would also reduce the chance that all work would be postponed because of one or two areas. TRX suggested submitting the first group in draft for NDEP review and comment on LOU grouping (EAs, thirds of facility, etc.) in the SAP as well as content.
10. TRX indicated that a separate soil gas SAP would be submitted to the NDEP.
11. TRX stated that the source of soil gas contamination is likely the groundwater and that NDEP comments requesting increased numbers of soil gas measurements on the western side of the facility have been addressed.
12. TRX stated that the response to the NDEP's Radionuclide letter dated December 7, 2007 was submitted to the NDEP. NDEP has not yet completed its review of this document. TRX indicated that they will not use STL Richland for radionuclide analysis in the future unless problems at the lab are corrected.
13. TRX stated that the Technical Memorandum for Parcels A and B was resubmitted to the NDEP. NDEP has not yet completed its review of this document.