

Meeting Minutes

Project: Tronox (TRX)
Location: NDEP – Las Vegas
Time and Date: 10:00 AM, January 16, 2007
Meeting Number: ---
In Attendance: NDEP-BCA – Brian Rakvica, Shannon Harbour, Todd Croft
Tronox – Keith Bailey, Susan Crowley
Neptune – Paul Black (for NDEP)
Teri Copeland (for NDEP)

CC: Jim Najima

1. The meeting was held to discuss the development of the Phase A report and Phase B Work Plan (WP).
2. TRX noted that data from the Phase A scope of work (SOW) is still being received. STL is approximately 4 weeks behind schedule. ENSR will be performing the data validation.
3. TRX noted a desire to determine the appropriate criteria for selecting the analytes for which site characterization is complete. It was proposed that hypothetical situations would be reviewed.
 - a. Are radionuclide concentrations consistent with background?
 - b. Are VOC concentrations in excess of applicable PRGs or leaching criteria?
 - c. It was noted that the Phase A data should be tied to the CSM and determine what is logically needed to determine the nature and extent of contamination. Dividing the Site into logical sub-areas will allow TRX to expedite this process.
4. It was clarified that future land use will remain commercial/industrial.
5. NDEP discussed the existence of the Uniform Environmental Covenants Act (UECA) in Nevada and how this process could be used to restrict the deed of the property.
6. TRX agreed that remediation may be an option for areas of the Site to achieve compliance. NDEP noted that it may be useful to complete interim remedial actions before determining nature and extent of all contaminants. Some areas of the Site may be sufficiently impacted that additional characterization is not prudent prior to completion of remedial actions.
7. Discussion of dioxin/furans.
 - a. It was noted that if Site concentrations were below 50 ppt TEQs that dioxin/furans would not be a concern.
 - b. It was noted that if dioxin/furan concentrations are above 50 ppt but below 1,000 ppt TEQs that TRX should discuss this issue with the NDEP prior to proceeding.
8. Logical outputs of the Phase A SOW are as follows:
 - a. Preliminary development of sub-areas of the Site.

- b. Nature and extent for some site-related chemicals may have been achieved. The NDEP noted that this may not represent a cost savings to TRX unless an entire suite of chemicals (e.g.: VOCs or radionuclides) can be eliminated from select sub-areas. NDEP noted that these issues should be discussed with the NDEP prior to development and submittal of a report.
 - c. Development of the Phase B SOW. It was discussed that this could be included as part of the Phase A report and that this would save TRX some time. This document should be brief and should provide the following:
 - i. Figure, showing locations of borings/wells.
 - ii. Table, showing depths of borings/wells and analytical suites.
 - iii. The text of the Phase A report should provide the justification for the Phase B SOW.
 - iv. Phase B WP should be designed to be dynamic to minimize submittals to the NDEP.
 - d. TRX hopes that the radionuclide suite can be limited to gamma spectroscopy after this round of sampling. NDEP will review once the data is received.
9. Sub-areas discussion.
- a. It was noted that risk assessments should be performed on a sub-area specific basis.
 - b. It was noted that sub-areas should be determined based on the CSM as well as chemical analyses.
10. Risk assessment discussion.
- a. NDEP noted that TRX may perform a number of internal iterations of the risk assessment to determine what the drivers are.
 - b. NDEP suggests that TRX not submit the risk assessment until it is established that the risk assessment will pass.
 - c. NDEP is amenable to meetings where preliminary risk assessments can be discussed and interim actions can be proposed.
 - d. NDEP noted that the risk assessments should not be submitted until these interim actions are completed and confirmatory samples have been collected.
11. NDEP noted that it would be helpful to meet once all the data is received and some basic presentation materials have been developed. For example, basic summary statistics, some tables and maps. NDEP can help TRX review some of the issues discussed above.
12. Discussed upgradient and background data/comparisons.
- a. It was noted that the TRX upgradient data showed conformance with the BRC/TIMET background data set via the box and whisker plots but not via the quantitative statistical tests.
 - b. NDEP noted that this may be related to several factors:
 - i. Sample population for the TRX upgradient set is small and is being compared to a set that is large.
 - ii. "p" value being used is incorrect for the situation.

- iii. Perhaps the data should have only been compared to the McCullough portion of the background data set.
 - iv. NDEP is reviewing this report currently and hopes to have a better idea in the next two weeks.
 - c. NDEP noted that it is likely that much of the upgradient data is usable once it is demonstrated.
- 13. Discussed tentative schedule.
 - a. Phase A report and Phase B WP – submit/approved by mid-2007.
 - b. Phase B WP implementation – end-2007.
 - c. Risk assessment – following.
- 14. Discussed NPDES permitting and related topics.
 - a. TRX is performing some calculations to verify the validity of the mixing zone scenario under future conditions.
 - b. NDEP presented information known regarding the termination of the use of the City of Henderson (COH) RIBs and the SCOP project. It was noted that only 1 MGD of effluent is expected to be injected into the Birding Preserve each day. The remainder of the effluent will be transmitted to the Wash or SCOP pipe.
 - c. It was noted that the SCOP project is expected to leave ~30 MGD of effluent in the Las Vegas Wash in addition to a projected 20 MGD base flow.
 - d. NDEP noted that these projects will reduce the availability of dilution water in the Las Vegas Wash as well as in the Seep Area.
 - e. NDEP noted that it is possible and likely that concentrations of a number of contaminants (TDS and organics) may increase in the Seep Area. NDEP strongly encourages TRX to research this issue to prevent any possibility of an upset condition in the future.
 - f. Discussed TRX GAC beds. It was noted that samples are not collected pre- and post-GAC. NDEP noted that it may be beneficial to determine if the GAC beds are removing organics or if the organics are simply not present in the influent currently. NDEP believes that it is unlikely that the GAC beds are effective since they have never been replaced.