

Meeting Minutes

Project: Tronox (Trx)
Location: telephone
Time and Date: 1:30 PM, Tuesday, May 16, 2006
Meeting Number: ---
In Attendance: NDEP-BCA – Brian Rakvica, Shannon Harbour
Tronox – Keith Bailey, Rick Stater, Susan Crowley (via phone)
ENSR – Dave Gerry, Sally Bilodeau, Robert Kennedy (via phone),
Ishrat Chaudhury (via phone)
Neptune (for NDEP) – Paul Black, Dave Gratson (both via phone)
Teri Copeland (for NDEP) (via phone)
GEI – Barry Giroux, K. Saravanan, Greg Garvey (all via phone)
Malcolm Pirnie – Bruce Nelson (via phone)
AIG – Joe Guerriero (via phone)

CC: Jim Najima, Todd Croft

1. Meeting was held to discuss the Phase A Work Plan and the ECA Scope of Work.
2. NDEP provided draft comments for discussion purposes in response to Trx's May 1, 2006 email. NDEP to email this response document to Tronox. Trx noted that these comments would be reviewed in detail after the meeting and a response would be provided to the NDEP.
3. Discussed the conceptual ECA Plan.
 - a. Trx reviewed the history of how this process has evolved.
 - b. Discussed 0.1 multiplier for cancer PRGs. NDEP noted that this is covered in depth in the comments that have been provided.
 - c. Discussed evaluation of Step 1 data.
 - i. NDEP noted that it is not possible to pre-suppose that any number of samples will be sufficient. Trx will need to demonstrate this after the data are collected (via data adequacy evaluation). Additionally, Trx may need to iterate this evaluation and investigation between Steps 1 and 2.
 - ii. Trx clarified that it is their intention to collect a groundwater sample at an existing, co-located well that is near the proposed soil boring location.
4. Discussed the Phase A Work Plan.
 - a. Trx noted that currently they are estimating costs at \$6,000 per sample. Negotiations are on-going with the laboratory to reduce costs.
 - b. Trx noted that samples will be collected at the surface and every 10' to the water table. Specifically 0', 10', 20', 30' and possibly 40' or 50' bgs.
 - c. NDEP noted that it is important for Trx to tie the sampling and analysis to a well-defined CSM. The NDEP expects that the work plan will provide justification for selectively reducing the sampling and analysis campaign (transparency and traceability) and that DQOs and DQA should be

performed ultimately to justify that the number of samples collected is sufficient. NDEP emphasized that an ultimate justification of data adequacy can only be made following analysis of the results for the proposed sampling.

- d. Discussed specific analytes and proposals for cost reduction as follows:
 - i. Radionuclides. Trx proposes to analyze for Ra-226 and Ra-228 and back quantiate the remaining radionuclides. Trx will also analyze 10% of all samples in Phase A for the full suite of analytes in a fixed laboratory. These fixed laboratory samples would then be used to attempt to confirm secular equilibrium. NDEP noted that this sounded reasonable. NDEP noted that Trx should review the background data set (by TIMET and BMI) for this same issue.
 - ii. Dioxins/furans. Trx noted that immunoassays cannot achieve PRG or 0.1*PRG detection limits. NDEP suggested that the ATSDR screening level (50 ppt TCDD-TEQ) is a reasonable risk-based concentration. Trx noted that the immunoassays can regularly achieve a 50 ppt detection limit. Trx proposed to also confirm these with approximately 10% in a fixed laboratory analysis. NDEP concurred.
 - iii. Ethylene glycol. Trx noted that this would only occur in the auto repair areas and the SNAP auto parts center. NDEP agreed that it is reasonable to tie the analysis to the CSM. It was also noted that this compound has a very low toxicity.
 - iv. SVOCs. Trx noted that for their SRC list, the dichlorobenzene isomers could be covered by the VOC analysis. The remaining SVOCs are mainly PAHs and there is the option to perform only the Base-Neutral extraction with the SVOC GC/MS method or to analyze these via the HPLC (e.g. method 8310) method. NDEP requested that Trx review the corresponding detection limits. Trx is still reviewing this issue internally and may also consider PAH analysis.
 - v. Methyl mercury. Noted that total mercury could be analyzed and that this could be reviewed in light of the methyl mercury PRG for soil (i.e., as a screening characterization, assume methyl mercury concentration is equal to total mercury concentration). For groundwater, dissolved oxygen would be reviewed to determine if methyl mercury could be present. Trx also noted that if groundwater contains high levels of dissolved oxygen, it is believed that the soils above would not have methyl mercury unless it is an area of a fuel spill etc. NDEP concurred.
 - vi. Silicon. Trx to review where this source comes from and if it is likely to be a concern. NDEP to provide a copy of an internal paper on silicon.
 - vii. Pesticides. NDEP noted that the closed Montrose Ponds are cross or up gradient of the site and recent data suggest contamination east of these ponds. NDEP noted that other sources include: the

Beta Ditch, Hardesty/AMECCO Chemical, and adjacent operations.

- viii. TPH. Trx to review applicability of PID or FID screening. NDEP cautioned that it will be difficult to apply this to TPH only due to the non-specific nature of these instruments.
 - ix. Wet Chemistry. Still in review by Trx.
 - e. NDEP noted that broad suite analyses should be completed for each source area. NDEP clarified that in some cases LOU areas may be combined into a single source area, if warranted.
 - f. Trx noted that they are considering sampling of the ore material and the tailings for metals and radionuclides (Ra-226/228 only with back quantitation).
5. Trx noted that the tailings removal project is still being discussed in house. A physical survey of the materials will likely need to occur first.
 6. Discussed the upgradient investigation. Report is likely delayed due to analytical labs. Draft outline provided to the NDEP. NDEP to review.
 7. Discussed chromium performance report.
 8. Next Meeting: June 15, 2006 at 1:30 PM at Trx, Henderson