

Department of Energy & Environmental Protection Remediation Division Remediation Roundtable Q&A Newsletter Vol. 24, January 9, 2017

Presented below are the Department's responses to verbal comments made at the Remediation Roundtable held on October 25, 2016. The comments and responses may have been edited for clarification purposes.

# SELECTED VERBAL COMMENTS FROM THE OCTOBER 25, 2016 ROUNDTABLE:

### **Roundtable Tips: Verifications**

- **Comment:** Many Phase II Reports are dated with just the month and year. What date is appropriate to put on the verification form as the completion of the Phase II Report?
- **Response:** The date entered on the verification form is up to the person rendering the verification. The LEP must specify whatever date is most appropriate to represent the date the Phase II investigation was complete and all releases at the establishment pertaining to the verification had been identified. This may be the date of the Phase II report, the date on the cover letter submitted to the client or DEEP, the date the last environmental samples were taken or analyzed, or another date depending on particular circumstances. It is important to specify a day, particularly because the responsibility relates to that date for purposes of documenting that all releases as of that date had been identified. The decision is the LEP's, but the LEP must be able to justify whatever date is indicated as the date the Phase II was completed.
- **Comment:** What date do we choose for Verifications when there is a combined Phase II/III report where that line is blurred?
- **Response:** If it incorporated a complete Phase II, you may use the date of the combined Phase II/III report, or you may use an option presented in the above response.

# Roundtable Tips: Phase I ESA Expectations:

**Comment:** Since the Site Characterization Guidance Document (SCGD) is guidance and not regulation, how can DEEP require more than the ASTM requirements for a Phase I?

- **Response:** Some state laws, such as the Transfer Act, and Voluntary 22a-133x and RCRA Corrective Action regulations (22a-449(c)-105(h)) require that an investigation be performed "in accordance with prevailing standards and guidelines". The SCGD is a prevailing standard or guideline. An ASTM Phase I report can be included; however, it would need to be supplemented with the additional information as outlined in the SCGD, such as defining de minimis releases that are potential areas of concern, not just Recognized Environmental Concerns (RECs).
- **Comment:** From a practical point of view, say we have an ASTM Phase I, do we have to separately submit an additional AOC-based approach to be in conformance?
- **Response:** Yes. At a minimum, you would need to follow up on de minimis conditions, which are overlooked by the ASTM methodology.
- **Comment:** Can you provide advice when an ATSM Phase I was prepared for out-of-state lawyers, who all want ASTM? For work that was done 4-6 years ago and the Phase II and RAP were based on the ASTM Phase I, would you have to go back and supplement the Phase I with all AOCs prior to the verification?
- **Response:** Yes, you would have to revisit and address the AOCs that would be expected to be evaluated in accordance with the SCGD, which became effective September 1, 2007. Otherwise the verification would be considered insufficient.

## Roundtable Tips: 8-Year Verification Reminder:

- **Comment:** If groundwater is not clean in the 8 years required following a Transfer Act filing, what is DEEP's position on the need for extensions?
- **Response:** Per §22a-134a(g)(1)(C), the Certifying Party may submit an Interim Verification at the 8 year milestone, in lieu of a Final Verification. The Interim Verification, defined in §22a-134(28), indicates that the establishment is in compliance with the RSRs except for on-going groundwater remediation. (On-going groundwater remediation does not include groundwater compliance monitoring.) Therefore, soils would need to be in compliance with the RSRs.

#### RSR and EUR Wave 2 Regulations Update

- **Comment:** When you pass the proposed Regulation package on to the Commissioner, will you make it available to the public?
- **Response:** No, we will be working with the Commissioner to finalize the draft. We have shared the conceptual draft language in April 2016 and a revised draft in August 2016 that incorporated public feedback, so the public is already familiar with the major concepts. The next public version will be released at the beginning of the formal regulation adoption process, which starts with a public hearing and comment period.

## Emerging Contaminants, 1,4-Dioxane:

- **Comment:** Why are TCE sites being required to be evaluated for the presence of 1,4-Dioxane?
- **Response:** Based on the information we presently have available, including a major study by the Air Force, it is prudent to include TCE sites [in addition to TCA sites], as 1,4-dioxane has been found at TCE sites.
- **Comment:** Ethoxylation processes to reduce alkalinity of common detergents, creates 1,4dioxane, so it is in personal care products. Has the Department found it to be in residential septic systems also?
- **Response:** To date, the Department has not identified 1,4-dioxane groundwater pollution originating from residential septic systems at Remediation sites in Connecticut. DEEP is aware of a case study on Cape Cod where low-level (around 1  $\mu$ g/L) 1,4-dioxane groundwater contamination is suspected to be partially attributable to residential septic discharges. Note that a nearby landfill is also a documented source of 1,4-dioxane groundwater contamination at this site, and the septic discharges could represent the circulation of contaminated water originating from potable wells.

The two Remediation Potable Water sites where 1,4-dioxane has been detected in residential wells also have chlorinated solvents as co-contaminants. Nearby potable wells that are also monitored at these sites have had no detections of 1,4-dioxane alone, leading the Department to conclude that 1,4-dioxane pollution is not originating from residential septic systems at these sites. While it is certainly possible that detergents and other personal care products containing 1,4-dioxane may be discharged to residential septic systems, the Department expects environmental professionals to consider all possible sources of 1,4dioxane pollution in developing a conceptual site model and not dismiss a detection of 1,4-dioxane as being attributable to residential septic discharges without also considering other potential sources.