

Section 1.1, Title200 Workplan Approval & Costs (p. 1). Revised the general PRS contact information (website address, email, phone).

Table 2-1, Notification of Unexpected Site Conditions (p. 4). Revised the NDEE after-hours contact number.

Figure 2-1, Generalized NDEE RBCA Process Flow Chart (p. 6). Emphasized that cost estimates are required for T-200 reimbursement consideration, and clarified when public notice is required for site closure.

Table 4-1, Chemicals of Concern (p.14). Revised 'Other potential analytes' to include ethanol and breakdown products, and added soil gas samples to the list of minimum quantification levels.

Section 4.3.1 – Maps (p. 15). Emphasized that NDEE requires drafted maps that show the location of current structures and features, not simply an annotated aerial photograph.

Table 4-2, Minimum Concentrations for Contaminant Plume Maps (p. 16). Added soil gas concentrations.

Section 4.4.3 – Water Well Survey (p. 18). Clarified the scope of a visual survey of properties that must be made to look for unregistered wells: within 200 feet of the source for Tier 1, or 200 feet of the maximum extent of contamination for Tier 2. *(OLD CHANGE, previously announced by RBCA Update)*

Section 4.5.1.1 – General Monitoring Well Installation Requirements (p. 19). Added a paragraph for air knifing, potholing, etc. for utility avoidance, with PM approval required. Removed reference to needing a variance for using bentonite chips, since that is now included in T-178.

Section 4.5.1.3 – Direct Push (p. 19). Use of direct push technologies is allowed for Tier 1 and Tier 2, provided that all required data can be collected and any permanent monitoring wells are constructed in compliance with Title 178.

Section 4.5.3.1 – Purging of Monitoring Wells in Sands or Gravels (p. 20). Changed the minimum well volumes from 5 to 3. *(OLD CHANGE, previously announced by RBCA Update)*

Section 4.5.3.2 – Purging of Monitoring Wells in Fine Grained Materials (p. 20). Determined by purging results rather than sediment type. *(OLD CHANGE, previously announced by RBCA Update)*

Section 4.6.1 – Discovery of Free Product (p. 21). Added emphasis to the possibility that the Tier 1 or Tier 2 investigation may be amended to include free product delineation.

Figure 4-1, Free Product Response Process (p. 22). Added FP delineation to the final box.

Section 4.7.2.1, Item #1 – Sampling of Surface Soils using cores (p. 23). Added "or other similar methods approved by the Department." *(OLD CHANGE, previously announced by RBCA Update)*

Section 4.7.2.2 – Continuous Sampling of Soils (p. 23). Edited to clarify the Department's intent that field screening samples should be collected from all borings at a maximum interval of 5 feet, and that if field screening above 200 PID/FID units is found in the first 25' of a non-source area boring, the remainder of the boring is to be continuously sampled and samples for laboratory analysis must be collected as for a known source area. *(OLD CHANGE, previously announced by RBCA Update)*

Section 4.7.3 – Ground Water Sample Collection Methods (p.24). Emphasis added to highlight prohibited sample collection methods due to potential loss of volatile COCs.

Section 4.9 – Quality Assurance / Quality Control Considerations (p. 28). Clarified that additional QA/QC samples are only required for ground water, not for soil and soil gas sampling.

Section 4.10.2.1 – Licensing and Registration (p. 30). Updated the process for when a Title 178 variance is desired (PM approval first, then T178 request).

Section 4.10.5.1 – Reports via E-mail (p. 32). Updated to provide the DEE electronic submittal process requirements.

Figure 5-2 Conditions for Discontinuing Borehole to Ground Water (p. 39). Labels in the explanation were changed from “Source Area #1 and #2” to “Example #1 and #2” to match the figure.

Table 6-1, Common Data Collection Techniques for Tier 2 (p. 41). Direct push technologies are allowable for free product delineation and ground water monitoring wells only if the wells can be constructed in compliance with T178.

Section 6.1.3 – Intrusion of Vapors to Structure from Contaminated Ground Water Pathway (p. 43). Changed to make soil vapor samples the preferred assessment method. The order of sections 6.1.3.1 and 6.1.3.2 was reversed and renumbered to list the preferred method first.

Section 6.1.4 – Intrusion of Vapors to Structure from Contaminated Subsurface Soils Pathway (p. 44). Changed to make soil vapor samples the preferred assessment method. The order of sections 6.1.4.1 and 6.1.4.2 was reversed and renumbered to list the preferred method first.

Section 6.2.3 – Chemical and Physical Parameters (p. 46). Small clarifications added throughout to emphasize that one representative sample per site (not per boring) from each sediment type is required for dry bulk density, volumetric water content, and fractional organic carbon. *(OLD CHANGE, previously announced by RBCA Update)*

Section 6.2.3.2a – Volumetric Water Content Number of Samples (p. 47). A representative sample is required from each sediment type in the vadose zone only, not the capillary zone also. *(OLD CHANGE, previously announced by RBCA Update)*

Section 6.3.2, Item #3 – Soil Gas Sample Collection Methods (p. 48). Made field analysis using lab-quality GC the only listed method. Options for remote lab analysis using Summa canisters and Tedlar bags were replaced with a statement that any other method requires PM approval.

Section 8.1.2 – Soil Leaching to Ground Water Exposure Pathway (p. 63). An error was corrected to define “subsurface soils” as being greater than or equal to 3 feet below ground level, instead of less than or equal to. *(OLD CHANGE, previously announced by RBCA Update)*

Tables 8-11 and 8-12, Surface Water Impact Tier 1 lookups (pp. 75-76). Revised RBSLs based on updated surface water exposure standards.

Appendices B & C, Tier 1 and Tier 2 Report Forms (pp. B-91 to C-127). Updated to include images of the current Tier 1 and Tier 2 reporting forms.

Other minor spelling, punctuation, and grammatical changes were made throughout the document as necessary.