

Final

BRAC Cleanup Team

Meeting Minutes

December 2, 2003

| BRAC Cleanup Team | Organization | Phone/email |
|--------------------------|--|--------------------|
| John DeBack | Defense Logistics Agency (DLA)/DDSP-D (Memphis) | 901.544.0622 |
| Turpin Ballard | Environmental Protection Agency, Region IV (EPA) | 404.562.8553 |
| James Morrison | Tennessee Department of Environment and Conservation, Division of Superfund (TDEC) | 901.368.7958 |
| Project Team | Organization | Phone/email |
| Mike Dobbs | DLA/Defense Distribution Center | 717.770.6950 |
| David Buxbaum | U.S. Army SREO | 404.524.5061 x287 |
| Bruce Railey | U.S. Army Corps of Engineers | 256.895.1463 |
| Stephen Offner | CH2M HILL | 770.604.9182 x302 |
| David Nelson | CH2M HILL | 770.604.9182 x394 |
| Casey Hudson | CH2M HILL | 407.423.0030 |
| Virgil Jansen | Jacobs Engineering | 865.220.4933 |
| Angela McMath | MACTEC Engineering and Consulting | 770.590.4601 |
| Tushar Talele | MACTEC Engineering and Consulting | 770.421.3591 |
| Greg Wrenn | MACTEC Engineering and Consulting | 770.421.3472 |
| Phil Pauquette | MACTEC Engineering and Consulting | 770.421.3414 |
| Jim DeLano | MACTEC Engineering and Consulting | 205.733.7617 |
| Denise Cooper | C&A, Inc./Labat-Anderson, Inc. | 901.767.1249 |

BRAC Cleanup Plan (BCP) Update

Mr. John DeBack reported that the Rev. 1 was distributed and no further comments were received. Subsequent master schedule discussions identified an error with the Dunn Field portion of Figure 5-1 (Master Schedule). Ms. Denise Cooper will incorporate the correct Dunn Field Master Schedule into Rev. 2 and will distribute it in accordance with the statement of work.

RCRA Permit Status

Mr. Tushar Talele has initiated the permit renewal process and has discussed the permit renewal package with Mr. Clayton Bullington of TDEC. Mr. Bullington indicated there would be no fees assessment associated with the renewal package. Mr. Bullington also provided boilerplate language for the permit renewal process. Mr. David Buxbaum requested that he review the draft permit renewal application and said he would provide permit termination language from a similar permit renewal package.

Mr. Steve Offner asked if the ROD should include information regarding the permit renewal. Mr. Buxbaum felt the existing ROD language was sufficient.

Land Use Control Implementation Plan (LUCIP)/LUC Dispute Status

Mr. Buxbaum reported that the Army had received Version 7 Rev. 0 LUCIP and that he had coordinated the review and resolved comments. Army HQ conducted a 72-hour review with the Navy. Army HQ had approved and finalized Version 7 and had sent it to EPA. Mr. Buxbaum said he had discussed with Ms. Martha Brock of EPA the changes from Version 6 to 7, which included review and concurrence guidelines. He is hopeful that EPA will approve Version 7.

Master Schedule (Deliverable and Major Task Schedule for FY04/FY05)

Mr. Talele presented the deliverable matrix he has worked with Mr. Offner. Mr. DeBack requested that MACTEC update the matrix on a weekly basis in order to identify potential delays of primary deliverables and provide EPA timely notification. The team discussed timing of and process for internal and regulatory reviews.

The team discussed the matrix and made suggestions for improvements. Mr. Talele, with assistance from Mr. Offner, will populate the matrix with dates from the October 24, 2003 schedule and distribute it to the project team by December 12.

The team also discussed the Rev. 1 BCP Figure 5-1 (Master Schedule). The October 16 schedule had not been replaced with the October 24 schedule that reflected the EPA-requested extension of the Rev. 1 Dunn Field ROD. Ms. Cooper determined that the correct information was incorporated into the text of the Rev. 1 BCP, but the schedule had not been changed. Ms. Cooper will issue Rev. 2 with the proper schedule.

The team discussed the deliverables and field activities scheduled for December 03/January 04:

Groundwater sampling event (ZVI pilot test) – week of December 17, 2003

Rev. 0 Pre-design investigation technical memorandum – January 1, 2004

Bench scale column test results – January 5, 2004

Groundwater sampling event (ZVI pilot test) – February 04

Semi-annual groundwater monitoring report (2nd half 5th year) – January 10, 2004

Main Installation (MI)***Remedial Design (RD)***

CH2M HILL received comments from MACTEC and Mitretek, and preliminary comments from EPA, on the Rev. 0 Intermediate MI RD that resulted in the need to evaluate delivery alternatives. Mr. David Nelson distributed a technical memorandum (An Overview of Sodium

Lactate Delivery Alternatives – Memphis Depot, Main Installation). Mr. Casey Hudson presented the TM data and proposal regarding manual delivery of sodium lactate in the areas of highest concentration as the preferred delivery method. The team discussed the information and delivery proposal. The team agreed to finalize the design using the manual delivery method and to include flexibility to install additional injection/monitoring wells and to adjust the injection schedule and quantities. The BCT agreed to delineate the contaminant footprint to the 50 ppb contour per individual VOC (e.g. PCE, TCE), but that the active remediation area footprint will be the 100 ppb contour and anything outside will be allowed to naturally attenuate.

MACTEC will initiate the Rev. 0 MI RA Work Plan concurrent with review of the 90% MI RD to facilitate the process.

Ms. Angela McMath requested that the regulators review and provide comments as soon as possible on the proposed long-term monitoring well locations in the Rev. 0 Intermediate MI RD. She also indicated that contract actions were underway to begin installation of the long-term monitoring wells in early 2004.

Finding of Suitability to Transfer (FOST) 3

Mr. DeBack reported that Mr. Buddy Wagoner was working the real estate covenants. Mr. DeBack will coordinate a conference call between Ms. Cooper, Mr. Wagoner and himself to revise the FOST schedule.

PCP Dip Vat Soil Samples

Mr. Nelson presented the dip vat area sampling results and the team discussed the information. CH2M HILL will utilize the dioxin/furan background levels from the MI RI for comparison and will include the information in the TM, scheduled for distribution on December 12, 2003. Mr. Ballard suggested using a decision tree to determine need for further action.

Dunn Field

Hays Road Easement

Mr. DeBack met with the City and came to agreement regarding the easement. The Site 21 issue is closed. The City plans to begin the project by widening E. Person from the viaduct to Hays Road. Mr. DeBack suggested that MACTEC coordinate with the City regarding constructing access roads during construction of the ZVI and PRB.

Groundwater Recovery System

Mr. Jim Delano reported that MACTEC was prepared to assume responsibility for O&M of the recovery system on January 1, 2004. He and Mr. Virgil Jansen discussed several aspects of the current O&M process, such as repairing damaged pumps and transferring property. Mr. Jansen indicated that Mr. Smith would complete pump replacement and other repairs by the end of December 2003.

Disposal Pits Pre-Design Fieldwork

Mr. Jansen reported that Jacobs Engineering has received sample results and has completed data validation for most of the pits. He anticipates receiving the remaining data on December 2. Jacobs Engineering will provide the raw data and data validation to CH2M HILL on December 8, 2003. Mr. Jansen presented validated data for several parameters. He also indicated that the fieldwork located some, but not most, of the contents identified in historical documentation. In a

great many of the trenches, Jacobs Engineering encountered native soil. The TM is on schedule for distribution on January 1, 2004.

Decision Logic for Disposal Pit Cleanup Levels

Mr. Ballard indicated that he had discussed cleanup levels with Mr. Jim Morrison and had worked with CH2M HILL to prepare a decision tree process for development of soil remediation goals. Mr. Offner presented and the team discussed the decision tree, the summary of mobility parameters for potential chemicals in disposal pits and remediation goals for soil.

Off-Site Groundwater Migration

The BCT requested that TDEC initiate a site discovery via the PA/SI process to investigate a suspected groundwater contamination source upgradient of Dunn Field based on groundwater sampling results from off-site, upgradient monitoring wells at the corners of E. Person and Hays Roads. Mr. Morrison indicated that it would be about two years for TDEC to issue any findings. Mr. Offner said that fresh data was forthcoming, as Jacobs Engineering had just completed a round of sampling that included the off-site, upgradient wells. Mr. DeBack said that the monitoring wells suggested for the north end of Dunn Field would not be installed as the City has agreed to move the northern boundary for the recreation area.

Dunn Field Groundwater Treatability Study

Mr. Offner provided preliminary results from the bench scale study. The column analysis indicates reduction of the VOCs to below MCLs within about 10 hours, sometimes longer for degradation products. Mr. Offner still must analyze the results, but from first review, it appears to be working. He will distribute a progress report detailing the installation and preliminary results of the ZVI system. Mr. Offner will update the team on post-injection sampling results via bi-weekly updates.

Mr. Offner said that CH2M HILL did conduct pre-injection and post-injection slug tests to identify any permeability problems. He also indicated they were on schedule to distribute the Treatability Study TM.

Next Meeting

The next meeting is January 15, 2004, at CH2M HILL's offices in Atlanta, GA.

SIGNED 1/15/04
JOHN DEBACK DATE
Defense Logistics Agency/Defense Distribution Center (Memphis)
BRAC Environmental Coordinator
BRAC Cleanup Team Member

SIGNED 1/15/04
TURPIN BALLARD DATE
Environmental Protection Agency
Federal Facilities Branch
Remedial Project Manager
BRAC Cleanup Team Member

SIGNED 1/15/04
JAMES MORRISON DATE
Tennessee Department of Environment and Conservation
Memphis Field Office
Division of Superfund
BRAC Cleanup Team Member