

Final

BRAC Cleanup Team

Meeting Minutes

July 20, 2004

BRAC Cleanup Team	Organization	Phone/email
Michael Dobbs	Defense Logistics Agency (DLA)/Defense Distribution Center (DDC) J-3/J-4E	717.770.6950
Turpin Ballard	Environmental Protection Agency, Region IV (EPA)	404.562.8553
James Morrison	Tennessee Department of Environment and Conservation, Division of Superfund (TDEC)	615.532.0910
Project Team	Organization	Phone
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Jim DeLano	MACTEC Engineering	205.733.7617
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Steve Offner	CH2M Hill	770.604.9182 x302
Craig Sprinkle	CH2M Hill	770.604.9182 x383
David Nelson	CH2M Hill	770.604.9182 x645
Kinzie Gordon	Mitretek Systems	303.779.2664
John K. Miller	Mitretek Systems	703.610.2560

Previous Meeting Minute Approval

The BCT approved and signed the minutes from the May 20, 2004 meeting and June 15, 2004 teleconference. Mr. Holmes distributed the 2003 Administrative Record update on CDs to TDEC and EPA.

Findings from Recent Field Activities

Mr. Holmes reported that the sampling data provided was preliminary and had not completed data quality control procedures.

Target Treatment Area 1 (TTA1)

Mr. Quinn presented preliminary groundwater sample results from wells DR1-1 through DR 1-8. For some well pairs, contaminant levels varied with depth, with higher concentrations in the shallow wells. Mr. Morrison asked about the depth differences in the screened depths for the nested well pairs at TTA1, and Mr. Quinn indicated about 30 feet.

During installation of the TTA1 wells, MACTEC installed LTOA well MW39A northeast of Building 770 and completed it above the top of clay. Groundwater sample results indicated higher levels of PCE in MW39A than in MW39. The team discussed the PCE levels in MW39A and the possibilities of a relationship to the chlorinated VOC plume at TTA1.

Target Treatment Area 2 (TTA2)

Mr. Quinn presented preliminary groundwater sample results from TTA2. Both DR 2-2 and 2-3 had a very thin saturated thickness and were hand bailed to collect samples. In general, sample results corroborated previous results for this area. An exception was carbon tetrachloride, which was detected at 240 ppb at well DR 2-7.

LTOA/LTM Wells

Mr. Quinn presented preliminary groundwater sample data from the LTOA/LTM monitoring wells. Results for MW140, MW142, MW143, and MW66A indicated “J” values of PCE and TCE. The soil samples from MW141 indicated “non detect” for PCP near the dip vat area. Results for monitoring wells in the northwest corner of the Main Installation also indicated “J” values of PCE. Mr. Quinn indicated that PCE levels at MW94A and MW39 would require long term monitoring.

The team continued its discussion of MW39A and the possible relationship to contaminant levels at TTA1, but was unable to determine if the source of concentrations in MW39A were from TTA1 based on clay contours and water flow direction. Mr. Ballard suggested continued monitoring at MW39/39A to assess trends.

Mr. Morrison asked to see information presented in an iso-concentration format and suggested the use of different colors or shades to present clay contours and concentration contours in order to see the effects of top of clay on contamination distribution. Mr. Ballard suggested that figures be provided in GIS format in order to add or delete layers.

New Dunn Field Wells

Mr. Quinn reported that MWs 144 through 150 were installed and groundwater samples collected. The team discussed the analytical results and reviewed cross sections distributed by Mr. Nelson, paying special attention to 1,1,2,2-PCA concentrations of 7.6 ppm (mg/kg) at MW150 and 13 ppm at MW144. Mr. Miller indicated the analytical lab should be able to quantify constituent levels even if one level is very high.

AI: Mr. Holmes to ask the lab about quantifying all constituent levels. Completed July 29, 2004.

Mr. Ballard noted that contaminant levels at MW54 have increased with each round of sampling since fall 2003. The team discussed potential sources for the contamination levels, as well as the areas where SVE, PRB and ZVI will be implemented.

Mr. Ballard continued the PRB design discussion indicating that since the 7-ppm concentration at MW150 had already moved past the currently designed PRB location, then perhaps the design should eliminate the northeast portion of the PRB between the 220-foot and 225-foot potentiometric surface contours. He also suggested shifting the location of the PRB wall to north-south orientation west of MW150 to treat contamination that had already moved past MW150. Ms. Gordon reminded the team of the thicker saturated thickness at MW79 and its possible effect on the PRB design.

The team discussed the best potential locations for the PRB wall based on the post-shutdown potentiometric surface and determined that several more monitoring wells were needed to refine the design. The team identified 7 additional monitoring well locations necessary to refine the PRB design and to refine the conceptual site model (CSM) for long term monitoring.

Mr. Holmes indicated MACTEC would soon mobilize to install the monitoring wells on the northern end of Dunn Field to better define the area being impacted by the up gradient plume migrating onto Dunn Field. Depending on property access, MACTEC could install the 7 additional wells during the same mobilization. MACTEC will also sample several existing monitoring wells.

Mr. Holmes would determine the need for additional funds and request the contract modification, if necessary. Mr. Nelson indicated installing and collecting appropriate data from the additional wells would delay the remedial design. Ms. Gordon indicated that the data, especially the saturated thickness data, was necessary in order to proceed with the design should the location of the PRB be moved to the west of the originally proposed location.

The team discussed property access issues related to the additional monitoring wells. Ms. Cooper will determine the property owner for the well location adjacent to MW67. Mr. Morrison requested information about the railroad property such as the point of contact and actions taken to date from Mr. Ed Blocher, and then he will initiate the State's access process.

AI: Mr. Holmes will obtain the railroad property information from Mr. Blocher and forward to Mr. Morrison.

AI: Upon receipt of the railroad property information, Mr. Morrison will initiate the State's access process.

During the July 21 Partnering Session, the BCT concurred to evaluate a time-critical removal action to reduce contamination levels in the area of MW54 and MW150 and to provide time necessary to implement the final remedial action. Mr. Dobbs tasked the team to quickly calculate costs for the appropriate types of interim action (e.g., PRB, ZVI) and provide that information via teleconference on July 30. Mr. Holmes will coordinate the teleconference. CH2M Hill will be the lead for the interim action design. Mr. Dobbs also tasked the team to install the 7 additional monitoring wells and collect samples as soon as possible, and to provide the BCT with the team's interim action recommendations at the August 19 BCT meeting.

AI: Mr. Holmes to coordinate July 30 teleconference and to expedite monitoring well installation.

AI: CH2M Hill to calculate costs for appropriate types of interim action and to provide the information during the July 30 teleconference.

Semi-Annual sampling at Dunn Field

Water level measurements at Dunn Field: Pre and Post Pump Shutdown

Mr. Holmes reported that MACTEC collected water levels on Monday, June 21, 2004, and then shut down the recovery system pumps on Tuesday. Water levels had stabilized by Friday, June 24, when another round of water level measurements were conducted to assess changes to the potentiometric surface attributable to operation of the recovery system. Mr. Quinn indicated that the shut down of the recovery well system caused the 225 foot-contour line to move to the west. With the pumps off, the 225 foot-contour line ran along the Dunn Field boundary then turned westward to MW33. Ms. Gordon suggested that the westward deflection at MW33 might influence contaminants by pushing them northward and keeping them from moving south. Mr. Offner indicated that MW33 had historically been clean.

The team discussed how the water level information might affect the PRB and ZVI design for down gradient, off-site groundwater. Mr. Nelson reported that CH2M Hill had provided the new data to the PRB design consultant, GeoSierra. They were looking at a single-thickness system in concert with the ZVI. Mr. Offner said GeoSierra must also take the groundwater flow velocity and vectors into consideration given the new water level data.

AI: MACTEC to provide CH2M Hill the updated potentiometric surface data.

New Conceptual Site Model (CSM) Data

Mr. Holmes reported that MACTEC would shut down the recovery system again in August to obtain vertical flow data. Mr. Miller suggested that there would not be much vertical flow in wells with 10-foot screened interval and that MACTEC should have a clear plan as to what data they need to obtain. Mr. Sprinkle pointed out that the U.S. Geological Survey collected vertical flow data from every two feet of screened interval. Mr. Holmes said that MACTEC would collect data from MW140 and perhaps several other wells, as the equipment was available. He would determine the data needs and go from there.

Top of Clay Contour Map

Mr. Quinn presented an updated top of clay contour map based on recently installed monitoring wells. Mr. Holmes asked for the team's input on the Main Installation portion of the map. He indicated that MACTEC had looked at the different clays encountered and modeled the top of clay accordingly, but the area of the suspected window through the fluvial aquifer was geologically confusing. He questioned whether the top of clay should be drawn as if there were only one clay. Mr. Ballard suggested that by looking at the depositional environment, perhaps there could be a sand channel with clays coming in.

The team discussed various theories regarding the top of clay model with emphasis on better defining the southeastern portion of the suspected window and how the clay drops off in that area. The team identified the need to better define the area in order to appropriately place critical LTM wells. Mr. Holmes indicated that MACTEC would update the cross sections with the recently gathered data and would continue to work the issue of how the clay was situated at the southeastern area of the suspected window. MACTEC would incorporate all the new data points and work the model to produce a refined top of clay contour map.

New Cross Sections

Mr. Nelson distributed a cross section of the Dunn Field PRB area for discussion. Mr. Offner indicated that the remedial design would include more cross sections. Mr. Holmes confirmed that the remedial action work plan would also include updated cross sections.

Phase II SVE and Fracturing Pilot Study

Mr. Nelson reported that CH2M Hill had distributed response to comments on the SVE and “frac”ing study work plan on July 19, 2004. The team agreed that there were no technical issues that required resolution. Mr. Nelson interjected that the “frac”ing study incorporated data to prop open the fractures using ceramic beads to alleviate the fractures from healing as has occurred at other “frac”ing operations.

Mr. Nelson and Mr. Railey were working funding issues. Based on their conversation, Mr. Nelson anticipated mobilization on the Phase II SVE and Fracturing Pilot Study on August 2, 2004, that would continue until about August 12.

PRB and Source Area Remedial Design Status

PRB bench-scale test results

Mr. Nelson indicated that CH2M Hill had contracted with GeoSierra to assist with the PRB remedial design. He has provided GeoSierra with data from the design related investigations. Mr. Nelson noted that CH2M Hill has started writing the initial portions of the design document, so the PRB-related wells should be installed as soon as possible in order to incorporate the data without a significant delay on delivery of the next document iteration.

Mr. Offner stated that CH2M Hill was working with GeoSierra and ETI to respond to Mitretek’s comments on the bench-scale treatability study. He anticipated they would resolve some internal issues regarding the bench-scale test results next week.

AI: CH2M Hill to resolve internal PRB bench-scale treatability study issues by July 29, 2004.

ZVI Treatability Study Report

Mr. Sprinkle reported that CH2M Hill received a draft report from ARS that they are reviewing. Mr. Nelson indicated CH2M Hill was writing a technical memorandum (TM) that would include the PRB and ZVI bench-scale and treatability study results and that would be incorporated into the RD. Mr. Holmes asked if a TM would be issued prior to the RD. Mr. Nelson responded the TM would be distributed for internal review prior to incorporation into the RD.

Offsite Access

Mr. Holmes spoke with Mr. Blocher prior to the BCT meeting regarding access issues to allow CH2M Hill to survey for topographical boundary and surface features. Mr. Nelson stated that some of that land was heavily forested and that the surveyors needed to cut back the brush to allow for line of sight. Most of the area was on Belz and railroad property, but also included some MLGW property. Mr. Blocher indicated to Mr. Holmes that cutting brush on the railroad property would be a problem.

Mr. Holmes indicated Mr. Blocher did not push for access to the property, as remedial action implementation was not scheduled until 2006. He included sufficient time in the schedule to complete the CERCLA access process prior to fieldwork mobilization, if necessary. Mr. Holmes will make sure that the property owners know the long-term plan.

Mr. Holmes will talk with Mr. Blocher and try to coordinate a meeting with Belz and MLGW while he is in Memphis on July 27 – 28. He will also contact Mr. Buxbaum to discuss the situation and request assistance, if necessary.

AI: Mr. Holmes will speak with Mr. Blocher and Mr. Buxbaum and discuss the situation.

Dunn Field LUCIP

Mr. Offner said he had spoken with Mr. Buxbaum about several LUCIP issues. Mr. Buxbaum offered some suggestions, which CH2M Hill incorporated. Mr. Nelson reported that CH2M Hill

had submitted the Dunn Field LUCIP to AMC and DLA in early July and that comments were due to CH2M Hill in early August. The LUCIP will then be incorporated into the intermediate Source Area RD to be distributed to the BCT.

According to Mr. Offner, Mr. Morrison and Mr. Buxbaum briefed Mr. Steve Stout, Assistant General Counsel for TDEC, on the Notice of Land Use Restrictions at the Main Installation. TDEC provided several comments that CH2M Hill was working to incorporate prior to submitting the Notice to TDEC. Mr. Nelson interjected that TDEC requested the Notice include a map showing survey coordinates of the area affected by the Notice and that was why CH2M Hill needed the survey data.

Disposal Sites Remedial Action (RA) Work Plan (WP)

Mr. Holmes said he had received Mr. Ballard's comments on the Disposal Sites RA WP. He anticipated distributing responses by July 23. Mr. Holmes said that MACTEC had worked the subcontractor issues and were ready to move forward upon receipt of funds and EPA approval of the WP.

Hays Road Realignment

Mr. Holmes reported that the City of Memphis had moved the Dunn Field fence and scrapped away the grass. The City had postponed work on the recovery system sanitary sewer connection until August 2, 2004. He continued that MW46 would be abandoned, but MW28 would remain. Mr. Holmes indicated MACTEC would re-surface the area around the monitoring wells to ensure they remain intact.

Findings of Suitability to Transfer (FOSTs) 3 and 4

Mr. Nelson reported that the Army had FOST 3 for signature, and that EPA had provided the concurrence letter. Mr. Holmes requested a copy of the signed FOST for the information repositories and that he would have the community relations staff determine public notification requirements. Mr. Holmes reported that MACTEC distributed FOST 4 to the Army and DLA for internal review. He had received comments from the Army, but was awaiting Mr. Buxbaum's comments.

IRA System Status

Mr. DeLano reported that MACTEC shut down the recovery system for a week beginning on June 21, 2004. The team replaced 3 flow meters on RW1, RW3, and RW5, and they performed annual instrument calibration. Mr. DeLano indicated that the process went as expected, except for transducer 1, which MACTEC would evaluate. He continued that the pump in RW7 failed about 1½ week after system re-start and would be replaced. The data for the semi-annual report was validated, and the report would be distributed the week of July 26.

Revised Master Schedule/Deliverable Matrix

Mr. Holmes distributed the deliverable matrix and reviewed several items with the team. Mr. Dobbs requested that field teams take photographs during field events for use in project briefings and community relations activities. Mr. Ballard reminded Mr. Holmes that the Federal Facilities Agreement (FFA) required that regulators receive 3 weeks notice prior to start of field activities.

BRAC Cleanup Plan Version 8

Mr. Holmes indicated that Ms. Cooper had started the BCP update, and that he based the schedule on the Site Management Plan schedule presented in the FFA. Mr. Dobbs indicated that DLA required the BCP around November 1 and requested that the schedule be changed

accordingly. He will confirm DLA's required delivery date and will forward schedule and abstract data requirements to Mr. Holmes.

AI: Mr. Holmes to revise the deliverable matrix to indicate November 1 for BCP Version 8.

AI: Mr. Dobbs to confirm DLA's requirements for BCP delivery and abstract data and forward to Mr. Holmes.

RCRA Permit Status

Mr. Holmes reported that TDEC had requested additional information (an updated table), which MACTEC had worked with Mr. Buxbaum. MACTEC submitted the revised permit application to TDEC.

Adobe 6

Mr. Holmes requested that Ms. McMath look into obtaining the Adobe 6 license for TDEC.

Next Meeting

The BCT scheduled the next meeting for August 25 and 26, 2004, in Memphis, TN at the Memphis Depot Business Park, with a tour of the site the afternoon of August 25.

<u>SIGNED</u>	<u>8/25/04</u>
MICHAEL DOBBS	DATE
Defense Distribution Center	
BRAC Environmental Coordinator	
BRAC Cleanup Team Member	

<u>SIGNED</u>	<u>8/25/04</u>
TURPIN BALLARD	DATE
Environmental Protection Agency	
Federal Facilities Branch	
Remedial Project Manager	
BRAC Cleanup Team Member	

<u>SIGNED</u>	<u>8/25/04</u>
JAMES MORRISON	DATE
Tennessee Department of Environment and Conservation	
Memphis Field Office	
Division of Superfund	
BRAC Cleanup Team Member	