



# THE MEMPHIS DEPOT TENNESSEE

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## ADMINISTRATIVE RECORD COVER SHEET

AR File Number 848

**Final**

**Memphis Depot  
BRAC Cleanup Team  
Meeting Minutes**

**15 November 2005**

<b>BRAC Cleanup Team</b>	<b>Organization</b>	<b>Phone/email</b>
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<b>Project Team</b>	<b>Organization</b>	<b>Phone</b>
Roy Shrove	Air Force Center for Environmental Excellence (AFCEE)	210.536.2409
Tom Holmes	MACTEC Engineering	770.421.3373
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David Nelson	CH2M HILL	770.604.9182 x645
John K. Miller	Mitretek Systems	703.610.2560

***BCT Business/Previous Meeting Minute Approval***

The BCT approved and signed the minutes from the 20 October 2005 meeting.

***Dunn Field Groundwater Interim Remedial Action (IRA) System***

Ms. Ilic reported that all the recovery well pumps worked properly during the month of October. She indicated that MACTEC was investigating a problem caused by sand in some of the flow meters, but that the sand had not affected pumping. She also reported that MACTEC had changed the data logger program to provide flow in gallons per minute.

Mr. Holmes reported that the City of Memphis requested a shut down of the recovery system on 15-16 November 2005 in order to re-grade the corner of E. Person and Hays Road as the roadwork had uncovered a portion of the discharge pipe. MACTEC personnel would be on hand to observe the City's repair work.

Ms. Ilic reported that MACTEC was currently performing O&M sampling. Mr. Holmes stated that the semiannual report was distributed to EPA and TDEC in October and that MACTEC distributed the IRA System Optimization Technical Memorandum (TM) to EPA and TDEC on 14 November 2005. Mr. Holmes discussed the rationale for the recovery well optimization proposals contained in the TM. Assuming the IRA system would operate another two years, the TM proposals would reduce the system discharge by approximately 50% and reduce system O&M costs by approximately \$100,000.

Mr. Holmes requested the BCT's consideration and approval of the TM optimization proposals. The first step to implement the optimization actions would be to contact the City of Memphis regarding the Industrial Wastewater Permit discharge limits. The contaminant concentrations within the discharge would increase when the overall groundwater flow decreased and the concentrations may exceed the current discharge limits. The concentrations would be well under the limits for total mass, but specific contaminants may exceed the current concentration limits.

Mr. Ballard asked about the source of data for the TM. Mr. Holmes stated that the Semi-Annual Interim Remedial Action Groundwater Status Report was the source of the information. Mr. Holmes also indicated that recovery well groundwater monitoring would change from semi-annually to quarterly in order to monitor rebound in the wells that would be turned off.

Mr. Ballard asked if the TM included provisions for turning back on a recovery well based on sampling results. Mr. Holmes responded that the TM did not include a specific groundwater sample value that would initiate turning back on a recovery well. Mr. Holmes indicated that MACTEC intended to monitor contamination levels in the recovery wells and provide AFCEE and the BCT with a recommendation to turn a well back on if sample results indicated that need. Mr. Holmes asked that if EPA required a specific sample result value related to turning a well back on to include that information in comments to the TM.

### ***Dunn Field Disposal Sites Remedial Action***

Mr. Price reported that MACTEC had completed Addendum 1 to the Disposal Sites Remedial Action Work Plan (RAWP) specific to excavating the liquid containers at Disposal Site 3. He indicated that the liquid containers would be excavated using mechanical excavation and that vermiculite and surrounding soils would bind up the moisture released from the containers.

The waste disposal contractor had identified three potential treatment facilities with the most promising being Bennett Environmental, Inc. located in Canada. There were several advantages to using Bennett: 1) they would accept the containers intact allowing for better management of the containers and their contents; 2) they would pre-characterize the waste stream (Bennett requested samples of the soil and intact containers that they would analyze, profile and determine if they would accept the waste prior to excavation); and 3) By pre-characterizing the waste and allowing the containers to remain intact, MACTEC would be able to load the materials directly into the waste disposal trucks and ship it out same day as it was excavated.

The other facilities required all the containers to be broken, which meant MACTEC personnel must ensure all the containers were broken and then manage the liquid waste. The other facilities would not pre-characterize the waste, which meant MACTEC must containerize the materials in roll-offs, sample and analyze the materials, then await the other companies to complete the profile process before they could determine if they would accept the waste. Mr.

Price indicated that roll-off containers were hard to obtain due to cleanup work from Hurricanes Katrina and Rita.

Mr. Price reported that MACTEC had outlined the three proposed treatment facilities in the RAWP addendum. He also asked for information from the BCT regarding any special approval process necessary to ship waste out of the country for treatment/disposal. He also reported that MACTEC would distribute the addendum this week.

Mr. Price described the risk hazard analysis conducted by MACTEC. The analysis was for a worse case scenario of all containers breaking at the same time and the potential impact at the Dunn Field fence line. He indicated that the analysis determined that there would be no unacceptable risk to the community, so MACTEC did not include air sampling at fence line in the addendum. The RAWP addendum called for workers to wear Level B personal protective equipment because the historical documents indicated there could be other chemicals in this disposal site. The RAWP addendum also required air monitoring at the work area. The Health and Safety Plan was still being prepared by MACTEC and would be completed this week.

Mr. Ballard was unsure of EPA requirements regarding the transportation of waste material for out of the country disposal. Mr. Shrove indicated that Laguna Construction had transported quite a bit of waste material to Bennett for disposal, so Bennett was very experienced at handling waste from the United States.

Mr. Spann asked how much MACTEC anticipated over excavating Disposal Site 3. Mr. Price indicated over excavation depended upon field observations. Mr. Holmes continued that the work plan indicated that after excavating all the bottles any obvious areas of spillage would also be excavated and that samples will be collected from the bottom of the entire excavation, not just after removal of the bottles. Mr. Price anticipated that MACTEC would mobilize in early January with work lasting about two weeks.

### *Long Term Monitoring (LTM) Annual Report*

Mr. Holmes reported that the internal team was currently reviewing the LTM Annual Report and that it should be ready for distribution to the BCT within a few weeks. The report includes recommendations for additional wells. Mr. Holmes distributed figures depicting groundwater conditions based on the LTM sample results as well as indicating the proposed monitoring well locations.

Mr. Holmes indicated that one goal of the proposed monitoring wells was to identify if the plumes were connected in the area around MW39. Mr. Holmes indicated that there are still questions about how the isopleths are drawn. Any well that has had exceeded an MCL whether in the past year or in the past has a trend for that constituent and is discussed in the report.

The team discussed the information contained on the figures and paid special attention to the groundwater flow and constituent contours for each plume. Mr. Holmes noted that plume configurations were very important as they would dictate the compliance well network for each plume.

Mr. Spann requested that the groundwater contours at the MI be redrawn to better reflect the data within the well clusters without trying to tie all of the wells clusters together, which might better illustrate localized groundwater flow direction.

Mr. Ballard suggested that the report include a discussion of the disconnection between the potentiometric surface contours and the constituent contours. Mr. Holmes indicated that the report did include a brief discussion of how the contours were drawn.

Mr. Holmes anticipates distributing the LTM Annual Report to the BCT in the next few weeks and looks forward to receiving their comments.

**AI: MACTEC will redraw the groundwater contours for the well clusters and provide the drawings for review with the LTM Annual Report.**

#### *Source Areas Remedial Design Investigation (RDI)*

Mr. Nelson presented preliminary results from the membrane interface probes (MIP) and soil samples collected and analyzed to date. Based on the preliminary results, the treatment areas have reduced in size from those identified in the Dunn Field Record of Decision.

The team discussed the preliminary results and the impacts on the Source Areas RD. For certain portions of Treatment Area 2, Mr. Ballard indicated that concentrations in groundwater below this area indicated the need to collect soil samples even though the MIP data did not detect PCE to confirm that the soil did meet the groundwater protection remedial action cleanup levels for soil.

Mr. Nelson reported that they found surprisingly high TCE and PCE levels in MIP data from the area where the big fluorspar mound was once located and adjacent to the CWM sites, 24A and 24B. Because Treatment Area 4 had high soil gas readings, CH2M HILL started collecting data from these areas, but they still had some MIP data to collect. Mr. Nelson was somewhat surprised that although CH2M HILL found high MIP data values there was very little carbon tetrachloride and chloroform in the soil.

Mr. Ballard and Mr. Spann agreed that both agencies want the outer edge of the Treatment Areas, especially for PCA, to be confirmed by soil samples as opposed to MIP data. Mr. Spann also requested that the 100 ppb contour be redrawn.

Mr. Nelson concluded the presentation by indicating that two remedies most applicable for the loess were soil vapor extraction push/pull system or a thermal system. CH2M HILL must compare a thermal system to the SVE system. Mr. Ballard interjected that CH2M HILL also must factor the time to achieve remedial action objectives for the SVE push pull vs. a thermal system.

Mr. Nelson reported that CH2M HILL installed the off-site monitoring wells. He presented and the team discussed the associated boring and sampling data. During installation of MW185 and MW186, Mr. Jack Carmichael of the U.S. Geological Survey happened to be collecting groundwater level readings in the area and identified the fine, grey sand from MW186 as the intermediate aquifer. CH2M HILL encountered a clay layer under the intermediate fine grain, grey sand. Mr. Nelson indicated the information would be very useful in the groundwater model.

Mr. Holmes indicated that MACTEC would pull the PDBs within next few weeks, so MACTEC would make that preliminary data available for use by CH2M HILL prior to the 15 December 2005 meeting.

***Off-Depot Groundwater RD***

Mr. Nelson reported that CH2M HILL was awaiting notice to proceed on the PRB treatability study. Mr. Railey indicated he was working funding issues with DLA. Mr. Dobbs voiced concern that the PRB treatability study was on hold due to DLA and COE program funding policies. Mr. Dobbs advised both Mr. Railey and Mr. Shrove to evaluate what aspects of the Memphis Depot's program would stop at the end of the funding period. Mr. Ballard requested that Mr. Dobbs provide him with a letter regarding the impact on the Memphis Depot schedule as a result of the end of the fiscal year funding issues.

**AI: Mr. Dobbs requested that Mr. Railey provide him with the specific tasks that required funding.**

***Offsite Plume – Northeast corner of Dunn Field***

Mr. Spann reported that work had been delayed due to the EPA's contractor mobilizing to the Hurricane Katrina area. He anticipated that work begin on 5 December 2005. Mr. Spann requested access to several monitoring wells. Mr. Holmes indicated that MACTEC planned to replace the PDB in MW130 this week following sample collection, but that PDBs had been removed from MW128 and MW129. Mr. Spann asked about using the laydown pad at Dunn Field. He also requested addresses from the Memphis Depot mailing list for the areas where the monitoring wells would be installed. Mr. Dobbs indicated MACTEC could provide the addresses.

Mr. Nelson requested some more keyed locks for the newly installed monitoring wells, and Mr. Holmes said he would look into it.

***BRAC Cleanup Plan/Revised Master Schedule***

Mr. Holmes reported that the draft BCP Version 9 was in process and included more information in Section 6 regarding the Source Areas RDI, the question regarding PRB installation methods, and installation of additional wells on the Main Installation. Mr. Holmes indicated that due to the PRB funding issue there may be changes to the master schedule prior to distributing the draft BCP version 9 to the BCT. Mr. Holmes reviewed several specific schedule items of interest to the BCT. He also indicated that MACTEC was on schedule to distribute the draft BCP in early December.

Mr. Ballard indicated that since the BCP served as the Site Management Plan, the BCP cover letter would be an appropriate place to discuss the funding issues and their impact on the schedule. He reiterated the need to understand whether the delay was due to a failure of Congress to act or because some one within DLA or the Department of Defense will not approve the work order until Congress approved the budget.

***Community Relations Schedule***

Mr. Holmes reported that the current schedule called for a RAB meeting in the spring, EnviroNews in December, EnviroNews in June, and either a RAB or a public meeting in the fall. Mr. Ballard indicated he had distributed the NEJAC Federal Facilities Work Group report to the

BCT. Mr. Holmes will coordinate a one-on-one risk communication training session for the BCT with Frontline to take place sometime early next year.

*Next Meeting*

The BCT confirmed the next meeting will be on 15 December 2005 at CH2M HILL's office in Atlanta, GA, with the project team meeting the afternoon of 14 December 2005.



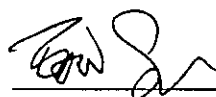
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DATE



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EVAN SPANN  
Tennessee Department of Environment and Conservation  
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DATE



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