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## THE MEMPHIS DEPOT TENNESSEE

## ADMINISTRATIVE RECORD COVER SHEET

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## 909 1 File: 190.300,000a

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Final

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Memphis Depot

BRAC Cleanup Team

Meeting Minutes

20 September 2007

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BRAC Cleanup Team	Organization	Phone/email
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Project Team	Organization	Phone
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Mike Perlmutter	CH2M Hill	678.530.4271
Kathleen Bradley	Noblis Systems	210.408.5554
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#### **Previous Meeting Minutes and Action Items**

The BRAC Cleanup Team (BCT) approved and signed the minutes from the 9 August 2007 meeting.

## Source Areas Remedial Action (SA RA)

## Fluvial Soil Vapor Extraction (SVE) System

As presented at the last meeting, the SVE system began operating on 25 July. As expected, upon start-up the system pulled a high mass of chlorinated volatile organic compounds (CVOCs) from the fluvial deposits. This necessitated replacement of the granular activated carbon (GAC) in the treatment system. The system was offline from 1 to 13 August when the GAC was replaced.

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Additionally, challenges related to the tight soils in some areas resulted in maintenance being required for the SVE blowers. The blowers are currently on-line, c<sup>-</sup>M continues to refine flow rates to determine the impact on each SVE well and to determine the best flow configuration to optimize the system. The vapor monitoring points (VMPs) show good vacuum influence; current data indicate the system is achieving a vacuum influence radius of influence of 80 fect or more.

Current estimates are that the SVE system has removed approximately 1,300 pounds (lbs) of CVOCs from the fluvial deposits. The SVE system is now pulling about 0.5 lb of CVOCs per hour. Mr. Spann and Mr. Ballard voiced satisfaction with the performance of the SVE system.

As allowed in the Source Areas RD, removal of the GAC filters will be pursued due to the low CVOC concentrations in the influent. Mr. Holmes reported that  $e^2M$  will submit a Fluvial SVE system progress report to the BCT soon that will contain the data, the rationale and the plan for discontinuing use of the GAC filters.  $e^2M$  will also provide the progress report to the Memphis/Shelby County Health Department.

## Loess/Groundwater Remedial Action Work Plan (RAWP)

 $e^{2}M$  submitted Rev. 1 Loess/Groundwater RAWP on 27 August that incorporated approved responses to Rev. 0 comments. The only remaining issue is the comparison of confirmation samples to Remedial Goals (RGs). The current approach is for  $e^{2}M$  to review the data and make a point-to-point comparison with the RGs. If some treatment areas do not meet the RGs, then treatment would continue for the time period defined in the RAWP of 165 days.

DLA requires the RAWP to include an exit strategy for use by EPA and TDEC to agree that it is time to end the thermal treatment. The team discussed the need for a well-written flow chart that should include decision points, the basis and assumptions for decision points, and actions to be taken if/when the system achieves the assumptions. The team agreed the flow chart did not require specific data points.

Mr. Ballard indicated that the determination of whether vadose zone soils meet RGs will consider whether the soil remediation is likely to prevent exceedances of Maximum Contaminant Levels in groundwater. In summary, some exceedances of RGs in soil may be acceptable if DLA can demonstrate that groundwater remains protected.

Mr. Holmes reported that Terratherm was the successful bidder to construct the thermalenhanced SVE system. They plan visit the site in early October to make final implementation plans.

 $e^{2}M$  has also scheduled a geophysical contractor to conduct a survey to confirm the extent of the drum burial area encountered during construction of the Fluvial SVE. A letter report will be submitted to describe the actions to take place and the confirmation sampling plan to include a sample location map. Mr. Ballard agreed with the letter report approach as long as it references methodologies already in place including the existing Quality Assurance Plan and Sampling and Analysis Plan.

# AI: e<sup>2</sup>M to prepare and distribute to BCT a flow chart regarding process for ending operation of the loess thermal system. By 28 September.

AI:  $e^{2}M$  to resolve issue of obtaining RGs in the loess in response to EPA comment on the Loess/GW RAWP. By 28 September.

#### Off-Depot Groundwater Remedial Design (RD)

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CH2M Hill received TDEC comments on 19 September and initial comments from EPA earlier this week with final comments forthcoming. Mr. Ballard sent the RD to the EPA unit in Ada. OK. They indicated the RD is very well written and presents the information and assumptions well. They have no technical comments and indicated the technical aspects are very well presented.

### Enhanced Reductive Dechlorination (ERD) Microcosm Study and Intermediate Aquifer Investigation (IAI)

CH2M Hill anticipates receipt of the bioaugmentation data set around 8 October. Mr. Perlmutter suggested coordinating a Project Team meeting for late October to discuss the data obtained to date. He indicated that given the pace of the ERD Microcosm Study and Intermediate Aquifer Investigation. CH2M Hill will have a good data set to discuss at the next BCT meeting.

Regarding the Intermediate Aquifer Investigation (IAI), CH2M Hill anticipates receiving all necessary data by 12 October and will begin updating the groundwater model.

The team discussed the schedule for completing the ROD Amendment based on the ERD Microcosm Study and IAI data. Mr. Ballard indicated DLA has good cause, as defined by the Federal Facilities Agreement, for extending the schedule for the RD since the BCT agreed to include the two new substrates in the ERD Microcosm Study.

The team agreed that it is premature to move forward with a public comment period and public briefing for the Revised Proposed Plan (previously scheduled for-November). At the next meeting, the team should have sufficient information to decide how to proceed with the Revised Proposed Plan and ROD Amendment.

AI: CH2M Hill to distribute ERD Microcosm Study and Intermediate Aquifer Investigation (IAI) data to internal project team the week of 15 October 2007.

AI: CH2M Hill to provide information (i.e. flow rate, constituent concentrations) to e<sup>2</sup>M regarding IAI wastewater disposal if it is to be accomplished through the existing Industrial Wastewater Discharge permit.

AI: Ms. Bradley to notify Mr. John Miller that an internal project team meeting to discuss the impact of the ERD Microcosm Study and IAI data on the Off-Depot Groundwater RD has been tentatively scheduled for 24 or 25 October in Atlanta, GA, and for him to notify Angela Clark when he can attend.

### Revised Proposed Plan and ROD Amendment

Mr. Holmes reported that  $e^2M$  submitted the Rev. 1 Revised Proposed Plan to the BCT on 17 September. He indicated that TDEC had no comments and that  $e^2M$  resolved EPA's comments on the Rev. 0 version. Mr. Holmes reiterated that the team must confirm what the Revised Proposed Plan for the Off-Depot groundwater will be and that there will be no further changes before conducting the public comment period.

Mr. Holmes indicated that BCT comments on the Rev. 0 ROD Amendment are due next week.  $e^{2}M$  plans to address comments that do not involve the remedy. Once questions about the Off Depot are resolved, revision of the ROD Amendment will be completed.

### Dunn Field Land Use Control Implementation Plan (LUCIP)

Mr. Perlmutter reported that Mr. Nelson submitted the Rev. 1 Version 4 LUCIP to Mr. Rick Wirsing, who has been replaced by Mr. Mike Bobrick. The team discussed the need for the

LUCIP to be finalized and approved by the Department of Army and EPA in time to submit the Rev. 1 100% Off-Depot Groundwater RD on 15 February 2008

Mr. Ballard indicated that the RD will not be considered final with another draft LUCI? that still requires EPA HQ approval. He commented that the document should be sent to EPA Region IV in order for him to submit it to EPA HQ. Mr. Dobbs requested that CH2M Hill contact Mr. DeBack and Mr. Bobrick regarding the schedule for completing the LUCIP and obtaining EPA HQ approval and signature.

A1: CH2M Hill to notify Mr. John DeBack and Mr. Mike Bobrick that the Dunn Field LUCIP must be approved and signed by EPA HQ by 15 February 2008. Request their schedule for the review/approval process and when they will submit the LUCIP to EPA Region IV. End of next week.

#### Main Installation

#### Long Term Monitoring (LTM)

Mr. Holmes reported that e<sup>2</sup>M completed the MI Annual Site Inspection in July 2007 and submitted the letter report to the BCT and Department of Army on 18 July. No deficiencies were identified.

 $e^{2}M$  completed the LTM quarterly sampling event in July. Samples were collected from wells installed within the past year, and the LTM report is currently being prepared. The analytical results are similar to those in the April LTM report. The next sampling event will occur in October. It is an annual event and will include all the wells slated for annual, semiannual and quarterly monitoring.

## Enhanced Bioremediation Treatment (EBT)

Mr. Holmes reported that  $e^{2}M$  collected third quarter samples in June. Analytical results indicated continued progress maintaining anaerobic conditions in both treatment areas.

The team discussed the groundwater concentrations in the west-central plume. The area is defined by Tetrachloroethene (PCE) levels found in MW39 and the monitoring wells recently installed in the area. PCE concentrations are similar to those in the existing treatment areas. The saturated zone within the central portion of the west-central plume is deep, potentially limiting the effectiveness of EBT.

Mr. Ballard iterated that according to the Main Installation ROD, the contamination levels at MW199 are consistent with the requirements to treat. Without treatment, the area will certainly not meet the criteria for Operating Properly and Successfully (OPS). Mr. Ballard suggested including a discussion of bioaugmentation as well as a discussion of other carbon source substrates with longer staying power.

Mr. Dobbs asked if the current conditions on the Main Installation will require  $e^2M$  to start the OPS demonstration process over with another eight months of sampling. Mr. Ballard responded that it may not require another eight months of sampling to demonstrate that the remedy is operating properly and successfully. He indicated that once the substrate has been injected creating the initial reduction then  $e^2M$  should submit the OPS request and provide the supporting data.

AI: e<sup>2</sup>M to develop a recommendation to treat the areas outside of the current MI Treatment Areas for BCT review.

#### Miscellaneous

#### Dunn Field FOST 4 Property

Mr. Holmes reported that the fence delineating the remaining government property at Dunn Field and the new Dunn Avenue gate is complete. The road will be paved today. Mr. Dobbs indicated that he anticipates receiving notification next week regarding the completion of the deed. Mr. Woods reported that he has received a call from the new owner's consultants, and he directed them to TDEC's Brownfield program regarding the property redevelopment.

#### Five-Year Review

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Mr. Holmes reported that e<sup>2</sup>M submitted the Rev. 0 Five-Year Review to the BCT in August and that BCT comments are due 28 September. Mr. Ballard forwarded the document to EPA HQ and anticipates receiving their comments next week. His review did not find anything requiring major revisions and he anticipated EPA HQ will not have any major comments either.

#### Information Repository (IR)

Mr. Dobbs informed the team that DLA intends to modify the Memphis Depot Information Repository to one location at the Memphis Depot instead of the Cherokee Branch Library. Mr. Ballard indicated the need for an addendum to the Community Information Plan (CIP), a primary document, regarding this change in IR locations.

## Cintas Preliminary Assessment/Site Investigation (PA/SI)

Mr. Woods reported that TDEC received the Cintas PA/SI sampling results with no results above the Maximum Contaminant Levels (MCLs). TDEC is evaluating the use of MIP around the railroad tracks as the source of the upgradient plume may be an historical spill on the tracks.

Mr. Dobbs asked how this will impact the Dunn Field remedial activities as the levels coming onto the property are above the remedial goals for the Source Areas and will continue to contribute to contamination levels there. Mr. Ballard responded that EPA's position is that once the contamination is on Dunn Field it will affect the treatment system's ability to achieve OPS and will affect property transfer.

Mr. Ballard suggested that EPA may consider signing a covenant deferral request associated with the FOST for the remaining Dunn Field property since the issue that prevents the treatment from achieving OPS is not one that should prevent transfer as it is groundwater with no human receptors. Since everything else the facility is implementing is moving the property toward an OPS determination then EPA could sign a covenant deferral request.

Mr. Woods said TDEC and EPA have discussed installing additional monitoring wells in an effort to identify a shallow source. If TDEC can obtain additional funds, then they plan to install shallow wells and evaluate a shallow contribution. Mr. Holmes requested the Cintas PA/SI report and the Wabash Avenue PA/SI report to assist the project team to develop a plan for the upgradient plumes.

## AI: $e^2M$ , CH2M Hill and Noblis (project team) to develop a plan for northeast plume. Discussion point for next BCT.

AI: TDEC to provide e<sup>2</sup>M with the Cintas PA/SI and the Wabash Avenue PA/SI reports.

Schedule Review

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Mr. Holmes noted that the Third Quarter EBT Report is delayed by about 10 days. The Finding of Suitability to Transfer (FOST)  $\rightarrow$  is delayed indefinitely based upon its mliance upon OPS.  $e^2M$  will address the FOST 5 schedule in the next BRAC Cleanup Plan.

#### Next Meeting

A Project Team meeting is tentatively scheduled for 24 or 25 October 2007 in Atlanta, GA to discuss impact of the ERD Microcosm Study and IAI data on the Off-Depot Groundwater RD.

# AI: $e^{2}M$ (Angela Clark) to confirm meeting date upon confirmation from John Miller regarding his availability.

The next BCT meeting is scheduled for 8 November 2007 in Atlanta, GA. The Project Team meeting is scheduled for the afternoon of 7 November 2007.

AI: Mr. Dobbs to send a letter to TDEC regarding travel to Atlanta for Mr. Woods and Mr. Spann.

A BCT meeting is also tentatively scheduled for 13 December 2007 in Atlanta, GA. The Project Team meeting is scheduled for the afternoon of 12 December 2007.

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MICHAEL DOBBS Defense Distribution Center BRAC Environmental Coordinator BRAC Cleanup Team Member

/Date

TURPIN BALLARD Environmental Protection Agency Federal Facilities Branch Remedial Project Manager BRAC Cleanup Team Member

<u>|| /15/07</u> Date JAMIE WOODS

Tennessee Department of Environment and Conservation Memphis Field Office Division of Remediation Environmental Project Manager BRAC Cleanup Team Member

