THE MEMPHIS DEPOT
TENNESSEE

ADMINISTRATIVE RECORD
COVER SHEET

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FINAL

BRAC Cleanup Team

Meeting Minutes

January 18, 2001

Attendees

BRAC Cleanup Team	Organization	Phone
John De Back (interim)	Defense Logistics Agency (DLA)/ Memphis Depot Caretaker Division (Depot)	(901) 544-0622
Turpin Ballard	Environmental Protection Agency, Region IV (EPA)	(404) 562-8553
James Morrison	Tennessee Department of Environment and Conservation, Memphis Field Office, Division of Superfund (TDEC)	(901) 368-7958
Project Team		
Mike Dobbs	Defense Distribution Center	(717) 770-6950
Paul Galiotto	Defense Distribution Center	(717) 770-4476
David Ladd	U.S. Geologic Survey	(615) 837-4773
Denise K. Cooper	Depot	(901) 544-0610
Jack Kallal	Depot	(901) 544-0614
Dorothy Richards	Corps of Engineers	(256) 895-1463
John Rollyson	Corps of Engineers	(931) 455-6771
Peggy DuBray	Corps of Engineers	(931) 454-6630
Robert Torstrick	Corps of Engineers	(256) 895-1512
Rick Bowlus	U S. Army Center for Health Promotion and Preventive Medicine	(410) 436-5208
Stephen Offner	CH2M Hill	(770) 604-9182
David Nelson	CH2M Hill	(770) 604-9182
Kraig Smith	Jacobs/Sverdrup Engineering	(615) 331-9232
Trevor Smith Diggins	Frontline Corporate Communications	(888) 848-9898
Alma Black Moore	Frontline Corporate Communications	(901) 573-1812
Frank Johnson	UXB International	(703) 625-3792

Review of Previous Meeting Minutes

The BCT discussed and signed the December 19 – 20, 2000 meeting minutes.

Review of Project Status

Land Use Control Assurance Plan (LUCAP)/Land Use Control Implementation Plan (LUCIP)

Mr John De Back provided Mr. Turpin Ballard and Mr. Jim Morrison latest LUCAP proposed by Army Base Transition Team. Mr. Ballard and Mr Morrison provided initial comments. Since the document differed from the draft previously submitted, their respective legal departments would review and provide comments Mr. De Back agreed to send the proposed LUCAP to their respective legal representatives and to coordinate a conference call or meeting for the first part of February to discuss their comments.

The BCT discussed the timing for submitting the LUCAP and the Main Installation Record of Decision (ROD) for signature. The ROD could be sent separately from the LUCAP, but Mr. Ballard indicated the need to discuss the signature process if the LUCAP was not submitted simultaneously with the ROD with his supervisor.

Mr. De Back indicated that the Defense Logistics Agency, through the Defense Distribution Depot Susquehanna, PA, would sign the ROD, but that the Army would sign the LUCAP.

Findings of Suitability to Transfer (FOST) and Environmental Condition of Property (ECP) for Parcel 1.8

Mr. De Back discussed the Finding of Suitability to Transfer for Parcel 1 currently being drafted and the need to change the ECP for Parcel 1.8 to a transferable category. Ms. Denise Cooper provided sampling data and the Main Installation Remedial Investigation (MI RI) baseline risk assessment (BRA) conclusion for Functional Unit (FU) 6, which contains Parcels 1, 4 and 5. The BCT discussed the BRA for FU 6 as well as Parcels 1 and 4.

The BRA concluded that FU 6 was suitable for industrial reuse. The residential surrogate site that indicated restricted use was located in Parcel 4. Parcel 1 was used in the past for administrative and employee parking purposes and does not contain any long term operational areas. The MI RI results indicated levels are not inconsistent with unrestricted use. The BCT agreed that a hazardous substance release occurred as a result of pesticide application during routine grounds maintenance, but not at concentrations that require remediation The BCT concurred that Parcel 1.8 change from ECP Category 7 to Category 3.

The BCT then discussed methods available to transfer property situated over groundwater contamination. Mr. Morrison agreed to provide Millington's CDR to Mr. De Back. The BCT then discussed the transfer strategy and schedule for the Main Installation and Dunn Field.

Defense/State Memorandum of Agreement (DSMOA)

Mr. Morrison requested assistance from the Memphis Depot in completing the state's DSMOA funding request. Mr Mike Dobbs agreed to complete the state's required funding form and submit it to Mr. Morrison.

Restoration Advisory Board (RAB) Planning

Ms. Cooper presented a draft RAB meeting presentation/topics schedule for the BCT's review and comment. The BCT agreed to provide Revision 1 documents, starting with the Dunn Field Remedial Investigation (RI), on CD-ROM to each RAB member in order to begin presenting the findings at RAB meetings before finalizing documents

The BCT discussed the issue of bi-monthly meetings and draw down of the RAB and agreed that it should be included on the topics schedule for discussion with the RAB toward the end of 2001. The BCT agreed that meetings should be cancelled if there was not sufficient technical information for a presentation, for example in the spring of 2001 before issuing the Revision 1 Dunn Field RI. The BCT agreed that the schedule should be updated to reflect any cleanup program schedule changes and presented to the RAB for their input. Ms. Cooper would update the schedule, and Mr. De Back would submit it for DDC approval prior to distributing it to the RAB before the February RAB meeting. Mr. De Back would provide the approved schedule to the appropriate contractors tasked with preparing the presentations.

Long Term Operational Area wells

Mr Morrison asked when the wells would be installed and sampled, as he must provide his lab a timeframe to expect samples. Mr. Offner indicated the wells should be installed by the end of February 2001 Sampling results would be presented to the BCT in the Main Installation Pre-Design tech memo and that it would be separate from the Conceptual Site Model tech memo. Mr. Offner would update the project schedule to include the document review schedule for both tech memos

Dunn Field Interim Remedial Action for Groundwater

Mr. Kraig Smith reported that Jacobs/Sverdrup Civil had mobilized the last week of October 2000 to modify the seven existing wells and to bring the four new wells on line They replaced the insulation and thermal wrap on the existing wellheads with heated stainless steel housings and restarted the original wells in November 2000. Mr. Smith reported that he was waiting for delivery of specially designed and manufactured flow control valves and that the manufacturer's delivery schedule had slipped due to production problems. Once he received the flow controls values, it would take about one week to install and restart the four new wells and to conduct the start-up tests. Mr. Smith indicated that the project was essentially completed with exception of the flow control valves and actuators, but that he still anticipated having all wells on line by end of January 2001.

Mr. Ballard asked about the shut down and restart procedures, and the project team discussed the reasoning behind the restart procedures discussed at the September 2000 BCT meeting. Mr. Ballard recalled that the entire system would be shut down for one week with all 11 wells coming back on line at same time. Mr. Ballard asked that Mr. Smith check the September 2000 BCT meeting minutes to verify the procedures on which the BCT had agreed.

Dunn Field Remedial Investigation Work Plan Addendum II Field Work

Mr. Offner presented draft analytical results of the diffusion bag samples collected from the new monitoring wells installed on and off Dunn Field to address the potential dense nonaqueous phase liquid (DNAPL) issue identified in MW70 CH2m Hill hung the bags in the monitoring wells around December 13, 2000, and removed them January 8, 2001. The BCT then discussed the findings.

Mr. Offner reported that the results showed levels of the trichloroethene and tetrachloroethene breakdown products indicating that natural attenuation was occurring. Mr. Offner also reported that fairly high 1,1,2,2 PCA concentrations on Dunn Field appear to be migrating off site in a fairly narrow area following a preferential pathway instead of spreading out in a plume. Mr. Offner presented additional data that indicated particular zones along the screen length of each sampled well tend to have higher concentrations than other zones in the same well(s) and this, as a result, may allow for future investigations to focus on the same zoned within the screened area of other wells. A point of focus for the Dunn Field Feasibility Study (FS) would be the remediation of the preferential pathway of contaminant migration.

Mr. Ballard reiterated the need for vapor flux calculations in Dunn Field baseline risk assessment and indicated that the Dunn Field Feasibility Study should include off site remediation. Mr. Offner suggested that diffusion bag sampling be incorporated into the groundwater O&M plan.

Mr. Offner also recommend collecting diffusion bag samples from MW79, a recently installed downgradient well, as there was a data gap in that area, and that the data be incorporated into the Dunn Field Remedial Investigation (RI). Mr. Offner indicated this would cause a 60-day delay in the project schedule. The BCT concurred that CH2M Hill would collect the additional data for use in the Dunn Field RI and would update the project schedule to include the 60-day delay.

Mr. Ballard suggested that CH2M Hill produce a cross section from MW73 to MW79 and to include the appropriate sampling data on the cross section. Mr. David Ladd suggested that CH2M Hill keep a watchful eye on MW40 due to the absence of a clay layer there. Mr. Ladd continued that if sampling results indicated unacceptable levels at MW79, then a monitoring well or piezometer should be installed

between MW79 and MW40 to determine the edge of the "hole" (indicated by lack of clay at MW40) for monitoring purposes

Mr Offner continued that the sampling results indicated an area on site that the Dunn Field FS would evaluate for source remediation Sampling results also indicated an area of groundwater that had moved beyond the capture area of the extraction system that the Dunn Field FS would evaluate for off site groundwater remediation Soil sampling results found no evidence of nonaqueous phased liquids in the soil column, but groundwater sampling results indicated potential for DNAPL to be present in MW73 that was) installed in the source area of Dunn Field According to Mr Offner, the BCT had discussed this area and the possibility of incomplete capture between recovery wells (RW) 4 and RW5. Based on the sampling information, Mr. Offner indicated incomplete capture between these two recovery wells was quite possible.

Mr. Morrison asked if the screening approach proved to be valid for determining the need for sampling, and the BCT discussed the correlation of screening results to sampling results. Mr. Ballard requested that the Dunn Field RI include a discussion of the correlation between screening results and sampling results.

Dunn Field Feasibility Study Scope

Mr. Morrison asked if CH2M Hill had evaluated whether there was enough data to support unrestricted reuse of the eastern half of Dunn Field and, if not enough data, had identified what was necessary to support unrestricted reuse. Mr. Offner would coordinate with Dr. Mylavarapu and email a response to the BCT on January 23. Mr. Ballard indicated he should look at the eastern half of Dunn Field with the exception of the pistol range. Mr. De Back requested that Mr. Offner's response include the boundaries of areas identified for unrestricted reuse. Mr. Offner indicated that the boundaries would be the boundaries of the exposure units. Mr. Ballard opined that the goal was to identify the smallest area that would require use restrictions.

Update of Conceptual Site Model for Dunn Field and Main Installation

Mr Morrison asked if CH2M Hill had coordinated with Mr. Ladd regarding the need for deeper wells off site at east end of Dunn Field. Mr. Offner indicated the request was for a shallow well to include in the O&M plan that would provide Waterways Experiment Station a boundary condition at the southeast corner of Dunn Field, nested with existing deep well MW36.

Mr. Offner and Mr. Ladd then discussed whether transducers were needed in the deeper wells to show flux/relationship between the extraction system, the confined/semi confined aquifer and Memphis Sand USGS data for MW32 and MW34 did not indicate any relationship between the fluvial aquifer above the clay and the lower sands. The BCT discussed whether to concentrate on the effect of the extraction system within the fluvial aquifer or to collect transducer data from the lower sand to determine what effect the extraction system was having, if any. Mr. Ladd indicated there was no need for deeper well transducers to monitor impact of extraction, as there were similar transducer trends in the confined sand and Memphis Sand aquifers, but they were different from transducer trends in the fluvial aquifer.

O&M Plan for 3rd Year of System Operation

Mr Offner distributed the draft O&M plan addendum and indicated that Jacobs/Sverdrup Civil would provide future addendums. Mr. Ballard requested, and Mr. Offner agreed to update the O&M plan and provide it to the BCT on CD-ROM. Mr. De Back asked if the Jacobs/Sverdrup contract included these latest sampling requirements Mr. Rollyson indicated the Corps was working the issue and requested BCT approval of the draft O&M plan addendum to ensure contract modified correctly. The BCT agreed to try and provide response later in the day. Mr. Ballard requested that contracts for O&M should include provision to quickly incorporate trend analysis recommendations. Mr. Rollyson indicated that future contract modification would not be a problem as Jacobs/Sverdrup was not responsible for the O&M plan

Ms Cooper reported that she had contacted Mr Akil Al-Chokhachi of the city of Memphis treatment works and had forwarded the request to modify the discharge agreement data. She was awaiting a response from Mr. Al-Chokhachi

Mr Morrison asked if the draft O&M plan addendum included "contamination mass removed" calculation Mr. Offner responded that the monthly operations report required in the O&M plan included contamination mass removed from the total system effluent for the month as well as a total, and Mr. Ballard requested that the total include results from the beginning of extraction system operations

CWM Update

Mr Frank Johnson reported that UXB had completed work at Sites 1 and 24A and had started work at Site 24B. He continued that during the preliminary sampling to better define the removal area at Site 24B the first geo probe detected decontaminating agent. Excavation had removed 9 cubic yards (cy) of dirt containing low concentrations of mustard that was being shipped to Nebraska for disposal (incineration). Approximately 240 cy of soil containing the degradation products thioxane and dithiane was to be shipped to Millington for treatment (fixation/solidification).

Mr. Johnson continued that they were very confident that they had found the neutralization pit. Currently, UXB was removing the overburden, which was uncontaminated, to prevent cross contamination and to provide a slope down to the excavation area for big machinery. Edgewood Chemical Biological Center tested the soil before removing it from the vapor containment structure (VCS). UXB placed soil containing mustard in 1 cy fiber boxes lined with 6 mil plastic, and the plastic is sealed shut with tape, so the box and soil would be incinerated together, no double handling to remove dirt from container prior to incineration. Two VCSs had been constructed, one over the work area and one to stage the fiber boxes and soil awaiting disposal.

The BCT asked about sampling results, and Mr. Johnson responded that TCLP analysis was performed on overburden soil samples to determine if it must be disposed of or, if clean, could be returned to the excavation. The disposal facility would perform TCLP analysis on soil known to contain mustard or by products. The after action report would contain sampling results. Per Mr. Shawn Phillips' instructions, soil containing foreign material/debris such as broken china was not returned to the excavation. Mr Johnson indicated that he had requested, and received, approval from the city of Memphis treatment works to dispose of investigation derived waste water containing phosphates/soaps that was used to decontaminate workers' protective clothing (not involved in a ring off).

Mr Johnson asked for permission to move the mounds of soil that were waiting for TCLP analysis results from the current location to one of the stockpile pads. He indicated the soil was placed on visquene and then covered with visquene, so there was no rain leaching through. UXB maintained the covers and daily activities included an inspection of the covers Mr. Johnson reported that overburden dirt that could not be returned to the excavation based on the TCLP results would be removed no more than 5 days after receipt of TCLP results The BCT agreed. Mr. De Back requested that UXB use one of the centrally located stockpile pads and reminded Mr Johnson of the dust control requirements that must be maintained during dry months if trucks must leave the road to load out. Mr. Johnson indicated that the project completion date depended on the full extent of the neutralization pit, but was tentatively set for May 7.

The BCT approved of UXB's IDW storage: fiber boxes with soil containing mustard stored in VCS #2; soil containing byproducts on visquene with a visquene cover on a stockpile pad; overburden awaiting TCLP on visquene with a visquene cover on a stockpile pad. Mr Ballard and Mr. Morrison agreed to visually inspect current storage after the meeting.

Mr Offner reported that CH2M Hill had collected samples for TCL/TAL analysis and that results had not indicated a source area, so no excavation had been required to remain open in order to manage hazardous waste issues

Main Installation Record of Decision

Mr. Offner reported that CH2M Hill had distributed Revision 1 ROD to the Defense Logistics Agency and the BCT for review and comment by January 31. The BCT discussed how the ROD should address the LUCAP and would focus their ROD review on the current LUCAP language and provide comment by

January 31 Mr Offner also asked Mr. Morrison to focus his review on the required resource damage statement as well as its placement within the ROD.

Mr Ballard initiated a discussion of the fence between in the golf course and the residential areas on and off the facility that was included in the selected remedy for the Main Installation. Mr Ballard indicated that there was no need for a fence separating the golf course from the industrial area Mr. De Back indicated the land use control applied only to the golf course The land use control would provide for limited access to the golf course, so the fence should be specific to the golf course and not to the entire facility perimeter fence Mr. Offner reported that the ROD included a fence around the golf course, only.

Mr Ballard then asked about the fishing/swimming restriction in the selected remedy since it was not necessary from a risk based perspective. The BCT agreed that the ROD contain only those restrictions that were required for risk management and discussed how to delete the fishing/swimming restriction from the ROD. Mr. Ballard indicated that Revision 2 ROD contain an Explanation of Significant Differences section. Mr. Ballard agreed to work with Mr. Offner on the necessary language.

Documents in Electronic Format

The BCT agreed that all contractors should provide all documents from Revision O through Revision 2 (final) on CD-ROM in Adobe pdf format and that each CD-ROM should include Adobe Reader software. The BCT also agreed that contractors should provide hard copies for Revision 1 and Revision 2 (final) documents to be placed in the information repositories. Mr. Offner reiterated Mr Ballard's earlier request that the cover letter be included on the CD-ROM cover. The BCT agreed that the current cover template be used for all future submittals. Mr. Offner will provide the cover template to Jacobs/Sverdrup and UXB.

Mr. De Back indicated the Depot would determine the number of CD-ROM and hard copies that were required and provide the information to Ms. Richards and Ms. DuBray.

SIGNED	2/23/01
JOHN DE BACK	DATE
Memphis Depot Caretaker Division	
Interim BRAC Environmental Coordinator	
SIGNED	2/15/01
TURPIN BALLARD	DATE
Environmental Protection Agency	
Federal Facilities Branch	
Remedial Project Manager	
SIGNED	2/27/01
JAMES W. MORRISON	DATE
Tennessee Department of Environment and Conservation	
Division of Superfund	
BRAC Cleanup Team member	

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Long Term Operational Area (LTOA) Monitoring Wells Discussion

Addendum

To

Final January 2001 BRAC Cleanup Team Meeting Minutes

Attendees

BRAC Cleanup Team	Organization	Phone
John De Back (interim)	Defense Logistics Agency (DLA)/ Memphis Depot Caretaker Division	(901) 544-0622
Turpin Ballard	Environmental Protection Agency, Region IV (EPA)	(404) 562-8553
James Morrison	Tennessee Department of Environment and Conservation, Memphis Field Office, Division of Superfund (TDEC)	(901) 368-7958
Project Team		
Dorothy Richards	US Army Engineering and Support Center, Huntsville	(256) 895-1463
David Nelson	CH2M Hill	(770) 604-9182
Stephen Offner	CH2M Hill	(770) 604-9182

Long Term Operational Area wells

The BCT discussed the need for additional diffusion sample data for the temporary LTOA wells Mr. Morrison requested that more diffusion samplers be placed in the temporary LTOA wells, and that CH2MHill sample them instead of TDEC. The need for additional diffusion samples would be based on the saturated thickness of the unit (e g a temporary well with a 10' saturated thickness would have a minimum of 4 - 2' diffusion samplers hung in them). Because these LTOA wells are proposed as temporary, sufficient data is needed to be acquired during a one-time sampling event in order to establish a representative baseline of LTOA site condition Mr Deback agreed to this approach because it would eliminate the need to revisit the wells with multiple rounds of sampling if contaminant levels in these temporary LTOA wells turned out to be consistent with contaminate levels (150 ppb) already detected on the Main Installation. In addition, by having CH2MHill collect these samples, TDEC would not need to sample these wells as intensely as previously discussed, there by saving time and resources

SIGNED 3/8/01
JOHN DE BACK DATE
Memphis Depot Caretaker Division
Interim BRAC Environmental Coordinator

SIGNED 2/29/01
TURPIN BALLARD DATE
Environmental Protection Agency
Federal Facilities Branch
Remedial Project Manager

SIGNED 2/29/01
JAMES W. MORRISON DATE
Tennessee Department of Environment and Conservation
Division of Superfund
BRAC Cleanup Team member

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE