



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 620

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FINAL
BRAC Cleanup Team
Meeting Minutes
March 14 - 15, 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		
Jim Thomas	DLA	(801) 775-6597
Mike Dobbs	Defense Distribution Center	(717) 770-6950
David Ladd	U.S. Geologic Survey	(615) 837-4773
Clyde Hunt	Corps of Engineers/Depot RPM	(901) 544-0617
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
John Whiting	Corps of Engineers	(334) 694-4216
Robert Torstrick	Corps of Engineers	(256) 895-1512
Stephen Offner	CH2M Hill	(770) 604-9182
Virgil Jansen	Jacobs Engineering/Sverdrup	(314) 770-4025
Frank Johnson	UXB International	(703) 625-3792
Russ Lloyd	Innovative Waste Management	(843) 725-2007
Gerry Girardeau	Innovative Waste Management	(843) 725-2014
Jim Covington	Depot Redevelopment Corporation	(901) 942-4939
Brent Akin	Barnhart Crane	

Review of Project Status

Main Installation Record of Decision (ROD) and Land Use Control Assurance Plan (LUCAP)

Mr. John De Back reported that he sent the LCUAP updated with EPA's comments to the Army Materiel Command (AMC) on March 13, 2001, and that AMC's legal counsel had taken lead on coordinating comments with EPA. Mr. De Back also reported that AMC had forwarded the LUCAP to the BRAC Transition Team (BTT) for concurrence and to work the issue of reporting.

Mr. Turpin Ballard reported that he received the Main Installation ROD from TDEC and that EPA would sign the ROD upon receipt of a signed LUCAP. Mr. Steve Offner indicated that the ROD referenced the LUCAP as if it were signed and that he required the LUCAP signature date before distributing the final, signed ROD. The BCT congratulated the ROD developers for providing a quality document.

Long Term Operational Area wells on Main Installation

Mr. Offner reported that CH2M Hill had received the appropriate funding and was working on the well installation schedule. He indicated that Corps of Engineers Huntsville and Mobile were working together to construct the wells. Mr. Offner also indicated that the Main Installation groundwater pre-design work plan would include a proposed well table and maps.

Dunn Field Interim Remedial Action for Groundwater

Mr. Virgil Jansen reported that Jacobs Engineering had replaced the pumps, motors and flow control valves in six of the original seven wells and restarted them. The new pumps and motors operated for a five-week period before being shut down to replace the flow control valves. Upon system restart the pump motors in Recovery Wells (RW) 5 and 7 did not work, so Jacobs Engineering replaced them. Both motors were shorted out. The motor on RW5 shorted out on March 5 and again on March 8. The motor on RW7 shorted out on March 5 but not on March 8. Jacobs Engineering requested that the manufacturer evaluate the motor.

On March 14, Jacobs Engineering stopped RW3 because the flow meter was not functioning properly and found a small pebble. When they restarted RW3, the motor was shorted out. Mr. Jansen continued that the evidence points to a problem with the electrical system, although no changes were made to the electrical system from the wellheads to main junction. Mr. Jansen indicated that Jacobs Engineering, the electrician and the pump motor manufacturer were evaluating the issue. Mr. Jansen would notify the BCT as soon as the problem was resolved.

Mr. Ballard asked if the Operations and Maintenance (O&M) Plan included provisions for notifying the regulators such problems and the potential effect on the interim action. Mr. Offner indicated the plan called for the contractor to notify only the Corps of Engineers. Mr. Ballard responded that the regulators must be notified if the system was not fulfilling the goals of the interim remedial action. Mr. John Rollyson indicated he would ensure the regulators were notified of interruptions in recovery system operations.

Mr. De Back asked if the problems appeared to be sabotage. Mr. Jansen responded that there was no evidence of sabotage. Mr. Offner indicated that he encountered a similar problem with a pump motor and that it was attributed to a nick in the lead. Mr. Jansen indicated that current evidence pointed to an electrical power supply surge and that could be part of the problem. Mr. Offner will provide Mr. Rollyson a letter from CH2M Hill that addressed electrical issues brought up by OHM/IT while they were operating the system. Mr. De Back suggested that if power surges were a problem, then Mr. Jansen might need to design a power conditioner into the system. Mr. Jansen responded that the electrical subcontractor was evaluating the power supply problem. Mr. Morrison suggested that Mr. Jansen evaluate the possibility of an electromagnetic field that may have developed between the recovery wells and overhead power lines.

Mr. Jansen reported that since the recovery system was not yet fully operational, he was still working under the construction contract.

The BCT discussed the O&M sampling requirements and the city of Memphis publicly owned treatment works reporting requirements – Jacobs Engineering will collect samples quarterly, specifically in May and November, and report the data in the Quarterly Report to be distributed on CD-ROM to the BCT. The monthly report for the Depot will include flow rates, but will not include analytical data.

Dunn Field Remedial Investigation Work Plan Addendum II Field Work

Mr. Offner provided initial results from the diffusion bag samples collected from Dunn Field monitoring wells (MW). The BCT discussed the results.

Mr. Offner reported that sample results provided the nature and extent of the 1,1,2,2-tetrachloroethane (PCA) plume, but that additional samples may be required to design the final remedy. Mr. Offner also reported that sample results provided the nature and extent for tetrachloroethene (PCE) and trichloroethene (TCE). Mr. Offner indicated that the Dunn Field Feasibility Study would evaluate final actions to remediate all on- and off-site contaminated ground water identified in the RI. The BCT then discussed the sampling frequency and results from the monitoring wells adjacent to RW5 compared to the system shut down schedule for RW5 to determine why O&M sample results were higher than the diffusion bag sampling results. Mr. Offner indicated that contaminants appeared to be breaking through the recovery system between RWs 4 and 5, but that it appeared not to be a wide area. Mr. David Ladd said that it appeared the break through area was made wider when the system was down.

Mr. Offner reported that *cis* 1,2-dichloroethene (DCE) and vinyl chloride levels indicated that natural attenuation was taking place and that TCE was breaking down naturally. He indicated there was an aerobic zone with micro anaerobic conditions.

Mr. Offner said that CH2M Hill was conducting an internal review of the cross sections from the Dunn Field area and that they wanted to conduct some resonance imaging.

Dunn Field Feasibility Study Scope

The BCT again asked Mr. Offner if any more sampling data was necessary to statistically support a declaration regarding the residential suitability of the east half of Dunn Field. Mr. Offner reported that there was enough data to support that declaration for the Northeast Recreational Area. Mr. Ballard reiterated that the BCT wanted to know what parts of Dunn Field would be available for unrestricted reuse; therefore, was there enough data to support such declarations. Mr. Offner would have Dr. Vijaya Mylavarapu determine if there was sufficient data to identify which parts were available for unrestricted reuse.

O&M Plan for 3rd Year of System Operation

Mr. Jim Morrison concurred with the draft O&M Plan Addendum 2. Mr. Offner will provide for the action item list the anticipated completion date for submitting the 3rd year O&M plan to the BCT. Mr. Jansen and Mr. Offner agreed to coordinate on the standard operating procedure for diffusion bag sampling. The BCT suggested installing diffusion sampling bags along the length of appropriate monitoring wells to identify the depth to contaminants, and then install diffusion sampling bags only in the contaminated area.

Main Installation Remedial Design

The BCT discussed the area identified for soil remedial action at Building 949 and Barnhart Crane's plans to install a temporary building at that area. The BCT discussed and the project team concurred that CH2M Hill would prepare a scope of work and provide it to the Mobile Corps. Mr. Jansen will pull or reference the appropriate sections, such as the sampling criteria, from the old paint shop and maintenance area soil removal work plan to produce the remedial design for soil removal at Building 949. Mr. Ballard suggested, and the project team concurred that the opening section of the remedial design should identify sections that the BCT has already reviewed and approved. The BCT could then concur with the design conditionally on incorporation of appropriate comments.

Mr. Brent Akin of Barnhart Crane indicated the desire to erect the building on the concrete pad and asked if the excavation would include the pad. Mr. Offner indicated the current data indicated lead levels adjacent to the pad and that confirmatory samples would determine if excavation of the concrete pad would be necessary.

The BCT discussed a process to determine if the pad would be excavated before field work began and agreed that soil samples should be collected from under the concrete pad and analyzed for total lead to determine if, and if so how much of, the concrete pad must be excavated.

Ms. Richards directed CH2M Hill collect the samples. The BCT visually inspected the site to identify sampling points. Mr. Offner will develop a recommendation and submit it to the BCT on March 20 for approval.

The project team agreed to the following schedule for the soil remedial design and action at Building 949.

- March 23 Mr. Offner to provide the Scope of Work to Mr. Rollyson,
- April 6 Mr. Jansen to provide cost proposal to Mr. Rollyson/Ms. Du Bray;
- April 13 Mr. Jansen, Mr. Rollyson and Ms. Du Bray to negotiate and, if funds are in place, Mr. Rollyson will provide verbal notice to proceed,
- April 13 Mr. Hunt to provide remedial design work plan cover letter to Mr. Rollyson/Ms. Du Bray to be incorporated into CD ROM cover;
- April 20 Mr. Jansen to provide the remedial design work plan on CD ROM to Mr. Rollyson/Ms. Du Bray,
- May 4 BCT to provide remedial design work plan comments and conditional concurrence to Mr. Hunt, who will forward the comments to Mr. Jansen, who will prepare responses to comments and provide them to Mr. Rollyson for distribution to the BCT,
- May 14 Mobilize

Mr. Jansen anticipated the project could be completed in mid June, 60 days after receiving the notice to proceed, and that excavation should be completed before June. Mr. Jansen and Mr. Akin discussed locations to store the excavated dirt during the waste analysis and disposal portion of the project. Mr. De Back instructed Mr. Jansen to coordinate directly with Mr. Akin on waste storage and area access issues.

Mr. Offner requested guidance on backfill and compaction requirements. Mr. Akin requested the hard pack area and concrete pad be restored to original condition. Mr. De Back instructed Mr. Offner to include in the Scope of Work the requirement to restore the area to original condition including the concrete pad.

CWM Removal Action Update

The BCT discussed the transportation and disposal of waste generated by the CWM removal action. Mr. Frank Johnson presented and the BCT discussed the draft Transportation and Disposal Plan (T&D Plan) currently being reviewed by the Solid Waste Management Division of TDEC/Memphis Field Office. Mr. Johnson introduced representatives from Innovative Waste Management, the subcontractors responsible for producing the T&D Plan and for processing all waste to the appropriate disposal facilities.

Mr. Johnson reviewed the 10 categories of waste generated, or with the potential to be generated, by the removal action and the proposed transportation and disposal methods. The BCT discussed the categories and made several recommendations.

Mr. Morrison asked if any of the waste categories would be impacted by a federal munitions rule. The BCT discussed archival information and sample results from the casings that indicated the casings

contained no munitions Mr. Johnson agreed to confirm that the waste categories would not be impacted by a munitions rule and to provide the BCT with a response

Mr Ballard indicated that all references to preliminary remedial goals (PRGs) as regulatory compliance standards must be removed, as PRGs were risk-based guidelines, not compliance standards. The regulatory compliance standards should include levels for mustard, Toxicity Characteristic Leaching Procedure (TCLP) levels as specified by the Resource Conservation and Recovery Act and maximum contaminant levels (MCLs) specified by the Safe Drinking Water Act.

The BCT discussed the cost effectiveness of collecting samples and analyzing soil cleared of mustard and by-products to determine if the soil could be used to fill the excavation based on PRGs. The BCT and project team agreed it would probably be more cost effective to dispose of the soil as special waste and bring in clean fill

The BCT discussed options for disposing of wastewater cleared of mustard, but that contained degradation by-products Mr. Johnson reported he had contacted Mr Akil Al-Chokhachi of the city of Memphis publicly owned treatment works (M.C. Stiles Treatment Plant) regarding disposal of this wastewater into the sanitary sewer system The BCT voiced concerns about discharging the waste water into a sanitary sewer connection within the adjacent community and suggested that Mr Johnson transport the waste water to and discharging it at the treatment plant Mr De Back requested that Mr. Johnson also coordinate with Mr. Jansen to determine the feasibility of discharging to the sanitary sewer system via the groundwater recovery system discharge connection.

Mr Ballard requested that the T&D Plan clarify and clearly define the term "legal detection limits "

The BCT discussed shipping waste generated at the CERCLA site out of state and an EPA guidance to notify the receiving states Mr Lloyd of IWM reported that he had requested that disposal facilities receiving the waste generated from the CWM removal action send Mr Johnson a letter documenting the facilities' awareness of the type of waste to be received, receipt of waste profiles and the CERCLA status of the shipping facility. Although Nebraska did not require the submission of waste profiles, IWM requested the facility to submit the waste profiles to the state and inform Mr. Johnson in writing that this had occurred

Mr. Johnson asked if the state was required to approve the T&D Plan prior to its implementation. Mr. Morrison was unaware of any such requirement as long as the waste is not being disposed of or treated at a TDEC permitted facility However, other states where the waste will be sent for treatment or disposal may have requirements At a minimum, Mr Morrison felt these states need to be notified of this waste transport in advance Mr Johnson agreed to incorporate by Friday all comments received during the meeting and submit it to Mr. Bob Torstrick, who will distribute the updated T&D Plan the week of March 19 to the BCT for review and comment

Mr Torstrick then provided a quick update on the CWM project The excavated bomb casings currently stored on site have been confirmed as free of CWM A visual inspection of two of the 29 burster tubes indicated that these burster tubes could not be confirmed as free of explosives. The other 27 bursters were confirmed as free of explosives. UXB was working to determine proper disposal method for casings with results indicating explosives Sample results collected from the boundaries of the neutralization pit excavation area have not detected mustard or degradation by-products. The project team was confident they had removed the entire neutralization pit and that excavation activities have been completed.

Mr. Johnson interjected that workers had encountered a dark, tar-like substance in excavation area, and ECBC's analysis confirmed it was not CWM or break down by-products. UXB collected samples from this substance, and CH2M Hill was analyzing them. Mr. Johnson will annotate the location of the tar-like substance in the after action report. Mr. Johnson reported that UXB had marked the excavation area boundaries in order for CH2M Hill to collect HTRW samples for the Dunn Field remedial investigation. Mr. Offner reported that CH2M Hill had collected all necessary HTRW samples.

Mr. Torstrick continued that as soon as all the casings were cleared, then the excavation would be filled with the soil removed from building foundations that were demolished by the DRC. Soil samples were collected, and UXB was awaiting results to ensure the soil was clean and suitable for use. The BCT concurred that the vapor containment structure could be removed to fill the excavation.

Mr. Torstrick indicated U.S. Army Technical Escort Unit personnel had started demobilizing, but that Edgewood Chemical and Biological Command personnel would remain on site until all monitoring and sampling efforts for CWM were completed. The second vapor containment structure would remain in place until all the soil containing mustard was transported to the appropriate disposal facility.

Mr. De Back requested that the weekly CWM briefings be stopped as soon as possible. Mr. Mike Dobbs requested that Mr. Hunt and Mr. De Back discuss CWM project closure community relations issues with Frontline.

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Ms. Richards indicated Huntsville Corps had evaluated the situation and the software and could provide assistance to purchase and distribute the software and to train the project team. Ms. Richards recommended that the documents be housed electronically by CH2M Hill, who is responsible for updating documents and incorporating comments. The BCT agreed that Ms. Richards should move forward with her recommendation.

Mr. Ballard identified the need to develop a standard operating procedure for providing comments using Adobe Acrobat, but no one was tasked to develop such a SOP. Ms. Richards agreed to coordinate with Mr. Rollyson, Ms. Du Bray and Mr. Jansen to ensure Jacobs Engineering was included.

SIGNED	April 11, 2001
JOHN DE BACK	DATE
Memphis Depot Caretaker Division	
Interim BRAC Environmental Coordinator	

SIGNED	April 11, 2001
TURPIN BALLARD	DATE
Environmental Protection Agency	
Federal Facilities Branch	
Remedial Project Manager	

SIGNED	April 16, 2001
JAMES W. MORRISON	DATE
Tennessee Department of Environment and Conservation	
Division of Superfund	
BRAC Cleanup Team member	

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE