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THE MEMPHIS DEPOT **TENNESSEE**

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 495

File: 212, 700,000 Q. D.C.

BRAC Cleanup Team

Meeting Minutes

March 17, 2000

Attendees

BRAC Cleanup Team	Organization	Phone
Shawn Phillips	Depot	(901) 544-0611
Turpin Ballard,	EPA Region IV	(404) 562-8553
Jim Morrison	TDEC-DSF	(901) 368-7953
Project Team		
Brian Deeken	TDEC-DSF	(901) 368-7955
Mike Dobbs	DDC Environmental	(717) 770-6950
Jackie Noble	DDC Command Affairs	
John DeBack	Depot	
Rick Bowlus	USACHPPM	
Denise K. Cooper	Depot	(901) 544-0610
Dorothy Richards	Corps, Huntsville	(256) 895-1463
Steve Dunn	Corps, Huntsville (OE)	(256) 895-1144
Kurt Braun	Corps, Mobile	(334) 690-3415
Neil Anderson	Corps, Arnold AFB	(901) 686-6195
Tom Hoff	PMNSCM	(410) 436-8738
Scott Bradley	Corps, Huntsville	(256) 895-1637
Virgil Jansen	Sverdrup	(314) 770-4025
Greg Underberg	CH2M Hill	(423) 483-9032
Steve Offner	CH2M Hill	(770) 604-9182

Review of Previous Meeting Minutes

The BCT discussed, approved and signed the February meeting minutes.

Open Action Items Review

The BCT and project team reviewed the action item list. The attached action item list provides updates or completion dates to the existing action items and provides action items from the March BCT meeting.

Project Status Review

CH2M Hill - New Program Manager

Mr. Greg Underberg announced that he accepted another position with CH2M Hill in Albany, NY. Mr. Steve Offner, formerly of OHM/IT, announced he accepted a job with CH2M Hill as

the Program Manager for the Corps Huntsville's Memphis Depot cleanup program contract. Due to his previous experience at Dunn Field, Mr. Offner will also serve as the Project Manager for the Dunn Field RI/FS work.

Mr. Underberg will continue to serve as a Senior Consultant providing hydrogeological and programmatic support to Mr. Offner for the Depot's project. Mr. Offner will attend the monthly BCT meetings.

Interim Remedial Action for Groundwater Phase IIA - Additional Onsite Recovery Wells

Mr. Kurt Braun indicated the request for proposal to install the piping system was sent to Sverdrup on February 24, but the projected award date changed to April 14.

Old Paint Shop and Maintenance Area Removal Action

Mr. Turpin Ballard voiced a concern about the work plan, specifically he questioned the need to collect soil samples before removing the soil and then also collecting confirmation samples. The sampling approach used at the housing area removal action should be used for this removal action. The BCT agreed that no soil samples would be collected before soil was removed from the area inside the fence (Area B), but the five soil samples identified for outside the fence (Area A) along Perry Road would be collected before any soil was removed. Confirmation samples will be collected after soil has been removed from the area inside the fence.

Mr. Ballard also questioned need for five samples identified for outside the fence along Perry Road. Mr. Underberg explained that previous sample results indicated levels of PAHs above background and that the additional sampling was proposed to confirm whether or not the elevated offsite levels were from the Depot. Mr. Phillips interjected that the PAHs were most likely from vehicle traffic along Perry Road and not a release from the Depot. The BCT requested CH2M Hill prepare a statement/table providing the data quality objectives for these five samples.

Mr. Jim Morrison indicated TDEC would be unable to provide comments on Sverdrup's work plan by the scheduled due date. He indicated TDEC comments would be delayed by about two weeks

CWM Removal Action at Dunn Field

Mr. Offner provided the BCT a technical memorandum, "Amended Sampling and Analysis Plan: Soil Sampling from CWM Excavations 24-A, 24-B and 1 for HTW – Dunn Field, Memphis Depot. The BCT will review, provide comments to CH2M Hill as soon as possible and be prepared to discuss the plan at the April BCT meeting.

Dunn Field Remedial Investigation/Feasibility Study

Mr. Underberg provided the BCT with a final technical memorandum, Sampling and Analysis Plan for Evaluation of Biodegradation of VOCs in Groundwater at the Memphis Depot, and informed the BCT that CH2M Hill would mobilize on March 20, 2000, to collect groundwater samples. The plan was previously submitted by e-mail to the BCT for review. Comments from TDEC were incorporated in the final version provided to the BCT. TDEC will coordinate with CH2M Hill to observe the sampling or collect split samples. Mr. Underberg indicated the document review schedule did not change based on incorporation of MNA data, once collected, into the final Dunn Field FS.

Mr. Ballard indicated U.S. Geologic Survey had several comments regarding the draft Section 14.5 provided by CH2M Hill at the February BCT meeting.

Mr. Braun indicated OHM/IT had installed the one remaining monitoring well (MW 68) west of Dunn Field. Mr. Underberg and Mr. Offner began a discussing of potential dense non-aqueous phase liquids (DNAPL) west of Dunn Field. Mr. Offner indicated samples were collected from three of the four new monitoring wells, and results from MW 70 in the TVA right-of-way indicated levels of TCE and 1,1,2,2-PCA higher than historical sampling results. These levels raised a question about the potential existance of DNAPLs offsite.

Mr. Phillips asked about sample results from MW 68. Mr. Jansen indicated MW 68 had not been sampled, but would be as part of the quarterly groundwater sampling program. Mr. Ballard asked if sample results indicated breakdown products of PCE. Mr. Offner responded that levels of breakdown products were identified in surrounding monitoring wells and that the boundary wells were still clean. When asked about the stratigraphy of the area specifically the confining unit, Mr. Offner responded he was awaiting survey triangulation necessary to verify the stratigraphy.

Mr. Phillips asked if the newly installed wells would be sampled as part of the monitored natural attenuation groundwater sampling program. Mr. Offner responded during the upcoming MNA sampling effort, he wanted to resample newly installed monitoring wells MW 70 and MW71 and monitoring wells that haven't been sampled as part of the routine O&M sampling. The BCT requested sampling specifically for DNAPLs. Mr. Morrison requested a profile of the water column to see where contamination is within the water column, especially at monitoring wells with high variability in sample results. He suggested using a relatively new technique called an diffusion sampler and agreed to provide a standard operating procedure for the infusion sampler to the BCT, CH2M Hill and Sverdrup.

Mr. John DeBack asked if the DNAPL would change the possibility of no further action for offsite groundwater. Mr. Underberg responded that it could. The DNAPL must be characterized to determine if it is moving past the recovery well system or if it was being pulled back by the recovery system. MW 70, where the potential for DNAPL was identified, lies about 30 feet west of the Dunn Field fence, but that the capture zone for the recovery wells has not yet been mapped. He continued that more monitoring wells were necessary in order to characterize the extent of the DNAPL.

Mr. Phillips asked if Waterways Experiment Station was involved with the DNAPL discussion. Ms. Dorothy Richards responded that WES received the latest groundwater sampling data and that additional monitoring wells were necessary to characterize the hydrogeology of the affected area. Ms. Richards pointed out that sampling for DNAPLs should be incorporated into the Sampling and Analysis Plan for Evaluation of Biodegradation of VOCs in Groundwater at the Memphis Depot and that this finding may change the conclusion of the Dunn Field RI.

The BCT discussed obtaining permission from Belz Properties to install more monitoring wells on Belz property west of Dunn Field. Mr. Phillips will initiate the process to obtain access to Belz property to install monitoring wells when he provides the recent groundwater sampling data from the new monitoring wells to Belz Properties. Mr. Jansen will provide the data from MW 69, 70 and 71 to Mr. Phillips, who will then forward the data to Belz Properties and request permission to install several additional monitoring wells. Mr. Phillips requested CH2M Hill provide him a map indicating the area where access is needed.

Mr. Offner and Mr. Underberg clarified that CH2M Hill will resample MWs 70 and 71 using MNA procedures to confirm the elevated concentrations. Either MW 12 or MW 35, depending on where these wells are screened, will be resampled for volatile organic compounds and using MNA procedures. After resampling these wells, CH2M Hill will evaluate the top of the confining unit and the potentiometric surface. CH2M Hill will evaluate other characterization methods, including the diffusion sampling method, for use in the work plan to evaluate the DNAPL issue.

Mr. Phillips directed CH2M Hill to include data quality objectives in the DNAPL sampling plan addendum. CH2M Hill will prepare a work plan for evaluating DNAPLs in groundwater west of Dunn Field after resampling MWs 70, 71 and 12 (or 35) and receiving the sampling data. CH2M Hill will provide a schedule for DNAPL characterization and the technical approach for the characterization effort by the April BCT Meeting. Turpin Ballard said that due to the potential DNAPL and the fact that the source areas within Dunn Field may need to be reevaluated, it was not appropriate to review the draft final RI Report at this time. To save reproduction costs on the next version of the RI, CH2M Hill requested all copies be returned to them.

Main Installation Remedial Investigation/Feasibility Study

Mr. Morrison indicated TDEC had identified several issues with the final Main Installation RI Report that was distributed on January 31, 2000, and will provide written comments.

Mr. Underberg presented the BCT a technical memorandum, Evaluation of Recreational Land Use Scenarios at Functional Unit 2, Memphis Depot, to answer the question: "Does the risk assessment as it currently stands provide sufficient protection for children on the entire golf course." Mr. Underberg explained that the memo compared risks associated with a recreational exposure scenario such as adult jogger and child playground user and used the UCL95% exposure point concentrations estimated for a golfer in the Streamlined Risk Assessment for Parcel 3 as well as the maximum detected concentrations across the golf course to assess the worst-case risks. The tech memo concluded that if a playground were established at an area with dieldrin concentrations similar to the maximum detected concentrations, the risks and the hazard index for children would be above acceptable levels.

The BCT discussed different aspects of the situation including the variability of dieldrin concentrations across the golf course and current playground construction practices that include a thick layer of material such as mulch to protect children from the hard ground. The BCT also discussed the feasibility of applying the treatment developed by Venture Capital and University of California at Riverside, lease and deed restrictions regarding construction of a playground on the golf course, and strategies for incorporating the treatment in the upcoming feasibility studies, proposed plans and records of decision.

Mr. Phillips questioned the industrial worker hazard index presented in the tech memo because it appeared to depart from the conclusion of the Streamlined Risk Assessment for Parcel 3. Mr. Underberg would request Ms. Vijaya Mylavarapu, CH2M Hill's risk assessor, verify and clarify that hazard index and report back to Mr. Phillips via email by March 25, 2000. Mr. Underberg asked if the tech memo information should be incorporated into the Main Installation FS, and the BCT agreed it would. Mr. Underberg will work with Ms. Richards to amend the current document review schedule to reflect the time necessary to update the Main Installation FS for soils.

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The BCT will review the technical memorandum, Evaluation of Recreational Land Use Scenarios at Functional Unit 2, Memphis Depot, and provide comment/approval by March 31, 2000. Once approved, the tech memo would be incorporated as an appendix to the final Streamlined Risk Assessment for Parcel 3 and to the final Main Installation RI Report. Mr. Morrison requested Mr. Underberg send him the tech memo electronically and he will forward it to Dr. Ruth Chen, Tennessee Department of Health, for her review.

The BCT agreed that the feasibility studies for the Main Installation would be broken into a soils FS and a groundwater FS that would proceed on separate review schedules. The Main Installation FS for soils would be distributed first. The MNA sampling would be incorporated into the Main Installation FS for groundwater, and it would be distributed. That would close out the Main Installation remedial investigation portion of the project.

Next Scheduled Meeting

Mr. Ballard indicated he had a scheduling conflict and would be unable to meet in April at the usual BCT meeting date and time. The BCT agreed to conduct the next meeting on Wednesday, April 19, 2000, beginning at 8:30 a.m.

SHAWN PHILLIPS

Memphis Depot Caretaker

BRAC Environmental Coordinator

TURPIN BALLARD

Environmental Protection Agency, Region IV

Federal Facilities Branch

Remedial Project Manager

JIM MORRIŠON

At

Tennessee Department of Environment and Conservation

Memphis Field Office, Division of Superfund

Remedial Project Manager

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