

N61165.AR.002931  
CNC CHARLESTON  
5090.3a

NOTES FROM BASE REALIGNMENT AND CLOSURE TEAM MEETING DATED 9 JULY 2002  
CNC CHARLESTON SC  
7/12/2002  
CH2MHILL

## Notes from July 2002 BCT Meeting Navy's CNC BCT Office, Charleston, SC

PREPARED FOR: Charleston Naval Complex BCT  
PREPARED BY: Richard Garcia  
DATE: July 12, 2002

The July 2002 BCT Meeting was held at the Navy's CNC BCT office in Charleston, South Carolina. The meeting began at 1030 hrs on Tuesday, July 9, 2002, and concluded at 1100 hrs on Wednesday, July 10, 2002.

The meeting began with introductions of team members, agenda review, and action item review.

### Tuesday, July 9, 2002

#### Update on Field Activities

Tom Beisel of CH2M-Jones provided an update on field activities at the following sites:

SWMU 166: Sampling and Injection activities performed at this site.

SWMU 196: Phase III of the ChemOx treatment is underway.

AOC 561: Hydrogen peroxide injection performed in June.

SWMU 6: Excavation of contaminated soil to be performed this week.

SWMU 25/70: Ninety day post-injection performance monitoring scheduled for this week.

SWMU 38: Two activities took place at this site: one area received hydrogen peroxide injection and a dig and haul of PCBs was performed in another area.

AOC 711-720: Sampling performed at some of these oil-water separator sites.

AOC 607: Electrical resistance heating completed. Water line repaired. SVE system will continue to operate.

SWMU 3: Soil excavation performed this week

SWMU 17: Vacuuming of NAPL from wells scheduled this week.

AOC 613: Sample various wells. Installation of two wells and geoprobe scheduled for July.

SWMU 8 and 9: Measured groundwater elevations and sampled wells.

AOC 633: An IM Work Plan was developed and submitted to DHEC to address LNAPL-impacted soil at the site. Soil Excavation scheduled in July/August.

AOC 701: DPT, Wells, and sampling performed at this site. Awaiting analytical results.

### **SWMU 196 Update**

Paul Favara briefly explained the progress and results from the ChemOx treatment at this site. He indicated that two treatments have been completed to date and a third treatment was scheduled this month. The site consists of a total of 46 injection points, 4 barrier wells, 13 vent points, and 18 monitoring wells. Over 10,000 gallons of hydrogen peroxide has been introduced to date with 2,400 gallons scheduled for the final phase.

He presented various drawings showing the location of the wells and injection points, concentrations, and percent reduction of the contaminants. He indicated that at four locations we have observed an increase of concentrations, but explained that these areas had received low amounts of peroxide. The proposed new injection points should take care of the areas of where higher concentrations were recorded.

About 56% of the total CBs have been removed on an average concentration basis. Less effective removal (on a percentage basis) has occurred with 13DCB and 14DCB while great results were observed on chlorobenzene (CB) (99%) and 12 DCB (92%). The area in the center of the plume performed the best.

Polishing activities, completion of CMS, and evaluation of future polishing technologies (including the potential use of permanganate) are future tasks associated with this site.

No groundwater flow effects have been observed. Post treatment profiling of the plume contamination has not been performed to date. Profiling may be performed during the subsequent monitoring or remediation phase.

### **Grid Well 11**

Tom Beisel provided a brief review of work activities around building NS28 regarding solvent contamination. Two new wells and a geoprobe were recently installed. Results from the recent sampling event noted some concentrations of TCE in the northern wells near an old maintenance shed. The results are being evaluated and plans to address this site have yet to be determined.

### **SWMU 175/AOC613/AOC615**

Louis Palmer provided an overview of the work activities at these sites. She provided background information of the history of the site; area of coverage, previous sampling performed, work performed under the UST program, and RFI results. Several drawings were presented indicating concentrations of PCE, TCE, 1,2-DCE, and Vinyl Chloride. A potentiometric map showed groundwater flow patterns in this area. Proposed activities were reviewed including measurement of extent of groundwater contamination around Building 255 (where the Hunley is

being renovated) and various oil-water separators and evaluation of the need for an IM.

### **Discussion of Well Inspection**

Tom Beisel provided a brief overview of CH2M-Jones plan to inspect all wells at the site. He stated that we would inspect about one zone per month to evaluate the conditions of the wells with additional inspections during sampling or groundwater gauging of wells. He also made reference to a document submitted to DHEC in May titled "Groundwater Monitoring and Well Inspection Work Plan" that describes the proposed facilities' overall annual groundwater monitoring program. This document is currently under review by DHEC.

### **Discussion of Data Collected with DPT Logs**

Paul Bergstrand discussed a recent document that was mailed to CH2M-Jones regarding examples of how DPT logs have been documented by other contractors. It was decided at the meeting that we will implement a system that will submit DPT and other boring logs upon a reasonable time after completion of the field work (i.e., 30 days) and with any report that references the DPT data. It was noted that the GIS also contains information regarding DPT data.

### **AOC 607**

Casey Hudson provided a brief overview of this site. The electrical resistance heating system operated between October 2001 and July 2002. The system was de-energized the first week of July. The SVE system will continue to operate while the soil temperatures cool. The leaking water line was repaired July 8<sup>th</sup>. A sampling event is scheduled this week and a follow up performance sampling event will take place within 6 months from the system shutdown. Other remedial alternatives will be evaluated for the dissolved plume phase. The system has removed a good portion of the plume. In areas of large concentration of solvent contaminants, the system was able to reduce concentration significantly (over 90%). At this time it is too early to evaluate the overall performance of the system.

### **Discussion of Characterization Data for SWMU 39**

Paul Favara provided an overview of the recent work at this site. Additional delineation of the plume was performed using DPT and Geo Probe. Latest round of sampling has been completed. Several drawings were presented indicating the horizontal and vertical extent of the PCE, TCE, cis-1, 2-DCE, and VC plumes. It was noted that the plume appears to be associated with SWMU 39 and not with SWMU 42/505. It was also noted that based on the concentrations and variations of the plumes that multiple spills could have occurred over the years. DHEC commented that a full delineation towards SWMU 2 might still be required, specifically around bldg. 1606. The team agreed that additional delineation actions would be pursued as appropriate. CH2M Jones indicated that they believed the DCE plume at SWMU 42 should be addressed as part of the SWMU 39 plume, allowing SWMU 42 to be closed out, similar to what was done for SWMU 2.

## **SWMU 8 Hydrazine Discussion**

Tom Beisel led a discussion regarding low levels of apparent Hydrazine concentrations detected at and around SWMU 8. The low concentrations are sporadic throughout a large area, making it difficult to identify a source. Laboratory data is questionable due to the fact that analysis is based on colorimetric results following an ASTM method. No EPA method has been developed for this constituent. Additional samples have been collected and split between labs for alternate laboratory testing to determine if the results received the date are an accurate indication of hydrazine or whether we are receiving "false positive" readings. The samples will be tested using an alternate analytical method (ion chromatography) to determine the accuracy of the results.

## **RAB Preparation**

The agenda for the RAB meeting was briefly discussed. Gary planned to address AOC 607, provide an update as to the status of the Phase III EBS/FOST, and provide and update of deliverables. A brief update of storm water effluent study and ecological risk assessment will also be presented at the meeting. A representative of the RDA will also provide a summary of the recent legislation regarding the future use of the CNC.

## **Wednesday, July 10, 2002**

### **RAB Meeting Debrief**

It was noted the meeting went well. There was good participation by board members and the material presented was good. Drawings presented by CH2M-Jones were informative. The issue regarding enforcement and policing of land use controls was raised at the meeting. It was explained that controls would have various layers of enforcement including legal mechanisms and zoning requirements.

### **Early Transfer Discussion**

Tony Hunt provided an informative briefing regarding the early property transfer process and a point by point discussion on addressing the objections to the previous attempt to an early transfer request in August of 2000, with the goal to establish a new early property transfer for December 2002. A handout was provided to the BCT members discussing the transfer process steps: fermentation; obtaining Washington level approval and development of Navy strategy; development of Covenant Deferral Request (CDR) or Finding of Suitability for Early Transfer (FOSET); and obtaining CDR approval.

The objections provided by the various BCT members from the August 2000 proposal for early transfer were discussed in order to determine if these items could be addressed if an early transfer is established for December 2002. Listed below are the SCDHEC concerns from the August 2000 early transfer proposal and it's current status:

- *Use of EPA guidance for NPL sites.* The Team now proposes the use of DOD/State guidance for non-NPL sites in the future.

- **Insufficient RFI information at the time of the request.** Only four RFI zones were approved at the time of the request. The team agrees that by December we should have adequately completed the site assessment work and characterized the risk associated with each remaining site.
- **No Land Use Control restrictions drafted at that time.** LUCs will be part of the permit; this issue has been greatly clarified over the past two years.
- **Navy's adherence to its own guidance/policies regarding consensus approach.** All parties affected will participate in the early transfer process; Navy will use more of a consensus-driven approach.
- **Permit ownership.** The Navy agrees that they will hold the permit until final closure; new property owners will adopt the voluntary cleanup program requirements.
- **Base line risk assessment and corrective measure schedules not complete.** Both of these items will be adequately resolved or completed by December 2002.

The RDA had the following concerns to the August 2000 early transfer evaluation:

- **Subservient language in FOSET.** Access restrictions/actions and insurance language did not favor the RDA. Progress has been made in this area regarding acceptance by indemnification insurance (Zurich). Discussions on this will topic continue.
- **Disruptions to normal process regarding cleanup effort.** The preparation of the early transfer document will be performed concurrently with the preparation of the phase IV EBS/FOST document scheduled for December. Minimum disruptions expected.
- **RCRA permit ownership.** Navy will keep; see above comments.

Tony requested that all parties review their stand regarding early transfer and present a position by the next BCT meeting. He also provided a web address that provides the DOD guidance to early transfer: [http://www.dtic.mil/envirodod/Policies/BRAC/brac\\_non-npl-mem\\_non-npl.htm](http://www.dtic.mil/envirodod/Policies/BRAC/brac_non-npl-mem_non-npl.htm)

A resolution or consensus to this moving forward with this approach should be established no later than August 2002, to allow adequate time to resolve and address key issues.

### **RDA Discussion**

Robert Ryan discussed briefly the recent legislation regarding the future ownership of the Base and the division of land between the City of North Charleston and the States Ports Authority. He also discussed future projects at the CNC including the demolition of buildings 234, 76, 68, 30, 25, and miscellaneous structures around the Power House Building 32. The Avenue D improvements and the Sewer replacement projects were also discussed.

### **Project Managers Meeting**

The project Managers meeting consisted primarily in a review of outstanding documents currently under review by DHEC and EPA. It was also noted that a number of Zone E sites would require a regulatory party assignment (DHEC vs. EPA).

It was also noted that all public documents pertaining to the environmental work at CNC have been moved from the Dorchester Library to the Main Downtown Calhoun Library.

The next BCT meeting is scheduled for August 12-14, in Columbia, SC.

### **Parking Lot**

Dean led a discussion regarding contaminants introduced in the laboratory. He referenced a document prepared by Ensafe titled "A comprehensive Review of Common Laboratory Artifacts Detected in Environmental Samples from The Charleston Naval Base". This document addressed common contaminants introduced in the laboratory such as acetone, methylene chloride and BEHP. He also provided an article on a recent publication that addressed SSLs. He requested that both documents be reviewed by DHEC and suggested a discussion on these topics during the next BCT meeting.

There was also a brief discussion led by Paul Bergstrand regarding a recent report of and oil sheen along Pier D, Cooper River, CNC property. He contacted Rob Harrell and Ensafe (due to their involvement with Zone J) to see if they had any information regarding a white material rising to the surface, dissipating, and leaving an oil sheen. Rob and the CSO investigated the area and saw foam rising to the surface from saltwater being sprayed, which appeared to be a natural phenomenon. There was no indication of any product being dumped into the water. No further action was expected from BCT members. No known releases were identified.

### **Action Items**

- Review of the 90% design for the Avenue D improvements
- Team to evaluate early transfer justification.
- EPA to provide document regarding Cecil Field LUCs on golf course area
- DHEC to review Ensafe's document on contamination introduced during sample collection and laboratory analysis and discuss at next BCT meeting

### **List of Attendees:**

U.S. Navy: Rob Harrell, Tony Hunt

USEPA: Dann Spariosu

SCDHEC: Jerry Stamps, Paul Bergstrand, Gill Rennhack, Joe Cherie Overcash, and David Scaturo.

CH2M-Jones: Gary Foster, Dean Williamson, Paul Favara, Louise Palmer, Casey Hudson, Tom Beisel, and Richard Garcia.

EnSafe: Steve Parker