

1D-00214

17 January 1996

## MEMORANDUM

From: David Porter, SOUTHDIV

To: Lawson Anderson, EnSafe  
Tonya Barker/Rob Williamson, NSA Memphis  
Jack Carmichael, USGS  
Jordan English/Jim Morrison, TDEC (Memphis)  
Sue Hosmer, NSA Memphis  
Keith Johns/Diane Cutler, EnSafe (Raleigh)  
LCDR Terry Jones/LT Chuck Starkey, NSA Memphis  
Mark Taylor, SOUTHDIV  
Clint Willer, TDEC (Nashville)  
David Williams, EPA Region IV

Subj: NSA MEMPHIS BRAC CLEANUP TEAM (BCT) MEETING, 03-04 JAN 96

Encl: (1) Minutes from 03-04 January 1996 BCT Meeting

1. Enclosure (1) is forwarded for your review and information.
2. Please call if you have comments and/or questions: (803) 820-5610, DSN 583, e-mail: [dlporter@efdsouth.navy.mil](mailto:dlporter@efdsouth.navy.mil).



NSA MEMPHIS BCT MEETING MINUTES  
03-04 JANUARY 1996

The NSA Memphis BRAC Cleanup Team convened at 11:00 am on Tuesday 03 January in the Environmental Conference Room, Building S-241. The following people were in attendance:

Lawson Anderson, EnSafe (Memphis)  
Tonya Barker, NSA Memphis  
Jack Carmichael, USGS (Nashville)  
Allison Choates, EnSafe (Memphis)  
Jim Kingsbury, USGS (Memphis)  
Mike Maughon, SOUTHDIV  
Jim Morrison, TDEC (Memphis)  
Bill Parks, USGS (Memphis)  
David Porter, SOUTHDIV  
Robert Smith, EnSafe (Memphis)  
Mark Taylor, SOUTHDIV  
Clint Willer, TDEC (Nashville)  
David Williams, EPA Region IV  
Rob Williamson, NSA Memphis

The team agreed to postpone a discussion of SWMU 7 data until Wednesday, when Dr. Rouhani would be present.

Robert Smith and Rob Williamson provided an update on the proposed levee at SWMU 2. The proposed location of the levee extension conflicts with the proposed location of two new rotosonic wells. It was decided to have EnSafe investigate the feasibility of moving the location of the wells approximately 30 feet to the west (outside of the construction area for the levee). This, however, may place them within the boundary of the landfill - more geophysical work will be needed to make a determination. If they can not be moved to the west, the installation of the wells will be delayed until the levee is complete, and they will be placed in their original location.

Re alleged dumping of PCB contaminated soil: per Lawson Anderson, sampling and testing is scheduled for next week. Immunoassay screening (detection limit of 1 ppm) will be used. David Williams noted that he discussed the issue with Beverly Spagg of EPA's Air branch (where PCBs are handled). She is very interested in the outcome of this issue, and David Williams noted that we need to document all our actions. Rob Williamson noted that they had received a signed copy of the manifest for disposal of the PCB contaminated soil. David Williams requested that the BCT conduct a site visit that afternoon to the locations of the alleged dumping.

David Porter briefly discussed the FOSL for Hangar N-126 and provided the regulators with a draft copy. He requested that the BCT conduct a walk-through of the space that afternoon so the FOSL could be finalized.

Randy Wilson and Jim Heide (NSA Memphis) addressed the BCT about the installation of a new 100,000 gallon aboveground tank at S-75. The installation does not appear to be in an area of concern. Randy Wilson provided the members of the BCT with copies of the final Tank Closure Plan.

The meeting was adjourned for lunch at 12:00 noon. The meeting was reconvened at 1:30 pm with the Millington Base Reuse Committee to discuss land transfer priorities. The following people were present:

Tonya Barker, NSA Memphis  
LCDR Darrell Creasey, NSA Memphis (new PWO)  
Jim Ferguson, Millington Base Reuse Committee  
LCDR Terry Jones, NSA Memphis  
Don Litton, NSA Memphis  
Jim Morrison, TDEC (Memphis)  
David Porter, SOUTHDIV  
LT Chuck Starkey, NSA Memphis  
Phil Whittenberg, Millington Base Reuse Committee  
Clint Willer, TDEC (Nashville)  
David Williams, EPA Region IV

Frank Ryburn was not able to attend the meeting due to illness. David Porter explained that the BCT was proceeding on the assumption that the airfield was the highest priority, and that additional wells were being installed along the edge of the apron to determine the extent of groundwater contamination. It is the BCT's goal to be in a position to transfer the airfield as soon as the EIS is complete in mid summer. Phil Whittenberg noted that the airfield itself is of little value to the airport authority without the accompanying apron areas (including tower and hangars), the reason being that the land in the apron area is needed for development of T-hangars and other revenue generating activities. The airport authority has requested FAA approval of the transfer through an Economic Development Conveyance (EDC). If this is not approved, the city may elect not to take the airfield under a Public Benefit Conveyance (PBC). Other issues, such as the placement of the new roadway on the western side of the runway (and possibility through SWMU 60) were discussed. The BCT requested that the reuse committee develop a list of priorities for property transfer for the team. Phil Whittenberg stated that he could develop such a list by the following week. The meeting was adjourned at 2:30 pm.

At 3:00 pm, LCDR Terry Jones, Jim Morrison David Porter, LT Chuck Starkey, Clint Willer, and David Williams conducted a walk through/visual inspection of the space in Hangar N-126 proposed for lease to the airport authority (who intends to sub-lease to a golf club manufacturer as an area for assembling golf clubs). The space is located on the first floor east side of the hangar. It was noted that the space once contained a degreasing unit. Jim Morrison requested that the floor tile be investigated to determine if it was asbestos containing.

At 3:30 pm the BCT conducted site visits at locations to be sampled for PCBs (in response to alleged dumping of PCB contaminated soil). The BCT agreed on the number and location of samples. The following people participated in the field visits:

- Lawson Anderson, EnSafe (Memphis)
- Jack Carmichael, USGS (Nashville)
- Allison Choates, EnSafe (Memphis)
- Jim Kingsbury, USGS (Memphis)
- Jim Morrison, TDEC (Memphis)
- Bill Parks, USGS (Memphis)
- David Porter, SOUTHDIV
- Robert Smith, EnSafe (Memphis)
- Mark Taylor, SOUTHDIV
- David Williams, EPA Region IV

The team reconvened at S-241 at 4:40 pm and discussed well placements for Assembly E SWMUs. Mark Taylor noted that SWMU 2 is a possible candidate for off-site wells on the east side across the ditch. Rob Williamson will investigate to determine the owner of the property. At SWMU 9, it was decided that only deep wells would be installed, as no water was obtained shallow during the DPT work. SWMUs 59 and 65 were also discussed. It was noted that since the area is still in use, any remedial action would be delayed. A discussion of SWMU 14 was postponed until Wednesday morning. The meeting was adjourned for the day at 5:30 pm.

The BCT reconvened Wednesday morning at 8:00 am at the offices of EnSafe. The following people were present:

- Lawson Anderson, EnSafe (Memphis)
- Ben Brantley, EnSafe (Memphis)
- Jack Carmichael, USGS (Nashville)
- Allison Choates, EnSafe (Memphis)
- Jim Kingsbury, USGS (Memphis)
- Jim Morrison, TDEC (Memphis)
- Bill Parks, USGS (Memphis)
- David Porter, SOUTHDIV
- Robert Smith, EnSafe (Memphis)
- Mark Taylor, SOUTHDIV
- Clint Willer, TDEC (Nashville)
- David Williams, EPA Region IV
- Rob Williamson, NSA Memphis

The team discussed the well placement for SWMU 14.

The team discussed the concept of looking at groundwater as one operable unit. Clint Willer reviewed the process for alternative groundwater standards (must demonstrate technical impracticability and petition the Tennessee Water Quality Control Board). Jim Morrison stated

that ruling out DNAPL will go a long way with the state on this issue. He also stated that it was important to break out the loess and fluvial zones.

Rob Williamson briefed the team of the desires of the station to demolish building N-121. It was decided to address possible environmental issues under the slab in two phases: (1) pull down building, and then (2) core slab and take soil gas and soil samples (coring and sampling will be conducted by EnSafe). If no problems are noted, then remove the slab. Contractor (for removing the slab) must be 40 hour trained. Either the 8(a) contractor or the Army Corps of Engineers will be used to remove the slab.

Lawson Anderson provided the team with contamination maps of SWMU 7 and the surrounding areas of the apron.

At 10:00 Mike Maughon (SOUTHDIV) and Dr. Rouhani (NewField, Inc) arrived to join the meeting. Dr. Rouhani discussed the use of geostatistics in the decision making process for contaminated sites. He summarized his discussion in the morning by stated that geo-statistical information can answer the following four questions:

- (1) Do you have adequate data?
- (2) Where are the data gaps?
- (3) Where are the contaminated areas?
- (4) What is the block value of the contamination (concentration - used for risk assessment)?

The meeting adjourned for lunch and reconvened with Dr. Rouhani to discuss specific data for NSA Memphis. Dr. Rouhani provided the following information and conclusions about the data at NSA Memphis:

- ◆ There is adequate data at the turkey shoot area.
- ◆ There is adequate upper fluvial information except around the location of the previous hangar.
- ◆ More data from the lower fluvial is needed, including one well to close-out the north side of N-126, one at the old hangar, and one additional. Do not add lower fluvial wells for the sake of achieving enough samples for geostatistics.
- ◆ A value of >1% solubility defines a DNAPL. With a solubility of < 1%, the contaminant travel with the groundwater. For TCE, 1% solubility is 11,000 ppb. Highest concentration of TCE detected is 1,100 ppb = 0.1% solubility; therefore not a DNAPL.
- ◆ It is difficult to correlate data from different depths; however, if they are from the same formation, a 3D analysis can be performed (superimpose lower fluvial on upper fluvial - should correspond to groundwater flow).
- ◆ Since a source has not been identified, and the concentration are no where near the solubility limit, pump and treat is not practical.
- ◆ The use of bioremediation should be investigated, since the contaminate levels are barely above MCLs. Risk assessment should show that there is not a problem.

- ♦ The data suggests that there are pockets of contamination with no connected plume; therefore there is no applicable remedial alternative. The data does not seem to correspond with what is known about groundwater flow; therefore there are multiple sources.
- ♦ The quality of data from DPT is good since it is instantaneous sampling (probably better than wells).
- ♦ Data fluctuation of 300% is not unusual and should be expected.
- ♦ Very little chance, statistically, that a source will be found.
- ♦ Cockfield investigation is not needed, since tritium is not found in the cockfield.

The meeting was adjourned at 4:30 pm.

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