

N61165.AR.003306
CNC CHARLESTON
5090.3a

NAVAL BASE CHARLESTON ENVIRONMENTAL PROJECT TEAM MEETING MINUTES FOR
1997 CNC CHARLESTON SC
12/1/1997
CNC CHARLESTON

**Naval Base Charleston
Environmental Project
Team**

Meeting Minutes

1997

PT AGENDA

PT MINUTES

January 3, 1997

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Agenda
January 14 and 15, 1997**

Leader - Brian Stockmaster
Scribe - Bobby Dearhart

** Location to be determined*

January 14, 1997

8:00 - 9:00	Introduction Ground Rules Revise Agenda Prioritize Agenda Define Objectives of Meeting Review Action Items from December Meetings Review RFI/CMS Schedule Schedule 2 Day Planning Meeting		Brian Stockmaster
9:00 - 11:00	Pre-RAB Presentation [includes Break] SWMU 39 Update CMS Ranking Factor Presentation	(Discussion) (Information) (Discussion)	Brian Stockmaster Tony Hunt Ann Ragan
11:00 - 11:30	CTF Precedent Setting	(Information)	Doyle Brittain
11:30 - 12:00	CTF Holding Pond Update	(Information)	Daryle Fontenot
12:00 - 1:00	Lunch		
1:00 - 2:00	Draft PT Accomplishment Presentation	(Decision)	Diane Cutler
2:00 - 2:10	Break		
2:10 - 3:00	Base Business Plan Presentation (RDA)	(Information)	Borry Steinberg

January 15, 1997

8:00 - 8:30	Post-RAB Meeting Critique	IM MEMO (DECISION)	(Discussion)	Brian Stockmaster
8:30 - 9:30	Follow-up on RAB-CMS Presentation		(Decision)	Ann Ragan
9:30 - 9:45	Break			
9:45 - 10:00	Use of Organic Background		(Decision)	Johnny Tupia
10:00 - 11:00	Zone H RFI Report Approval - ?		(Decision)	Tony Hunt
11:00 - 11:30	Zone K RFI 60% Progress Review		(Decision)	Todd Haverkost
11:30 - 12:00	Academia Involvement		(Decision)	Tony Hunt
12:00 - 1:00	Lunch			
1:00 - 3:00	CMS Objectives (Cleanup Levels)		(Decision)	Tony Hunt
3:00 - 3:15	Break			
3:15 - 4:30	Going from RFI to FOST		(Decision)	Daryle Fontenot
4:30 - 5:00	Next Meeting Date, Time, Place and Leader Set Agenda		(Decision)	Brian Stockmaster
5:00 - 5:30	Review Action Items and Parking Lot Set January Conference Call Close-out and Wrap-up			Donna Kopski

SUGGESTION TO ADD 1 HOUR ROUNDTABLE
DISCUSSION AT END OF MEETING

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Minutes**

Date: 1/14/97 - 1/15/97 **Place:** NRRC, Charleston **Time:** 0800 - 1700

Attendees: All Present **Invited Guests:** Jay Bassett (USEPA), Lawson Anderson, Britton Dotson, Barry Doll, Ron Severson, Diane Cutler (E/A&H), Pat Franklin (SDIV)

Leader: Brian Stockmaster **Scribe:** Dave Backus

MO1

Check-In

Brian opened the meeting at 8:00 and began check-in. Reviewed Ground rules and introduced Donna Kopeski from Galileo who was substitute facilitator for Cecile. The team revised and prioritized the agenda. Doyle introduced Jay Bassett who will be taking over for him as the EPA RPM.

Bobby Dearhart announced that he would no longer be the permanent scribe. The team reached consensus that E/A&H would become the permanent scribe for PT meetings. Dave Backus volunteered to scribe for this meeting. The team also revisited the issue of minutes format. Consensus was reached that minutes would be of an abbreviated format. Jay stated that he had some examples of other Teams minutes and Brian provided a copy of the Pensacola PT meeting minutes from December. The team also agreed that it would be advantageous to track action items and decisions with a chronological numbering system.

MO2

RFI/CMS Schedule

EPA has some problems with the EPA review dates listed in the latest project schedule. EPA has met review time frames, but always sends comments to SCDHEC. The dates listed in the schedule are the dates when SCDHEC submits comments to the Navy. Bobby has a concern that format of this schedule does not show progress or completion of any given line item. Suggestion was made to designate (with shading) when actions are complete or dates are missed.

Jay states that the project schedule and CAMP are two different documents. The CAMP should list the regulatory durations as stated in the permit. The project schedule is a planning tool for the cleanup team. **Team consensus was reached to include only the regulatory durations in the CAMP, and use the project team schedule internal to the cleanup team.**

Project Team Meeting Minutes

M03

Pre-RAB Discussion

Larry Bowers (E/&H) to provide CMS training presentation tonight.

Ann will lead an exercise aimed at getting RAB's input on ranking criteria. Tony asks if we are going to the public for CMS input prematurely? Project Team agreed to go forward with the presentations and input exercise as planned.

M04

SWMU 39 Update Discussion

Tony gave the history of SWMU 39 to bring Jay up to speed. Three additional wells were installed to the west of the Bldg. 1604 groundwater plume last week. Sediment and surface water samples will be collected in the marsh next week.

Paul asked: What progress has been made to transfer the responsibility for the Crawford Ave. wells to someone other than the Navy. Tony stated that we are waiting on the results of the 3 wells installed last week before transferring responsibility.

Doyle feels there are four separate issues:

- 1) Hess release - DHEC and Hess have the lead.
- 2) Bldg. 1604 release - EPA is pleased with the investigation so far.
- 3) Crawford Ave. Private wells - Close out Naval Base CHS involvement and transfer responsibility.
- 4) Asbestos Landfill west of the marsh - The well installed near the landfill last week may not yield good information concerning Bldg. 1604, we need to be careful on how we interpret the data from this well.

Hess has requested to measure water levels at their wells along with the Navy's wells in the northern affected area. Todd states that this should be no problem to coordinate.

M05

RFI/CMS Schedule

See Tony's schedule for all changes, summary to follow:

Date Change for EBST	Clouter Island	1/25/97
Date Change for EBSL	231 Facilities	1/17/97
Date Change for EBSL	NS Annex	1/25/97

CTF Status — Still waiting on comments from RDA on Options 1 & 3. RAB sent letter to City of N. Charleston supporting Option 3. Navy needs to know who, and for what purpose the property is going to be re-used.

Project Team Meeting Minutes

Daryle provided the team with a revised project schedule/progress report that was geared toward the RDA for consideration. Doyle suggested handing this out to both the RDA and the RAB every month. Some minor changes to column format were discussed and will be addressed by Daryle.

M06

Draft PT Accomplishment Presentation

Diane Cutler (E/A&H) provided a draft copy of the project team accomplishment document for discussion and review. She wanted the document to be upbeat with lots of facts and trivia, tried to include the endorsement of the regulators in regards to progress and fast track of the process. Team consensus was reached that this format was the best way to present the successes of the team. Team will review the accomplishment report and provide comments by 1/24 to Diane. Diane will compile all the comments and prepare a Draft-Final (back out to the team) by 2/3. Final comments are due by 2/7. Report will be distributed at the RAB meeting 2/11.

M07

Chicora Holding Pond Update

EPA wants to make sure that we are consistent in what we report to the community. Doyle questioned why the Zone J work plan stated that BTEX contamination was found in the holding pond. Tony was given the action to review all the CTF reports again to see what levels of BTEX and TPH are present and do they pose a risk - by next PT meeting.

M08

Chicora Tank Farm Precedent Setting Discussion

Doyle had a concern that the RDA is constantly inquiring as to how they are going to receive property; how clean is clean, will the property be encumbered.

This has become an issue at CTF. RDA has stated they will not accept the property unless all the tanks are completely removed. Doyle feels this is setting a bad precedent, what are our options in transferring property. Someone needs to look at the RDA's charter, are they responsible for marketing 100 percent of the property that is being conveyed?

Daryle will check the RDA's charter and report at the next PT meeting.

M09

RDA Attendance at Project Team Meetings

- RDA has stated that they are not getting enough information from the monthly meetings with the PT.
- RDA would like the opportunity to have a staff member or environmental consultant sit at the PT meetings.

Project Team Meeting Minutes

- RDA did not want to meet yesterday.
- Suggestion to invite the current Base Transition Coordinator (Tom Fressilli) to attend our meetings.
- Suggestion made to meet with the RDA Board instead of the staff members. Thinking was that this problem might be one of communications. Take our update information straight to the Board.

Daryle was given two action items to address this issue: 1) Ask Tom Fressilli to attend the PT meetings every month to facilitate communication between the PT and the RDA. and, 2) offer to have the PT meet with the RDA Board at their place from 2:00 to 3:00 on PT meeting Tuesdays.

MIO

RDA Base Business Plan Presentation

Jerri Johnson introduced Barry Steinberg from the law firm Kutak/Rock in Washington, D.C. Kutak/Rock is a subcontractor to Flour-Daniel, who the RDA has retained to update or refine the existing reuse plan at Naval Base Charleston.

Barry states that he RDA would like to ask several questions:

- Where are the contamination hot spots?
- What are the yearly cleanup budgets at least 5-years out?
- What are the cleanup priorities utilizing the anticipated budgets?
- Does the PT have a work plan that prioritizes issues vs. Cost?
- What is the baseline data and where are you going with it?
- Are there any onsite incineration projects planned?

In a round table informal response, the following answers were given as items that the RDA has been made aware are available for their use:

- Environmental Baseline Survey (info is also summarized in every FOSL).
- Updated Environmental Condition of Property Map.
- \$18M obligated for FY97.

Project Team Meeting Minutes

- Project is fully funded through the Corrective Measures Study.
- All of the investigative Zones have Work Plans on file in the information repository.

Barry asked about the status of USTs. Daryle states that the EBS identified all of the USTs that were required to be pulled or investigated. If the RDA wanted an exempt tank pulled the Navy would be willing to pull it.

Barry ended his apparent fact finding mission with the following comments:

The RDA has concern that contaminated sites are leaching chemicals into the river, does the investigation include the river? YES.

\$18M looks like a low ball figure, other smaller bases are getting a much bigger slice of the funding pie.

If NBC had more funds, could the PT obligate them and increase the cleanup work load?

Barry's goal is to revise and communicate the RDA's reuse plans, before the Navy commits irreversible funds to cleanup initiatives that are not in sync with the RDA's plans.

W 11

RAB Meeting Debrief

Plus

- CMS exercise went well
- Ann's Pre-CMS exercise was good
- Interested parties from community
- Good Location
- Larry's presentation was good
- Community recognition of Doyle
- Good job on Chicora issues - Daryle
- Tony's presentation was good

Minus

- Should have mentioned GW contamination in Zone D
- Well owners name was mentioned on Crawford Ave
- Disperse PT throughout the audience
- List of acronyms for new community members
- Room acoustics was very poor
- Be aware of the volume of your voice
- Vocabulary was too technical

Project Team Meeting Minutes

M 12

Zone H RFI Report Discussion

State has the following concerns:

- The document needs to be geared more toward a public document, written so the common person can read and understand it.
- Document does not address groundwater comparisons to MCLs.
- Paul would like to see a summary table of all analytical hits.
- Most sites have failed to define the extent of contamination, Navy is prematurely comparing hits to RBCs before extent above background has been established.
- Paul would also like to see a figure showing a tabular record of the hits and their respective concentration at select sites.

After some discussion, it was decided that a focussed meeting would be a better forum to address the States comments and concerns. A meeting was set for 8:00 am Thursday morning 1/16 at E/A&Hs Mt Pleasant office.

M 13

Zone K RFI 60% Progress Review

Zone K is comprised of 8 sites at the Naval Annex and 3 sites on Clouter Island. All first round soil, sediment and groundwater samples have been collected. Many of the groundwater samples were collected with a GeoProbe. Jay Bassett has problems with the quality of metals data collected with a GeoProbe.

E/A&H originally proposed VOC analysis for GeoProbe samples, but added metals in response to a comment from SCDHEC. Jay would like to further discuss the validity of GeoProbe metals analyses at the next PT meeting. We might be able to look at some other alternatives.

SWMU 161 — No further samples proposed. **Team Consensus**

SWMU 162 — Well NBCK-162-001 was moved approximately 50 feet to get it out of the soccer field. A soil boring was installed in its original location.

Four additional samples are proposed in the NE corner of the site near SB002 due to mercury exceedance of the RBCs. Decision was made to wait on the GW data (2/10/97) before final second round sample determination (analytes, matrix, etc.). **Team Consensus**

Project Team Meeting Minutes

- SWMU 163 — No soil exceedances, recommend waiting for GW results to determine further GW investigations. Paul requests a copy of all the detections at the site. **Team Consensus**
- SWMU 164 — No further samples proposed. **Team Consensus**
- SWMU 166 — Three VOC hits were detected at this site. Additional monitoring wells (10% of the GeoProbe total) will be used to further define the extent of these detections. E/A&H will evaluate the metals data to look for trends and possible location of 1 of the additional wells. **Team Consensus**
- AOC 696 — Three Aroclor 1260 exceedances were detected at this site. Suggestion made to move this site to an Interim Measure with no further RFI sampling. **Team Consensus**
- AOC 697 — No further samples proposed. **Team Consensus**
- AOC 698 — No soil exceedances, recommend awaiting GW sample results to determine further GW investigation. **Team Consensus**

m 14

Background Organics Discussion

DHEC suggests going back to determine background concentrations for individual PAHs and compare those to the BEQ background number.

Barry Doll (E/A&H) states that the BEQ calculation is a linear factored summation and should be exactly the same as the individual PAHs. E/A&H given action to provide ½ J; 2X Bkgd. to each of the individual PAHs in the Zone H data set.

DHEC agrees that the PAHs are widespread across the base, but that does not mean that they should not be addressed. Even though the contamination was not produced as a result of waste management activities at many sites, RCRA has the authority to require corrective actions at releases produced from sources other than SWMUs. Johnny stated that the State may decide to follow this path, if the situation requires such a measure.

Jay has some problems with part of the background organics approach. (Assigning all Non-Detects with ½ of the MDL).

Johnny asks if we can collect some background samples off-base? How far do we have to go?, What type of area do we choose?, What do we know about the anthropogenic history of that area? The team was in general disagreement to collecting off-base background.

Project Team Meeting Minutes

M 15

Background Arsenic Discussion

Zone B arsenic background was higher than any of the site sample detections. DHEC wants to know why the background levels were so high. Barry Doll (E/A&H) explains that the data was log-normally distributed, that coupled with the fact that the grid-based (background) samples outnumbered the site samples led the statistical model to yield a high arsenic number.

E/A&H has calculated some scatter plots in Zone B comparing arsenic to aluminum and iron. The plots were very linear suggesting that the arsenic concentrations are normally proportionate to other metals detected in soil.

There was general discussion surrounding the fact that Zone B is on a golf course (where arsenic was historically used as a herbicide) and the location of the grid-based sample points.

Johnny suggests moving forward giving him some more time to review the background approach technical memo.

Jay asks: What is the minimum sample population for our stated confidence level or 95 percent? Generally EPA accepts 8 to 10 samples, but Barry will look into this question.

Brian asks: What are all the Zone H issues doing to the project team schedule? General consensus that we would look for solutions to the issues with the least amount of schedule impact (as possible) in the focussed meeting on Thursday.

M 16

Interim Measures Lead Issues

Brian asked the team to refer to his memo on this issue.

Doyle states that he understands that the team agreed to clean to industrial standards as a minimum, but some sites went beyond that as a result of information discussed in the IM scoping meetings.

Bobby added that he agrees with Doyle's statement, but we had in previous meetings established that, sites with contaminant concentrations exceeding industrial risk levels would be good candidates for IM. The industrial risk level was to be used as a quick and easy mechanism to identify potential IM sites. The actual cleanup levels, once the sites had been nominated for IM, would be decided in the scoping meetings. Again, it was agreed that IM sites would be cleaned to at least industrial risk levels as a minimum.

Brian's main issues for this discussion were:

- Are the IM work plans ok?

Project Team Meeting Minutes

- Concurrence on the decision tree approach for interim measures in the memo.
- Redefine the concurrent review process for IM documents.

Work plans — Already have EPAs approval if things do not change from the scoping meeting. If things change from the scoping meeting agreements, EPA will withdraw their approval.

Decision Tree — Issue was shelved until later, try to discuss again at the next PT meeting.

Concurrent Reviews — Proceed as was agreed in last months IM scoping meeting. Prior to an approval, make sure that everyone's comments have been addressed.

M17 Site Specific IM Discussion

SWMU 38 — State agrees with industrial RBCs for pesticides cleanup as a minimum.

SWMU 42 — Brian recommends dropping from the IM list. The site has one 1100 mg/kg lead hit. Industrial cleanup level is 1300 mg/kg. Detachment estimated \$7000 - \$14,000 IM cost. **Consensus Passed to clean the hot spots to residential lead criteria (400 mg/kg).**

Consensus changed for SWMU 38, now team agrees to clean SWMU 38 to residential RBCs.

SWMU 6 & 7 — Consensus to clean three contaminants at hot spots to residential RBCs.

SWMU 5 — Huge disparity in removal volumes, residential vs. industrial. Propose cleaning site to industrial lead (1300 mg/kg) and continue with plans for pipe removal. **Consensus Passed.** State would like to see the work plan again.

AOC 574 — Tank has been pulled, POL staining left in the excavation. **Consensus Passed to clean site to industrial RBCs.**

AOC 653 — Removal complete, **Consensus Passed to fill the hole.**

SWMU 8 — Proceed as planned in IM scoping.

SWMU 14, AOC 670, AOC, 684 — Proceed as planned for the geophysical anomalies, suggestion made to segregate the top 3 to 4-inches of soil from any other material due to the possibility of lead contamination from the firing and skeet ranges. Document IM actions in the CMS.

AOC 626 — Proceed as planned in IM scoping.

Project Team Meeting Minutes

AOC 636 — Navy EOD is planning to scan this site when it mobilizes for the survey at AOC 503. The detachment has researched this site and found information that contradicts the information presented in the RFA. The new information appears to show only storage of munitions, not disposal.

E/A&H given action to identify who authored this RFA section and interview them to see where they found information stating that the unit was used prior to 1944 for subsurface disposal of waste torpedoes. Report on findings at next PT meeting.

AOC 696 — Team consensus was reached earlier in this meeting to move this site to an IM. **Consensus Passed to clean this site to residential levels for PCBs.**

Daryle proposes moving the Going from RFI to FOST Discussion to next months meeting.

Tony will provide CMS Objectives to the team by 1/31/97, and discussion will be on the February PT meeting agenda.

MIB

Academia Involvement

Tony states that nothing in this proposal is illegal, all work will be performed in coordination with SDIV Contracts Department.

- Program is self-funded.
- Data quality will be appropriate for decisions needed.
- Project team schedule impacts will not be an issue.
- Tony will distribute responses from authors to Team comments as they are received.

Project Team Meeting Minutes

Naval Base Charleston Project Team Action Items Summary

Item No.	Action	Responsibility	Due
9701-A01	Provide example of abbreviated meeting minutes to E/A&H	Jay Bassett	Before next PT meeting
9701-A02	Compile minutes, actions, and decisions notebook to be maintained monthly	E/A&H	By next PT meeting
9701-A03	Review Draft Env. Progress report and provide comments to Diane Cutler	Team	1/24/97
9701-A04	Review all the CTF reports, do the BTEX and TPH levels found pose an unacceptable risk	Tony	By next PT meeting
9701-A05	Review RDAs charter, are they required to market 100 percent of the property conveyed	Daryle	By next PT meeting
9701-A06	Ask BTC (Tom Fressilli) to start attending the PT meetings	Daryle	By next PT meeting
9701-A07	Make offer to meet with the RDA Board on PT Tuesdays from 2:00 to 3:00	Daryle	By next PT meeting
9701-A08	Resolve problems with metals analysis from GeoProbe sample method	Jay	By next PT meeting
9701-A09	Provide tables with all analytical detections from Zone K investigations	Britton	1/16/97
9701-A10	Apply ½ J; 2X background to each of the individual PAHs in the Zone H data set	Barry	By next PT meeting
9701-A11	Statistically analyze the Zone H data set using ½ J&U values as well as zeroing all J&U values	Barry	By next PT meeting
9701-A12	Review the Background Approach Technical Memo	Johnny	By next PT meeting
9701-A13	Research the minimum sample population needed for 95% confidence level	Barry	By next PT meeting
9701-A14	Interview the author of RFA Section AOC #636 concerning second sentence of Section 5.113.1	E/A&H	By next PT meeting

Project Team Meeting Minutes

Naval Base Charleston Project Team Consensus Decision Summary

Item No.	Consensus	Issue
9701-D01	Passed	E/A&H will record minutes of meeting from now on. Minutes will be of an abbreviated format
9701-D02	Passed	Include only the regulatory dates required by the Permit in the CAMP. Continue to maintain the RFI/CMS schedule for internal PT use. Dates will be shaded in the schedule once complete.
9701-D03	Passed	Maintain a running log of consensus test decisions.
9701-D04	Passed	Maintain a running log of PT action items.
9701-D05	Passed	Distribute Daryle's RFI Progress Update to the RAB and RDA every month with minor format changes as discussed in the meeting.
9701-D06	Passed	The Draft PT Accomplishment document is the best format for presenting the successes of the project team's cleanup effort.
9701-D07	Passed	Jay will register the PT members for the USEPA Region 4 Natural Attenuation of CL Solvents conference in Atlanta February 19-20, 1997.
9701-D08	Passed	Offer a monthly meeting with the entire PT and the RDA Board from 2:00 to 3:00 on PT meeting Tuesdays.
9701-D09	Passed	BTC (Tom Fressilli) attending PT meetings.
9701-D10	Failed	RDA attending PT meetings only for issues of their interest.
9701-D11	Passed	Move AOC 696, Transformer Area, (Zone K) to an Interim Measure with no further RFI sampling. Clean to residential levels for PCBs.
9701-D12	Passed	Excavate the SWMU 42 "hot spots" to residential lead levels (400 mg/kg).
9701-D13	Passed	Excavate SWMU 38 "hot spots" to residential RBCs.

Project Team Meeting Minutes

Item No.	Consensus	Issue
9701-D14	Passed	Excavate SWMU 6&7 "hot spots"(3 contaminants) to residential RBCs. The work plan will not be amended even though it is written to excavate to industrial levels.
9701-D15	Passed	Excavate SWMU 5 to industrial lead levels (1300 mg/kg) with the subsequent pipeline removal as planned.
9701-D16	Passed	Excavate AOC 574 to industrial RBCs for the RBCA constituents.
9701-D17	Passed	Backfill the hole at AOC 653 based on the current confirmation analytical results.

PT AGENDA

February 5, 1997

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Agenda
February 11 and 12, 1997**

Leader - Bobby Dearheart
Scribe - Dave Backus

Location - Naval Base Charleston, Bldg. NH-45, Executive Conference Room (Across from Admiral's old Office)

February 11, 1997

8:00-9:00	Introduction Ground Rules Prioritize Agenda Define Objectives of Meeting Review Action Items from January Meeting Review RFI/CMS Schedule		Bobby Dearhart
9:00 - 10:00	Zone A RFI Report Approval	(Decision)	Lawson Anderson
10:00 - 10:20	Zone K 90% Progress Review	(Decision)	Lawson Anderson
10:20 - 10:30	Break		
10:30 - 11:00	Zone B CMS Scoping Discussion	(Discussion)	Robert Moser
11:00 - 12:00	Zone H CMS Scoping Discussion	(Discussion)	Larry Bowers
12:00 - 1:00	Lunch		
1:00 - 2:00	Pre-RAB Discussion	(Discussion)	Bobby Dearhart
2:00 - 3:00	RDA Question/Answer Meeting (RDA Present)	(Discussion)	Daryle Fontenot

February 12, 1997

8:00 - 8:30	Post-RAB Meeting Critique	(Discussion)	Bobby Dearhart
8:30 - 8:45	Environmental Progress Report Approval	(Decision)	Diane Cutler
8:45 - 9:00	RDA Charter - Report	(Information)	Daryle Fontenot
9:00 - 10:00	Zone D Pre-Submittal Review	(Information)	Craig Smith
10:00 - 10:15	Break		
10:15 - 12:00	Zones F & G 90% Progress Review	(Decision)	Craig Smith
12:00 - 1:00	Lunch		
1:00 - 2:00	February 4 Meeting Information	(Information)	Team
2:00 - 2:30	Going from RFI to FOST	(Information)	Daryle Fontenot
2:30 - 3:00	Metals Analysis/GeoProbe Discussion	(Discussion)	Jay Bassett
3:00 - 3:15	Break		
3:15 - 3:30	Chicora Tank Farm Pond Risk - Report	(Information)	Tony Hunt
3:30 - 4:30	Interim Measures Decision Tree	(Information)	Brian Stockmaster
4:30 - 5:00	Next Meeting - Date, Time, Place, and Leader Set Agenda, Review Action Items and Parking Lot Schedule February Telecon (If Necessary)		
5:00 - 5:30	Close-out and Wrap-up		Cecile Lacey

February 5, 1997

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Agenda
February 11 and 12, 1997**

Leader - Bobby Dearheart
Scribe - Dave Backus

Location - Naval Base Charleston, Bldg. NH-45, Executive Conference Room (Across from Admiral's old Office)

February 11, 1997

8:00-9:00	✓ Introduction		Bobby Dearhart
	✓ Ground Rules		
	✓ Prioritize Agenda		
	✓ Define Objectives of Meeting		
	✓ Review Action Items from January Meeting		
	✓ Review RFI/CMS Schedule		
9:00 - 10:00	Zone A RFI Report Approval <i>BEHIND DISCUSSION</i>	(Decision)	Lawson Anderson
10:00 - 10:20	✓ Zone K 90% Progress Review	(Decision)	Lawson Anderson
10:20 - 10:30	✓ Break		
10:30 - 11:00	✓ Zone B CMS Scoping Discussion	} <i>MOVED TO NEXT MONTH</i>	Robert Moser
11:00 - 12:00	Zone H CMS Scoping Discussion		Larry Bowers
12:00 - 1:00	Lunch		
1:00 - 2:00	Pre-RAB Discussion	(Discussion)	Bobby Dearhart
2:00 - 3:00	RDA Question/Answer Meeting (RDA Present)	(Discussion)	Daryle Fontenot

February 12, 1997

8:00 - 8:30	✓ Post-RAB Meeting Critique	(Discussion)	Bobby Dearhart
8:30 - 8:45	✓ Environmental Progress Report Approval	(Decision)	Diane Cutler
8:45 - 9:00	✓ RDA Charter - Report	(Information)	Daryle Fontenot
9:00 - 10:00	✓ Zone D Pre-Submittal Review	(Information)	Craig Smith
10:00 - 10:15	Break		
10:15 - 12:00	Zones F & G 90% Progress Review	(Decision)	Craig Smith
12:00 - 1:00	Lunch		
1:00 - 2:00	February 4 Meeting Information	(Information)	Team
2:00 - 2:30	Going from RFI to EOST <i>MARCH</i>	(Information)	Daryle Fontenot
2:30 - 3:00	Metals Analysis/GeoProbe Discussion <i>MARCH</i>	(Discussion)	Jay Bassett
3:00 - 3:15	Break		
3:15 - 3:30	Chicora Tank Farm Pond Risk - Report <i>MARCH</i>	(Information)	Tony Hunt
3:30 - 4:30	Interim Measures Decision Tree <i>EMS STRATEGY</i>	(Information)	Brian Stockmaster
4:30 - 5:00	Next Meeting - Date, Time, Place, and Leader Set Agenda, Review Action Items and Parking Lot Schedule February Telecon (If Necessary)		
5:00 - 5:30	Close-out and Wrap-up		Cecile Lacey

PT MINUTES

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Minutes**

Date: 2/11/97 - 2/12/97 **Place:** NBC, Bldg. NH-45 **Time:** 0800 - 1700

Attendees: All Present **Invited Guests:** Lawson Anderson, Barry Doll, Craig Smith, Robert Moser, Diane Cutler (E/A&H), Jerri Johnson, Jack Sprott (RDA), Tom Fressilli (CSO)

Leader: Bobby Dearhart **Scribe:** Dave Backus

9702 - m 19

Check-In

Bobby opened the meeting at 8:00 and began check-in. Reviewed ground rules and introduced Tom Fressilli who was attending his first meeting as representative of the Caretaker Site Office (CSO). The team revised and prioritized the agenda.

m 20

Agenda Prioritization

- DHEC not ready to address Zone A approval
- Move Environmental Progress Report approval to today
- RDA will attend today from 2:00 - 3:00
- Add Background discussion to 9:00 - 10:00 slot this morning
- Add Management planning tools discussion - 15 min Cecile
- Add Land Use Restriction Model discussion - 30 min Jay
- Add tomorrow AOC 696, and 670/684 Scoping discussion - 1 hr Kevin

m 21

Review Action Items

All action items from last month have been completed except the following:

9701-A02 E/A&H will compile minutes, actions, and decisions notebook by next months meeting.

m 22

RFI/CMS Schedule

SCDHEC stated that they will complete the Zone A Report approval review by 3/7/97. Daryle stated that SDIV management needs to make sure that the reports for the land-based Zones A through I, and K are approved (on schedule) by 9/30/97. SDIV has obligated funds for FY 97 and needs to budget for FY 98. SDIV is concerned that they will lose funds obligated for FY 97 if they are not used.

Project Team Minutes

SCDHEC stated that schedules are not a primary goal of the state. Schedules should be looked at as a tool for the PT to manage the workload.

The Zone B RFI report has been approved and the Navy needs to apply for a minor permit modification before CMS activities can commence. SCDHEC would like to put a hold on minor mods until several Zones have caught up to that point, then do all the minor mods at one time.

M 23

Background Discussion

SCDHEC does not like the UTL method as a conservative value for background. They would like to see background issues discussed on a zone-specific basis in the pre-submittal reviews of each Zone report.

SCDHEC would also like to discuss the determination of zone-specific background before determining the COPCs for every zone. It was noted that most of the zones were already past the point of determining COPCs.

Jay proposes a 2X arithmetic mean background method for risk assessment, then use the UTL for cleanup criteria.

SCDHEC states that they would like to see all of the raw data (before COPC determination) to provide more confidence in the method.

M 24

Organic Background Discussion

E/A&H states that we are not proposing the development of organic background numbers to screen constituents out of the risk assessment, but as a tool for risk management decisions. Barry Doll proposes the use of method C (from his Zone H background reference concentration memo dated 2/10/97) which substitutes zero or all non-detects in the statistical analysis.

Tony asks if organic background determination method C is agreed to by the team for IDW and site characterization purposes. **Team consensus was reached to use method C for PAHs.**

M 25

Zone K 90% Progress Review

Groundwater data arrived last Friday 2/7, metals background will be calculated both by the 2X mean and the UTL methods. Additional geoprobe samples will be collected after next week following review of the groundwater data.

SWMU 161 — No exceedances for Fe and As as reported last month, they both fell out after comparison to background (2X mean).

SWMU 162 — Al, Fe, and As fell out after comparison to background (2X mean). The rest of the recommendations are the same as in last month's 60% review,

Project Team Minutes

additional soil sampling in the vicinity of the former sewage treatment area due to exceedances for mercury.

- SWMU 163 — SB001 0-1 foot interval had PCB hit. Lower interval had none. Recommend no additional samples and evaluate the GW data.
- SWMU 164 — Recommend additional soil samples in the area of soil borings 002 and 004. There are no wells present at this site. Question raised as to why we were not sampling between Bldg. 2556 and soil boring 002? Team agreed to add 1 soil sample between 002 and 004 run for As only.
- SWMU 166 — Recommendation same as 60% review. No exceedances for As or Fe.
- AOC 696 — Recommend moving to IM with no further RFI investigation.
- AOC 697 — Recommend no further investigation.
- AOC 698 — Recommend no further investigation, evaluate GW data.
- Zone K next steps — Evaluate GW data, 2nd round geoprobe sampling, pre-submittal meeting is more likely to occur in June than in May as currently planned. Team decision made to delay the discussion on schedule impacts until next months PT meeting.

m 26

Zone B CMS Scoping Discussion

AOC 507 — Robert Moser asks the question: Where is the source of the contamination that he is to clean up? The site is grass covered with 2 sample points exceeding the 1E-04 criteria, the maximum detection was 1.5 mg/kg benzo (a) pyrene.

Jay requests a map with the contaminant concentrations posted.

Robert states that there are four remedial alternatives for benzo (a) pyrene:
bio-remediation
dig & haul
incineration
no further action

Jay states that for him to be able to make a decision he would like to see a memo - comparing the organic background for PAHs to the risk numbers for 1E-04, 1E-05, and the 1E-06 for Zone B.

Project Team Minutes

Statement is made that we need to define the cleanup goals before proceeding with the CMS. Further team agreement that we need to decide whether or not further action is warranted at each site before the RFI report is submitted so that decision can be recorded in the report.

Question posed: Is acceptable risk a residential 1E-04 to 1E-06 range; or, greater than or equal to 1E-06 residential?

Team consensus was reached to shelve this discussion and have a focused meeting to discuss risk management roles, responsibilities, procedures in moving from RFI to CMS.

Meeting set for 25 Feb 97 at 0930 in DHECs Columbia office.

M 27 Environmental Progress Report Approval Discussion

1st Page — Shipyard Detachment changed to Environmental Detachment

2nd Page — 1st sidebar, change environmental investigations to investigative fieldwork.
2nd Para, consensus passed to keep this paragraph describing small and minority owned business open house.

1st Page — 2nd Para, 3rd Sent, changed to: Today, the investigative fieldwork has been completed on more than 90% of the sites.

These changes will be made by Diane Cutler in the near future, then mailed out to the full RAB distribution list. **Consensus Passed.**

M 28 Pre-RAB Discussion

No major presentations this month, mainly update the status of the investigation. CTF is still waiting on the reuse response from the City of N. Charleston.

Tony would like to present selected sampling results from sites within Zones F & G. The sites include the caustic pond and the former dry cleaners facility.

Ann will recap the January CMS exercise and present the results of the data evaluation.

M 29 RDA Question/Answer Discussion

Daryle introduces Jerri Johnson and Jack Sprott with the RDA. Jack gives the following update on the RDAs progress:

The RDA has hired Flour Daniel to perform a Feasibility/Business Plan. They are not looking to hold back the progress of the RFI, want to cooperate with our schedule and once they understand our priorities, they may ask if we can shift some of our efforts to meet reuse needs.

Project Team Minutes

Specific Issues

- SCDHEC asks if the PT can expect a priority list from the RDA after the Business Plan has been completed - Jack replies YES.
- The RDA has not officially requested the Naval Base property. They will make application after completion of the Business Plan (near the end of the summer).
- Barry Steinberg (Kutak/Rock) will need some information from the PT for development of the Business Plan.
- Once complete, the RDA will approve the Business/Feasibility Plan and turn it over to the Navy as a formal request for the property.
- RDA does not like the current valuation of the Naval Annex if they cannot have the 5 frontage acres that are currently planned for reuse by the Marine Corps.
- RDA will probably go with the City of North Charleston's recommendation on the Chicora Tank Farm remedial alternative.
- Jack stated that the RDA is under no obligation to accept 100 percent of the property that is conveyed by the Navy.
- RDA would like to continue receiving minutes of the PT meeting.
- Daryle states that he is aware of \$6M of "use or loose" money that was awarded to the RDA, How is that money going to be used? There are several asbestos projects to be completed. Jerri responded that they have 4 projects currently scoped for those monies.
- Jack stated that the City of North Charleston has passed an ordinance that the Naval Base is not to be reused as a port facility.
- The RDA has made application to include the base in the Foreign Trade Zone.
- The Business/Feasibility Plan will be consistent with the ROD as close as is practicable.
- The housing in Zone C has been given a high priority (as a whole tract) and holds potential for — high-end office space, tourism, or housing. The McKinnley Act is not going to be active in that area.

M30

Partnering Tools Training

Jay feels we have already covered all the training in the Hilton Head meetings in 1995.

Project Team Minutes

Cecile states that this training would build upon the initial training and offer new tools to increase our productivity in meetings.

Team comes to consensus to have Cecile provide the training on 10 Mar 97 from 10:00 to 4:00.

M 31

Team Exercise - Cecile

Cecile opened the morning of the second day with an exercise designed to reveal the expectations of other PT members as well as what each PT member has to offer the team. The following is a record of the team member responses:

As a member of the Naval Base Charleston Project Team I expect:

- Solution oriented attitudes.
- Respect.
- Trust, Support, Commitments.
- Information/communication flow; Flexible - nonlinear thinking when necessary; Open-minded, look at options and alternatives; Stress team dynamics, recognize and treasure individual differences; Recognize conflict is not bad, it is needed to get right answers; Look at long term, don't push off decisions, address issues and resolve when needed; Be open to the RDA, they are part of the process; Use all tools.
- Be professional, don't take things personal.
- Hard work based in good scientific methods, the flexibility to make decisions based on common sense, and the guts to be a leader and make decisions at the table.
- To be listened to; To try and understand the position that my agency is in; Work in joined effort; Progress.
- Open honest communication; Make decisions at the table; Look for ways to make progress.
- Full participation.
- Respect; Focus on goal; "Off Time" participation (Dinner with the PT).
- Full commitment to the team; Willingness to make decisions and accept the liability of those decisions; Consideration of their actions or lack of actions to the team.
- Honesty, Equal dedication.
- Respect one another; Come to meetings prepared; Ready to make decisions so we can keep moving on the project.

As a member of the Naval Base Charleston Project Team I offer:

- Respect for their concerns.
- Insight into wants, desires and needs of the CNCRDA.
- Technical knowledge, contractual experience and understanding of regulatory and DoD policy with respect to the environmental field.
- Respect for concerns and responsibilities.
- Opportunity, Support.

Project Team Minutes

- Wide experience from participation on 6-8 project teams and facilities; Different approach to problems; “Big Picture” perspective; 80/20 Rule → empowered by EPA.
- Respect, Attention, Honesty.
- To listen to everyone; Work towards the same goal; Respect.
- My full commitment to working out issues as quickly as possible; My time at their convenience to expedite problem solving; My willingness to work through issues to expedite resolution of issues and maintain progress.
- Commitment, Dedication; The ability to offer multiple solutions to issues.
- My experience and knowledge in the environmental field.
- The desire to see this team succeed; Do what ever I can to support every member of this team.
- Hard work, long hours, flexibility, technical expertise, and a killer ski boat for anyone that wants to have fun.
-

☞ 32

RAB Meeting Debrief

Plus

Minus

- | | |
|--|--|
| <ul style="list-style-type: none">• Location was good• Uneventful• Lou’s presence• Tony’s presentation• Jean Moreci’s participation and responses to Lou• More public participation• Didn’t play “Devil’s Advocate” with the presenters• Tom did not wear a tie• Paul Rose and Daryle’s comments in response to questions from the RDA | <ul style="list-style-type: none">• Not prepared for Lou’s questions concerning GW flow• No training to RAB on tech issues• PT became complacent w/RAB prep - didn’t play “Devil’s Advocate”• Stick to agenda better• Get flyers to RAB sooner• Lou’s presence• GW issue became too technical• More Team presentations - not just Navy• RDA taking too big a role in meetings• Response to Environmental Justice issue was not taken well by community |
|--|--|

☞ 33

RDA Charter Discussion

RDA is not responsible for accepting 100% of property conveyed, as stated by Jack Spratt earlier in the meeting.

RDA may want piece-meal parcels at their will.

Project Team Minutes

RDA has questioned Navy about the development of Zone L sampling plan. Daryle responded with our concept and offered a focused meeting with the project team on the issue.

M 34

Zone D Pre-Submittal Review

No AOC or SWMUs in this Zone. Zone was comprised of grid-based sampling.

Question: Does the permit apply?

Jay states that the permit is applicable. Better question: Is this a CSI ?, then proceed from the findings. Paul states that zone boundaries are arbitrary.

Todd questions:

Can we reference generic background information sections in future reports? Discussion added to parking lot.

Section 1 — Johnny asked to amend last sentence.

Section 2 — No comments.

Section 3 — Jay would like to see better, the section noting deviations from work plan. (Propose giving this section its own heading in the report format).

Section 4 — Jay needs brief summary of results of data validation.

Section 5 — Paul will need table with all detections because of limited sample population, background was determined using 2x background. Jay suggests discussion of comparison to background in adjacent zones (C, E, and F).

Section 6 — Make reference to sample location (1-6) in parking island. This sample slightly exceeds RBCs for As and DDT. Probably from application rather than a release.

M 35

Zones F 90% Progress Review

AOC 619, SWMU 4 — Few SVOC exceedances. Some pesticide in soil outside of SWMU 4, probably application. Small exceedance of chloromethane. Paul has question about fuel drop pipes at rail terminals - Craig states that these are covered in the fuel distribution line investigation.

Question arises about 619SB001 some TCE and perchloroethylene surrounding 619SB004. Jay states may need a well in that area - Craig states that we have a well, 619GW001 is at SB001 and did not detect those constituents in groundwater.

Project Team Minutes

Tony has made Gabe Magwood aware of the UST in this area. Detachment will investigate. **Team consensus for No Further Investigation.**

SWMU 36, AOC 620 — SWMU 36 has significant hits of lead. Groundwater flow showed we did not have a well downgradient of metals contamination. Propose a shallow well southeast of 620SB007.

Team consensus to install two wells, one in the proposed locations and another adjacent to 620SB004 to determine whether we have leachate from the source area.

SWMU 109 — Only one hit of thallium in groundwater, Propose investigation complete. Few metals in soil, one high As hit.

Johnny would like to see the metals background calculations.

Team consensus to install three additional soil samples (As only) out side the rail head and coordinate with Zone L investigation.

Sediments should be tracked into Zone L suggestion made to add this catch basin to the DET IM scope for catch basins. **Team consensus.**

SWMU 175, AOC 613 — Geoprobe indicated high VOC, SVOC and metals. Monitoring wells installed and samples.
GEL004 — High VOCs, probably from fuel line
613004 — High VOCs
GEL007 — High VOCs

Fuel extent has been delineated. Most hits between Building 242 and 255 (locomotive maintenance) Recommending CMS at this point. **Team consensus.**

Paul suggest IM for existing tank between Building 242 and 255. Put on parking lot to investigate as an IM.

Paul would like to visit this site at lunch for more clarification. Possibly one deep well down gradient of 613SB004. Jay suggests recording turbidity during the sample extraction when we go back to quarterly sample.

Paul would like to look at lithology and screen placement. Fax boring logs of wells to CSO office after lunch.

Project Team Minutes

AOC 607 — DPT screening with mobile lab (DQO Level III). Water encountered 8' to 10' and 18' to 20'. Cooper Marl at 28 to 30'. Source around GW006 indicated 45,000 $\mu\text{g}/\text{kg}$ PCE with all degradation products to VC. Subsurface soil indicated PCE under Building 1189.

Deep well had elevated lead. 607GW004 had lower levels of solvents, down dip of the source area.

Recommended two additional shallow wells to be installed. **Team consensus.**

Also have **Team consensus** to install an intermediate and deep well nested with 607GW006. These wells will be surface cased into the corresponding clay layers for each level.

Team consensus to clean the site's catch basins, investigate if lines can be cleaned (makes sense) clean them.

AOC 613 Post-Lunch Site Visit —

Action to look at groundwater data from Zone E GRD wells, downgradient of this site. Then decide if additional wells are needed at AOC 613.

AOC 609 — High BTEX hits in one groundwater sample (fuel like). Be aware to discuss the arsenic hit. **Team consensus for no further action.**

AOC 611 — Suggestion made (Jay) to scrape 1 to 2 feet of soil in the AOC area as an IM. **Team consensus.**

AOC 616 — Recommend no further investigation. **Team consensus.**

AOC 617 — Recommend five additional soil samples and two additional wells. **Team consensus for one additional well - down gradient.**

Action to send Jay an e-mail of which Zone F as samples (if any) are screened out by background.

M36

Zone G 90% Progress

GRD G003 — Propose 5 additional soil samples. **Team consensus to move to IM with confirmation sampling.**

Project Team Minutes

SWMU 120 — Recommend No Further Investigation. **Team consensus.**

SWMU 8, AOC 636/637 —

Recommend cutting Site 637 out from the other two.

SWMU 8/636 — IM underway at both sites, recommend No Further Investigation. **Team consensus.**

AOC 637 — Propose 3 additional soil samples.

Team consensus to NFI, run risk assessment and address additional sampling in CMS (if necessary). Collect surface water samples at logical discharge point into ditch. Install two additional groundwater wells.

SWMU 11 — No Further Investigation, recommend IM. **Team consensus** to wait and further discuss IM.

AOC 628 — Recommend No Further Investigation. **Team consensus.**

AOC 633/634 — Recommend No Further Investigation. **Team consensus.**

W 37

IM Scoping — Zone K

AOC 696 — Additional proposal to de-energize, remove, and dispose of all transformers located at this site. **Team consensus to proceed as proposed.**

AOC 670/684 — Proceed as planned, Detachment will continue researching disposal options.

After further discussion, telecon for 2/27/97 back on. Jay and Johnnie resolved the residential risk-based cleanup criteria goal as discussed in the February 4th meeting. No need for February 25, 1997 meeting.

Jay also states he sees no need for DQO Level IV on this project. Also sees no need for Dioxin unless it is suspected.

SWMU 3 — Some high chlordane and DDE, recommend two additional soil samples. **Team consensus** to move this site to IM with confirmatory sampling.

SWMU 6/7, AOC 635 —

Mostly confirmatory sampling, know it will go CMS. IM is planned, recommend No Further Investigation. **Team consensus** to proceed with IM — CMS.

Project Team Minutes

- AOC 638** — Recommend No Further Investigation. **Team consensus.**
- AOC 642** — Recommend No Further Investigation. **Team consensus.**
- AOC 643** — Recommend No Further Investigation. **Team consensus** to add catch basins to DET scope no further investigation on RFI.
- AOC 646** — Recommend No Further Investigation. **Team consensus.**
- AOC 706** — **Team consensus** to install one shallow groundwater well to see if inorganics are leaching - analyze for metals only.

Fuel Distribution System —

Found Heavy fraction SVOCs system-wide, suggest developing a technical data presentation for USEPA and DHEC to see how they want to handle this site.

Team consensus to carve this site of the Zone G RFI Report. Whether it goes UST program or not.

M30

Sandy Reagan - Issues of Preparedness

- Trust
- What can E/A&H do to facilitate the decision making process?
- Hit maps will help Jay.
- State needs more time to make decisions.
- State says that packages for the D,F&G review were 1.5 weeks late coming to them if the convention was to have material in everyone's hands 2 weeks before the meeting.
- Change is not always a bad thing.
- Team dynamics will naturally be affected by addition of new members. This also is not always bad.
- On the other hand, change just for the sake of change is not good. It impedes progress and clouds the issues.
- Discussion concerning the fact that it is not desirable to end a 2-day meeting on a sour note or issue.

* Put suggestions for what is needed to facilitate progress on agenda for next month.

M 39

February 4th Cleanup Levels Meeting

See Minutes of this meeting to be provided by Robert Moser (E/A&H).

Project Team Minutes

m 40

DPT Analysis for Metals Discussion

Could be significant part of the Zone L scope of investigation. The State does not have a problem with running filtered and unfiltered analyses, then compare; if unfiltered analyses show metals, State will not absolutely require permanent wells.

m41

Wrap up - Cecile

- Plus for capturing team decisions separately in the minutes.
- Exercise this morning was eye opening.
- Discussed and resolved long standing issues this meeting - progress.
- Plus for the Meyers Briggs chart and acknowledgement during the meeting.
- Change is good - human nature to resist.
- Need to revisit defining roles and responsibility.
- Lots of interruptions - may want to revisit the role of a Gatekeeper.
- Revisiting issues decreases moral. (Might contradict the previous two bullets?)
- Telecon 27th 2 p.m. to 4 p.m. Daryle will coordinate.

Project Team Minutes

**Naval Base Charleston
Project Team Action Items Summary**

Item No.	Action	Responsibility	Due
9702-A15	Normal minutes and the "Cape format" for next month.	E/A&H	By next PT meeting
9702-A16	Identify sample contaminants that were above the RBC, but screened out of the process by the UTL bkgnd method and provide new statistical analyses using those samples. Barry to list these chemicals for Zones A, B, C, H, and I.	E/A&H	2/14/97
9702-A17	Review the contaminants from the previous action item, be ready to discuss where we go from here in the telecon 2/27/97.	Team	2/27/97
9702-A18	Bring map with contaminant concentrations from the background sample points to the Zone B CMS scoping discussion.	E/A&H	By next PT meeting
9702-A19	Finalize Environmental Progress Report and distribute.	D. Cutler	By next PT meeting
9702-A20	Look at GW data from GRD wells in Zone E, downgradient of AOC 613.	E/A&H	2/28/97
9702-A21	Issue letter to DHEC outlining revised info on AOC 636.	Tony	2/28/97
9702-A22	Consider waste oil tank at SWMU 175 as an IM.	Brian	By next PT meeting
9702-A23	Send Jay an e-mail denoting which Zone F arsenic samples (if any) are screened out by comp. to background.	E/A&H	By Zone F pre-submittal meeting
9702-A24	Perform cost analysis on DQO III vs. IV and 10% split for Appendix IX.	E/A&H	By next PT meeting
9701-A25	Send latest update of the IRIS database to E/A&H; specifically for the new reference dose for PCBs.	Jay	2/28/97

Project Team Minutes

Naval Base Charleston
Project Team Consensus Decision Summary

Item No.	Consensus	Issue
9702-D18	Passed	As applicable, start an (offline) meeting between EPA, DHEC, SDIV, and E/A&H to resolve issues on work plans or reports. Monday mornings before PT meetings.
9702-D19	Passed	Look at the background issues from Zones A,B,C,H, and I this month in the telecon, address all other Zones next month.
9702-D20	Passed	Use organic background method C as a tool for site assessment/characterization and IDW management.
9702-D21	Passed	Agreement on Zone K 90% recommendations as presented, with the addition of 1 sample point at SWMU 164 (As only).
9702-D22	Passed	Shelve CMS scoping discussion (Zone B) for focused meeting in Columbia 0930 2/25/97. Cancel 2/27 telecon.
9702-D23	Passed	Move Zone B&H scoping to next PT meeting.
9702-D24	Passed	Env. Progress Report is considered Final with incorporation of changes this meeting. D. Cutler will distribute by mail to the entire RAB and community member list.
9702-D25	Passed	Galileo to provide additional tools training to team on 10 March 97 from 10:00 - 6:00 pm.
9702-D26	Passed	AOC 619, SWMU 4 — No Further Investigation.
9702-D27	Passed	SWMU 36, AOC 620 — install 2 additional wells, one in the proposed location and another adjacent to 620SB004.
9702-D28	Passed	SWMU 109 — collect 3 additional soil samples for As only outside the railhead and coordinate results with the Zone L investigation. Add the removal of sediments from the storm water catch basins to the IM scope of work.
9702-D29	Passed	SWMU 175, AOC 613 — No Further Investigation, this site will be recommended for CMS. The UST located between Bldgs. 242 and 255 was put on the Parking Lot to investigate as an IM.
9702-D30	Passed	AOC 607 — Install 2 additional shallow wells, also install and additional intermediate and deep well nested with well 607GW006. Add storm water catch basins to IM scope of work.

Project Team Minutes

**Naval Base Charleston
Project Team Consensus Decision Summary**

Item No.	Consensus	Issue
9702-D31	Passed	AOC 609 — No Further Investigation, make note to discuss the high As hit in the parking lot median.
9702-D32	Passed	AOC 611 — No Further Investigation, scope this site for an IM. Scrape and remove the top 1-2 feet of soil in the AOC area.
9702-D33	Passed	AOC 616 — No Further Investigation.
9702-D34	Passed	AOC 617 — Install 1 additional well downgradient of the site.
9702-D35	Passed	Move the area surrounding sample GRDG003 to an IM with confirmation sampling.
9702-D36	Passed	SWMU 120 — No Further Investigation.
9702-D37	Passed	SWMU 8, AOC 636, AOC 637 — separate 637 from the other two sites. IM is underway at SWMU 8/AOC 636, No Further Investigation on these.
9702-D38	Passed	AOC 637 — No further soil sampling pending preliminary risk evaluation (collect additional soils in the CMS, if necessary). Collect a surface water sample at the logical discharge (runoff) point from the site to the nearby ditch. Install 2 additional wells downgradient of the site.
9702-D39	Passed	SWMU 11 — No Further Investigation.
9702-D40	Passed	AOC 696 — Proceed as planned with the IM scope . In addition, remove and dispose of all transformers.
9702-D41	Passed	AOC 670/684 — Proceed as planned with the IM scope. DET will continue to research disposal options for scraped soil containing lead shot.
9702-D42	Passed	AOC 628 — No Further Investigation.
9702-D43	Passed	AOC 633/634 — No Further Investigation.
9702-D44	Passed	SWMU 3 — Recommend IM with confirmatory sampling.
9702-D45	Passed	SWMU 6/7, AOC 635 — No Further Investigation, proceed with IM.
9702-D46	Passed	AOC 638 — No Further Investigation.
9702-D47	Passed	AOC 642 — No Further Investigation.

Project Team Minutes

**Naval Base Charleston
Project Team Consensus Decision Summary**

Item No.	Consensus	Issue
9702-D48	Passed	AOC 643 — No Further Investigation, add catch basins to IM scope.
9702-D49	Passed	AOC 646 — No Further Investigation.
9702-D50	Passed	AOC 706 — Install one additional shallow GW well, analyze metals only.
9702-D51	Passed	Fuel Distribution System — Carve this site out of the Zone G RFI Report whether it goes to the Petroleum Management Program or not.
9702-D52	Passed	GW Sample Analyses Using DPT — Run filtered and unfiltered analyses, then compare; if unfiltered results show metals State will not absolutely require permanent wells. (Will have significant impact in Zone L).

PT AGENDA

March 3, 1997

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Agenda
March 11 and 12, 1997**

Leader - Dave Backus
Scribe - Brian Stockmaster

Location - Naval Base Charleston, Bldg. NH-47, Band Room

March 11, 1997

8:00-9:00	Introduction Ground Rules Prioritize Agenda Define Objectives of Meeting Review Action Items from January Meeting Review RFI/CMS Schedule		Dave Backus
9:00 - 10:30	Background Issues - Zones A, B, and H	(Decision)	Barry Doll
10:30 - 10:45	Break		
10:45 - 11:00	Suggestions for PT Progress	(Discussion)	Sandy Reagan
11:00 - 11:30	ArcView Demonstration	(Information)	E/A&H
11:30 - 12:00	Zone B CMS Discussion	(Decision)	Robert Moser
12:00 - 1:00	Lunch		
1:00 - 1:15	SWMU 39 Update	(Information)	Tony Hunt
1:15 - 2:00	Pre-RAB Discussion	(Discussion)	Dave Backus
2:00 - 3:00	RDA Question/Answer Meeting (RDA Present)	(Discussion)	Daryle Fontenot

March 12, 1997

8:00 - 8:30	Post-RAB Meeting Critique	(Discussion)	Dave Backus
8:30 - 9:30	Zone A RFI Report Approval	(Decision)	Lawson Anderson
9:30 - 10:00	Land Use Restriction Model	(Information)	Tony Hunt
10:00 - 10:15	Break		
10:15 - 10:30	DQO Level III vs. IV/ Appendix IX	(Decision)	Todd Haverkost
10:30 - 12:00	Zone H CMS Scoping/Discussion	(Discussion)	Larry Bowers
12:00 - 1:00	Lunch		
1:00 - 2:00	Interim Measures Discussion	(Discussion)	Kevin Tunstall
2:00 - 2:30	Chicora Tank Farm Update	(Information)	Tony Hunt
2:30 - 3:00	Going from RFI to FOST	(Information)	Daryle Fontenot
3:00 - 3:15	Break		
3:15 - 3:30	Zone K Schedule Update	(Information)	Todd Haverkost
3:30 - 4:00	Review Format of RFI Reports	(Decision)	Todd Haverkost
4:00 - 4:30	SWMU 175 Waste Oil Tank Update	(Information)	Brian Stockmaster
4:30 - 5:00	Next Meeting - Date, Time, Place, and Leader Set Agenda, Review Action Items and Parking Lot Schedule March Telecon (If Necessary)		
5:00 - 5:30	Close-out and Wrap-up		Cecile Lacey

PT MINUTES

ACTION ITEMS

Minute Reference: 9703

Narrative Reference: A01 26
Team Member: EA&H

Narrative: EA&H to generate Lithographic cross-sectional maps for extreme NW corner of SWMU 39. Provide maps by 3/19/97. - COMPLETE

Narrative Reference: A02 27
Team Member: Daryle

Narrative: Daryle is send letter to RDA outlining proposed demo plan for CTF tanks. Due 3/20/97. This letter will be cosigned or a seperate letter sent from DHEC. - COMPLETE

Narrative Reference: A03 28
Team Member: Team

Narrative: Review and prepare membership, roles & responsibilities on the PT and consider team structure. - Today

Narrative Reference: A04 29
Team Member: Todd

Narrative: RFI report format reduction proposal. Todd will provide proposal for format proposal. Due 3/21/97 This action item is tied to the same issue currently in the parking lot. - COMPLETE

Narrative Reference: A05 30
Team Member: Tony

Narrative: Tony to draft letter documenting changes to Zone work plans and Comprehensive work plan. - REVIEW TODAY OR TOMORROW

Narrative Reference: A06 31
Team Member: Team

Narrative: Dave passed out an informational package on the fuel distribution system for review by all members for discussion at the April meeting. - SUB COMMITTEE NEEDS TO MEET WEEK OF 4/21 TO RESOLVE

Narrative Reference: A07 32
Team Member: Subgroup

Narrative: Subgroup team will get together and discuss the need for additional wells for AOC 613. The subgroup is State, Ensafe, SDiv. Jay gave his proxy to Paul on this issue. - SAME AS ABOVE

Narrative Reference: A08 33
Team Member: EA&H

Narrative: The team agreed to the concept of having Ensafe make up packages on all Zone H sites for consideration for entering into CMS and get these packages out in time for the Team to review and make decisions at a future PT meeting. - COMPLETE

Narrative Reference: A09 34
Team Member: Kevin

Narrative: Detachment to provide SCDHEC SWMU 8 sample results by 3/26/97. - SUBMIT TODAY

Narrative Reference: A10 35
Team Member: EA&H

Narrative: Ensafe will provide the ArcView information to Paul on the groundwater flow in ArcView at the next PT meeting and will work at getting Zone H data out earlier. - COMPLETE

Narrative Reference: A11 36
Team Member: Jay

Narrative: Jay will provide the NOAA consideration information to the Team prior to the next meeting. - COMPLETE

RAB CRITIQUE

12 MARCH, 1997



+	- / ▲
<ul style="list-style-type: none"> ✓✓✓✓ Daryle's responses to CTF (consistent) i.e. Fuel odors ✓ Anne's Support on CTF ✓ Tony's positive responses to Q's on his presentation ✓ Brian's presentation ▲ Good opportunity to present tech memo on clean & demo tanks to include liability issue ▲ Include CTF poster depicting closure options. 	<ul style="list-style-type: none"> ✓✓✓✓ Daryle left hanging on his own (with CTF) ✓ RDA not allowed to provide update ✓✓ DHEC may have been able to better support CTF issue Need to diffuse concern over future liability (Navy holds liability) "Continue to <u>walk</u> around the issue" (CTF) RAB's Q's were not fully answered re: hazardous v.s. soil and GW (linked with comment above) Need to identify support as needed <u>before</u> meeting Tony's map lacked some information

CHARLESTON NAVAL BASE PROJECT TEAM ~~DRAFT~~ MEETING MINUTES

11 & 12 MARCH, 1997

Below is a table of the topics discussed (M items) at the 11 & 12 March, 1997 meeting and related decisions (D items) and action item (A items). This table is provided to make review and cross referencing of topics, decisions and action items easier.

Topic number	Agenda item / Topic	Related Decision	Related Action item
M01	Introduction		
M02	Parking lot		
M03	May meeting and BRAC conference	D01	
M04	Background issues	D02	
M05	Meeting minutes		
M06	February Action Item review		
M07	Project Team Schedule		
M08	Ensafe's offer of assistance		
M09	ArcView demonstration		
M10	Zone B CMS / AOC 507	D05	
M11	SWMU 39 update	D06	A01
M12	Project Status sheet & CTF issues		A02
M13	Team participation		A03
M14	Team membership		A03
M15	Minute clarification RE: AOC 609		
M16	RAB Critique		
M17	Zone A RFI comment review		
M18	DQO level III vs. IV	D07, D08	A05
M19	Zone H CMS scoping	D09	A08
M20	Interim measure status / review		A09
M21	Bldg. 1175 & communications		
M22	CTF issue		
M23	Zone K update	D10	
M24	Groundwater flow maps		A10
M25	April's agenda		

Note: As you can see action items A06, A07 and A11 are not really tied to a specific agenda item or if they are I didn't catch the connection. Forgive the spelling error, but do point them out in your review as well as any other errors or suggestions to improve our meeting minutes.

DECISION ITEMS

Minute Reference: 9703

Narrative Reference: D01 53
Team Member: Team

Narrative: May's meeting will remain the 13th and 14th. Reference with M03.

Narrative Reference: D02 54
Team Member: Team

Narrative: Review the data sets within the confines of a smaller working group. Barry will finish his work on the data sets for zones B and H. In addition this subgroup will decide on the appropriate methodology to be used. Working group includes: Tony, Johnny, Jav. Todd, Barry, Paul. The subgroup will meet on March 25th at Ensafe's office in

Narrative Reference: D03 55
Team Member: Team

Narrative: Based on the information presented at last PT meeting regarding AOC 636 UXO, the team decided that no UXO search was needed and the IM work plan would not have to search for this as currently stated.

Narrative Reference: D04 56
Team Member: Team

Narrative: Team decided to include scheduling and development of an agenda for the Monday issues meeting as part of the PT meeting wrap up. Reference M08.

Narrative Reference: D05 57
Team Member: Team

Narrative: The Team decided that No Further Action (NFA) is warranted for CMS on AOC 507.

Narrative Reference: D06 58
Team Member: Team

Narrative: Tony to draft letter concerning off base findings found during SWMU 39 investigation and submit to DHEC for further action.

Narrative Reference: D07 59
Team Member: Team

Narrative: Team decided to cut out level IV from subsequent sampling.

Narrative Reference: D08 60
Team Member: Team

Narrative: Team decided to drop the matrix spikes and matrix spike duplicates from level III samples.

Narrative Reference: D09 61
Team Member: Team

Narrative: Team decided to take soil samples under mechanical room of the FBMTC (SWMU 17) for CMS purposed to determine the whether PCBs are under the building or not.

Narrative Reference: D10 62
Team Member: Team

Narrative: The Team decided to carve out SWMU 166 from the Zone K RFI report and address them separately to keep from holding up the Zone K report to adequately address this site.

NARRATIVE DISCUSSION

Minute Reference: 9703

Narrative Reference: MQ1 42

Team Member: Dave

Narrative: Introductions: Barry Doll, Steve Waldon (sp) Attendees: Tony, Johnny, Jay, Brian, Cecil, Dave, Paul, Bobby, Daryle, Jerri Johnson, Tom, Sandy, Kevin, Ann;

Narrative Reference: MQ2 43

Team Member: Team

Narrative: The following Parking lot items were generated: IM work plan (30 min), Team participation in training (15 min), May PT meeting (15 min), Bldg. 1175 Demo (15 min), Communications (15 min), Qtrly GW flow maps (30 min), NOAA considerations concerning Zones J and L RFI workplans (15 min), Team membership / roles and responsibilities, Discuss future limiting of analytes on subsequent rounds of sampling, The following items were moved to the agenda to the parking lot: Land use model, Review format RFI reports,

Narrative Reference: MQ3 44

Team Member: Daryle

Narrative: Daryle briefed the Team on the BRAC conference being held in Charleston in May which is scheduled the same time as the PT meeting. Reference with D01.

Narrative Reference: MQ4 45

Team Member: Barry Doll

Narrative: Barry handed out a package to the team regarding background. Barry summarized his handout. Much of the discussion centered around the methodology used in calculating the UTL and whether this or two times the mean is the more appropriate method for calculating a background number. Reference: D02

Narrative Reference: MQ5 46

Team Member: Team

Narrative: Team discussed meeting minute format and all provided their comments regarding their desire on which format to continue. Team will continue with the "Cape format".

Narrative Reference: MQ6 47

Team Member: Team

Narrative: February Action item review: 9702- : A15, A16, A17, A19, A20, A21, A22, A24 Complete; A18 on agenda, A23 and A25 not complete and carry on action list.

Narrative Reference: MQ7 48

Team Member: Team

Narrative: Todd passed out an updated schedule. The dates in red are past due. The priority for reviews are A, H, C and I, respectively. Ensafé will provide a hit list table for Zones C and I to the State and EPA. Comments on Zone I due by the first of May. Zone C comments due April 4. A revised schedule will be included the the final version of these meeting minutes.

Narrative Reference: MQ8 49

Team Member: Sandy

Narrative: Sandy asked if there was any assistance or help Ensafé could provide to any of the team members in doing the work of the Team. E-mail Sandy for any identified assistance. It was brought to the Team's attention that we have agreed to meeting on Mondays prior to the PT meeting to bring up any item.

Narrative Reference: M08 50

Team Member: Steve

Narrative: ArcView demonstration: Steve Lorgin from EA&H presented a demonstration on the capabilities and usefulness of ArcView.

Narrative Reference: M10 51

Team Member: Robert Moser

Narrative: Robert presented the risk information concerning AOC 507. The only COC at this site is BaP in the range of 1E-4 to 1E-6 for risk. The question was presented to the Team whether this site should be categorized as a No Further Action (NFA). reference: D05

Narrative Reference: M11 52

Team Member: Tony

Narrative: Tony presented an update on SWMU 39. Tony went over an E-mail he had previously sent out on this site. Reference: D06 & A01

Narrative Reference: M12 53

Team Member: Team

Narrative: Team went over the Project Status sheet to be provided to the RAB. Tony will include suggested changes to the sheet provided to the RAB. The Team discussed the recent News paper article on the Chicora Tank Farm and the letter received by the Navy from the RDA on the tank farm. Reference A02

Narrative Reference: M12 54

Team Member: Team

Narrative: Team picked up from the parking lot the issue of Team participation. The Team added to the parking lot the need for team membership and roles and responsibilities. This is an issue which the team feels needs addressing. Reference: A03

Narrative Reference: M14 m 55

Team Member: Team

Narrative: The Team discussed team membership and membership types (Core, Support, Adjunct). The Team decided to table and developed action item A03. Reference A03

Narrative Reference: M18 56

Team Member: Paul

Narrative: Paul brought to the team's attention that the minutes of the last meeting needed clarification as follows: For AOC 609 ~~it needs to be clarified that the NFA is regarding the RCRA IR program and that further action is warranted under the Tank Program.~~
FURTHER ACTION IS WARRANTED UNDER THE TANK PROGRAM

Narrative Reference: M18 57

Team Member: Team

Narrative: The team conducted a RAB critique. The pluses and deltas will be provided with the final meeting minutes.

Narrative Reference: M17 58

Team Member: Ensafe

Narrative:

Ensafe's Zone A team of Lawson Anderson, Toby Dlasingame and Ron Severson reviewed comments. The team discussed the State's comments. The comments of Johnny's which needed discussion were: background which will be addressed in our meeting on the 25th; an issue with thallium in groundwater. What is needed for thallium is an explanation for our findings; other issues were addressed and resolved with Ensafes members as to how they need to be addressed. The team received Paul's comments at today's meeting and went over his comments to make sure it was clear what the concern was and how to address them.

Narrative Reference: M18 59

Team Member: Todd

Narrative:

DQO level III vs. IV: Todd informed the team on the differences between the two data levels and associated costs. The question to the team is the added cost of level IV vs. III (approx. \$120K) worth the value added for Zone L? Reference: D07, D08 & A05

Narrative Reference: M18 60

Team Member: Larry Bowers

Narrative:

Larry Bowers lead the team in a CMS scoping discussion for Zone H. Todd led the team in an explanation that any site with risk <1E-6 residential would not have to go into CMS and would be proposed for NFA. For sites falling within the 1E-4 to 1E-6 residential range that further consideration and a Team decision will be made based on site specific data as to whether the Team recommends the site for CMS. Any site >1E-4 residential would required CMS, the degree of that CMS is site specific. Reference: D09 & A08

Narrative Reference: M20 61

Team Member: Kevin

Narrative:

Kevin provided a handout with the status of all interim measures and briefed the Team on these. AOC 693 will be removed from the IM list due to RFI investigative sample results indicating no COC at this site. SWMU 38 IM does not need to address single sample hit of PCBs. The Detachment will excavate SWMU 5 site as a whole rather than piece meal between the boundrys of clean RFI sample locations ~~and will not need to take confirmation samples.~~ Reference: A09

Narrative Reference: M21 62

Team Member: Paul

Narrative:

Bldg. 1175 demolition and communications issues: Paul passed out copies of a letter he had sent out concerning the proposal to demolish building 1175 and went over his concerns with the proposed use and future development on this site. Jerri ask several questions on the liabilities of future development of the base. It was discussed that the people who can accurately answer these questions were not at the table (i.e. SDIV real estate, legal and others). Regarding the communications issue the conclusion was to use telecon to involve Daryle, Jerri, SCDHEC, and any other appropriate party regarding these type issues.

Narrative Reference: M22 63

Team Member: Tony

Narrative:

CTF Update: Tony provided a review of the issue regarding what the 1994 CTF report stated regarding possible wetland contamination. He showed that based on this report and sampling that no aparent further action was needed regarding the settling pond.

Narrative Reference: M23 64

Team Member: Todd

Narrative:

Todd discussed where we were with the Zone K report and proposed carving out several sites to keep things moving on this report. Reference: D10

Narrative Reference: M24 65

Team Member: Paul

Narrative:

Quarterly groundwater flow maps: Paul would like to see the ground water flow data compiled into ArcView. Reference: A10

Narrative Reference: M26 66

Team Member: Cecil

Narrative: Next agenda: See attached sheet

Narrative Reference: M26 67

Team Member: Cecil

Narrative: Cecil went over the new evaluation form with the team and her evaluation. Cecil suggested doing some team training at each meeting.

NAVBASE CHARLESTON PROJECT TEAM

Date: April 7, 1997
To: NAVBASE Charleston Project Team
Prepared by: Todd Haverkost, E/A&H, Memphis, TN
Copy: Project Team Notebook
Subject: Final Meeting Minutes: March 25, 1997 Project Team Subcommittee
Minute Reference: 9703S
Purpose: The subcommittee meeting was held per narrative discussion 9703-M04 and decision 9703-D02 to discuss background data sets for Zones B and H.

Subcommittee:
Tony Hunt SOUTHDIV, Charleston
Daryle Fontenot SOUTHDIV, Charleston
Jay Bassett USEPA Region IV, Atlanta
Johnny Tapia SCDHEC, Columbia
Paul Bergstrand SCDHEC, Columbia
Todd Haverkost EnSafe/Allen & Hoshall, Charleston

Visitors:
Barry Doll EnSafe/Allen & Hoshall, Raleigh
Britton Dotson EnSafe/Allen & Hoshall, Nashville

TEAM ACTION ITEMS

Carry Over Action Items from Previous Meetings

Table 1A - NAVBASE Charleston Project Team Subcommittee Carry over Action Item List

Action Item No.	Minutes Reference	Responsibility Team Member	Action Item
None			

New Action Items from March 25, 1997 NAVBASE Charleston Project Team Subcommittee Meeting

Table 1B - NAVBASE Charleston Project Team March 1997 Meeting Action Item List

Action Item No.	Minutes Reference	Responsibility Team Member	Action Item
9703S-A0137	9703S-M01	E/A&H	Identify any water supply wells near the Annex property. - 1 PRODUCTION WELL OK
9703S-A0238	9703S-M01	E/A&H	Complete DPT sampling to Annex boundary. - COMPLETE
9703S-A0339	9703S-M01	Tony	Contact SCDOT to arrange for contingency DPT sampling along I-26. - HAVE BEEN CONTACTED, COULD BE A WHILE. WE HAVE BEEN REFERRED TO DISTRICT ENGINEER
9703S-A0440	9703S-M02	Team	At April PT meeting need to revisit issue of what to do with background data set outliers. - NEXT MEETING, TOMMOROW
9703S-A0541	9703S-M02	Tony	Submit letter to SCDHEC addressing revised Zone B background values. - COMPLETE DIST TOMMOROW
9703S-A0642	9703S-M03	E/A&H	Provide team info on selection of non-parametric UTL values. - IN PROGRESS
9703S-A0743	9703S-M04	Paul	Determine DHEC's position on groundwater background values which exceed MCLs. - IN PROGRESS
9703S-A0844	9703S-M04	E/A&H	Recalculate Zone H shallow groundwater arsenic value using all 4 quarters of data. - COMPLETE, REVIEW TODAY
9703S-A0945	9703S-M04	E/A&H	Review well NBCH-GDH-009 thallium data. - TURN & ID NEW ON WELL SHARP
9703S-A1046	9703S-M04	E/A&H	Revise the Zone H risk assessment as needed based on the revised UTLs. - IN PROGRESS, AWAITING DECISIONS ON ARSENIC & THALLIUM

TEAM SUBCOMMITTEE DECISION

Table 2 - NAVBASE Charleston Project Team March 1997 Meeting Decisions

Decision No.	Minutes Reference (Table 3)	Decision
9703S-DQ163	9703S-MQ2 69	Agreed to eliminate the vanadium data for boring 11 of the Zone B background data set.
9703S-DQ264	9703S-MQ2 69	Agreed the remaining alternative background values for Zone B are acceptable. NFA for Zone B.
9703S-DQ365	9703S-MQ3 70	Agreed the alternative surface soil background values for Zone H are acceptable.
9703S-DQ466	9703S-MQ3 70	Agreed the alternative subsurface soil background values for Zone H are acceptable.
9703S-DQ567	9703S-MQ4 71	With the exception of arsenic and thallium, the alternative groundwater background values for Zone H are acceptable.
9703S-DQ668	9703S-MQ5 72	Subcommittee conditionally agreed that the UTL _{95,95} method will be used to calculate background for all the zones. The team will meet to discuss and reach consensus on the calculated background values for each zone prior to submittal of the RFI report.

MINUTES/DISCUSSION

Table 3 - NAVBASE Charleston Project Team March 1997 Meeting Minutes/Decisions

Minutes Item No.	Presenter	Topic/Discussion
9703S-MQ1 68	Britton	Presented the results of the second round of DPT sampling at the annex. TCE/DCE detected in groundwater at concentrations > 100 ppm. Source appears to be a former "auto service rack" as identified on a 1958 Air Force map. The downgradient extent has not been defined and will require an additional round of sampling which could include sampling along the I-26 median.
9703S-MQ2 69	Barry	Alternative background concentrations in Zone B soil were proposed for aluminum, arsenic, beryllium, chromium ₊₆ , manganese, and vanadium. Histograms of the data sets were presented to help identify outliers. With the exception of vanadium the proposed values were accepted. The proposed vanadium value was reduced from 76 ppm to 52 ppm after the elimination of an additional outlier.
9703S-MQ3 70	Barry	Alternative background concentrations in Zone H soil were proposed for aluminum, arsenic, beryllium, chromium, manganese, thallium, and vanadium. Again, histograms of the data sets were presented and a discussion of the outlier evaluation ensued. All of the proposed values were accepted.

Table 3 - NAVBASE Charleston Project Team March 1997 Meeting Minutes/Decisions

Minutes		
Item No.	Presenter	Topic/Discussion
9703S-M05 71	Barry	Alternative background concentrations in both shallow and deep Zone H groundwater were proposed. The values for barium and manganese were accepted. There was some question regarding thallium and the fact that quantitation limits were greater than the MCL. Also the proposed background value is higher than the MCL. Acceptance of the value for arsenic is pending a recalculation of the number using all four quarters of data.
9703S-M05 72	Team	Following the Zone B and H background discussions, the group conditionally agreed that the method for determining background for the remaining zones should also be the UTL _{95,95} method. The project team will continue to review the grid based sample data on a zone by zone basis to identify outliers through statistical means and application of best professional judgement. Additionally the team will have to concur on whether data transformations are needed to normalize the data sets, and if so, what type of transformation is most appropriate. The team needs to exercise caution from zone to zone to ensure cleanup requirements are not applied inconsistently based on what could simply be variations in the data.

Handouts at Meeting

- Draft CAMP revision
- Basewide groundwater flow maps from 6/96 and 10/96 (given to Paul only)
- Zone A "hit" list
- Annex TCE plume info
- Alternative background values for Zones B and H

Attachments

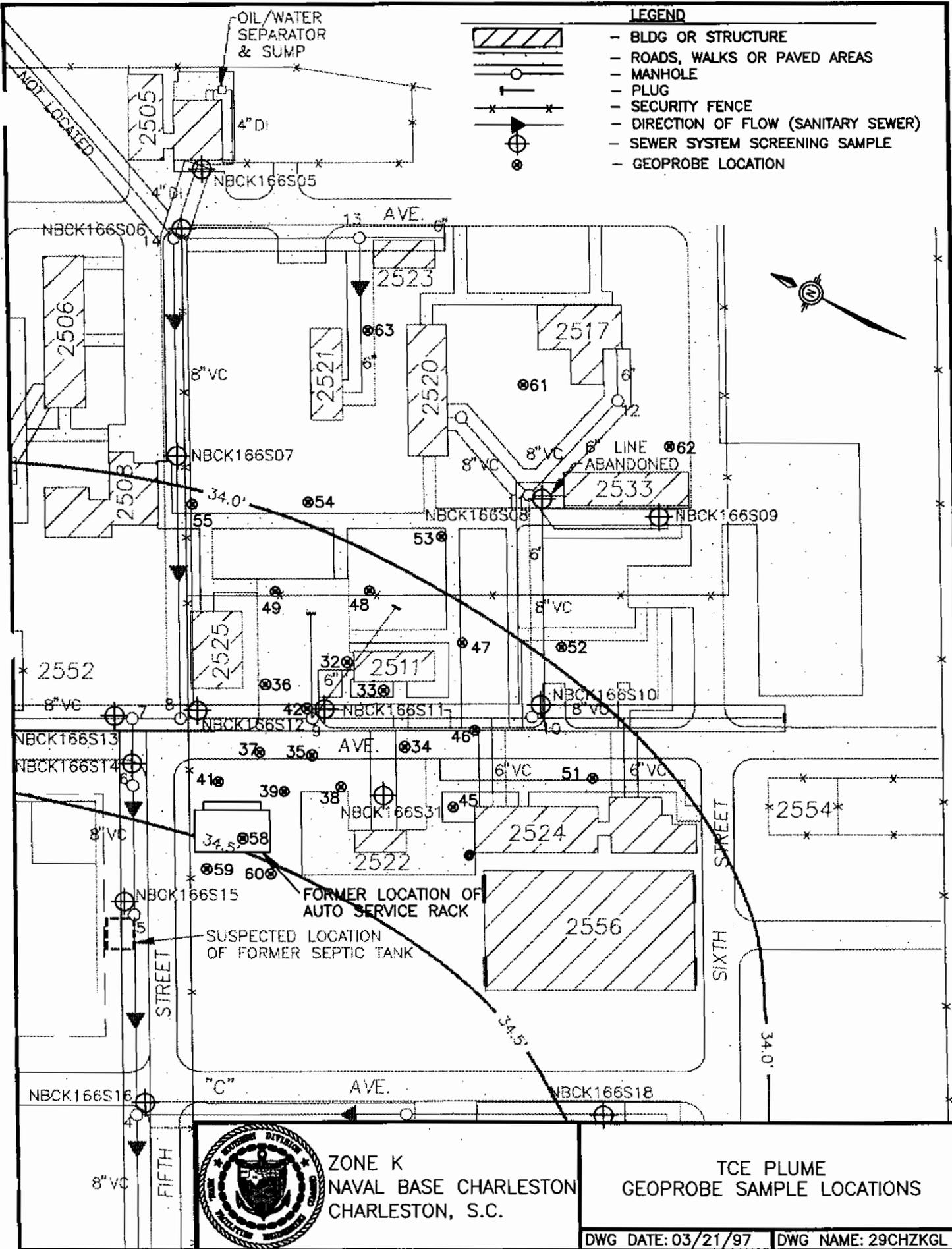
- Annex TCE plume info
- Alternative background values for Zones B and H

CLOSED TEAM ACTION ITEMS

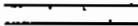
Action Items from Previous Project Team Meetings and Telecons Closed during the March 1997 Project Team Subcommittee Meeting

Table 4 - NAVBASE Charleston Project Team March 1997 Closed Action Item List

Action Item No.	Minutes Reference	Responsible Team Member	Action Item
9703-C10	9703-A10	E/A&H	Provide basewide groundwater flow maps to Paul.



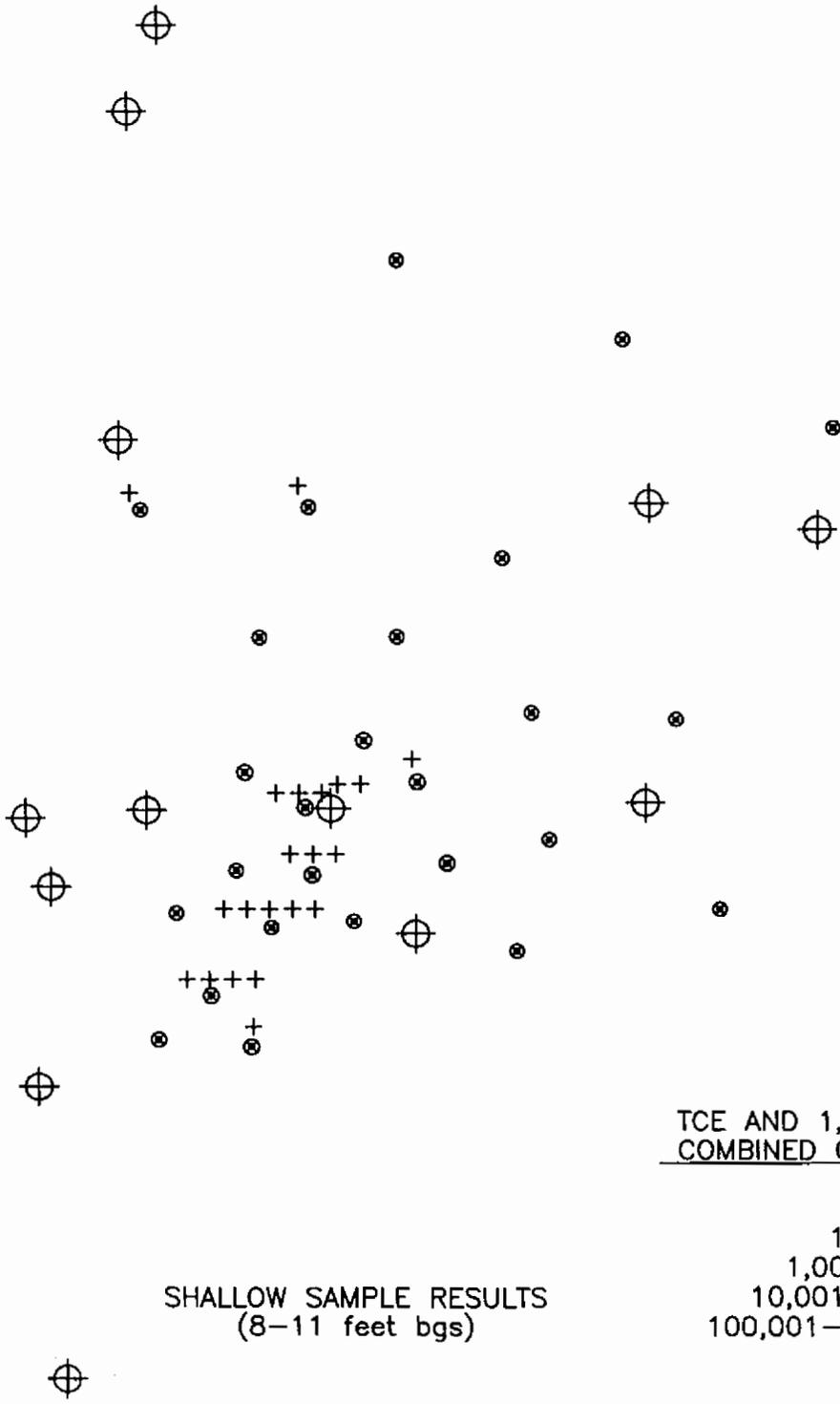
LEGEND

-  - BLDG OR STRUCTURE
-  - ROADS, WALKS OR PAVED AREAS
-  - MANHOLE
-  - PLUG
-  - SECURITY FENCE
-  - DIRECTION OF FLOW (SANITARY SEWER)
-  - SEWER SYSTEM SCREENING SAMPLE
-  - GEOPROBE LOCATION



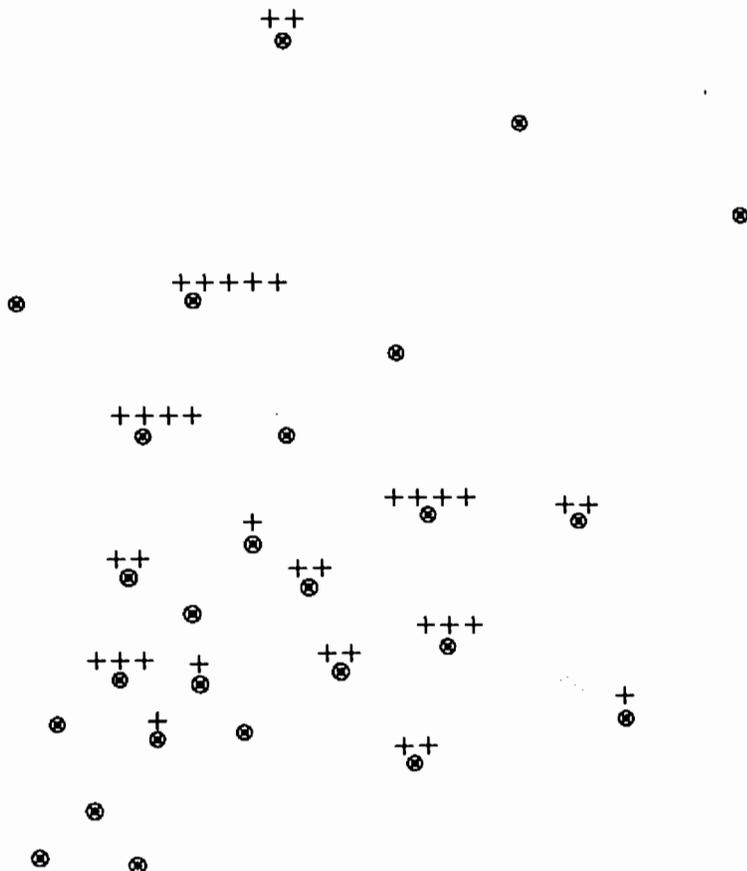
ZONE K
 NAVAL BASE CHARLESTON
 CHARLESTON, S.C.

TCE PLUME
 GEOPROBE SAMPLE LOCATIONS



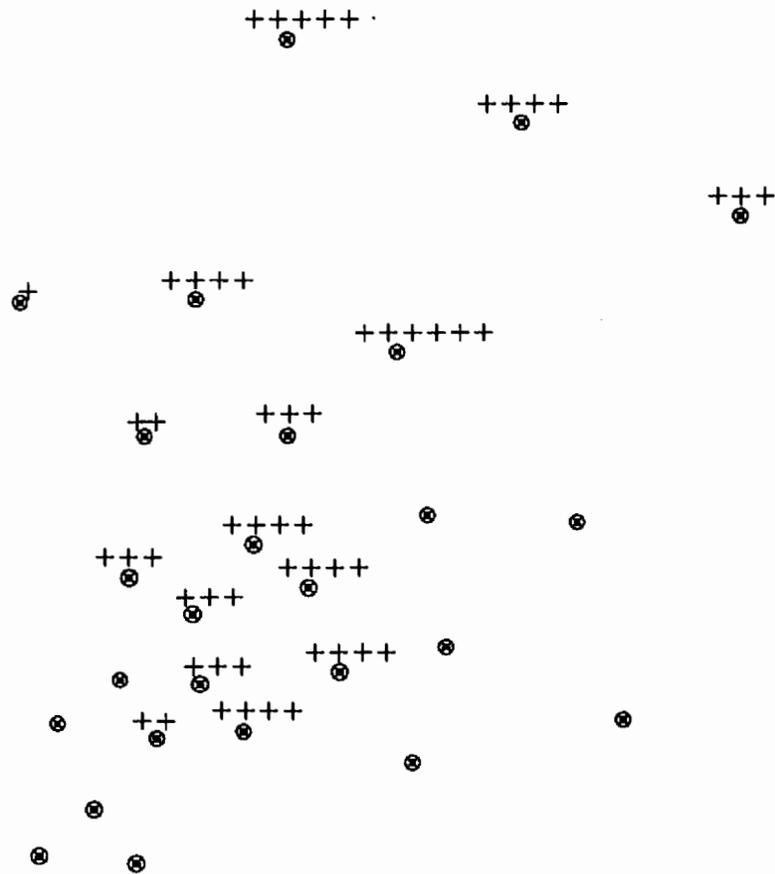
SHALLOW SAMPLE RESULTS
(8-11 feet bgs)

TCE AND 1,2-DCE COMBINED CONCENTRATION (ppb)	
1-10	+
11-100	++
101-1,000	+++
1,001-10,000	++++
10,001-100,000	+++++
100,001-1,000,000	++++++



INTERMEDIATE SAMPLE RESULTS
(22-26 feet bgs)

TCE AND 1,2-DCE COMBINED CONCENTRATION (ppb)	
1-10	+
11-100	++
101-1,000	+++
1,001-10,000	++++
10,001-100,000	+++++
100,001-1,000,000	++++++



DEEP SAMPLE RESULTS
(33-36 feet bgs)

TCE AND 1,2-DCE COMBINED CONCENTRATION (ppb)	
1-10	+
11-100	++
101-1,000	+++
1,001-10,000	++++
10,001-100,000	+++++
100,001-1,000,000	++++++

Zone B soil

3-24-97

Alternative background reference values (mg/kg)

	Surface Soil					Subsurface Soil				
	RBC	SSL	SSL	SSL	SSL	RBC	SSL	SSL	SSL	SSL
Aluminum	7,800n	19,400	13,900	15,500	15,500	--	--	--	--	--
Arsenic	0.43c	8.9	12.4	17.1	17.1	29	5.3	10.8	10.8	35.52
Beryllium	0.15c	0.86	0.95	1.23	1.34	--	--	--	--	--
Chromium ₆	39n	35.6	48.3	75.7	80.2	38	24.9	48.1	48.1	83.86
Manganese	180n	358	385	464	589	--	--	--	--	--
Vanadium	55n	34.5	47.8	76.5 52	156	--	--	--	--	--

RBC values are adjusted for THQ = 0.1 to allow for multiplicative effects.
 SSL values assume DAF = 20.

Zone B

3-24-97

Outliers removed from grid-based background datasets

Surface soil

Aluminum	GDBSB00101	47,900 mg/kg
	GDBSB00201	39,500 mg/kg
Arsenic	GDBSB01101	24,000 mg/kg
	GDBSB00101	19.6 mg/kg
	GDBSB00201	22.1 mg/kg
	GDBSB00301	9.0 mg/kg
Beryllium	GDBSB01101	28.7 mg/kg
	GDBSB00101	1.45 mg/kg
Chromium	GDBSB00201	1.2 mg/kg
	GDBSB00101	63.8 mg/kg
Manganese	GDBSB00201	54.8 mg/kg
	GDBSB00101	499.5 mg/kg
Vanadium	GDBSB00201	454 mg/kg
	GDBSB00101	89.95 mg/kg
	GDBSB00201	71.9 mg/kg

Subsurface soil

Aluminum	GDBSB00102	55,600 mg/kg
	GDBSB00202	32,900 mg/kg
Arsenic	GDBSB00102	33.9 mg/kg
	GDBSB00202	15.8 mg/kg
Chromium	GDBSB01102	11.7 mg/kg
	GDBSB00102	75.7 mg/kg
	GDBSB00202	48.5 mg/kg

Zone H soil

3-24-97

Alternative background reference values (mg/kg)

Chemical	Surface Soil					Subsurface Soil				
	RBC	2xMean	UTL _{90,90}	UTL _{95,95}	UTL _{orig}	SSL	2xMean	UTL _{90,90}	UTL _{95,95}	UTL _{orig}
Aluminum	7,800	16,800	18,800	26,000	25,310	--	--	--	--	--
Arsenic	0.43c	11.7	12.6	15.6	14.81	29	15.7	17.9	22.5	35.52
Beryllium	0.15c	0.75	0.93	1.37	1.466	--	--	--	--	--
Chromium	39	46.8	48.3	59.1	85.65	38	60.7	67.5	84.2	83.86
Manganese	180	243	352	583	636.4	--	--	--	--	--
Thallium	0.63		0.63 (?)	1.1	0.63	0.7		1.3	1.3	1.3
Vanadium	55	45.9	52.4	73.0	77.38	--	--	--	--	--

Zone H groundwater

Alternative background reference values (µg/L)

Chemical	Shallow Groundwater					Deep Groundwater			
	RBC/MCL	2xMean	UTL _{90,90}	UTL _{95,95}	UTL _{orig}	2xMean	UTL _{90,90}	UTL _{95,95}	UTL _{orig}
Arsenic	0.045/50	10.6	17.8	26.0	27.99	3.61	3.65	8.2	14.98
Barium	260/2000	27.1	105	323	323	--	--	--	--
Manganese	84/NA	1,310	1,820	2,440	3,391	573	757	998	776.2
Thallium	0.29/2.0	3.4	4.2	5.3	7.66	--	--	--	--

Zone H

3-24-97

Outliers removed from grid-based background datasets

Surface soil

Manganese GDHSB04101 983 mg/kg

Subsurface soil

Arsenic GDHSB04302 136 mg/kg
Chromium GDHSB08602 95.2 mg/kg

Shallow groundwater

Arsenic GDHGW00301 26.6U $\mu\text{g/L}$
Manganese GDHGW00901 4,570 $\mu\text{g/L}$
 00902 3,190 $\mu\text{g/L}$
 00903 3,250 $\mu\text{g/L}$
 00904 2,620 $\mu\text{g/L}$
Thallium GDHGW00901 105 $\mu\text{g/L}$

Deep groundwater

Arsenic GDHGW01D03 36U $\mu\text{g/L}$

Areas Complete

SWMU-690 (Perimeter Road)	Report Issued 29 Aug 96
SWMU-44 (Coal Field)	Report Issued 10 Feb 97
SWMU-21/54 (Sandblast Grit)	Report Issued 11 Feb 97
SWMU-159 (Recycle Center)	Actions Complete 31 Jan 97, Report Due 1 May 97
AOC-626 (Viaduct Road)	Actions Complete 18 Feb 97, Report Due 19 May 97

Work In Progress

SWMU-653 (Hobby Shop) Backfilling Complete - 10 (40cuyd) waste piles on site, evaluating waste characterization samples.

AOC-503 (Marsh UXO) 5 of 8 anomalies excavated. Scrap metal was only thing found. 2 of remaining anomalies are at a depth of 30' and have magnetic signatures that do not match that of the depth bombs. The last anomaly is at a depth of approximately 17' and will be re-evaluated for excavation. The DET is currently drafting a progress report and recommendations for the site.

AOC-574 (Bldg 9 Fuel Tank) Excavation complete - Confirmatory samples received - Letter sent to SDIV on 7 March 97 recommending backfilling.

SWMU-8 (Sludge Pits) Area 1: Had meeting with SDIV 3/4/97 concerning cost overruns and direction at the site. The DET will segregate debris from the removed soil and dispose of the debris. Preliminary samples of the waste soils indicate only petroleum constituents present and therefore will be recommended for bioremediation and reuse as fill at the site. Discovered piping (contained oil) is being removed (50% complete). No further chasing of soils is planned for this site.

Area 2: Soil borings have indicated free product at a depth of 8' on the north side of the site. Excavation has started in the non-overlapping area and is to a depth of approximately 2'. Note for Paul... The plywood pieces that were located next to the fence were not covering anything except the ground - it is suspected that these were used as equipment footings due to the softness of the ground on that end outside of the fenced area.

SWMU-14 (Chem Disposal Pond) Training for the EM-61 magnetometer is starting today and will last a week. The instructor will locate the anomalies at SWMU-14 as part of the training. Excavation scheduled to start 19 March 97.

SWMU-5 (Battery Cracking) All piping has been flushed, removed and capped.
Excavation waiting on disposal contract and is scheduled to start 24 March 97.

SWMU-6/7 (Public Works Coral) Concrete slab is broken up and ready for disposal,
awaiting waste contract finalization. Concrete removal and excavation scheduled to start
19 March.

AOC 707 (Petro Spill) Excavation complete - Confirmatory samples being
taken today.

AOC-708 (Petro Spill (PCB's)) Screening samples taken (Immunoassay for TPH)
indicated TPH < 5 ppm. Confirmatory samples for petroleum constituents, metals and
PCB's at the lab being analyzed.

SWMU-42 (Asphalt Plant) Scheduled to commence 3/13.

Awaiting Admin Action

SWMU-38 (Bldg 1605 Parking Lot) Procedure sent out for concurrent review on 18 Feb
97 - awaiting comments via E-mail. NOTE.. Pls copy Bobby on the Email comments,,
my mailbox has been having receiving problems - the SUPSHIP computer person has
fixed the problem.

AOC-696 (PCB slab @ Nav Annex) Cost estimate (PEP) submitted 28 Feb 97 based on
scoping at last Project Team meeting. Statement of Work not received from SDIV. DET
is ready to negotiate \$ and perform work.

AOC-611 (XX @ Gas Station) Cost estimate (PEP) submitted 28 Feb 97 based on
scoping at last Project Team meeting. Statement of Work not received from SDIV. DET
is ready to negotiate \$ and perform work.

SWMU's 13 & 138 and AOC's 659 & 667 Ltr dtd 28 Feb requesting transfer from
RCRA to UST program was Fed-ex'd to SCDHEC last week.

Awaiting Other Action

AOC-670/684 (Skeet/Pistol Range) Information faxed to Harold Seabrook about the site
- questioned him about disposal options for this area -- He will reply after looking over
the data.

AOC-693 (Clouter Island) A tour of the island w/ SDIV on 3/6/97 revealed no
mysterious "white powder" which was the scope of the IM. DET to submit a letter
documenting no IM action at this site to close out the PEP request.

SWMU-19 & 121 (runoff @SMWU-9) Preliminary investigation reveals that there is not a physical "surface" water runoff problem due to witnessing complete soil absorption during a heavy rain. DET to investigate SWMU-9 based on input from Ensafe to see if these sites can be addressed more efficiently along with SWMU-9 rather than separately.

AOC-636 (Torpedo Storage) Ltr sent to SCDHEC by SDIV to clarify RFA. DET to submit a letter to SDIV documenting no IM action at this site to close out the PEP request.

Process Closure Status 3/11/97

Areas Complete

Work In Progress

Bldg 9 Foundry (SMWU-83) Site complete with exception of receiving PCB sample results.

Bldg 44 Plating Shop (SWMU-44) Lower annex is removed and disposed. West wall of the upper annex removed and in process of removing interior railing system & interferences. Project at approximately 60% complete.

Bldg 681 (AOC 681) PEP being generated.

Awaiting Admin Action

Awaiting Other Action

PT AGENDA

PROJECT TEAM MEETING AGENDA
APRIL 8/9, 1997

Leader: Jay Bassett
Scribe: Dave Backus
April 8, 1997

Time	Topic	Goal	Comments
8-9	Prioritize/change agenda Review Action items		
9-9:30	RFI/CMS schedule	Information	
9:30-9:45	Break		
9:45-11:00	Discuss/adopt team structure	Decision	
11-11:10	Break		
11:10-1200	Roles & Resp.	Decision	Define members' roles and resp.
12-1pm	Lunch		
1-2	Landuse restriction model	Decision	Continue previous exercise
2-3	Pre RAB preparation		

April 9, 1997

Time	Topic	Goal	Comments
8-8:30	Post RAB critique	Information	
8:30-9:30	Tech. Comm. Report (Background)	Information	
9:30-9:45	Break		
9:45-10:15	IM discussion	Discussion	
10:15-10:45	NOAA discussion	Discussion	
10:45-11:15	USGS flow model	Information	
11:15-11:45	Limiting of subsequent GW sampling	Discussion/ Decision	
11:45-12:45	Lunch		
12:45-1:45	Comp. CMS workplan decision	Decision	
1:45-2:00	Break		
2-3	Cont. CMS		
3-3:30	Zone H update	Decision	
3:30-4:00	Next mtg agenda...		
4-4:30	Wrap up & eval		

PT MINUTES

**Naval Base Charleston
Environmental Cleanup Project Team
Technical Subcommittee Meeting Minutes**

Date: 4/7/97

Place: E/A&H Office

Time: 1300 - 1600

Attendees: Jay Bassett, Todd Haverkost, Dave Backus, Tony Hunt, Paul Bergstrand

Guests: Barry Doll (E/A&H)

Leader: Jay Bassett **Scribe:** Dave Backus

Discussion/Decisions

9704S - M73	Barry	<p>Zone H arsenic in shallow groundwater. After analyzing 4 rounds of data, several outliers were identified. Barry calculated several scenarios as outlined in his handout.</p> <p>First round data only yielded a UTL of 26.0 ug/l. All rounds of data with ambiguous results dropped yielded a UTL of 21.5 ug/l.</p> <p>Paul will take the data package back to Johnny for discussion. Decision Pending.</p>
9704S - M74	Barry	<p>Zone H thallium in shallow groundwater. Decision Pending. Will wait to see the outcome of DHECs decision on background values exceeding MCLs.</p>
9704S - M75	Barry	<p>Zone A Background. Constituent by constituent discussion of surface soil, subsurface soil, shallow and deep groundwater.</p> <ul style="list-style-type: none"> • Johnny needs to review manganese in shallow GW. • Check field notes for turbidity readings, concerning chromium in deep GW. • Zero out thallium in deep GW, address presence at GRDA - 003. <p>Decision Pending, Barry will check with Johnny on his review of this package.</p>

Action Items

9704S - A47	Paul	<p>Take Zone H shallow GW background package back to discuss with Johnny.</p>
9704S - A48	Jay	<p>Jay will talk with Elmer Aken about arsenic hit of 30.1 mg/kg at GRDA - 006.</p>

COMPLETE

SUGGESTED COUPLE EXTRA SAMPLES

Technical Subcommittee Minutes

9704S - A49	E/A&H	Collect at least 4 additional soil samples surrounding GRDA - 006 and analyze for arsenic only.
9704S - A50	Tony / E/A&H	Research the historic Navy uses of thallium and its availability or sources in the environment.
9704S - A51	Barry	Prepare a similar background package for analysis of Zone E data by 4/25. Review package with regulators in telecon on 4/30.

COMPLETE
DATA WITHIN
2 WEEKS

IN PROGRESS

COMPLETE

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Minutes**

Date: 4/8/97 - 4/9/97

Place: NBC, Bldg. NH-46

Time: 0800 - 1700

Attendees: Jay Bassett, Ann Ragan, Paul Bergstrand, Daryle Fontenot, Tony Hunt, Tom Fressilli, Bobby Dearhart, Kevin Tunstall, Dave Backus, Todd Haverkost, Sandy Reagan, Cecile Lacey

Invited Guests: Diane Cutler, Britton Dotson, Larry Bowers (E/A&H), Jeri Johnson (RDA)

Leader: Jay Bassett **Scribe:** Dave Backus

Discussion/Decisions

9704 - M77	Jay	<p>Parking Lot issues: Team correspondence needs to be discussed concerning PT letters sent without full review of the team.</p> <p>Review March Action Items: Identified need for tech subcommittee meeting to discuss Fuel Distribution System and additional wells at AOC 609 week of 4/21.</p>
9704 - M78	Todd/Tony	<p>Review RFI/CMS Schedule:</p> <p>Zone A comment resolution meeting set for next months agenda.</p> <p>Document approval for Zones C & I moved to June meeting.</p> <p>Zone E background discussion set for telcon later this month.</p> <p>Zones F & G background discussions pending, field work end will be discussed in the telecon week of 4/21.</p> <p>Zone J field work will start within 2 weeks, 30% progress meeting moved to June.</p> <p>Zone K report in progress, SWMU 166 split out from main report, field work continues. Solvent plume has been detected to the SE property boundary.</p> <p>Zone L field work to begin in 2 weeks.</p>
9704 - M79	Paul	<p>Document Review Priority for DHEC: A, C, I, and D.</p>

Project Team Minutes

9704 - D69	Team	<p>Team Membership:</p> <p>Full Polling Members EPA - Jay Bassett DHEC - Johnny Tapia, Paul Bergstrand Navy - Daryle Fontenot, Tony Hunt, Brian Stockmaster E/A&H - Todd Haverkost</p> <p>Technical (Adjunct) Members — Poll as needed DHEC - Ann Ragan E/A&H - Dave Backus</p> <p>Support Members — Non polling DET - Kevin Tunstall, others as needed E/A&H - Zone TOMs, Tech personnel</p> <p>Observers — Non polling Navy - Tom Fressilli RDA - Jeri Johnson</p>
9704 - D70	Team	Team Roles and Responsibilities: See Attachment
9704 - M80	Tony	<p>Land Use Restriction Model: Discussion centered around determination of Industrial or residential clean up levels. Tony offered a Draft model for the Team's review. Discussion evolved into concerns over transfer mechanisms of the RCRA Permit.</p> <p>Team is to review Tony's model and discuss further next month.</p>
9704 - M81	Jay	<p>Pre-RAB Discussion: Will report completion of Zone B to the RAB. Provide copy of the CTF letter to anyone interested. Suggestion made to providing the RAB with training on the steps to close a petroleum tank at next months meeting.</p> <p>RFI Status - Field work initiated in all zones.</p> <p>Zone K Update - Britton Dotson presented maps and data denoting the TCE plume (at SWMU 166) to the eastern property boundary. Currently searching SCDOT construction plans for I-26 and pursuing access agreements for potential sampling in Interstate R.O.W.</p> <p>Also propose sampling on the east side of I-26 and persuing access to several wells in the neighborhood east of that. Suggestion made to provide vicinity map during the presentation so the public can see the big picture showing I-26 and other downgradient areas.</p>

Project Team Minutes

9704 - M82	Team	<p>RAB Critique:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p style="text-align: center;">±</p> <ul style="list-style-type: none"> • Jeri's discussion well recv'd • Location • Few questions about CTF • RAB provides community reps • Continue to ask for RAB input • Postponement of Zone K update </td> <td style="width: 50%; vertical-align: top;"> <p style="text-align: center;">-/Δ</p> <ul style="list-style-type: none"> • Public participation • RAB attendance • More interest in reuse than environmental • Have less frequent meetings, i.e., quarterly • Can't do much about RAB participation • Not asking for public decisions • Public informing vs. Public decisions • Eliminate Jeri's role in reuse at the RAB meetings </td> </tr> </table>	<p style="text-align: center;">±</p> <ul style="list-style-type: none"> • Jeri's discussion well recv'd • Location • Few questions about CTF • RAB provides community reps • Continue to ask for RAB input • Postponement of Zone K update 	<p style="text-align: center;">-/Δ</p> <ul style="list-style-type: none"> • Public participation • RAB attendance • More interest in reuse than environmental • Have less frequent meetings, i.e., quarterly • Can't do much about RAB participation • Not asking for public decisions • Public informing vs. Public decisions • Eliminate Jeri's role in reuse at the RAB meetings
<p style="text-align: center;">±</p> <ul style="list-style-type: none"> • Jeri's discussion well recv'd • Location • Few questions about CTF • RAB provides community reps • Continue to ask for RAB input • Postponement of Zone K update 	<p style="text-align: center;">-/Δ</p> <ul style="list-style-type: none"> • Public participation • RAB attendance • More interest in reuse than environmental • Have less frequent meetings, i.e., quarterly • Can't do much about RAB participation • Not asking for public decisions • Public informing vs. Public decisions • Eliminate Jeri's role in reuse at the RAB meetings 			
9704 - D71	Team	Hold RAB training sessions at least quarterly, or as often as needed. Look at better room set up for RAB meetings.		
9704 - M83	Todd	Tech Subcommittee Report: Format with smaller focused group has been very productive so far. Will continue to meet each month for near future.		
9704 - M84	Tony	SWMU 39 letter to DHEC: Tony will provide info packages prepared by E/A&H as enclosures with the letter. Do we send a copy to Mr. Wannamaker? Suggestion to ask his permission to mention him in the letter and request that DHEC contact him with progress updates.		
9704 - D72	Tony	DQO Level Letter: Suggestion made to file letters such as this in the Comprehensive Plan and update the Comp plan annually incorporating changes that were initially documented by letter.		
9704 - D73	Jay	Team Correspondence Issue: If sending correspondence out with PT's name, send draft out to team for comment before final distribution.		
9704 - D74	Team	Consensus on the following Zone K groundwater issues: 1) Complete permanent wells at amended locations discussed in this meeting. 2) Stainless steel materials in all wells within the plume. 3) Continue access agreements for I-26 R.O.W. sampling.		
9704 - M85	Jay	NOAA Discussion: NOAA representative (Denise Klimas) would like to have participation in Zone J PT discussions. EPA would like the Navy to provide an official response to her comments on the Zone J work plan. Suggestion was made to have a face to face meeting to discuss comments prior to drafting official responses.		
9704 - M86	Todd	Limiting analytes in subsequent rounds of groundwater sampling: Process is fine as is, plenty of regulator involvement. Where do we go fom here?		
9704 - D75	Team	Will discuss specific analytes to be dropped as they are reviewed in the remaining progress reports for each zone.		

Project Team Minutes

<p>9704 - M87</p>	<p>Todd</p>	<p>Zone H comment resolution:</p> <p><u>General Issues</u></p> <p>1) Resolved if we submit the “hits only” tables. Propose using the most recent version of RBCs when drafting reports, then advise of current changes during review of the reports.</p> <p>2) Delete the “common lab artifact” statement and handle these issues site-by-site if necessary.</p> <p>3) E/A&H to research IDLs for sample runs in Zone H.</p> <p>4) Will be resolved on a site-by-site basis.</p> <p>5) E/A&H to revise site maps in all sites with RFA boundaries in Section 4 of the report, also add any relevant site features, i.e., ditches, swales, etc.</p> <p>6) Will be resolved in site-specific comments.</p> <p>7) At the time reports are being repaired, E/A&H will provide all available data, and the general groundwater flow direction on each map.</p> <p>8) Will be resolved in site-specific comments.</p> <p><u>Site-Specific Issues</u></p> <p>9) Add statement to conclusion that we will investigate GW further during the CMS.</p> <p>10) No problems with this site or comment, it will be addressed.</p> <p>11) Add statement to conclusion that we will investigate further during the CMS.</p> <p>12) Same as response 9.</p> <p>13) Same as response 9.</p> <p>14) same as response 9.</p> <p>Team elected to continue this discussion later.</p>
<p>9704 - M88</p>	<p>Larry</p>	<p>Zone H Presumptive Remedies: Larry Bowers provided a presentation on SWMU 9 remedy considerations.</p> <ul style="list-style-type: none"> • RCRA cap, Engineered cap, Natural (enhanced) cap. • Groundwater control — mixing zone ?, compliance points, containment. • Run-on, Run-off concerns. • Potential near-future activities — topo surveys, determine northern boundary of landfill, further groundwater study associated with DHEC comments.

Project Team Minutes

9704 - M89	Ann	Tier II Update: PT needs to choose our Tier II Link from the State-specific list provided by Ann. Marshall Dickson from Shaw Air Force Base was chosen by the team.
9704 - M90	Cecile	Wrap Up: <ul style="list-style-type: none"> • Good time management this month. • Team structure exercise was positive. • Team Roles and Responsibilities was excellent. • Make sure we keep DET in the loop. • Practice more open, honest communication. • Speak up if someone makes you uncomfortable. • Still have unresolved conflict within the team. • Team building activity proposed for next month is very positive, need more of those type activities.

Action Items

9704 - A52	Tech Subcommittee	Subcommittee needs to meet the week of 4/21 to discuss the Fuel Distribution System and additional wells at AOC 613. Corresponds with 9703 - A06, A07.	COMPLETE
9704 - A53	Team	Review Tony's Land Use Restriction Model, draft comments due by next team meeting.	THIS MEETING
9704 - A54	Tony	Tony, Daryle, and Steve Beverly to conference with Randy Thompson (DHEC) on permit and land use restrictions. Tony to report outcome at next PT meeting.	INCOMPLETE RE-SCHEDULE
9704 - A55	Paul	Develop Tank Closure presentation and be prepared to present at next RAB.	COMPLETE
9704 - A56	Tony	Make corrections to SWMU 39 letter, contact Mr. Wannamaker and distribute by 4/18/97.	COMPLETE
9704 - A57	Britton	Revise additional sample plan for SWMU 166 and fax new maps to regulators with well permit applications.	COMPLETE
9704 - A58	Tony	Coordinate Zone J comment resolution meeting with Denise Klimas for 4/24 in Columbia, if possible.	COMPLETE

TEAM PROCESS EVALUATION

DATE: APRIL 8 - 9, 1997
TEAM: CHARLESTON NAVY BASE
FACILITATOR: CECILE LACEY - CLOSE-OUT EVALUATION
MEETING LOCATION: CHARLESTON NAVY BASE - BAND ROOM

PROGRESS

- * Better communications developing between team and RDA.
- * Team restructured its membership to include:
 - Full consensus members (Total of 7)
 - Adjunct members (consensus as needed)
 - Support (no consensus)This will assist the team to be more effective when making decisions.
- * Team developed and adopted roles and responsibilities for all team members.
- * Improvement exhibited in time management and management of agenda items.
- * Team has "social team building" activity planned for next month.

SUGGESTIONS FOR IMPROVEMENT

- * Team should continue social team-building activities; helps members better understand each other.
- * All team members need to encourage and practice open and honest communications, particularly when a conflict exists or arises.
- * In light of regular technical committee meetings, team should try to cut project team meetings from 2 days to 1 1/2, and eventually to 1 day.
- * Facilitator's typed evaluation of team should be included with monthly meeting minutes.
- * All team members need to get rid of "old baggage"; this is causing unnecessary conflicts to arise. If issue remains unresolved with anyone, that individual needs to open it up in the team environment for resolution. This also lead to high levels of frustration for several members.
- * All team members need to be honest with each other - If conflict arises, or exists between individuals, talk to each other and resolve outside of team environment. "Normative Conflicts"
- * Suggested training:
 - Managing Productive Meetings
 - Communication Skills
 - * Listening
 - * Non-verbal
 - Providing and Accepting Feedback

RAB MEETING EVALUATION

- RAB seating arrangement should be reconfigured. This will:
 1. Encourage more input from members, and
 2. Will allow chair and co-chair to react/respond better to questions and or reactions (body language)

TEAM AGREED TO CHANGE ARRANGEMENT FOR NEXT RAB MEETING

- Although Detachment has chosen not to participate as a consensus member of the project team, the team needs to make every effort to inform Bobby Dearhart, who is a member of the RAB, of all team discussions pertaining to the RAB meeting prior to the meeting.
- Team should provide mini-training sessions on a regular basis to the RAB in an effort to increase knowledge and interest in environmental topics.

TEAM HAS AGREED TO PROVIDE TO RAB ON A QUARTERLY BASIS OR AS NEEDED.

PERSONAL NOTE:

It has been a great pleasure working with this team over the past year. I have seen great improvement in the performance of this team as a "team". The recent change in membership has caused them to revert to the Forming Stage. However, do not anticipate them to continue in this stage for long, as long as they implement some of the suggestions for improvement.

I am very interested in the success of this team and will be working very closely with the new facilitator or assist in this effort in any way I can.

NAVBASE CHARLESTON PROJECT TEAM

Date: ~~April~~^{may} 12, 1997
To: NAVBASE Charleston Project Team
Prepared by: Tony Hunt, SOUTHDIV
Copy: Project Team Notebook
Subject: Draft Meeting Minutes: April 24 & 25 Technical Subcommittee Meeting
Minute Reference: 9704S
Purpose: The meeting agenda included discussion of CMS recommendations and comment resolution for Zone H, discussion of recommendation for transfer of Fuel Distribution System, and Zone E soil background

Subcommittee:

Tony Hunt	SOUTHDIV, Charleston
Daryle Fontenot	SOUTHDIV, Charleston
Johnny Tapia	SCDHEC, Columbia
Paul Bergstrand	SCDHEC, Columbia
Todd Haverkost	Ensafe/Allen & Hoshall, Charleston
Dave Backus	Ensafe/Allen & Hoshall, Charleston

Jay Bassett was not able to attend, his proxy was assigned as follows:

Zone E Background - Johnny Tapia
Zone H CMS recommendations - Todd Haverkost
Fuel Distribution System - Paul Bergstrand

Visitors:

Barry Doll	Ensafe/Allen & Hoshall, Raleigh
Craig Smith	Ensafe/Allen & Hoshall, Nashville
Larry Bowers	Ensafe/Allen & Hoshall, Memphis

TEAM ACTION ITEMS

Carry over Action Items from Previous Meetings

Table 1A - NAVBASE Charleston Project Team Subcommittee Carry Over Action Item List

Action Item No.	Minutes Ref.	Responsibility	Action Item
9703S-A09	9703S-M04	E/A&H	Review well NBCH-GDH-009 thallium data
9703S-A10	9703S-M04	E/A&H	Revise the Zone H risk assessment as needed based on the revised UTLs

New Action Items from April 24 & 25, 1997 NAVBASE Charleston Project Team Subcommittee Meeting

SUB COMMITTEE

Table 1B - NAVBASE Charleston Project Team 24 & 25 April 1997 Meeting Action Item List

Action Item No.	Minutes Ref.	Responsibility	Action Item
9704S-A11 59	9704S-M02	Todd	Sample Grid wells for RDX, TNT using Method 8033
9704S-A12 60	9704S-M03	Brian	Check on status of EOD survey at AOC 661
9704S-A15 61	9704S-M05	Paul	Decide on adequacy of AOC 660 samples
9704S-A14 62	9704S-M06	Paul	Verify site being addressed adequately in UST program with Paul Bristol
9704S-A15 63	9704S-M07	Tony	Check Zone L sampling in the area of OIA G80
9704S-A16 64	9704S-M08	Tony/Gabe	Check on status of UST removal at NS-44
9704S-A17 65	9704S-M08	Todd	Generate map of all chlorinated solvent hits in Zone H
9704S-A18 66	9704S-M09	Paul	Review RFA for AOC 665 and determine if sampling was adequate
9704S-A19 67	9704S-M11	Todd	Collect additional soil samples at AOC 667 & SWMU 156.
9704S-A20 68	9704S-M11	Tony	Task Det to collect two quarters of GW data for BEHP
9704S-A21 69	9704S-M12	Todd	Install and sample two temporary wells within berm of AOC 659
9704S-A22 70	9704S-M13	Paul & Johnny	Review data validation sheets for those sites where MC is believed to be present
9704S-A23 71	9704S-M14	Brian	Report on the results of the IM at AOC 656
9704S-A24 72	9704S-M16	Brian	Report on the results of the IM at AOC 653
9704S-A25 73	9704S-M16	Paul	Site visit AOC 653 to determine adequacy of investigation and IM
9704S-A26 74	9704S-M18	Tony	Task the Det to sample well for two quarters for SVOCs only
9704S-A27 75	9704S-M19	Todd	Propose locations for additional wells at SWMU 159
9704S-A28 76	9704S-M23	Tony/Todd	Develop proposal for abandoning wells
9704S-A29 77	9704S-M24	Paul/Johnny	Discuss transfer of FDS with Paul Bristol ECD end of May
9704S-A30 78	9704S-M25	Craig/Todd	Look at Zone L sampling downgradient of AOC 613/615 and determine adequacy. Propose more if necessary
9704S-A31 79	9704S-M28	Barry	Compile background results to date and distribute to the Project Team
9704S-A32 80	9704S-M30	Paul/Johnny	Research the possibility of bioremediating petroleum contaminated soils from a RCRA site
9704S-A33 81	9704S-M30	Tony	Task Detachment to take random samples of soil piles at SWMU 8 and analyze for VOCs

Table 2 - NAVBASE Charleston Project Team March 1997 Meeting Decisions

Decision No.	Minutes Reference	Decision
9704S-D01 76	9704S-M02	AOC 503 - Proceed with CMS
9704S-D02 77	9704S-M03	AOC 661- RFI incomplete, waiting on EOD
9704S-D03 78	9704S-M04	AOC 654 - NFA, GW to be addressed with SWMU 9
9704S-D04 79	9704S-M06	AOC 662 [XFER to UST]
9704S-D05 80	9704S-M07	OIAs - NFA, GW to be addressed with Zone L.
9704S-D06 81	9704S-M11	AOC 663 & SWMU 136 - CMS
9704S-D07 82	9704S-M14	AOC 656 - CMS
9704S-D08 83	9704S-M15	AOC 655 - NFA, based on acceptable risk
9704S-D09 84	9704S-M17	AOCs 649, 650, 651, SWMUs 19, 20, 121 - CMS
9704S-D10 85	9704S-M19	SWMU 159 [CMS]
9704S-D11 86	9704S-M20	SWMU 17 [CMS]
9704S-D12 87	9704S-M22	SWMU 14 [CMS]
9704S-D13 88	9704S-M26	Agreed the background values for Zone H are acceptable for arsenic.
9704S-D13 89	9704S-M27	Agreed the background values for Zone A are acceptable

MINUTES/DISCUSSION*SUB COMMITTEE***Table 3 - NAVBASE Charleston Project Team March 1997 Meeting Minutes**

Minutes Item No.	Presenter	Topic/Discussion
9704S-M01 91	Larry	CMS Recommendations and Zone H RFI Report Comment Resolution. [Current recommendation] Continuing discussion from the Project Team meeting. The handout that Larry provided was reviewed to categorize sites as NFA, CMS, XFER to UST or requiring further discussion (FD).
9704S-M02 92	"	AOC 503 [CMS] Interim Measure completed, decision on site will depend on IM results which likely result in institutional controls. Additional sampling needed in grid wells in the vicinity of the site.
9704S-M03 93	"	AOC 661 [RFI not complete] Need to know status of EOD survey
9704S-M04 94	"	AOC 654 [NFA] 3 hits of Methylene Chloride in soil, low concentrations. GW is currently being monitored under UST program, GW likely to be addressed with SWMU 9. NFA for soil.
9704S-M05 95	"	AOC 660 [FD] NFA recommended, Report should tie the samples at the site to the footprint of the building. RFA was reviewed, Paul still undecided.
9704S-M06 96	"	AOC 662 [XFER to UST] Excavation done on site, samples taken were not in the vicinity of the removed tanks. Recommendation made to assess site contamination under UST program.
9704S-M07 97	"	Other Impacted Areas (OIAs) [NFA] 38 and 7 - NFA based on acceptable risk G80 - Soil not considered a problem, will use data point to assess GW in this area. Check to see if DPT for Zone L will provide any additional information
9704S-M08 98	"	AOC 666 [FD]

Need information on UST removal, NFA was tentatively agreed upon pending determination of disposition of soils. GW will be looked at with map that is generated to identify trends with chlorinated solvents.

9704S-M09 99 “ AOC 665 [FD]
NFA recommended, Paul to look at RFA and determine if sampling was satisfactory.

9704S-M10 100 “ AOC 667 & SWMU 138 [FD]
Additional GW samples may be needed here due to presence of chlorinated solvents (below MCL). Look at what DPT work is planned in Zone L for O/W separator and review chlorinated solvents map.

9704S-M11 101 “ AOC 663 & SWMU 136 [CMS]
Additional soil samples for As are needed as well as two more quarters of GW monitoring for BEHP.

9704S-M12 102 “ AOC 659 [XFER to UST (previous decision)]
Two Methylene Chloride hits in soil at lower interval exceeded SSL and are of a concern, no GW samples taken. Hits could not be explained by data validation. Two temporary wells within berm recommended for sampling for MC only.

9704S-M13 103 Todd Methylene Chloride and BEHP discussion
Todd provided several examples of where the data validation process in some cases I-flagged MC hits and U-flagged others from the same sample ran in different batches. The concentrations of MC were approximately the same with the difference being in the blank analysis. Paul and Johnny are to review the data validation sheets where questions on MC exist.

9704S-M14 104 Larry AOC 656 [CMS]
Site to be included in CMS for monitoring. Need to see report on Interim Measure.

9704S-M15 105 “ AOC 655 [NFA]
NFA based on acceptable risk

9704S-M16 106 “ AOC 653 [FD]
Need to look at results of IM. Paul to site visit

9704S-M17 107 “ AOCs 649, 650, 651, SWMUs 19, 20, 121 [CMS]
GW to be addressed with SWMU 9, Consider hot spot removals at these sites.

9704S-M18 108 “ SWMU 178 [XFER to UST (previous decision)]
Use wells for data points to assess SVOCs (BEHP) for 2 quarters

9704S-M19 109 “ SWMU 159 [CMS]
Additional wells required, Navy to propose locations.

9704S-M20 110 “ SWMU 17 [CMS]
No discussion

9704S-M21 111 “ SWMU 13 [XFER to UST (previous decision)]

9704S-M22 112 “ SWMU 14 [CMS]
IM is progress, more to decide on soil with respect to the lead shot on the soil surface, GW may require additional monitoring

9704S-M23 113 Tony Discussion on well abandonment. Navy is to provide a proposal for abandonment of monitoring wells considering the requirements for continued or additional monitoring in the CMS and beyond.

9704S-M24 114 Craig Fuel Distribution System (FDS)
Proposal was to transfer this site to UST program since data indicated there was no RCRA concerns. Concern of dibenzofuran hits were explained as possibly originating from pipe coating, VOA was full scan. Paul and Johnny to discuss with Paul Bristol. This decision has impact on report, if it goes UST all is well however if it remains RCRA report will be delayed. Early August submittal date expected now which is based on end of additional field work.

9704S-M25 115 Craig AOC 613/615
Concern is VOCs in GW, well pairs in Zone E do not appear to be close enough.

9704S-M26/16	Barry	Look at Zone L work in this area and add samples if necessary. Zone H Background discussion All outstanding issues were resolved with the exception of Thallium in groundwater. This issue is being addressed separately and will be discussed during the May Project Team meeting.
9704S-M27/17	"	Zone A Background discussion The background values for Zone A were agreed upon
9704S-M28/18	"	Zone E Surface and Subsurface soil background discussion Histograms and probability plots of various transforms were reviewed. Values for background were agreed upon with minor changes. Several sample locations were determined to consistently have higher concentrations of inorganics, these were GDESB018 (As and Cu) and 07 (Al and Mn). Groundwater background to be discussed in May technical subcommittee meeting. Results of background discussions to date are to be compiled and made available to the Project Team
9704S-M29/19	Tony	Briefly discussed Zone A status, Navy and Ensafe to determine status of response to comments and schedule meeting to discuss.
9704S-M30/20	Tony	Briefly discussed SWMU 8 with respect to disposition of excavated soils. Tony explained that these soils were fill material and had been characterized based on previous sampling, recent RFI samples and characterization samples taken by the Det. Two issues need to be resolved, (1) List of analytes for determination of disposition and ; (2) Should this soil be replaced as fill, bioremediated or disposed off site. . The Navy will take additional random samples to confirm that low concentrations of VOCs detected previously are no longer present to address the first issue. Paul/Johnny are to research the possibility of bioremediation of soils with petroleum contamination only from a RCRA site to address the second issue.

Handouts at Meeting

Zones D, F and G RFI data and results of Fuel Distribution System investigation
Zone E surface and subsurface histograms, probability plots and summaries
Zone A background value - Chromium in deep groundwater
Zone H groundwater sample results - 4 quarters

Attachments

None

CLOSED TEAM ACTION ITEMS

Table 4 - NAVBASE Charleston Project Team April 1997 Closed Action Item List

Action Item No.	Minutes Reference	Responsibility	Action Item
9703S-A01	9703S-M01	E/A&H	Britton identified water supply wells during last PT meeting
9703S-A02	9703S-M01	E/A&H	DPT sampling to Annex boundary complete
9703S-A03	9703S-M01	Tony	Encroachment permits obtained from SCDOT 4/18/97
9703S-A04	9703S-M02	Team	Revisited outlier issue and resolved 4/7/97
9703S-A05	9703S-M02	Tony	Submitted letter on Zone B Background 5/9/97
9703S-A06	9703S-M03	E/A&H	Provided team with information on selection of non-parametric UTL values during 4/7/97 meeting
9703S-A07	9703S-M04	Paul	Provided DHECs position on gw background values that exceed MCLs during 4/24/97 meeting. Thallium issue is currently being addressed and will

9703S-A08

9703S-M04

E/A&H

be discussed further

Recalculated Zone H shallow gw arsenic values
using all 4 quarters of data and discussed at 4/25/97
meeting

PT AGENDA

PT MINUTES

**Naval Base Charleston
Environmental Cleanup Project Team
Technical Subcommittee Meeting Minutes**

Date: 5/12/97

Place: E/A&H Office

Time: 1000 - 1600

Attendees: Jay Bassett, Todd Haverkost, Dave Backus, Daryle Fontenot, Tony Hunt, Brian Stockmaster, Paul Bergstrand, Johnny Tapia,

Guests: Barry Doll, Britton Dotson, Greg Temple, Jay Cornelius (E/A&H), Denise Klimas (NOAA)

Leader: Paul Bergstrand

Scribe: Dave Backus

Discussion/Decisions

Issue No.	Responsible	Dialogue
9705S - M121	Todd	<p>Zone J Overview — Zone J was developed to take a base-wide approach, investigating all potentially affected water bodies.</p> <p>COPCs — Determined by screening against Region IV sediment values, and Human Health RBCs.</p> <p>Phased approach — 3 phases with decision points at completion of each phase.</p> <p>Decisions to implement eco-corrective actions will be made in Zone J, not in other specific zones.</p>
9705S - M122	Denise	<p>Keisler Air Force Base contractor has put together an exhaustive list of toxicological data on aquatic species. We should not try to re-invent the wheel. Jay C. stated that he will attempt to get a copy of those numbers.</p>
9705S - M123	Denise	<p>Question concerning screening criteria and decision flow chart. Where do we get the <1 HQ; 1-10 HQ; > 10 HQ criteria?</p> <p>Denise suggested an 8-step process document/decision plan developed by the EPA- ECO Division in 1994. This process uses the max. Concentration to calculate HQ instead of the mean concentration.</p> <p>Jay C. stated that we will present both the max. and the mean concentrations in our screening calculations.</p>
9705S - M124	Denise	<p>Concern about the analytical methods listed in the work plan. Are we planning to have the lab perform any kind of organic cleanup on the sediment samples? Major concern was to keep the detection limits as low as possible.</p> <p>Denise will check to see if there are any cleanup methods or updated guidance. Geoff Scott (chemist) would be a good contact at the NOAA Ft. Smith Lab.</p>

Issue No.	Responsible	Dialogue
9705S - M125	Denise	<p>Background Determination — How are we going to use background? Need to the answer to that before we go to the field to collect data.</p> <p>Sampling performed in Phase 1 will identify background locations. Pricilla Wendt or Diane Duncan might be able to assist with suitable background locations. Also check with Tom Boyd of the Naval Research Lab. Look at tributyltin when attributing Navy's contribution of contamination to the river.</p>
9705S - M126	Denise	<p>Suggests sampling dredge spoil run-back areas on Clouter Island looking for tin or some other Naval contribution indicator.</p> <p>Might be some problem now that the property has been transferred to the Corps of Engineers. Also not specifically a RCRA issue in that dredge ops fall under CWA 404(b) regulations.</p>
9705S - M127	E/A&H	<p>Cooper River Sampling Locations —</p> <ol style="list-style-type: none"> 1) Locations at Clouter Creek are o.k. as proposed. 2) Additional locations proposed on the Navy's side of Shipyard Creek are o.k. Added 3 additional locations in this meeting. 3) Noisette Creek additional sample locations are o.k. <p>Jay C. will provide copies of corrected maps.</p>
9705S - M128	Barry	<p>Zone C Background Discussion — Need to look at the sample locations for 3 arsenic outliers.</p> <p>Lead number is higher than any other zone so far.</p> <p>DHEC and EPA want 2X arithmetic mean for groundwater analysis (The 4 wells used in Zone C is not representative of the entire zone).</p> <p>Barry was tasked to calculate 2X mean and fax the results to the team for comparison. Suggestion made to include some of the site wells to the data set to increase the population.</p>
9705S - D90	Team	<p>Decision made to use 2X arithmetic mean for groundwater background values in Zone C.</p>
9705S - M129	Todd/Mark	<p>Zone A Comment Resolution — Most report comments have been resolved. Paul agreed to review supplemental info, in lieu of another document submittal, followed by a final document submittal after all comments had been resolved.</p> <p>SWMUs 1, 2, and 39 will be submitted as a package, DHEC will comment, then E/A&H will combine into final Zone A Report document.</p> <p>Suggestion made to not automatically push all data gap analysis to the CMS. If it can be settled in the RFI, collect the data and settle the issues before submitting the final report.</p>
9705S - M130	Barry	<p>Zone D Background Discussion — No comments or problems with any of the values presented.</p>

Technical Subcommittee Minutes

Issue No.	Responsible	Dialogue
9705S - M131	Todd	Zone H Status — AOCs 653 and 661 need further investigation or have been altered by IM activities. How do we tie IM results into the Final RFI Reports. SDIV and E/A&H are developing a plan of action (outline) for completing the Zone H Report. Todd will distribute this outline next week to the team.

Action Items

Issue No.	Responsible	Dialogue
9705S - A82	Jay	Provide E/A&H with the terrestrial/aquatic toxicological reference numbers put together by the Kiesler Air Base team. By next PT meeting.
9705S - A83	E/A&H	Provide Denise Klimas with copies of the Comprehensive Baseline Risk Assessment and Sampling and Analysis Plan. By 5/30/97.

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Minutes**

Date: 5/13/97 - 5/14/97

Place: NBC, Bldg. NH-46

Time: 0800 - 1700

Attendees: Jay Bassett, Paul Bergstrand, Johnny Tapia, Tony Hunt, Brian Stockmaster, Dave Backus, Todd Haverkost, Cecile Lacey, Joe Land

Invited Guests: Britton Dotson, Larry Bowers (E/A&H), Jeri Johnson (RDA) Christine Coker-Sanford (SCDHEC)

Leader: Paul Bergstrand

Scribe: Dave Backus

Discussion/Decisions

Issue No.	Responsible	Dialogue
9705 - M132	Paul	Ann Ragan sent word that our elected Tier II contact (Marshall Dixon) will not be able to represent us. He has already been picked by another team.
9705 - M133	Team	Facilitator Introduction/Exercise — Joe Land, Galileo Institute <ul style="list-style-type: none"> • What you should know about me. • What you need to know about the team. • What you can expect from me. • Here is what I need from you. See Team member and facilitator responses attached to these minutes.
9705 - M134	Team	Project status and Scheduling — <ul style="list-style-type: none"> • Zone A CMS Scoping next PT Tech meeting. • Zone B letter to DHEC requesting NFA mailed yesterday. • DHEC comments on Zone C Report due by 5/30. • DHEC comments on Zone D Report due by 6/16. • Zone E background to be resolved by 6/9 PT Tech meeting. • Zone F&G background to be resolved by 6/9 PT Tech meeting. • CTF remedy awaiting funding authorization.
9705 - M135	Paul	Pre RAB — <p>Paul will be presenting a Tank Closure Training Module tonight.</p> SWMU 166 Update (Britton Dotson) <ul style="list-style-type: none"> • High potential that the source has been identified. • PCE has been detected for the first time downgradient of the source area (specifically on the other side of I-26 from the Annex property).
9705 - D91	Team	Team consensus to present the offsite migration of contaminants to the RAB tonight. Report that the next step planned is to evaluate the groundwater and geologic data in an attempt to define the extent of the migration.

Project Team Minutes

Issue No.	Responsible	Dialogue		
9705 - D92	Team	Team consensus for Paul to follow his presentation as planned to include specific reference to the remedy planned for CTF.		
9705 - M136	Team	<p style="text-align: center;">Post RAB Critique</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center; vertical-align: top;"> <p style="text-align: center;">±</p> <ul style="list-style-type: none"> • Good answer to Annex next step. • Followed Pre-RAB strategy. • Stayed away from debate with RAB • Technical subject matter was good. • UST presentation addressed many community concerns. • Good technique to list common questions, then answer them. • UST presentation was good set up for Environmental Justice. • Team provided support to both presentations. • Good seating arrangement. • RAB Members came together in response to elderly woman attack. </td> <td style="width: 50%; text-align: center; vertical-align: top;"> <p style="text-align: center;">-/Δ</p> <ul style="list-style-type: none"> • More bkgnd info for Annex presentation. • Terms were too technical • Poor response to “why are you out there?” • Co-Chairs did not keep meeting on track. • Need better definition of POL vs. HazWaste. • Need better answer to “where are the petroleum fumes coming from?” • DOD Rep. contribution was Not relevant to discussion. • Clean up responsibility not accepted - “No Trust”. • Agenda too packed. • RAB not reflective of community. • Be aware of non-verbal communication when presenting or addressing community concerns. </td> </tr> </table>	<p style="text-align: center;">±</p> <ul style="list-style-type: none"> • Good answer to Annex next step. • Followed Pre-RAB strategy. • Stayed away from debate with RAB • Technical subject matter was good. • UST presentation addressed many community concerns. • Good technique to list common questions, then answer them. • UST presentation was good set up for Environmental Justice. • Team provided support to both presentations. • Good seating arrangement. • RAB Members came together in response to elderly woman attack. 	<p style="text-align: center;">-/Δ</p> <ul style="list-style-type: none"> • More bkgnd info for Annex presentation. • Terms were too technical • Poor response to “why are you out there?” • Co-Chairs did not keep meeting on track. • Need better definition of POL vs. HazWaste. • Need better answer to “where are the petroleum fumes coming from?” • DOD Rep. contribution was Not relevant to discussion. • Clean up responsibility not accepted - “No Trust”. • Agenda too packed. • RAB not reflective of community. • Be aware of non-verbal communication when presenting or addressing community concerns.
<p style="text-align: center;">±</p> <ul style="list-style-type: none"> • Good answer to Annex next step. • Followed Pre-RAB strategy. • Stayed away from debate with RAB • Technical subject matter was good. • UST presentation addressed many community concerns. • Good technique to list common questions, then answer them. • UST presentation was good set up for Environmental Justice. • Team provided support to both presentations. • Good seating arrangement. • RAB Members came together in response to elderly woman attack. 	<p style="text-align: center;">-/Δ</p> <ul style="list-style-type: none"> • More bkgnd info for Annex presentation. • Terms were too technical • Poor response to “why are you out there?” • Co-Chairs did not keep meeting on track. • Need better definition of POL vs. HazWaste. • Need better answer to “where are the petroleum fumes coming from?” • DOD Rep. contribution was Not relevant to discussion. • Clean up responsibility not accepted - “No Trust”. • Agenda too packed. • RAB not reflective of community. • Be aware of non-verbal communication when presenting or addressing community concerns. 			

Project Team Minutes

Issue No.	Responsible	Dialogue
9705 - M137	Larry	<p>Comprehensive CMS Work Plan Comment Resolution—</p> <ol style="list-style-type: none"> 1) All final docs will be signed and P.E. certified. 2) No further action - needs to be clarified. NFA determinations need to be decided before moving forward to CMS. 3) Concur 4) Provide outline up front in zone-specific work plans for better flow and clarification. 5) Clarified in response No. 2. 6) Clarify the term "source control". 7) Statement of Basis and public comment section will be expanded for clarification. 8) Second Paragraph of comment needs clarification - some of the treatability elements could be combined. E/A&H will look at different presentation of this section. 9) DQOs - Define scope and objectives up front, then state the DQOs for that specific treatability. 10) Concur 11) Data Analysis and Interpretation - Need description of data, uncertainties, extent, and impact. 12) Project work elements - Some could be deleted 13) Concur 14) Concur 15) Concur 16) Concur 17) Concur 18) Overall inconsistency in way work plan was written - Need some front matter to clarify Section 5, maintain flexibility throughout the plan. 19) Concur 20) Concur <p>EPA Comment Resolution - Jay's conceptual approach</p> <ul style="list-style-type: none"> • SAP to fill data gaps • Treatability Study (if req'd) • Technical Memo <ul style="list-style-type: none"> - SAP - Treatability WP • Decision Point • Statement of Basis <p>Control of Data Presentation should be dictated by the need for Team decisions, not a fixed percentage of completion.</p> <p>Jay will provide 2 examples of CMS WP flow charts.</p>

Project Team Minutes

Issue No.	Responsible	Dialogue
9705 - M138	Larry	<p>Zone C CMS Scoping/Recommendations — SWMU 44 - Extensive IM activities, recommended by E/A&H for CMS. IM after action report has just been completed for this site. SWMU 47/AOC 516 - CMS candidate due to GW contamination. AOC 508, 511 - Non-CMS candidate AOC 515, 519 - Non-CMS candidate AOC 523 - Non-CMS candidate AOC 510, 511, 512, 513, 517, 518, and 520 - Non CMS-candidates, but some do exhibit GW contamination.</p>
9705 - M139	Larry	<p>Zone A CMS Recommendation/Scoping — SWMU 43 - No COCs, Non-CMS candidate. AOC 506 - Low concentration hits, Non -CMS candidate. Paul has concerns with well 506-001, this well appears to be side-gradient and shallow, the contaminant of concern at this site is DNAPL. Recommendation made to DPT sample to an intermediate zone, if results are non detect, he will support an NFA recommendation for this site.</p> <p>SDIV would like to step back and take a wholistic approach to the GW contamination, lithology, and hydrology across all of Zone A. Paul also suggested that if DPT is recommended, make sure the sample locations are next to the pad at AOC 506.</p>
9705 - M140	Paul	<p>Thallium Background Values vs. MCLs — DHEC will accept background values above MCLs if the Navy can establish that the constituent is naturally occurring.</p> <p>Potential Navy Sources:</p> <ul style="list-style-type: none"> • Coal • Coal fly ash • Rodenticide residuals • Bearing enhancement materials (i.e., ball bearings) <p>Potential Industry Sources:</p> <ul style="list-style-type: none"> • Phosphate mining • Lead & Zinc smelting <p>Potential Natural Sources:</p> <ul style="list-style-type: none"> • Coexists with arsenic • Moderate mobility in reducing environments • Calcareous sediments <p>At issue is a 139 ug/l thallium detection in a 4th quarter deep well at the mouth of Noisette Creek. SDIV proposes additional quarterly sampling and possible geo-chemical samples of the Ashley Formation (Cooper Marl).</p>

Project Team Minutes

Issue No.	Responsible	Dialogue
9705 - M141	Jay	<p>CTF Win/Win Proposal for Closure and Reuse — DOD representative Phylis Breeland suggested a possible win/win scenario for future negotiations concerning CTF. DOD needs to have some more flexibility :</p> <ol style="list-style-type: none"> 1) More community involvement 2) Develop a hybrid remedy, totally demolish and remove (option 4) 2 of the tanks nearest to the school, and employ option 3 on all the remaining tanks, or other options with whatever remains in the budget.
9705 - M142	Team	<p>Tier II Link Discussion — Marshall Dixon has already been assigned to another team, others nominated for consideration include: Mike Sydow, Savannah COE Dick Williams, Myrtle Beach AFB Glenn Easterly, Charleston AFB Suggestion made to contact these 3 individuals and see if they are willing or able to serve as our link.</p>
9705 - M143	Tony	<p>Land Use Model/Plan — Players are not present at this meeting. Steve Beverly (SDIV counsel) is reviewing Tony's proposal for Navy Policy issues. Suggestion made to move this issue to the parking lot for next month's meeting.</p>
9705 - M144	Team	<p>Telecon set for 29 May at 0900 EDT Agenda:</p> <ol style="list-style-type: none"> 1) Finalize Zone H issues 2) Zone E GW background 3) Possibly Zone I background
9705 - M145	Brian	<p>Detachment has completed the Building 44 Annex demolition. Jay would like to see the proposed confirmation sampling plan. Need to see on a figure where the stained areas of soil are located in relation to the proposed samples. Todd will meet with Kevin Tunstall to coordinate the sampling effort.</p>

Project Team Minutes

Action Items

Issue No.	Responsible	Dialogue
9705 - A84	E/A&H	Report data results of additional samples taken for arsenic surrounding GRDA-006 at the next PT Tech meeting.
9705 - A85	Jay	Provide compliance schedule language to SCDHEC by 5/22/97.
9705 - A86	Gabe Magwood	Investigate where the petroleum fumes near the CTF area are coming from. Also invite Jim Conner to attend the field investigation , (if necessary). Define what residual fuels remain in the CTF tanks. Report findings to PT before next RAB meeting 6/10/97.
9705 - A87	Jay	Provide 2 examples of CMS flow charts from other project plans to Larry Bowers (E/A&H) by 5/30/97.
9705 - A88	E/A&H	Collect additional GW samples at well 4D (Mouth of Noisette Creek) for statistical analysis. Collect samples of the Ashley Formation for geo-chemical analysis. Report progress by next PT Tech meeting.
9705 - A89	Brian/Jeri	Meet with Tom Fressili, ask for better definition of DOD flexibility suggested by Phylis Breeland. Report at next PT meeting.
9705 - A90	Johnny Joe	Johnny to contact the 3 nominees for the Tier II link to see if they are available and what their thoughts are on the role of the Point of Contact person. Joe will bring examples from other POC responsibilities to next meeting.
9705 - A91	Tony	Check with Steve Beverly on the Agreement in Principle between EPA/Navy/State of Florida concerning institutional controls at Florida installations. Also fax copies of Institutional Controls Guidance document developed by the Navy following the last BRAC conference. Report at next PT meeting.
9705 - A92	Brian	Talk to Daryle about suggestions for another meeting location for the RAB. Report at next PT meeting.

Project Team Minutes

PROJECT TEAM EXERCISE

Facilitator and Team Expectations

At the beginning of last month's meeting Cecile Lacey introduced Joe Land as her replacement facilitator for the Naval Base Charleston Project Team. Following Joe's introduction, Cecile led the team in an exercise designed to promote communication and indoctrinate Joe to the team. Joe and each team member present were asked to respond to the following statements:

- What you should know about me.
- What you need to know about the team.
- What you can expect from me.
- Here is what I need from you.

The following is a record of each team members and the facilitators responses.

Paul Bergstrand

What you should know about me.

- Need to reflect on issues.
- Detail oriented.

What you need to know about the team.

- External "uncontrollable"
- Forces-/influences - affect.
- Getting better.

What you can expect from me.

- Fairness
- Consistency
- Dedicated to CNAV PT and success of redevelopment of CNAV.

Here is what I need from you.

- Interrupt when needed.

Johnny Tapia

What you should know about me.

- I am a little more extroverted than introverted.
- I enjoy working with challenging issues, and people who show enough common sense to consider other's points of view.
- I enjoy sports and travel.
- It really annoys me to be interrupted or to be "interpreted" on what I am trying to say.
- I do not like people who talk too much or exhibit a needless display of knowledge.

What you should know about this team.

- This team is complex and has come a long way. There are issues we'll never agree on.

What you can expect from me.

- I'll give my work and knowledge to the team to move ahead in our project.

Project Team Minutes

— Opinions that I agree with need not be repeated. We deal with a lot of issues where there sometimes is not a clear answer.

Here is what I need from you.

- I expect respect and tolerance with each other's positions. I need feedback from everyone's experiences to work more effectively.
- Be really active to put us back on track. Don't let anybody ramble-on.

Jay Bassett

What you should know about me.

- Creativity.
- View people based on competency.
- Big picture, get frustrated by details.
- Believe the whole is greater than the parts.
- Expect to be questioned.
- Baby on the way.
- Facilitator confidentiality; careful of impacts to other members.
- Very extroverted, direct but have improved.
- Relatively new team member.
- Can be competitive, push issues but then drop back.

What you should know about this team.

- Too wrapped up in schedule; look, see what is important.
- High integrity folks.
- Still resolving some fundamental roles, responsibilities, mission, goals, etc.
- Still "me" not us... but making progress.
- Resolving process issues - How we make decisions, and how to move on. ID's, data needs, presentation styles.
- Need to keep end in mind, (not defined).
- Everyone gets along, though need to recognize conflict leads to success.
- Successes need to be documented.
- Improve team reputation; in past we did it to ourselves.
- Some conflict with Tier II and RDA; met head to head.

What you can expect from me.

- Direct; candid communication and discussion
- Strong pioneer on team processes.
- Team development of importance.
- Participate actively and strong team advocate to all agencies.

Here is what I need from you.

- Creativity
- Focus - make team aware.
- Individual mentoring.
- Look to improve self through team.
- Training/team development.
- Feedback to team prior to Tier II/management.

Project Team Minutes

Tony Hunt

What you should know about me.

Personal

- Family oriented.
- Religious.
- Goals.

Professional

- Dedicated.
- Hard worker.
- Conscious of the sterotypical “federal worker”.

What you should know about this team.

- We are coming out of a transition period.
- We are making progress.
- We are finding our comfort zones

What you can expect from me.

- I will be open and honest, ask me.
- I do not like to play games.
- I will support team decisions.

Here is what I need from you.

- Don’t sit back and watch, challenge us to do better.
- Be honest with us.

Brian Stockmaster

What you should know about me.

- Extroverted thinker.
- Like to play Devil’s Advocate to make sure we have taken a wholistic look.
- Don’t take myself too seriously.
- Don’t like “can’t”, or to do things just because we have done them before.
- Feel we should make decisions with 40% of information not 100%.
- Like to work with people.

What you should know about this team.

- Making progress, but we haven’t realized a clear common mission.

Todd Haverkost

What you should know about me.

- Relatively quiet.
- Very trusting of people until the prove otherwise.
- Not real strong technically in any one particular area.
- Don’t like when people try to finish my thoughts.

What you need to know about this team.

- Feel like we still “tap dance” around many issues.
- Think we have come a long way.

Project Team Minutes

What you can expect from me.

- Honest answers.
- Support in whatever manner is required.

Here is what I need from you.

- Intervention when it is obvious that the team is floundering.

Dave Backus

What you should know about me.

- Extreme extrovert.
- Love to think out loud.
- Generally keep the “big picture” in mind.
- Often used by the team as a reality check.

What you should know about this team.

- This team is in a state of transition.
- We have just re-defined the team’s roles and responsibilities.
- Recently down-sized the number of polling members.
- The team has trouble making decisions at the table. Most times info is presented at the meeting, then team members need to go back to their office to process the info before making a decision.

What you can expect from me.

- Accurate meeting minutes.

Here is what I need from you.

- Keep things going.
- Try to help us face and resolve the internal conflict that still seems to exist.

Joe Land

What you should know about me.

- Watch, learn, progress.
- Family is priority.
- Balanced career
 - State
 - Corporate
 - Military
- Double-speak.

What you can expect from me.

- Consistency.
- Open and receptive.
- Honesty/confidentiality.
- Fun.

Here is what I need from you.

- Be who you are.
- Keep the vision.
- Feedback.

PT AGENDA

**NAVAL BASE CHARLESTON PROJECT TEAM
PROJECT TEAM MEETING AGENDA
9 JUNE 97 AT ENSAFE OFFICE, MT PLEASANT, SC
10-11 JUNE 97 AT BAND ROOM IN BUILDING NH-16, NB CHARLESTON**

AGENDA FOR 9 JUNE 97 PROJECT TEAM TECHNICAL SUBCOMMITTEE MEETING

9-Jun-97

TIME	TOPIC	LEADER	GOAL	REMARKS
1030-1045	Meet, Greet, Review Agenda			
② 1045-1200	Background Determination for: Zone E GW (Manganese & Thallium) & Zones I (Soil and GW)	Barry Doll	Decision	Agree on background levels of inorganics for Zones E GW (Manganese & Thallium) & Zone I.
1200-1300	LUNCH		EAT	
1300-1500	Zone A RFI Report Response to Comments and CMS Scoping	Todd Haverkost	Decision	Resolve regulator comments on Zone A RFI Rpt and agree on sites to enter CMS for Zone A.
1500-1515	BREAK			
1515-1545	② Thallium issue at SWMU 166 & ① GENERAL DISCUSSION	Tony Hunt	Decision	Determine how to address Thallium at SWMU 166.
1545-1600	AOC 661 - DET Information & DISCUSS SWMU B?	Tony Hunt	Decision	Evaluate DET info on AOC 661
1600-1630	AOC 666, 667, & SWMU 138 - Review maps of chlorinated solvent hits and POA	Tony Hunt	Decision	
1630-1700	Comprehensive CMS Work Plan	Tony Hunt	Decision	Flow Charts
1830-?!?!?	Cookout at Brian's Plantation Home	Brian Stockmaster	Have FUN!!!!	Do not destroy the man's house or yard. Have Fun!!

PT MINUTES

**Naval Base Charleston
Environmental Cleanup Project Team
Draft Technical Subcommittee Telecon Minutes**

Date: 6/3/97

Time: 1330 - 1500

Participants: Jay Bassett, Todd Haverkost, Daryle Fontenot, Tony Hunt, Brian Stockmaster, Paul Bergstrand, Johnny Tapia, Joe Land, Barry Doll, Greg Temple.

Leader: Tony Hunt

Scribe: Todd Haverkost

Discussion/Decisions

Issue No.	Responsible	Dialogue
9706T-M146	Barry	Discussed the proposed groundwater background concentrations for inorganics in Zone E as proposed in the E/A&H memo dated 5/22/97. Particular emphasis was placed on arsenic, beryllium, manganese, and thallium in shallow groundwater due to obvious outliers in the data set. In deep groundwater attention was focused on arsenic, beryllium, manganese, thallium, and cyanide due to outliers.
9706T-D93	Team	Consensus was reached that all shallow values were acceptable as proposed with the exception of manganese and thallium. A decision regarding manganese is pending preparation of maps showing spatial distribution and a thallium decision is pending receipt of analysis of marl samples. Consensus was reached that all deep values were acceptable as proposed except for thallium again pending receipt of sample analysis.
9706T-M147	Todd	Discussed resolution of comments for AOCs 653, 659, 660, 661, 665, 666, 667 and SWMU 138 in Zone H based on info provided in the E/A&H memo dated 5/22/97.
9706T-D94	Team	RFI recommendations for each of the sites was agreed upon by consensus as follows:
		AOC 653 - Include groundwater in CMS to monitor for arsenic. NFA for soil.
		AOC 659 - Install two temporary wells to monitor for methylene chloride as part of the RFI. Results and final recommendations will be submitted in an RFI addendum.
		AOC 660 - NFA
		AOC 661 - Proceed with soil sampling as part of RFI. Review DET package Monday to determine need for UXO survey. Results and final recommendations will be submitted in an RFI addendum.
		AOC 665 - Collect additional soil samples as part of RFI. Results and final recommendations will be submitted in an RFI addendum.

Discussion/Decisions

Issue No.	Responsible	Dialogue
9706T-D94	Team	<p>AOC 666 - Include in CMS due to risk posed by arsenic in soil. Defer the decision on groundwater pending review of additional info at the PT subcommittee meeting on 5/9.</p> <p>AOC 667/ SWMU 138 - Perform groundwater sampling using DPT to verify source and extent of chlorinated compounds as part of the RFI. Results and final recommendations will be submitted in an RFI addendum.</p>

Action Items

Issue No.	Responsible	Dialogue
9706T-A93	Barry	<p>Prepare maps for:</p> <ul style="list-style-type: none"> • Zone E shallow groundwater where arsenic > 50µg/L and manganese > 800 µg/L. • Zone E deep groundwater where arsenic > 50 µg/L and cyanide in wells surrounding NBCE-GDE-06D.
9706T-A94	Todd	Prepare a map of all Zone H and I chlorinated VOC hits in groundwater to be discussed at the 6/9 technical subcommittee meeting.

**Naval Base Charleston
Environmental Cleanup Project Team
Technical Subcommittee Meeting Minutes**

Date: 6/9/97

Place: E/A&H Office

Time: 1000 - 1600

Attendees: Todd Haverkost, Dave Backus, Tony Hunt, Daryle Fontenot, Brian Stockmaster, Reece Batten, Johnny Tapia, Paul Bergstrand

Guests: Barry Doll, Larry Bowers (E/A&H)

Leader: Daryle Fontenot **Scribe:** Dave Backus

Discussion/Decisions

Issue No.	Responsible	Dialogue
9706S - M148	Paul	Would like to have an update on the Dry Cleaners site in Zone F. Also looking for an update on SWMU 102, bldg. 79.
9706S - M149	Tony	Thallium in Groundwater Issue — Propose using arcview to analyze the spatial distribution of Thallium basewide, then locate several samples for geochemical analysis. If we determine that thallium occurs naturally in the minerology of the sediments, DHEC will agree that it is naturally occurring. If the sample results show no thallium in the sediments, we will have to come back to the table and discuss.
9706S - M150	Paul	Suggestion to provide better warning signs at our hazwaste cleanup sites. Local citizens were noted picking berries at a chlordane remedial site on another federal facility.
9706S - M151	Barry	Zone E Background Discussion — Barry provided maps of Zone E shallow and deep wells with arsenic > 50 ug/l, manganese > 800 ug/l and cyanide results around Grid Well 006. The spatial distribution of contaminants showed no correlation with the exception of the area surrounding Dry Docks 3 & 4. Johnny requested a smaller copy of each map for his review. Johnny will review the spatial distribution and is to give some decision on the background values Barry has calculated for each of these constituents.

Technical Subcommittee Minutes

Issue No.	Responsible	Dialogue
9706S - M154	Larry	Comprehensive CMS Work Plan --- Larry provided a draft copy of a CMS flowchart for comment. Final edit including all suggestions by the project team will be included in the Comp CMS Work Plan.

Action Items

Issue No.	Responsible	Dialogue
9706S - A96	Barry	Look at all thallium background numbers to see if all were calculated using non-parametric methods. Report at June 25 telecon.
9706S - A97	Paul	Check with DHEC lab officials to see if they will accept Instrument Detection Limits from each set of analyses to quantify non-detect values that are greater than the MCLs. Report at next PT meeting.
9706S - A98	Barry	Revise and distribute updated background values table to the team. By June 25 telecon.

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Minutes**

Date: 6/10/97 - 6/11/97

Place: NBC, Bldg. NH-46

Time: 0800 - 1700

Attendees: Paul Bergstrand, Johnny Tapia, Ann Ragan, Daryle Fontenot, Tony Hunt, Brian Stockmaster, Reece Batten, Dave Backus, Todd Haverkost, Joe Land

Invited Guests: Diane Cutler, Larry Bowers (E/A&H), Jeri Johnson, Jack Sprott (RDA) Mac McNeil (Bechtel), Ted Pugh, Robert Brown, Lenny Araujo (North American Realty Advisory Services)

Leader: Daryle Fontenot **Scribe:** Dave Backus

Discussion/Decisions

Issue No.	Responsible	Dialogue
9706 - M156	Johnny	Attempted to call the Tier II POCs. Could not reach Mike Sydow. Dick Williams has left his position with the Air Force. Glenn Easterly is interested, but he has bid on another position at a facility in another city.
9706 - D99	Team	Telecon on 6/26/97 changed to a PT Tech subcommittee meeting at the E/A&H Mt. Pleasant office starting at 1000 EDT.
9706 - M157	Team	Mission, Vision, and Goals Exercise — Team consensus was reached that the team mission is still accurate. Vision probably needs to be a little stronger, team agreed to re-visit this issue at a later date.
9706 - M158	Team	Introduce Reece Batten as Brian Stockmaster's replacement to the PT. Reece will pick up where Brian leaves off managing the coordination of Interim Measures activities with the DET. As well as future CMS activities for the project.
9706 - M159	Daryle	Project Schedule Discussion — RDA has suggested that they would like to start receiving property on 1/99. We need more honesty in what we say we can do and cannot do. SDIV has to provide a Plan of Action to management by next Monday 6/16. Tony suggests re-formatting the project team schedule with accurate deliverable milestones, then meeting as a team to fill in the dates.

Project Team Minutes

Issue No.	Responsible	Dialogue
9706 - M160	DET	<p>Detachment Interim Measures Progress Update —</p> <ul style="list-style-type: none"> • SWMU 75 - confirmation sampling plan is in SDIV review. • SWMU 159, AOC 656 - Final report has been submitted. • AOC 707, 708, 574, 653 - Reports are in progress. • SWMU 14 - Uncovered 14 drums so far (5-gallon). Drums contain chloroform and chlorine decontamination agents, estimate 2 weeks to complete. • SWMU 6, 7 - 75 percent complete, need additional funds to complete. Removal volume is greater than what was anticipated after screening. • SWMU 5 - Removal volume is also increasing, currently down to groundwater and still have significant levels of lead at the base of the excavation. One well has been abandoned and the excavation is within 5 feet of another. • SWMU 8 - Heavy rain last week mobilized some oil from the excavation. Cleanup efforts are still in progress. Excavation area is larger than expected, also found an asbestos lined drain pipe in the area. 3/4 of the excavated soil has lower PAH levels than what was left in the hole. DET would like to put this material back in the hole in lieu of offsite disposal. Area 2 is loaded with scrap metal. Disposal option for this material is Chambers Landfill. Future plans for this area are to complete the trenching and install collection basins. • SWMU 3 - Plan of Action in SDIV review.] • AOC 696 - Work Plan in regulatory review for the PCB portion of the site. • Pistol and Skeet Range Disposal - Propose disposal of this soil as Non-Haz. No samples to date have failed TCLP for lead. The issue at hand here is characterization of the waste.

Project Team Minutes

Issue No.	Responsible	Dialogue				
9706 - M161	Daryle	<p>Pre RAB Preparation — No RAB in July, next RAB is 12 AUG 97. CTF Update - Tony and Pete Bayley sampled all of the tank vents last week with a Flame Ionization Detector. Two community members were present for the screening. Tanks M and O had detectable odors to the nose. All tanks were unremarkable on the FID with the exception of Tank O. Tank O (Used Oil Tank) had a strong odor, the community members confirmed that this was the odor that they periodically smelled in the neighborhood. Suggestion made to install a carbon filter on the vent line of Tank O. Community held a meeting last Tues. with officials from North Charleston to discuss potential reuse options for CTF. SWMU 166 Update - 19 permanent wells have been installed and sampled to date. Analytical results from the wells confirmed the DPT results from earlier. One deep location at the property boundary detected 2300 ug/l total VOCs. What is the next step? Survey the wells, aquifer characterization, and research historical uses of the property. We have taken several rounds of water level data, but it is all relative now since the wells have yet to be surveyed. We also need to research the historic uses of the property across I-26. AOC 607 Update - Some new data is in on the intermediate and deep wells. Suggestion made to have a full presentation of these data including lithologic cross sections for next months meeting.</p>				
9706 - D100	Team	<p>Consensus to task the DET to design and install a carbon filter for the vent line on Tank O at CTF.</p>				
9706 - D101	Team	<p>Consensus passed to provide the RAB with an updated answer package to the Grass Roots Coalition questions.</p>				
9706 - M162	Team	<p>Post RAB Critique —</p> <table border="0" style="width: 100%;"> <tr> <td style="text-align: center; vertical-align: top;">±</td> <td style="text-align: center; vertical-align: top;">-△</td> </tr> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Good room set up • Community participation • RAB web page • Sensitive issues handled well • Good presentation - Tony • Good job w/ CTF filter • Good presentation - Jeri • Wannetta kept meeting focused • Decision letter - CTF • Only 1 EnSafe employee present </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Non-environmental questions • Questions regarding Letter of Appreciation to Doyle • Too much detail on slug tests • Poor RAB member attendance • Some confusion with issue of changing RAB location • Include cross sections with all future GW discussions </td> </tr> </table>	±	-△	<ul style="list-style-type: none"> • Good room set up • Community participation • RAB web page • Sensitive issues handled well • Good presentation - Tony • Good job w/ CTF filter • Good presentation - Jeri • Wannetta kept meeting focused • Decision letter - CTF • Only 1 EnSafe employee present 	<ul style="list-style-type: none"> • Non-environmental questions • Questions regarding Letter of Appreciation to Doyle • Too much detail on slug tests • Poor RAB member attendance • Some confusion with issue of changing RAB location • Include cross sections with all future GW discussions
±	-△					
<ul style="list-style-type: none"> • Good room set up • Community participation • RAB web page • Sensitive issues handled well • Good presentation - Tony • Good job w/ CTF filter • Good presentation - Jeri • Wannetta kept meeting focused • Decision letter - CTF • Only 1 EnSafe employee present 	<ul style="list-style-type: none"> • Non-environmental questions • Questions regarding Letter of Appreciation to Doyle • Too much detail on slug tests • Poor RAB member attendance • Some confusion with issue of changing RAB location • Include cross sections with all future GW discussions 					

Project Team Minutes

Issue No.	Responsible	Dialogue
9706 - M163	RDA	<p>Jack Sprott introduced Ted Pugh, Robert Brown, and Lenny Araujo of North American Realty Advisory Services to present a confidential Reuse Marketing Analysis —</p> <p>Even though this site is the largest in size and available assets in the Trident area, the site will not push the market. The market is very finite and will determine the reuse options for the site.</p> <p>From a Land Use Diagram the following reuse scenarios were described for our investigative Zones:</p> <p>Zone A - Marine Industrial Zones B, C - Lifestyle Retirement Community Zone D - Office and Recreation Center Zones E, F, and G - Marine Industrial - Flex Zones H, I - Government Office and Training Campus Zones H, I - Industrial Park, Marina</p> <p>The major emphasis is on utilization of existing assets, North American felt that the Sasaki Plan went too far too quickly.</p> <p>Definition of Flex Space - Two or more uses within one Building shell. Very easy to subdivide or finish out to meet multiple uses.</p> <p>North American stated that currently the entire facility is zones M-2.</p> <p>They are looking at several options for reuse of Zones B and C</p> <ul style="list-style-type: none"> • Continuing Care Assisted Living • Age Restricted Retirement • Single Family Occupancy • Golf/Park Amenities • Multi-Occupancy Inns for the former officer quarters <p>01 JAN 99 is still the best date for initiation of property conveyance. Application from the RDA to the Navy will be made for the entire parcel of property.</p> <p>North American feels that the Marketing Plan can also serve as a Conveyance Plan. The RDA wants to progress to a point of communication with the Navy to know up front what restrictions will be placed on each parcel of land. Close communication between reuse priorities and environmental investigation progress, in the upcoming months, was identified as a primary goal of both sides.</p>

Project Team Minutes

Issue No.	Responsible	Dialogue
9706 - M164	Todd/Larry	<p>Zone A Comments Resolution — Team came to agreement that the majority of the Zone A comments had been resolved. This time slot will be used to try and reach consensus on which site will move into the CMS process.</p> <p>SWMU 1 - NFA (administratively) SWMU 2 - CMS tentative team consensus dependant on DHEC review of data from the sites.</p> <p>SWMU 38 - CMS Team Consensus based on nature and extent of pesticides and PCBs. IM has already been completed at the pesticide areas but did not address the PCB contamination.</p> <p>SWMU 39 - CMS Team Consensus</p> <p>SWMU 43 - NFA Team Consensus Pending resolution of the thallium issue in groundwater.</p> <p>AOC 506 - Recommendation is pending results of 3 DPT samples as a follow up to the data presented in the report.</p> <p>AOC 505/SWMU 42 - DET is currently performing an IM based on lead contamination. Paul want a deep groundwater sample at this site due to the VOCs detected in shallow wells. Team Consensus to collect 1 deep DPT sample of groundwater down gradient of the shallow wells before making a CMS determination.</p>
9706 - M165	Joe	<p>Tier II POC Responsibilities — Frequency of participation - As needed (both ways) Responsibilities - Team Consensus on the following:</p> <ul style="list-style-type: none"> • Adhere to Team processes, ground rules, and norms. • Articulate Tier II perspective on issues. • Seek to obtain necessary team resources, training, information, etc., as appropriate. • Coordinate information flow between Tier I teams (i.e., innovative technologies, partnering innovations, etc.). • Maintain neutral posture and do not actively participate in team decisions. • Advocate and support Tier I positions and decisions to Tier II. <p>Team will wait to hear the results of Glenn Easterly's transfer request. Ramona Wilson will serve as the alternate.</p>

Project Team Minutes

Issue No.	Responsible	Dialogue
9706 - M166	Tony	<p>MMO Presentation — Freeman & Vaughn Engineering Consultants have approached the DET with an alternative technology for remediation of halogenated VOCs in groundwater. The technology was developed and tested at the Savannah River Plant under a contract for DOE and involves enhancement of the MonoMethyl Oxenase bacteria in the degradation of chlorinated solvents.</p> <p>A brief description of the process in lay terms involves injection of Methane gas to a contaminated groundwater system, then monitoring the progress of the MMO converting Methane to Methanol. The methanol is an advantageous byproduct of the MMO process that acts as a catalyst to the natural degradation of chlorinated solvents in anaerobic conditions. The MMO process itself also enhances the anaerobic state of the contaminated area.</p> <p>Benefits of this technology are increased yield of contaminants removed under traditional vapor extraction, higher treatment efficiencies, and decreased time from start to finish.</p> <p>SDIV would like to propose utilizing this technology as a demonstration project on the SWMU 39 VOC contamination located at the northern boundary of the base. The proposal involves Freeman and Vaughn training the DET on implementation of the technology and successful performance of the technology would constitute an IM for the SWMU 39 contamination.</p>
9706 - D102	Team	<p>Team Consensus passed to look into the feasibility of this technology for an Interim Measure at SWMU 39.</p>
9706 - M167	Tony	<p>Zone J Sample Elimination — E/A&H is proposing the elimination of those water-body samples not indicative of Navy contaminant contribution. Tony distributed a copy of the proposal prepared by Jay Cornelius and needs a reply by 6/17/97.</p>
9706 - M168	Jeri	<p>Report on Discussions with Phyliss Breeland DOD Rep — She stated that DOD can spend dollars for improvements, just felt that the Navy doesn't want to. Tom Fressilli will call her for clarification of that statement.</p>
9706 - M169	Tony	<p>SWMU 8 Disposition of Waste Piles — Refer to SWMU 8 IM Handout: Piles with high PAHs are proposed for disposal as industrial (special) waste. DET would like to put all other excavated material back into the hole (Most has PAHs at levels less than that at the base of the excavation).</p> <p>Paul had some questions concerning the representativeness of the sampling methods. Tony will check with the DET samplers on that issue.</p> <p>Johnny can give an answer on this issue by Friday 6/13/97.</p>

PT AGENDA

PT MINUTES

**Naval Base Charleston
Environmental Cleanup Project Team
Technical Subcommittee Meeting Minutes**

Date: 7/09/97

Place: Stone Mountain, GA

Time: 1300 - 1700

Attendees: Jay Bassett, Paul Bergstrand, Johnny Tapia, Daryle Fontenot, Tony Hunt, Reece Batten, Dave Backus, Todd Haverkost

Invited Guests: Britton Dotson (E/A&H)

Leader: Todd Haverkost **Scribe:** Dave Backus

Discussion/Decisions

Issue No.	Responsible	Dialogue
9707S - M171	Britton	<p>SWMU 166 Status Update — Monitoring well data shows good correlation with DPT data. Interpretation of lithologic logs show a trench in the top of the Ashley formation running through the middle of the area of contamination. No appreciable upward or downward groundwater flow gradient. Offsite samples (across I-26) have shown PCE contamination, we have identified a former dry cleaner to the east-northeast of DPT points 77 and 78 (Gas Light Square Shopping Center).</p> <p>E/A&H proposes 9-10 more DPT points, converting at least 3 to temporary piezometers to calculate GW flow direction. Paul suggests looking at historic tax maps or aerials to determine all of the surrounding building uses.</p> <p>Next step planned is to obtain access agreements from the City of N. Charleston for the additional DPT points. (As well as DHEC permits).</p> <p>Also propose comprehensive aquifer characterization to support (calibrate) a GW flow model as well as ultimate (or interim) remedial alternatives.</p> <p>Paul suggests coordinating with Jan Cooke of DHEC (734-9300) to try and get water levels from any surrounding monitoring wells installed by others in this area.</p>
9707S - D103	Team	<p>Consensus passed to move forward with E/A&Hs option 1 to install additional DPT points on the east side of I-26. Also proceed with aquifer characterization including 1) slug tests 2) specific capacity tests 3) long term GW level monitoring. Wait for the results of these data before making plans to proceed with pump tests.</p>

Project Team Subcommittee Minutes

Issue No.	Responsible	Dialogue
9707S - M172	Todd	<p>Zone C Comment Resolution —</p> <p>SWMU 44 - Propose 9 confirmation samples from within the IM removal footprint. Analyze these samples for metals and SVOCs, screen them against RBCs, and SSLs. Also propose re-sampling all the monitoring wells for SVOCs. Team Consensus with the addition of metals for the GW samples.</p> <p>SWMU 47/AOC 516 - Johnny had concerns with lead in GW samples 001 and 007. Propose that we have enough data to complete the RFI, this site has already been proposed for CMS. Johnny believes the lead contamination in soil should be defined (>400 mg/kg) surrounding soil boring 007. Johnny would like to re-run the lead uptake model using the max. detect value at boring 007. Then describe the current surface conditions and exposure scenarios in the summary section of the report. Team Consensus</p> <p>AOC 508/511 - E/A&H recommends NFI. Johnny suggests the need for some GW samples to rule out contaminant leachate. Todd asks a fundamental question: How small does the area need to be to define extent? Jay stated that if we put in a well and it is clean... we can walk away from this site. Team Consensus to install 2 temporary wells, then calculate a site-specific SSL. Paul needs to check with his people on the temp well issue and will call Tony and Todd with an answer by 7/18/97.</p> <p>AOC 515/519 - E/A&H recommends NFI. DHEC would like to see some GW data from this site as well because the site was listed in the RFA as a paint shop during the 1930s. Field work and analytical results were within the scope of a CSI. Team Consensus for NFI.</p> <p>AOC 523 - Team Consensus for NFI. We have all the data needed for the report.</p> <p>AOC 512 - Team Consensus to install 2 Temporary monitoring wells.</p> <p>AOC 518 - No disagreements with DHEC comments.</p> <p>AOC 522 - Site is 150 feet upgradient of AOC 523 where we had no problems with VOCs. DHEC needs to review the data before concurrence.</p> <p>AOC 700 - Propose that we correlate GW data with wells at SWMU 44. Will also add pesticide and SVOC analysis to well 008 at SWMU 44 and apply results to AOC 700.</p>
9707S - M173	Paul	<p>Zone I Background Discussion —</p> <p>Last month's minutes listed the agreed upon background value for thallium as (6.6 ug/l) which was in error. Thallium background in GW is still in discussion basewide.</p>

Project Team Subcommittee Minutes

Action Items

Issue No.	Responsible	Dialogue
9707S- A106	Britton	SWMU 166 - Provide PT with the table of engineering parameters needed for CMS. Prepare for aquifer testing, and pursue access agreements for additional DPT samples across I-26. Complete by 7/18/97.
9707S - A107	Tony	Research where excavated soils from the new construction at Bldg. NSC 66 were disposed of or moved to. Also, what is the current surface condition at soil boring NBCC-047-SB007. Report to PT by 7/18/97.
9707S - A108	Johnny	Review Zone E GW background maps, provide final decision on values proposed by 7/16/97.

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Minutes**

Date: 7/10/97 - 7/11/97

Place: Stone Mountain, GA

Time: 0800 - 1700

Attendees: Jay Bassett, Paul Bergstrand, Johnny Tapia, Daryle Fontenot, Tony Hunt, Reece Batten, Dave Backus, Todd Haverkost, Joe Land

Invited Guests: Larry Bowers (E/A&H), Jeri Johnson (RDA), Tom Fresilli (BCO)

Leader: Todd Haverkost **Scribe:** Dave Backus

Discussion/Decisions

Issue No.	Responsible	Dialogue
9707 - M174	Tony	<p>Project Team Schedule Update — Official notification to EPA and DHEC that a FOSL is being prepared for buildings 13A, 44, and 79. Draft anticipated to be delivered in the first week of August.</p> <p>Zone A report will be re-submitted on 8/30/97.</p> <p>Formal response to Zone C comments will be submitted on 7/18/97.</p> <p>Zone F&G Draft Reports will be submitted 10/15/97.</p> <p>Response to Zone H comments due 7/31/97.</p> <p>Zone I comments due 8/21/97.</p>
9707 - M175	Todd	<p>AOC 607, Dry Cleaners Site Update — E/A&H feels confident that the extent of the release has been defined. Shallow piezo maps show a major depression or sink heading toward MW-006.</p> <p>There appears to be potential for dissolved phase contaminants to migrate into a nearby sewer line.</p> <p>E/A&H plans to inspect and sample the sewer lines in the area of the site. Paul would like a copy of the cross sections, then he needs at least 5 days to concur that we are done with RFI sampling.</p> <p>E/A&H will investigate the sewer issue and make recommendations for Interim Measures. Jay would like the investigation for potential IM to be expedited.</p> <p>Team Consensus that any further data gaps whether, the pipeline, or identified by Paul, will be scoped for further investigation in the CMS. Progress will be reported at the next PT meeting.</p>

Project Team Minutes

Issue No.	Responsible	Dialogue
9707 - M176	Tony	<p>Land Use Restriction Model — Tony needs: "What are the steps necessary to meet the requirements of an institutional control". DHEC would like to see a permit structure that names the assuming property user as the owner, but requires the Navy to maintain responsibility for O&M of any remedial alternative. EPA's major concern is those properties that are transferred with an institutional control, or those sites that are cleaned up to less than residential risk criteria. Deed restrictions and institutional controls are fairly easy to put in place, the problems arise with how are these enforced, who is responsible.</p> <p>Team Consensus that the PT needs to act as a catalyst to push the respective policy decision makers to make proposals, decisions, and actively negotiate this issue.</p>
9707 - M177	Jay	<p>PT Communication with the DET — DET has felt that their information has not always made it back to the team. They have also stated that full PT attendance is a waste of their time. Reece suggests that the DET be invited back to the table at milestone points on each project. Jay would like to see an IM management plan developed defining what projects are active and their status. Suggestion made to have the DET come back and brief the PT monthly.</p>
9707 - D104	Team	<p>Consensus passed to have SDIV task the DET with a standing agenda slot in each meeting for monthly updates on IM projects.</p>
9707 - M178	Todd	<p>Zone J&L 30% Progress Review — Zone L - All of the primary DPT sampling has been completed (375 soil and GW samples), with the exception of the CIA (Zone E). E/A&H plans to have all invasive sampling complete within 30-days. Progress has been much better than expected. Dye/Tracer study work plans are being developed.</p> <p>Zone J - All of the phase I sampling will be complete within the next 10-days. Will have to re-sample 5 locations due to complications at the analytical laboratory. PRC, Inc. will be tasked by EPA to assist with background determinations in Zone J.</p>

Project Team Minutes

Issue No.	Responsible	Dialogue
9707 - M179	Todd	<p>Zone D RFI Comment Resolution —</p> <p>EPA Comments - Jay 1) Will list all constituents found on a site by site basis in QA/QC samples. Jay needs: "What information from data validation could impact the ultimate decisions on sites.</p> <p>DHEC Comments - Paul 1) E/A&H did not include a lithologic cross section because there are only 2 sample points. A cross section between those 2 points will be included.</p> <p>2) Hits List - Table 5.4 should suffice for this request.</p> <p>3) Soil boring 006 deep contaminants - E/A&H did collect soil samples from the intermediate and deep intervals at this site, the constituents in question were not detected in the DPT samples.</p> <p>DHEC Comments - Johnny 1) Would like to see a statement denoting that the contamination found beneath the parking lot outside Bldg. 76 will be reported in the Zone E report. E/A&H will resubmit the report by 7/25.</p>
9707 - M180	Todd	<p>Schedule Strawman Discussion —</p> <p>Proposed strawman from E/A&H discussed at the table. List of agreed upon milestone or deliverable points is attached.</p>
9707 - M181	Jay	<p>Tier II Meeting Update —</p> <p>Identified problems with communication back to the Tier I level. Glenn Easterby accepted our POC position, need to add him to the distribution list and forward him last few months and all future meeting minutes.</p> <p>SCDHEC (Tier II Level) stated that they are working on a decision flowchart for landfills that are SWMUs. (Might have some implications to SWMU 9).</p>
9707 - M182	Jeri	<p>RDA Update —</p> <p>RDA has question: "Can potential tenants move soil in the dredge spoil area at the southern tip of the base?" — DHEC will not be able to render opinion until late August after the Zone I report has been reviewed.</p> <p>Same question for the area surrounding and including SWMU 8? — Team needs more info on the future use of that area, as well as what type of soil movement is planned so we can evaluate whether it is permissible.</p> <p>What are the plans for the piles of dirt at AOC 653? — The soils have high TPH, DET and the Navy are evaluating disposal options.</p>

Project Team Minutes

Issue No.	Responsible	Dialogue
9707 - M183	Reece	<p>Disposal Options Discussion at SWMUs 8, 14, and 25 —</p> <p>SWMU 14 - DET wants to screen the soil for lead contamination, if soil is clean, DET proposes disposal as non-hazardous. Suggestion made to have DET present the preferred disposal method.</p> <p>Johnny needs a report on how long the waste piles base-wide have been, or will be, left onsite.</p> <p>SWMU 8 - DET is proceeding with the original scope approved in the IM work plan. An interceptor collection trench is planned for the IM of Area 2. Suggestion made to put installation of the trench on hold until further discussion of the team. (Issue added to the agenda of a telecon set for July 28 at 1430 EDT).</p> <p>SWMU 25 - Need to expedite the planned sampling analytical to a 14-day turnaround. RDA has requested a plan for when the CIA boundary fence can be restored to its original state.</p>
9707 - D105	Team	<p>Team Consensus to have SDIV task (and fund) the DET to repair the fence in front of SWMU 25 to its original condition.</p>
9707 - M184	Johnny	<p>MMO Demo Project Regulatory Requirements —</p> <p>Johnny has researched the permitting and regulatory requirements anticipated to be required for operation of the MMO Demo Project with the following areas identified:</p> <ul style="list-style-type: none"> • Well permits. • 40 CFR Part 264 Subpart AA, Air Emission Standards for Process Vents. • 40 CFR Part 264 Subpart BB, Air Emission Standards for Equipment Leaks. • 40 CFR Part 270.65 Subpart F, Research, Development, and Demonstration Permits. <p>Johnny also stated that there may be other air permitting requirements that apply.</p>

Project Team Minutes

Issue No.	Responsible	Dialogue
9707 - M185	Larry	<p>Zone H CMS Scoping — Larry stated that the overall scope of the CMS effort is covered in the comprehensive work plan, most of the prescribed requirements are mandated and will be completed for those sites elevated to the CMS process. The following scope proposals are for those data needed to fill data gaps identified in the RFI or provide additional data needed for the CMS evaluation.</p> <p>AOC 656 -</p> <ul style="list-style-type: none"> • 2 additional rounds of GW sampling as a part of CMS. <p>AOC 653 -</p> <ul style="list-style-type: none"> • 1 additional well in the center of the excavation site. • Re-sample grid wells NBCH-GRD-003 and 006. • Review DET IM completion report. <p>AOC 663/SWMU 136 -</p> <ul style="list-style-type: none"> • 8 additional soil borings to define the extent of arsenic only. • Several additional GW samples (3-4 DPT or temp wells). • Review data results of SWMU 178 additional wells. • Review DET completion report of 2 UST removals (Gabe Magwood). <p>SWMU 159 -</p> <ul style="list-style-type: none"> • 2 additional wells at highest concentration of soil TCE hits. • Review data results from nearby grid-well pair. • Review DET IM completion report. <p>AOC 666 -</p> <ul style="list-style-type: none"> • Several additional soil borings to define extent of arsenic contamination. <p>*** Request made that Steve Waldron bring data for this site to Columbia when he arrives for the DHEC Arcview training.</p> <ul style="list-style-type: none"> • Review GW data results. • Review DET IM completion report. <p>SWMU 14 -</p> <ul style="list-style-type: none"> • Additional rounds of GW monitoring. • Assess location of GW wells in relation to the “DANK” canisters identified by DET. • Review DET IM progress reports to date, and future plans. <p>AOC 503 -</p> <ul style="list-style-type: none"> • Review EOD completion report. • Additional GW monitoring at nearby grid well pair. • Site will require institutional controls. <p>SWMU 17 -</p> <ul style="list-style-type: none"> • Obtain subsurface utility schematic.

Project Team Minutes

Issue No.	Responsible	Dialogue
9707-M185	Larry	<p>SWMU 17 - (cont.)</p> <ul style="list-style-type: none"> • Sample soils beneath the back wing of the building to fill data gaps. • Perform aquifer testing. • Propose treatability study <ul style="list-style-type: none"> -chemical dehalogenation -thermal desorption -solvent extraction <p>SWMU 9 -</p> <ul style="list-style-type: none"> • Define landfill boundary, size, and volume. • Install perimeter GW wells between ball fields and Shipyard Creek. • Install additional surface trenches for landfill definition. (EPA does not approve of this line item, no useable data can come from it). • Better definition of existing cover. • Perform aquifer testing/run HELP model. • Collect additional geotechnical/and or geochemical data to support CMS analysis. <p>SWMUs 19, 20, and 121 AOCs 649, 650, and 651 -</p> <ul style="list-style-type: none"> • The Navy feels sites are well defined within the RFI. • Navy proposes no further sampling requirements for soil. • Navy proposes further GW monitoring of grid wells in this area.
9707-M186	Jeri	<p>USCG Dredge Material Update —</p> <p>USCOE states that some of the insitu material samples exceeded screening levels. USCOE wants USCG to put the dredge spoils in the Zone I dredge spoil area.</p> <p>Negotiations are stalemated at this point.</p> <p>RDA has requested a copy of the USCG's analytical reports for the insitu samples. The USCG has denied that request without first filing a formal FOIA request with the District Office.</p> <p>There are no contingencies for continued use of existing dredge spoil areas in the conveyance of property agreements.</p> <p>Jay suggests that the RFI team sample the sediments surrounding the USCG pier at the planned dredge completion depth for RFI constituents.</p>

Project Team Minutes

Issue No.	Responsible	Dialogue				
9707 - M187	Joe	<p>PT Meeting Wrap Up — Next meeting 8/6/97 starting at 1300, Hampton Inn Stone Mountain, GA. Tony is next team leader. Johnny is next time keeper. Agenda is due 1 week before the meeting and try to be much more specific with the purpose and goals of each agenda item.</p> <p style="text-align: center;">Meeting Summary</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">±</td> <td style="width: 50%; text-align: center;">-/Δ</td> </tr> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Good location • Team building/Ball game • Completed tasks • Complex issues handled well • FOCUS • Good working meeting • Recog. comm. breakdown with DET • Increased understanding of team concepts • Appreciation of travel to meetings • New member • RDA input and questions </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Too much time at breaks • Last minute agenda items • Agenda prep/data packages • DET absence • “hot potato” on several issues • Behind scenes decisions • Comm breakdown with DET • Reluctant to make decisions at table • No formal team building exerc. • No consensus checks </td> </tr> </table>	±	-/Δ	<ul style="list-style-type: none"> • Good location • Team building/Ball game • Completed tasks • Complex issues handled well • FOCUS • Good working meeting • Recog. comm. breakdown with DET • Increased understanding of team concepts • Appreciation of travel to meetings • New member • RDA input and questions 	<ul style="list-style-type: none"> • Too much time at breaks • Last minute agenda items • Agenda prep/data packages • DET absence • “hot potato” on several issues • Behind scenes decisions • Comm breakdown with DET • Reluctant to make decisions at table • No formal team building exerc. • No consensus checks
±	-/Δ					
<ul style="list-style-type: none"> • Good location • Team building/Ball game • Completed tasks • Complex issues handled well • FOCUS • Good working meeting • Recog. comm. breakdown with DET • Increased understanding of team concepts • Appreciation of travel to meetings • New member • RDA input and questions 	<ul style="list-style-type: none"> • Too much time at breaks • Last minute agenda items • Agenda prep/data packages • DET absence • “hot potato” on several issues • Behind scenes decisions • Comm breakdown with DET • Reluctant to make decisions at table • No formal team building exerc. • No consensus checks 					

Project Team Minutes

Action Items

Issue No.	Responsible	Dialogue
9707 - A109	Todd	Submit Risk Assessment portion of Zone A RFI report to EPA/DHEC by 7/18/97.
9707 - A110	E/A&H Paul	Paul to review AOC 607 data package and identify need/or no need for additional sampling for nature and extent. Give comments by 7/18/97. E/A&H to investigate potential for shallow GW infiltrating sewer line at AOC 607. Report findings and/or progress at next PT meeting.
9707 - A111	Reece	Develop a refined process for communicating the goals and objectives of IMs between the PT and DET. Bring DET to next PT meeting for discussion.
9707- A112	Johnny	Invite Glenn Easterby to September PT meeting.
9707 - A113	Dave	Add Glenn Easterby to the PT distribution list, and send him copies of the last couple months PT meeting minutes.
9707 - A114	Reece	Task the DET to complete the proposed sampling at SWMU 25, then repair the CIA boundary fence while waiting on the analytical results. Report progress by next PT meeting.
9707 - A115	Jay/Paul	Review AOC 666 groundwater results, then decide on which CMS actions (if necessary). Report by next PT meeting.

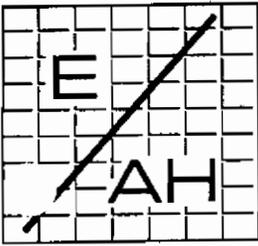
**NAVBASE Charleston
Project Team RFI/CMS Schedule
Task List Revision Strawman
7/21/97**

RFI General Task List

- Task 1 - RFI Work Plan Scoping
- Task 2 - Draft WP Distributed
- Task 3 - Regulatory Agency Review
- Task 4 - Comment Resolution Meeting
- Task 5 - Final Document Distribution
- Task 6 - Field Work Start
- Task 7 - 30% Progress Meeting
- Task 8 - 60% Progress Meeting
- Task 9 - 90% Progress Meeting
- Task 10 - Field Work End
- Task 11 - Consensus on Background Concentrations
- Task 12 - Pre-submittal Review
- Task 13 - Draft Document Distributed
- Task 14 - Regulatory Review
- Task 15 - Comment Resolution Meeting
- Task 16 - Additional Field Work (If necessary)
- Task 17 - Data Presentation
- Task 18 - Document Approval Meeting
- Task 19 - Final Document Distributed
- Task 20 - Document Approval Letter
- Task 21 - Permit Mods (As required)

CMS General Task List

- Task 1 - CMS Site Identification
- Task 2 - Determine Initial PRG/RGO
- Task 3 - CMS Work Plan/Treatability Plan Scoping
- Task 4 - Draft Work Plan Distributed
- Task 5 - Document Approval Meeting
- Task 6 - Execute Field Work & Treatability Studies (As required)
- Task 7 - Reevaluate PRG/RGO
- Task 8 - Evaluate Alternatives
- Task 9 - Team Approval
- Task 10 - Statement of Basis and Public Participation
- Task 11 - Permit Mods (As required)
- Task 12 - Finalize Remedy Selection



EnSafe / Allen & Hoshall

a joint venture for professional services

Program Management Office

Shelby Oaks Plaza
5909 Shelby Oaks Dr.
Suite 201
Memphis, TN 38134
Phone (901) 383-9115
Fax (901) 383-1743

EnSafe/Allen & Hoshall Branch Offices:

Charleston
935 Houston Northcutt Blvd.
Suite 113
Mt. Pleasant, SC 29464
Phone (803) 884-0029
Fax (803) 856-0107

Cincinnati
400 TechCenter Dr.
Suite 301
Milford, OH 45150
F (513) 248-8449
T (513) 248-8447

Pensacola
2114 Airport Blvd.
Suite 1150
Pensacola, FL 32504
Phone (904) 479-4595
Fax (904) 479-9120

Norfolk
303 Butler Farm Road
Suite 113
Hampton, VA 23666
Phone (757) 766-9556
Fax (757) 766-9558

Raleigh
5540 Centerview Drive
Suite 205
Raleigh, NC 27606
Phone (919) 851-1886
Fax (919) 851-4043

Nashville
311 Plus Park Blvd.
Suite 130
Nashville, TN 37217
Phone (615) 399-8800
Fax (615) 399-7467

Dallas
4500 Fuller Drive
Suite 106
Irving, TX 75038
Phone (972) 791-3222
Fax (972) 791-0405

July 23, 1997

Mr. Glenn Easterby
437 CES/CD
100 W. Stewart Avenue
Charleston AFB, SC 29204-4827

Re: Naval Base Charleston Project Team Meeting Minutes and Directory

Dear Glenn:

Welcome to the Naval Base Charleston Environmental Cleanup Project Team. We are looking forward to your input and guidance as our Point of Contact with the South Carolina Tier II. I have enclosed copies of the last few months meeting minutes as well as the latest copy of the team directory.

We hope to see you at our meeting in September, if you should have any questions in the interim don't hesitate to call any member of the team for assistance.

Sincerely:

Dave Backus, EnSafe/Allen & Hoshall
Naval Base Charleston PT Scribe

encl.



NAVAL BASE, CHARLESTON

Environmental Cleanup Program

This fact sheet is one of a series to inform interested citizens about the environmental investigations and cleanup actions at Naval Base, Charleston. Other fact sheets will be written at appropriate points in the program and in response to public interest. Distribution is coordinated through the Public Affairs Office at Naval Facilities Engineering Command, Southern Division, (803) 820-5771.

CHICORA TANK FARM

BACKGROUND

The Chicora Tank Farm is a 23-acre site which formerly supplied fuel and lubricants to Naval Base Charleston. It is located approximately 500 yards west of the former Naval Base. The tank farm currently consists of six non-operational fuel storage tanks which are covered with mounds of soil 3 - 5 feet high.

The tanks were constructed in 1943. Five were designed to hold fuel oil for use in boilers on Navy ships, and one tank was designed to hold waste oil. In 1988, the first of the six tanks was taken out of service and, currently, none of the tanks is in use.

SUMMARY OF ENVIRONMENTAL HISTORY

In 1986, testing was done in response to fuel that had leaked into the pump rooms of three of the large Chicora tanks. The tests were completed to determine if the surrounding soil or groundwater had been contaminated by the leaking fuel. No evidence of petroleum contamination was found.

*The **holding capacity** of the five tanks is 2,100,000 gallons each, and each tank is approximately 138 feet in diameter by 20 feet high. The sixth tank holds 1,134,000 gallons and is 102 feet in diameter by 20 feet high.*

In 1988, petroleum was discovered in one of the manholes of the french drain system. The Navy completed a detailed assessment to determine the extent of potential contamination. Assessment activities included a tracer survey, soil-gas survey, installation of soil borings and groundwater monitoring wells, and collection and analysis of soil, sediment, and water samples. In addition, samples were taken from the bottom of the tank farm's spill containment pond and quarterly monitoring was performed on well samples and from the french drain system pipelines.

The petroleum was removed from the manhole, and no more product returned, suggesting that the petroleum came from a single release, not a constant source. After a year of sampling, it was concluded that very low-level petroleum contamination is present in the groundwater near tank P.

South Carolina Department of Health and Environmental Control (DHEC) reviewed the results of the Navy's investigations and issued a "no further action" decision. DHEC also recommended that the tanks be cleaned and permanently closed.

More detailed information on the results of the environmental assessment of the tank farm can be found in the information repository at the Dorchester Road Regional Library.

TANK CLOSURE

In October 1995, initial decommissioning and tank closure options were addressed. The four options were:

- Option 1...** Clean and fill the tanks with inert material and leave in place.
- Option 2...** Partial demolition of tank roofs. Clean and fill with inert material.
- Option 3...** Partial demolition, with debris from tank used to fill remaining structure. Clean and fill remaining volume with inert material.
- Option 4...** Complete removal of tanks and piping.

State regulators, members of the Naval Base Charleston Restoration Advisory Board, the Navy, and the Environmental Protection Agency agreed that Option 3 was the preferred closure method. Option 3 was chosen because partial demolition of the tanks would shorten the height of the tanks, resulting in a fairly flat ground surface that would be more accommodating to future uses than the existing hills.

Option 3 includes knocking in the top and part of the sides of the tanks, allowing all demolition debris to fall into the tanks. The tanks would then be backfilled and a clay cap placed on top of the excavation to prevent groundwater infiltration. After the process is complete, the property will have small mounds at each tank site instead of the large hills currently there.

The Navy will proceed with Option 3 if the intended user of the property requires it for their plans. If no user is found for the property, the Navy will proceed with Option 1 which is technically simpler than Option 3.

Procedure for Cleaning Tanks

The contents of all tanks will be sampled and analyzed for proper disposal. After removal and disposal of any residual material, the tanks will be thoroughly washed and the resulting wastewater will be properly disposed. In addition, all fuel transfer and sludge pipelines connected to the tank farm will be cleaned, filled with inert material, capped, and abandoned in place.

STATUS

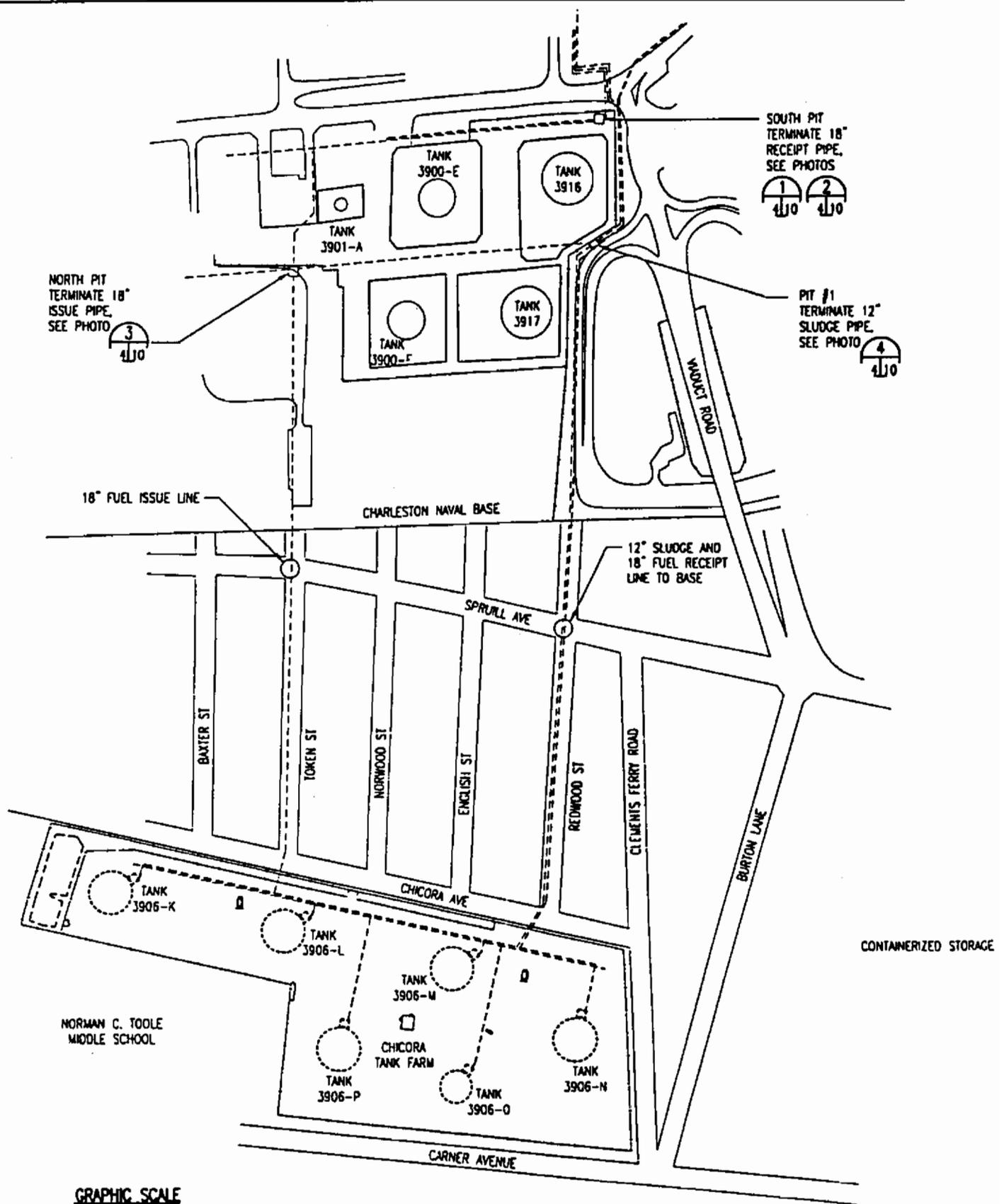
Currently, the RDA is working toward an arrangement to provide the property to a public entity free of charge or rent. However, the new owner/user will be responsible for all future maintenance and upkeep. The Navy will be responsible for any environmental cleanup that relates to its past activities.

As this time, the RDA is waiting to hear from various public entities before proceeding with conveyance.

FOR MORE INFORMATION

For more information on this fact sheet or any questions regarding the Naval Base Charleston environmental cleanup program in general, call or write:

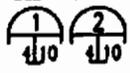
*Mr. Jim Beltz - Public Affairs Office
Naval Facilities Engineering Command - Southern Division
P.O. Box 190010
North Charleston, SC 29419-9010
(803) 820-5771*



NORTH PIT
TERMINATE 18"
ISSUE PIPE,
SEE PHOTO



SOUTH PIT
TERMINATE 18"
RECEIPT PIPE,
SEE PHOTOS



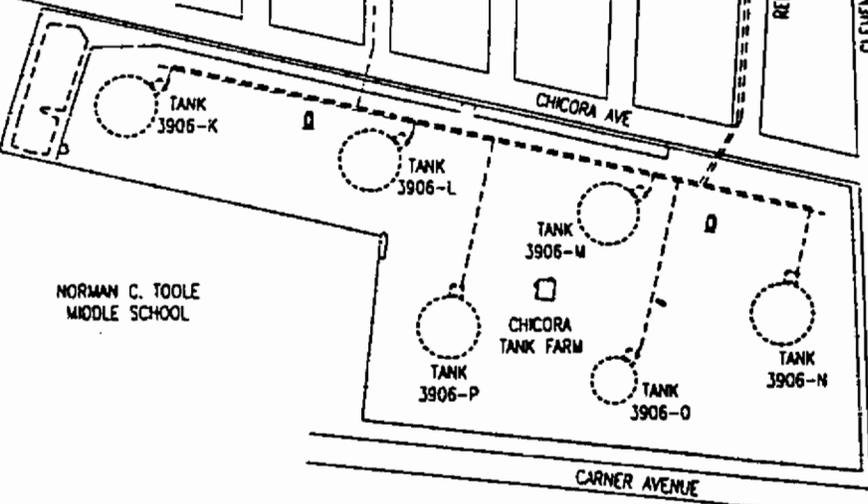
PIT #1
TERMINATE 12"
SLUDGE PIPE,
SEE PHOTO



18" FUEL ISSUE LINE

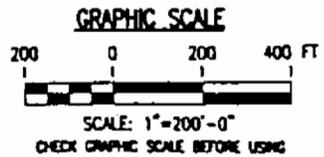
CHARLESTON NAVAL BASE

12" SLUDGE AND
18" FUEL RECEIPT
LINE TO BASE



NORMAN C. TOOLE
MIDDLE SCHOOL

CONTAINERIZED STORAGE



ISSUE/RECEIPT PIPING
SCALE: 1"=200'-0"

Public Affairs Office
Naval Facilities Engineering Command
Southern Division
P.O. Box 190010
North Charleston, SC 29419-9010
Official Business



DAVE BACKUS
ENSAFE/ALLEN & HOSHALL
5724 SUMMER TREES DRIVE
MEMPHIS TN 38134

MEMORANDUM

JUNE 17, 1997

TO: ALL RESIDENTS
FROM: NORTH CHARLESTON COUNCILWOMAN GUSSIE GREEN
SUBJECT: CHICORA TANK FARM

*3/11
2/10*

DEAR RESIDENTS OF UNION HEIGHTS AND CHICORA-CHEROKEE COMMUNITIES:

MAYOR KEITH SUMMEY MUST MAKE A FINAL DECISION OR AGREEMENT WITH THE NAVY AS TO WHETHER THE CITY OF NORTH CHARLESTON WILL ACCEPT AS A GIFT THE CHICORA TANK FARM (PROPERTY NEXT TO NORMAN C. TOOLE MIDDLE SCHOOL) VERY SOON.

THIS LAND WILL ALWAYS REMAIN AMONG US, REGARDLESS OF WHO OWNS THIS PARCEL OF LAND OR WHETHER IT IS USED FOR HEALTHY OR LIFE THREATENING ACTIVITIES.

WE NEED TO MAKE A VERY STRONG PLEA TO THE CITY TO ACCEPT THIS PROPERTY AND PRESENT RECOMMENDATIONS ON HEALTHY USES OF THIS LAND FOR THE SURROUNDING COMMUNITIES. UNLESS WE AS A COMMUNITY ACT ON THIS SITUATION IN A POSITIVE MANNER, THIS SITE COULD BE USED FOR ANYTHING. THEN WE WILL HAVE TO LIVE WITH IT.

MR. LOUIS MINTZ, A RESTORATION ADVISORY BOARD (RAB) MEMBER AND A MEMBER OF THE PUBLIC OFFICE SUBCOMMITTEE TO REPRESENT OUR COMMUNITY WITH THIS TANK FARM, WANTS TO INFORM US OF THE NAVY'S POSITION ON THIS ISSUE. HE WILL ATTEND OUR JUNE 23RD COMMUNITY COUNCIL MEETING AT THE LIVE OAK CENTER, 2012 SUCCESS STREET, NORTH CHARLESTON. WE WILL HAVE THE OPPORTUNITY TO ASK QUESTIONS AND FIND OUT WHAT IS BEST FOR US TO DO.

PLEASE ATTEND THIS VERY IMPORTANT MEETING THAT CONCERNS AN ISSUE THAT WILL AFFECT OUR COMMUNITY FOR THE REST OF OUR LIVES!!

We, the undersigned residents of Abbebee, Choora-Cherokee, Dorchester Farms, Dorchester Waylyn and Union Heights, urge the Mayor and members of North Charleston City Council to accept conveyance of the Choora Tanks Farms from the Regional Development Authority as a public benefit and limit its future use to recreational activities.

NAME (Sign your name. Do not print)	ADDRESS (Give your full home address)
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	
16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	

PT AGENDA

From: "mahunt@efdsouth.navy.mil"
To: DBACKUS , THAVERKOST , "raganfa@columb30.dhec.st...
Date: 7/31/97 5:26pm
Subject: Project Team Meeting 6,7 & 8 August

Please review this draft agenda for next week's meeting. Let me know if there are any additions/deletions, objective and time.

Technical Subcommittee Meeting, 6 Aug 1997

1300 - 1700 Review status and discuss the following documents/issues. What cannot be discussed will be scheduled for next telcon or if time permits, during the Project Team meeting.

Zone H RFI report (currently in review in SCDHEC). Data for AOC 659, 661, 665, 667/138 to be mailed 7/31/97. Please review and be ready to discuss at this meeting.

Zone A RFI report (data received on SWMU 42, 506; packages mailed 7/31/97, please review and be ready to discuss results at this meeting. SWMUs 1, 2 & 39 information will be hand delivered at project team meeting,

Please comment as soon as possible. Our goal is to have a completely revised report submitted by the end of August.

FOSL (To be hand delivered 8/7/97)

Zone I RFI report (in SCDHEC review)

Zone F background. Please be ready to discuss.

Zone I background. Please be ready to discuss.

Zone D final RFI report.

Zone J ; reduction in surface water sample letter

AOC 607 status

Zone H CMS Work Plan (will be distributed by the end of August)

Comprehensive CMS Work Plan.

Discuss the issue of collection of soil samples below the groundwater table.

Project Team Meeting

Thursday, August 7, 1997

✓ 0800-0900 Introduction, Ground Rules, Opening Excercise, Prioritize Agenda, Review Action items from July meeting,

✓ 0900-1000 Review RFI/CMS schedule, discuss FY 98 projects/budget

Break

✓ 1015-1100 Review Mission/Vision

Objective; Decision. Determine if current Mission/Vision is satisfactory and modify if required. Please come prepared to discuss this so that we may come to final resolution on this issue.

✓ 1100-1200 Natural Attenuation Parameters

Objective; Decision. Determine if the list of parameters that is being sampled for and analyzed at the sites having contaminated groundwater from chlorinated solvents is adequate.

✓ Lunch

✓ 1300 - 1500 Interim Measures Update

Objective; Information. Detachment provide an update on IM's.
Discussion expected on sites where the Det needs resolution on particular
issues. (SWMU 8 and AOC's 670/684)

✓ 1500- 1700 Ecological Study Brief

Objective: Information. Tetra-tech to provide a brief on studies
they are going to conduct which will provide information on local sediment
and water quality.

Thursday, 9 August 1997

✓ 0800- 0900 pre-RAB preparation

Objective; Decision. Determine what issues to discuss at the RAB.
Update on Chicora Tank Farm vent filter.

0900 -1100 Open

1100-1200 Close out and wrap up

Southern Division, Naval Facilities Engineering Command
P.O. Box 190010
N. Charleston, SC 29419-9010

PT MINUTES

**Naval Base Charleston
Environmental Cleanup Project Team
Technical Subcommittee Meeting Minutes**

Date: 8/6/97

Place: Stone Mountain, GA

Time: 1300 - 1730

Attendees: Todd Haverkost, Dave Backus, Tony Hunt, Daryle Fontenot, Reece Batten, Paul Bergstrand, Ann Ragan, Jay Bassett, Joe Land

Invited Guests: None

Leader: Tony Hunt **Scribe:** Dave Backus

Discussion/Decisions

Issue No.	Responsible	Dialogue
9708S - M188	Tony	<p>RFI Status/Progress Discussion —</p> <p>Zone H - EPA has issued an approval letter for the RFI Report. DHEC has not completed their review. Estimate late next week at the earliest.</p> <p>Zone A - Risk assessments on SWMUs 1, 2, and 39 will be distributed to the regulators next week. Entire report submittal planned for late August dependant on regulatory review of the risk assessments. Two key points needed from this review 1) Do we have outstanding investigative issues with these sites; 2) Concurrence on CMS recommendations.</p> <p>Zone I - DHEC is on track for 8/21/97 comment completion.</p> <p>Zone D - EPA has issued an approval letter for the RFI Report. Johnny and Paul still need to concur on their comments.</p> <p>Comp CMS Work Plan - EPA has provided comments, EnSafe plans to formally respond to those comments.</p> <p>Zone H CMS Work Plan - In peer review between SDIV and EnSafe. Regulators would like the work plan submitted on time. Planned submittal by next Friday 8/15/97.</p>

Issue No.	Responsible	Dialogue
9708S - M189	Todd	<p>Zone H Additional Data Summary — AOC 659 - Two DPT points were sampled within the bermed area. Methylene Chloride showed ND, 1 small detection of Benzene. Team consensus to move this site to the UST Program.</p> <p>AOC 661 - Soil samples were collected and analyzed for explosive compounds. All sample results were ND. Team consensus for NFA.</p> <p>AOC 665 - All data results showed ND. Team consensus for NFA.</p> <p>AOC 667/SWMU 138 - Recommendation for NFA at the Zone H Sites, but further investigation is needed of the contaminants identified at the Zone I border. Consensus passed.</p>
9708S - M190	Todd	<p>Zone A Additional Data Summary — SWMU 42/AOC 505 - Collected DPT GW samples at 15 and 25 feet bgs downgradient of 505-001. All samples were ND for VOCs. Data will be incorporated into the RFI report. Recommend NFI. EPA has no issues with GW, but needs confirmation results before writing off on soil. DHEC is not prepared to comment. EPA would like the fraction of ingested soil used in the Baseline Risk Assessment rationalized in the report for this site.</p> <p>AOC 506 - Three DPT GW samples were collected, lithology showed sand to 60 feet bgs at the top of the Ashley formation. Todd reported that the sample results were ND for VOCs. Paul stated that the 2 detections of acetone indicate that VOCs were not totally ND. Need to amend the ND statement. Team consensus for NFA, conditional on Johnny's approval.</p>
9708S - M191	Todd	<p>AOC 607 update — The sanitary sewer running between buildings 225 and 1189 showed a trickle of flow downgradient of shallow well 607-006. Paul needs a better understanding of how the contamination got into the environment. EPA suggests expediting an IM as opposed to implementing the CMS. (See action item A118 for actions pertaining to this site).</p>

Issue No.	Responsible	Dialogue
9708S - M192	Tony	<p>SWMU 166 Historic Use Analysis of Area Across I-26 — Tony presented several historic Tax Maps and aerial photos. Another dry cleaner was historically located in the traffic island at the I-26/Remount Road exit. Question posed: What type of IM is needed at this site? 1) Capture or contain contaminants at Annex property boundary. 2) Natural attenuation is probably feasible for offsite contamination, but Jay stated that it must be in conjunction with some form of source mitigation. SDIV has requested that EnSafe expedite the data collection to support an IM at this site.</p> <p>DPT Abandonment Issues - Paul has requested that DPT holes be abandoned by grouting as the probe is withdrawn from the hole, or going back in with a tremie and pressure grout. Geoprobe techniques will not support either of these abandonment methods. 1) Can we get a variance? 2) Paul and Todd will look into the possibility of a variance. 3) If a variance cannot be obtained, we will have to go to a cone penetrometer rig which has the ability to grout upon pull back.</p> <p>During a break, Paul spoke with David Baize (803) 734-5360 Chair of the GW Regulations Committee at DHEC. David stated that we could explain the abandonment procedures planned in the well permit request. He saw no problem with direct pull back and plugging of the vadose zone as long as the State knew the lithology and abandonment plans up front.</p>
9708S - M193	Jay	<p>Zone J Sample Reduction Request — After some discussion and review of work plan maps, OK to delete the following: SYC - 09; SYC - 20; NOI - 03; and NOI - 09. Jay will coordinate with Denise Klimas and Johnny, when available, on this decision.</p>
9708S - M194	Paul	<p>Collection of Soil Samples Below the Water Table — Paul sees a disconnect when we don't collect 2nd interval (3' to 5') samples due to intersection of the GW table, especially when we don't collect a GW sample in lieu of the lower soil interval.</p> <p>Paul asks that in the future, water or not ; Can we go ahead and collect the soil sample below the water table if no wells are planned in the area. Team Consensus Passed. This decision will not be retroactive.</p>
9708S - M195	Paul	<p>SWMUs 17 & 25 Expedite IM or CMS — Paul would like to have these sites moved to the front burner as far as plans for future actions are concerned. Todd will have 4 quarters of GW data faxed to us.</p>

Technical Subcommittee Minutes

Issue No.	Responsible	Dialogue
9708S - M196	Daryle	<p>Electrical Manholes Discussion —</p> <p>SCE&G is negotiating a lease/purchase for the electrical distribution system at the base. There are approximately 500 electrical vaults on the base. They have inspected several and found sediment, GW and odors.</p> <p>SDIV has already required them to obtain approval before disposing of any waste. Question: What is required for disposal of wastes typical from the bottom of these vaults?</p> <p>Jay suggests sampling a representative number of vaults and developing a disposal plan based on the sample results.</p>
9708S - M197	Paul	<p>Soil Disposal Discussion —</p> <p>Paul wants to see better management of all types of waste disposal associated with the environmental investigations or remedial actions.</p> <p>Paul discovered a report where the DET thermally disposed of "Petroleum Contaminated" soil in which the petroleum levels were ND.</p> <p>Tony presented a draft proposal for management options for petroleum contaminated soils. Team is to review and comment by the next Telecon or team meeting.</p>

Action Items

Issue No.	Responsible	Dialogue
9708S - A116	Tony	Draft letter to DHEC recommending transfer of AOC 659 to the UST Program. By the next PT meeting.
9708S - A117	Jay	Coordinate Zone F & I background issues with Johnny and Barry Doll. Tentative date set for 8/25/97 at 0900.
9708S - A118	EnSafe	<p>Sample within the sanitary sewer line downgradient of AOC 607 for water and air VOC contamination. The goal is to define the extent of contamination within the pipe and determine whether there is a health concern. Research historic aerial photos to determine past uses of the dry cleaner facility. Try to determine whether or not the same infiltration problem is occurring in the storm sewer (s) near the site.</p> <p>Report the results of this research by the next PT meeting.</p>
9708S - A119	Team	Review and provide comments on the proposal letter Tony drafted on Management Options for Petroleum Contaminated Soils. Comments due by 8/25/97.

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Minutes**

Date: 8/7/97

Place: Stone Mountain, GA

Time: 0800 - 1730

Attendees: Todd Haverkost, Dave Backus, Tony Hunt, Daryle Fontenot, Reece Batten, Paul Bergstrand, Ann Ragan, Jay Bassett, Joe Land

Invited Guests: Jeri Johnson (RDA), Tom Fresilli (BCO), Mac McNeil (Bechtel-RAC), Bobby Dearhart, Kevin Tunstall (DET)

Leader: Tony Hunt **Scribe:** Dave Backus

Discussion/Decisions

Issue No.	Responsible	Dialogue
9708 - M198	Tony/Todd	<p>RFI/CMS Schedule Discussion —</p> <p><u>RFI Schedule</u> Zone A - Draft document approval meeting 9/9/97. Zone C - Additional field work underway, data presentation 9/9/97, anticipated document approval meeting 10/14/97. Zone E - Pre-submittal review (sites 1-20) 9/9/97; (sites 21-50) 10/14/97; Draft document submittal 11/12/97. Zone F - Pre-submittal review 10/14/97; Draft document submittal 11/12/97. Zone G - Pre-submittal review 11/12/97; Draft document submittal 12/16/97. Zone H - Document approval meeting 9/9/97. Zone I - Comment resolution meeting 9/9/97. Zone J - 60% progress meeting 9/9/97. Zone K - Consensus on Bkgnd meeting 9/9/97. Zone L - 60% progress meeting 9/9/97.</p> <p><u>CMS Schedule</u> Zone A - Potential scoping meeting 9/9/97. Zone C - To be determined. AOC 607 - IM scoping meeting 9/9/97. SWMU 166 - IM scoping meeting 9/9/97. Zone H - Work plan will be distributed next week for review.</p>

Issue No.	Responsible	Dialogue
9708 - M199	Daryle	<p>FY '98 Execution Plan Discussion — \$13.9 M has been earmarked for remedial activities. Of that, \$712,000 is budgeted for EBS updates. \$13.2 M is budgeted for the Detachment.</p> <p>\$10 M of this money cannot be used until an execution (obligation?) plan is submitted to NAVFAC. The money must be obligated and/or the work tasked by the end of the 2nd quarter (31 MAR 98), or it may be utilized by the DET elsewhere.</p> <p>Question asked: How can we identify and expedite clean up work at sites across the base?</p> <p>EnSafe states that we already have 95% of the data that we need for the RFI. We inherently know that 15 to 20% of the total sites will need some kind of clean up. The remaining 80% are still gray and will require some negotiation to determine their disposition. If we are willing to move forward with IMs at sites that exhibit GW contamination, we can probably obligate the entire DET budget early in the year.</p>
9708 - D106	Team	<p>Team Consensus to schedule a focused meeting to identify potential IM sites base-wide for FY '98 implementation. Meeting set for 8/25/97 ; 1030 at the NBC NH-46 Band Room. EnSafe will pull together a team of core RFI personnel to develop site summaries and macro-data packages. Have no idea at this point what this effort will do to schedule impacts, suggestion made to leave a half hour at the end of the IM meeting to discuss RFI document schedule impacts in light of expedited IM scoping, work plan approvals, and execution.</p>
9708 - M200	Tony/Paul	<p>Natural Attenuation Parameters — Tony handed out the list of parameters that is found in the Comp WP. Team Consensus was reached to add these parameters to all future quarterly GW sampling events. Tony will check into the need for adding CO₂ to the list.</p>
9708 - M201	Joe	<p>Mission, Vision, & Goals Revisit — Joe stated that in his review of our MV&G statements he found that the mission and goal were very similar, almost the same statement with some different wording. Suggested to make the goal(s) more specific and set time lines or milestones for completion and revisits.</p> <p>Jay suggested reviewing the MV&G from another team and offered to distribute copies of the Cherry Point PT package for our team's review (Attached to these PT minutes).</p> <p>Further suggestion was made to post a copy of the MV&G at each team meeting in similar fashion to the Meyers-Briggs chart. Joe would like an hour at the next available meeting to re-develop our MV&G. Team Consensus</p>

Issue No.	Responsible	Dialogue
9708 - M202	Daryle	<p>Pre-RAB Discussion — RFI schedule is subject to change, and we need to inform the RAB of our plans to expedite the IMs at many of the sites across the base. DHEC investigated the odor problem at CTF on a hot day and was unable to locate a source. DET is awaiting delivery of the activated carbon filter that will be installed on the vent pipe of tank O. The City of N.Charleston and the N. Charleston School District met in July to discuss interest in pursuing a conveyance for CTF. Community members are still championing plans for a major recreational park.</p> <p>CTF Update - Still working on funding issues with DLA. Have re-use interest from the City and School Board. We need resolution of the re-use request "in writing" to help expedite the funding issues.</p> <p>SWMU 166 Update - Show the historical use maps and explain. Outline future investigative plans. Announce that we are expediting the IM for this site. Present the info on the (2) dry cleaners identified on the other side of I-26.</p>

Issue No.	Responsible	Dialogue
9708 - M203	Kevin	<p>DET Update and Presentation of IM Progress — Kevin handed out a summary table of the IM progress to date (Attached to the minutes). Jay asks: Is the DET issuing final completion reports before disposal of wastes has been completed? Answer was in some cases... Yes. Suggestion made to follow the completion reports with a cover letter and copies of all pertinent disposal documentation.</p> <p>SWMU 14 - 5 excavation areas have been completed, 2 small areas remain. DET discovered 93 (5-gallon) DANC drums buried behind building 1879. Also have 35 cu. yds. of soil taken from the surface of identified anomalies, characterization has indicated that this soil is non-haz. Kevin presented a letter to EPA and DHEC requesting a variance from the IM work plan for disposal of this soil. With the exception of the DANC drums, all of the other anomalies have turned out to be non-hazardous.</p> <p>SWMU 8 - Kevin delivered an interim status report (as required) to EPA and DHEC since this IM is likely to span more than a year for implementation. Backfilling in area 1 has been hampered by rain. Three trenches have been excavated in area 2, and over 13,000 gallons of waste oil has been collected from the surface of the trench water since excavation. Question asked: How deep is the sludge? DET has excavated 5-feet below the GW table and is starting to see clean soil. The GW is 5-8 feet bgs. DET has tried to address the limitations of the horizontal collection system by designing a vertical supplement to account for variations in the GW level. Question asked: When do we stop pumping oil? Point was made that this action is an Interim Measure, and this site could be a good model for when an IM ends, and the CMS/CMI begins. DET is researching costs and plans to submit a proposal to SDIV for an upgraded skimmer system for the area 2 trenches. Half of the identified sludge at area 2 has been excavated to date. Decision points for focused actions at this site: 1) Do we install an upgraded collection system for the free product at this site? 2) Do we fill in the current trenches and wait for the CMS/CMI? 3) DET is currently hesitant to continue excavation activities due to the amount of free product collecting in the trenches.</p> <p>SWMU 5 - Excavation has been extended laterally across the site. Current excavation depth is 3-feet. Approximately 75 cu. yds. left to dig. Suggestion to add an Estimated Completion Date column to the DET summary table.</p> <p>SWMU 7 - Slab and soils have been excavated. Lead contamination has been remediated, two areas left to complete (10'x10'x2' pesticide area) and (15'x13'x2' PCB area). Next step is to fully define the extent of the PCB contamination. DET is planning to purchase a field Gas Chromatograph to replace the immuno assay kits currently being used.</p> <p>SWMU 38 - Extent has not been fully delineated. Two areas have been excavated (6'x6'x4') totaling 10 cu. yds. Future plans include further extent delineation and covering the existing excavations with metal plates.</p>

Issue No.	Responsible	Dialogue
9708 - M203	Kevin	<p>DET Update and Presentation of IM Progress (Continued) — AOC 503 - Second set of data has been submitted to UXB International. DET did not find any significant anomalies in the 10 acre search area. No further investigation is planned.</p> <p>AOC 500 - Awaiting SDIV contracts to assign a private subcontractor to perform the waterborne UXO search. Will be completed in series with AOCs 501 and 502.</p> <p>SWMU 37 - Work plan is 90% complete. Implementation of this IM is actually included within the scope of the Zone L RFI investigation. Jeri (RDA) would like timely notification of all cross-connects identified.</p> <p>AOC 611 - Work Plan is in review, currently negotiating with regulators for clean up levels. Question: Can we revise the WP clean up goals to be the current background values for metals? Tony was given action to settle this issue with Johnny offline before the next PT.</p> <p>AOC 696 - Same disposition and actions as AOC 611.</p> <p>SWMU 25 Sampling - Planned to begin next week in the footprint of the demolished Annex building.</p> <p>No Further Action Sites - AOC 636, AOC 693, AOC 661, AOCs 670 & 684, and SWMUs 19 & 121.</p> <p>Unfunded Working Projects - Zone G Grid PCB Sites, SWMU 3, AOC 699</p>
9708 - M204	Paul	<p>SWMU 39 Hess Update — Hess has submitted a work plan to the DHEC District office for an offsite investigation of petroleum releases from their property.</p>

Issue No.	Responsible	Dialogue
9708 - M205	Jay	<p>Zone J Eco-Waterbody Background Study — Jay introduced representatives of Tetra-Tech to provide a brief on the plans for the Zone J Background Study. Gary Benfield and Steve Clark stated the first action is to review the Zone J work plan to get their orientation to the study area. Then a literature search will be performed to collect all available info on the Cooper River environment. Next they will compile the ecological specifics for the area, i.e., indigenous species, river flow rates, sediment loading rates, etc. With the help of the phase I sampling data they will begin to calculate background values for sediment and surface water. And finally, they will attempt to build a model strategy for contaminant allocation studies including Zone J and areas above and below the base.</p> <p>Gary stated that Tetra-Tech has experience with calculating aquatic background values working in San Francisco Bay. Tetra-Tech is the Navy's CLEAN contractor on the west coast. Portsmouth Naval Shipyard has developed an aquatic Fate and Transport model in conjunction with EPA Region I. Completion of the background study is tentatively planned for mid-October. Preliminary thoughts were to marry the results of this study with the decisions that are needed for Phase II Zone J sampling efforts. Team Consensus passed to make Jay Cornelius of EnSafe the coordinator with Tetra-Tech for this effort.</p>
9708 - M206	Joe	<p>Meeting Wrap-Up —</p> <p style="text-align: center;">±</p> <ul style="list-style-type: none"> • Flexible • Verbal review of Action Items • Good report from DET • Give/Take on tough issues • Outcome of \$\$ discussion shifted team focus • Moved to expedite remedial actions • Navy brought funding constraints to team • Team able to function, despite missing key member <p style="text-align: center;">-/Δ</p> <ul style="list-style-type: none"> • Slack on time this month • Better prepared for \$\$ discussion • DET needs funding from SDIV • DET not funded to attend meeting

Action Items

Issue No.	Responsible	Dialogue
9708 - A120	EnSafe	<p>Develop an (Expedited) base-wide Interim Measures list/package containing site names, rationale, supporting (macro) data, and presumptive remedies. List shall be distributed to the PT by 8/15/97. Meeting set for 8/25/97 1030 at NH-46 Band Room to discuss the potential IM list and make decisions and prioritize which IMs will be implemented during the early part of FY '98.</p>
9708 - A121	DET, SDIV EnSafe	<p>Develop a proposal for continuing remedial actions at SWMU 8 past sludge removal, i.e., free product collection. Discussion set for meeting on 8/26/97 following the IM expedition meeting.</p>

Technical Subcommittee Minutes

Issue No.	Responsible	Dialogue
9708 - A122	Tony	Resolve AOC 611 & 696 IM action levels with Johnny by next PT meeting.
9708 - A123	Jay	Respond to soil-gas letter. Research the EPA Oklahoma Development Lab's latest natural attenuation parameter list. Distribute an example Mission, Vision, and Goals deliverable from another partnering team (MCAS Cherry Point, NC)

Status of Interim Measures

at

Charleston Naval Complex

6 August, 1997

Completed Funded Projects

SDIV #	Project ID	Name	Project Description	Report Issued	Stockpiled?
96002	Swmu-44	Coal Field	Removed 15K tons of dirt/coal	7 Feb 97	no
96007	Swmu-54	Sand Blast Grit Area	Removed Approx. 37 lbs Haz waste (lead soil) and 1450 tons non-Haz blast media	7 Feb 97 - NEED COPY OF REPORT	no
96011	Aoc-690	Perimeter Road	Removed Debris along Perimeter Road	26 Aug 96	N/A
96014	Aoc-653	Auto Hobby Shop	Removed 3 Hydraulic Lifts and 360 cu yds of non-Haz soil (petroleum) - Stockpiled awaiting disposal	18 July 97	yes
96015	Swmu-159	Recycle Center Bldg.	Removed 18 cu yds of Non-Haz soil (Chrysene). Soil stockpiled at Bldg 1601 awaiting disposal.	23 May 97	yes
96016	Aoc-574	Bldg 9 Petroleum Spill	Removed 45 cu yds of Non-Haz soil (Petroleum). Soil stockpiled at Bldg 1601 awaiting disposal.	18 July 97 - NEED COPY OF REPORT	yes
96018	Aoc-626	Viaduct Road	Removed 450 cu yds of Non-Haz soil (Petroleum) and installed horizontal collection system. Soil stockpiled at Bldg 1601 awaiting disposal	23 May 97	yes
96014	Swmu-42	Former Asphalt Plant	Removed 5.4 cu yds of Non-Haz soil (lead) - Disposed of at Chambers Landfill	24 July 97	no
96018	Swmu-25 Process Closure	Bldg 44 Demolition	Demolished Annex (105' X 25') Removed 330 tons of Haz Material (Chromium/Lead Concrete), 60 tons Non-Haz waste (concrete), and 6 tons Asbestos Waste (Roofing).	15 July 97 - NEED COPY OF REPORT	no
96017	Swmu-83 Process Closure	Bldg 9 Foundry	Cleaned interior of Bldg 9 (Lead dust, Asbestos, PCB's, & Petroleum)	30 May 97 - NEED COPY OF REPORT	no

Working Funded Projects

SDIV #	Project ID	Name	Project Description	Current Status	Project Lead	Stockpiled?
96028	Aoc 707-708	Spill Bldg 1795 (707) & Btwn NS-688 & 669 (708)	Removed 5.6 cu yds of Non-Haz soil (Petroleum) from Aoc-707. No soil was removed from Aoc-708 due to field/confirmation sampling yielding satisfactory results. Soil from Aoc-707 stockpiled at Bldg 1601 awaiting disposal.	Report is in Detachment review. Estimated Date for Issue 14 August 97.	Smalls	yes
96017	Swmu-14	Chemical Disposal Pond	Detachment has surveyed field using EM-61 metal detector and is in process of uncovering and removing 34 Ensafe identified anomalies and 50 Det identified anomalies. SCDHEC approval ltr dtd 14 Feb 97 - Field work Started 8 April 97.	Removed 93 five gallon DANC containers as of 7/25/97. Removed 46 cu yds of "DANC" soil of which 11.2 cu yds is Haz (oxidizer). The 35 cu yds of removed topsoil from other areas that was potentially Haz is stockpiled and awaiting disposition. The DET has taken 4 random visual samples for "BB's" (results: none found) and 2 composite samples for total metals analysis and TCLP (results: Non-Haz). Workplan states to dispose of as Haz waste - need PT ok to dispose as Non-Haz. There are 2 anomalies remaining to investigate along with the completion of the remaining "DANC" area consisting of 2 trenches 20' X 6' by 4' in depth. Restarted work on 6 August 97 due to roll-off dumpster arriving at site. ECD for completion of the site is mid-August 97.	Moyer	yes
96017	Swmu-8	Oil Sludge Pits	Remove oil sludges from 2 areas - SCDHEC approval ltr dtd 7 Nov 96. Field work commenced 7 Nov 96.	Received funding increase 9 July 97 - currently cleaning up Area #1 and formulating Area #2 options while the disposal contract is being put in place (about a 6 week process) In Area #1 - removed and disposed of 600 tons of construction debris (concrete), 380 tons of asphalt, and 437 ft of asbestos coated piping. Actively disposing of 240 cu yds of Non-Haz soil (PAH's) and filling in the excavation with clean fill. In Area #2 - Removed approximately 13K gallons of oil to date and need to address 2 issues prior to proceeding: 1- recovery system -vs- removal/fill and 2- contract for disposal.	Stoney/Thom as	no

SDIV #	Project ID	Name	Project Description	Current Status	Project Lead	Stockpiled?
96020	Swmu-5	Battery Wrecking Pad	Remove lead contaminated soil - SCDHEC Approval ltr dtd 14 Feb 97 - Field work started 4 Mar 97.	Request for additional funding sent 17 July 97. Site in abeyance awaiting additional funding. Removed to date - 256 cu yds of Haz soil (lead). Left to excavate - approximately 70 cu yds. field work is estimated to take 3 weeks after restarting.	Morse	no
96015	Swmu-7	Old Public Works Storage	Remove PCB contaminated slab/soil, lead soil, and pesticide soil. SCDHEC Approval ltr dtd 23 Jan 97 - Field work started 20 Feb 97.	Request for additional funding sent 5 June 97. Site in abeyance awaiting additional funding. Removed to date: 283 tons of PCB contaminated soil & concrete, 30 cu yds of Non- Haz lead soil, and 5 cu yds of Haz pesticide soil. After funding is authorized, then a \$200,000 contract for disposal will be initiated which will take 6 weeks to get in place. Field work should complete 1 month after contract is in place.	Lewis/Gunter	no
96014	Swmu-38	B-1605 outside Storage Area	Remove pesticide contaminated soil. SCDHEC Approval ltr dtd 31 Mar 97 - Field work started 24 April 97.	Unable to determine a volume to be excavated based on Immunoassay testing. An increase in funds for this job has been received and over-expended due to waste disposal in excess of the estimated amount. The site is being secured and the holes covered with metal plates until further characterization and delineation of extent can be made for submittal of additional funding request.	Smalls	no
96016	Aoc-503	Marsh UXO	Locate 2 Mark 17 torpex depth bombs. SCDHEC Approval ltr dtd 24 Oct 96 - Field work started 29 Oct 96.	8 Anomolies were identified by NAVEOD TECHDIV, Indian Head, MD. 7 anomolies were excavated down to a max depth of 17 feet. The data set taken by TECHDIV along with a data set taken by the DET with the EM-61 was sent to UXB International (contractor) for evaluation. His report on this site was unfunded and will be delivered in conjunction with the waterbourne UXO contract. The last anomoly is approximately 30 feet BSL and TECHDIV evaluation is that it does not display the characteristics of a Mark 17 depth bomb.	Hardin	N/A
97014	Aoc-500	Waterbourne UXO Pier T	Find/Remove 2 Mark 47 Torpex Depth Bombs at end of Pier T. SCDHEC Approval ltr dtd 24 Oct 96. SDIV Notice to Proceed dtd 19 May 97.	Contract is being put in place - Naval Weapons Station contracting department is actively aquiring \$40,000 contract for this job.	Hardin	N/A

SDIV #	Project ID	Name	Project Description	Current Status	Project Lead	Stockpiled?
97014	Aoc-501	Waterbourne UXO Channel	Find/Remove 2 Mark 47 Torpex Depth Bombs in the channel between Piers X & Y. SCDHEC Approval ltr dtd 24 Oct 96. SDIV Notice to Proceed dtd 19 May 97.	Contract is being put in place - after AOC 500	Hardin	N/A
97014	Aoc-502	Waterbourne UXO Pier G	Find/Remove 3 five inch shells at southwest end of Pier G. SCDHEC Approval ltr dtd 24 Oct 96. SDIV Notice to Proceed dtd 19 May 97.	Contract is being put in place - After AOC-500	Hardin	N/A
97037	Swmu-37	Dye Test of Sanitary Sewer	Test for sewer/storm drain interconnection.	Funding received 27 May 97. Workplan is in DET review (@90%), still compiling data for dye injection rates and injection points. WP scheduled for draft issue 15 August 97.	Morse	N/A
97030	Aoc-611	Former Bldg 1264 Vehicle Maint.	To remove approximately 280 cu yds of soil (metals & benzo's).	Comments to draft WP received 17 March 97 (SCDHEC) and entered, second set of comments received 8 July 97 (SCDHEC) questioning incorporations made. Awaiting SDIV (Hunt) discussion with PT on the removal action having the option to cease at background levels if RBC's are unachievable. After this issue is resolved, the corrected WP will be sent out for review and await a SCDHEC approval ltr.	Wheeler	N/A
97030	Aoc-696	Annex Radar Site PCB's	Remove 6 transformers, PCB & Arsenic contaminated soil, and a 22' by 24' concrete slab.	Comments to draft WP received 6 June 97 and entered, awaiting SDIV (Hunt) discussion with PT on the removal action having the option to cease at background levels if RBC's are unachievable. After this issue is resolved, the corrected WP will be sent out for review and await a SCDHEC approval ltr.	Lewis	N/A

"No Further Action" - Unfunded Projects (NTP Not Issued)

SDIV #	Project ID	Name	Project Description
97005	Aoc-636	Torpedo storage area Bldg 661?	Determine requirements for clearing site of UXO's. Site was determined to require no Interim Measure Action. DET ltr Ser 608 dtd 2 June 97 issued to close out Project Order.
97005	Swmu-19/121	19- Solid Waste Xfer Station 121- SAA B-801	Assess site for run-off problems. Site was recommended to be addressed with Swmu-9 and determined to require no Interim Measure Action at this time. DET ltr Ser 579 dtd 19 May 97 issued to close out Project Order.
96008	Aoc-693	Fuse & Primer House, Clouter Island	Investigate/Remediate "white substance" from Fuse and Primer house. Site was determined to require no Interim Measure Action. DET ltr Ser 607 dtd 2 June 97 issued to close out Project Order.
96008	Aoc-670 & 684	Skeet & Pistol Range	Formulate approach for actions needed concerning lead shot in the soil. RFI sampling indicates isolated hits above 400ppm. DET PEP submitted to remove top 4" of topsoil and dispose of as Haz waste (due to ecological concerns and the waste (lead shot) was "contained" in the soil) was disapproved by SDIV due to excessive disposal costs and uncertainty of the soil characterization. Recommendations were submitted to SDIV in DET ltr Ser 585 dtd 19 May 97 which was issued to close out this Project Order.

"Working" - Unfunded Projects (NTP Not Issued)

SDIV #	Project ID	Name	Project Description	Current Status	Project Lead
97005	Aoc-661	UXO Storage shed	Determine requirements for clearing site of UXO's.	Site was determined to require no Interim Measure Action. DET to issue ltr to close out Project Order.	Hardin
97005	Swmu-3	Former B-428 Pesticide Mixing Area	Remove approx 13 cu yds of soil (pesticides).	Project Execution Package (cost estimate) submitted 20 May 97. Awaiting funding to proceed. Workplan already prepared and will be sent out for review upon funding approval.	Lewis
97005	Zone G Grid PCB's	Grid Sample PCB Removal	Remove approximately 740 cu yds of PCB contaminated soil (<50 ppb).	Project Execution Package (cost estimate) submitted 20 May 97. Awaiting funding to proceed. Site was delineated by the DET using Immunoassay kits for an estimated volume of 740 cu yds. Soil is < 50 ppb and will be sent to a sub-title D landfill (Chambers) for disposal.	Stoney
96008	Aoc-699	Storm Drain Cleanout	"Jet-Rod" Storm Drain Piping and clean Identified Catch Basins from the furthest upstream to the associated outfall.	Project Execution Package for this site was revised several times due to SDIV adding extra catch basins to the package. Latest PEP was submitted 4 June 97 and is awaiting SDIV funding. Workplan will take approximately 2 weeks to generate and submit as a draft for review. DET tasked on 29 July 97 to submit explanation of PEP overexpenditures prior to SDIV funding any additional funds. ECD: TBD	Morse

To <i>DAVE BACKUS</i>	From <i>J. Bassett</i>
Dept./Agency	Phone # <i>ETH.</i>
Fax <i>(901) 377-2454</i>	Fax #
NSN 7540-01-317-7565 5099-101 GENERAL SERVICES ADMINISTRATION	



GOALS - CNSV. ET.

MEASURING TEAM

6 - MONTH GOALS

TECHNICAL GOALS:

Date Completed

1. OU#1

- Strategies for comprehensive RI/FS
- Treatability Study Stripper Barn - Hot Spot System
- Treatability Study Site 16 Landfill - AS/SVE System

2. OU#2

- Complete RI/FS
- Sign ROD - Natural Attenuation w/ Hot Spot Remediation
- RD/RA Complete Design and Begin Soil Remediation

3. OU#3 ROD Signed and RA Completed

4. Prepare Draft Team Process Documents

- Comprehensive Facility Work Plan (H&S, SSP, QA/QC. etc.)
- Decision Plan

5. Identify Data Gaps and Report Format for Technical Presentation for OU#4 & OU#13

6. Schedule and Plan OU#9, 10, 14, & 15

TEAM GOALS:

1. To Be a Highly Functioning Team, Recognized by All of Our Organizations

2. Update SMP/ Plan Schedules & Funding

3. Review and Update Tier II Deliverables

4. Capture & Report Successes

5. Foster High Level of Trust and Commitment

6. Team Submits/Wins Environmental Award





MCAS Cherry Point Partnering Team



12 - MONTH GOALS

1. Set and Track Goals for 1 Year (CT)
2. Initiate FFA Negotiations
3. Initiate O&M Contract with Camp Lejeune
4. Address RCRA/CERCLA/UST integration and procedures
5. OU#4 & 13 Complete Any Additional Necessary Field Report and Submit Draft RI

Summary Statement:

The team has taken a long look at our goals and determined where we want to head from here. We feel we have turned the corner, as demonstrated in this meeting, and have now come together as a team. The past struggles have made us determined to continue building good working relationships between team members. We are excited about the makeup of the team and see the continued participation of each of the team members as crucial to the growth of this team to a highly functioning, successful, and self facilitating group. In the next few sessions we will be reviewing the Tier II deliverables and improving strategies for future work.





MCAS Cherry Point Partnering Team



OTHER GOALS

1. Meetings Scheduled Around Milestones
2. Team Process in Place
3. Concise Brief Reports, Accurate (error free)
4. Enhancement Meeting Skills and Communication Skills
5. Eliminate MOB Mentality
6. All Future Meetings – This One*
7. Beat Lejeune at Paint Ball, Laser tag
8. Had Fun After 6 Months!
9. Headway on Intrinsic BIO
10. Ecological Training
11. Comprehensive Knowledge of NC Regulations.
12. Matt 100% Dedicated
13. Preferred A/E Contractor for LAN T DIV
14. Contaminant Maps
15. Using GIS in Meeting



Agenda
Naval Base Charleston Project Team Meeting
August 25, 1997

Monday (NH-46, Band room, Old Naval Hospital, Naval Base Charleston)

- ✓ 1030 - 1200 Discuss list of sites for Interim Measures/Expedited CMS
Objective; To identify sites which require further remedial action, come to consensus on what action to take, to set a schedule for implementation and determine impact on current schedule. The goal is to identify projects which are within the capabilities of the Detachment as supplemented by Bechtel where necessary. SOUTHDIV has been working internally on the mechanism of Bechtel/Det interaction in an effort to make this go smoothly.
- ✓ 1200 - 1300 Lunch
- ✓ 1300 - 1500 List of sites (continued)
- ✓ 1500 - 1530 TPH letter discussion *APPROACH IDENTIFIED IN THE*
Objective: A decision is requested on the draft letter that was provided to each member at the August project team meeting. This letter has been discussed with Paul Bristol by phonecon with Gabe Magwood and he has agreed to the letter as written. The letter has not been discussed with the Waste Assessment Group in DHEC (Seabrook), it would be appreciated if either Johnny, Paul or Ann could help in contacting Harold and making him aware of our proposal. We have discussed various disposal options with him in the past however we have not officially made a proposal such as is included in the letter.
This issue affects AOC 653 soil disposal. In past discussions with Johnny Tapia and Paul Bristol this soil has been proposed for treatment at the bio facility. Approximately half of the soil is suitable as fill material on the facility if this letter is approved as written.
- ✓ 1530 - 1545 Break
- ✓ 1545 - 1615 Monitoring Well abandonment
Objective: A decision is requested on a list of monitoring wells that is proposed for abandonment. Maps of the affected zones as well as lists of wells proposed for additional monitoring to date will be made available during the discussion. Methods of abandonment will also be discussed to ensure there is no question as to how the wells will be abandoned and whether these methods are appropriate.
The Navy is considering utilizing the Detachment to do this work also.
- ✓ 1615 - 1730 SWMU 8
Objective: A decision is requested on the installation of any type of collection system at this site, if any. In light of the earlier discussions (SWMU 8 is to be considered for hydraulic controls, gw extraction, horizontal well collection) further discussion may not be needed. The fill material for the current excavation may be dependent on the type of system selected so this may be the only remaining issue.
- ✓ Other issues.....
Zone J surface water samples.
Surface water and sediment samples for SYC -09, SYC-20 and NOI-09 will be deleted in addition to the mid-depth and upper sample as agreed to previously. NOI-03 was not collected in the initial round of sampling however we can collect this sample in subsequent rounds if the team still determines that it is necessary. SWMU 44 is a site where sediment samples were collected already as part of the site investigation. The Zone J initial sediment data is attached to the 14 August monthly progress report for July. Thank you for your patience in this matter.
- ✓ Project Team meeting minutes
Dave would you please reword the last plus in the meeting wrap up to say something more like, "Team was successful in addressing important issues despite the absence of a key member."

DID NOT
GET TO

Other agenda items
Zone F and I background discussion

PT AGENDA

PT MINUTES

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Minutes**

Date: 9/9/97 - 9/10/97

Place: Mt. Pleasant, SC

Time: 0800 - 1730

Attendees: Todd Haverkost, Dave Backus, Tony Hunt, Daryle Fontenot, Reece Batten, Paul Bergstrand, Johnny Tapia, Ann Ragan, Jay Bassett, Dann Spariosu, Joe Land

Invited Guests: Jeri Johnson (RDA), Tom Fresilli (BCO), Mac McNeil (Bechtel-RAC), Bobby Dearhart, Kevin Tunstall (DET), Greg Temple, Steve Waldron, Britton Dotson, Mark Bowers, Larry Bowers, Jay Cornelius, Jack Mayfield (EnSafe), Glenn Easterby (Tier II POC)

Leader: Jeri Johnson

Scribe: Dave Backus

Discussion/Decisions

Issue No.	Responsible	Dialogue
9708 - M207	Jeri	<p>Introductions/Action Item Review</p> <p>Introduce Glenn Easterby as the South Carolina Tier II Point of Contact. Glenn has worked with many members of the team before and is looking for input from the team as to how he can be the most effective.</p> <p>Review action items from the August PT meeting.</p>
9708 - M208	Dave	<p>Comparison/Contrast of Data Presentation Techniques —</p> <p>Data from AOC 559 (Zone E) was used to compare/contrast risk mapping vs. concentration contour mapping. This presentation was in response to the 8/27/97 letter received from DHEC. The goal of this presentation was to develop a hybrid data presentation that provides the information needed to make RFI decisions.</p> <p>After the presentation, Team Consensus was reached to look at mapping the isoconcentrations of those COCs that drive risk at each site. DHEC was still unsure as to whether this was enough. Team still needs to define the specifics on contour intervals, contour method, and report format issues.</p>
9708 - M209	Greg	<p>Zone E Pre-submittal Review Sites 1 - 20 —</p> <p>Greg Temple presented the summary review of the first 20 sites in the Zone E RFI report. Handouts were provided summarizing the site background, data results, risk approach, and RFI recommendations.</p>
9708 - M210	Jay C.	<p>Zone J 60% Progress Review —</p> <p>Jay presented the first round data results for surface water and sediment at each of the Zone J subzones; Cooper River, Shipyard Creek, and Noisette Creek. No apparent patterns were established with the exception of elevated levels of most contaminants around the mouths of the dry docks in the Cooper River.</p> <p>Paul requested "hits only" tables for all of this first round data.</p> <p>EPA requested a data summary of all Zone J samples with appropriate location maps.</p>

Issue No.	Responsible	Dialogue
9708 - D107	Team	Team decision on Shipyard Creek sample points. On the next round of samples, team consensus was reached to collect surface water samples at the following sediment sample locations: SYC - 3, 5, 9, 11, 15, 18, and NOI - 3.
9708 - M211	Todd	<p>Zone C Additional Field Work Summary ---</p> <p>SWMU 44 - Nine confirmation soil samples were taken within the IM area. The samples were analyzed for SVOCs and Metals. Results were compared with their respective RGOs, results indicate that the residual contamination does not exhibit unacceptable risk. Recommend the site for CMS in soil and GW. Need more GW monitoring during implementation of the CMS.</p> <p>AOC 508/511 - Two temporary wells were installed. Analytical results were ND for pesticides. EnSafe also collected geotechnical data to calculate a site-specific SSL. Recommend No Further Investigation. Well 511-002 was converted to a permanent well due to high FID response and organic odors at the well head.</p> <p>AOC 512 - Two temporary wells were installed. ND for pesticides, recommend No further Investigation.</p> <p>AOC 700 - Regulator concerns were with VOCs, Pest, and Metals. Sampled well 044-08 which was ND for all constituents. Recommend No Further GW Investigation for this site.</p> <p>Plans for the Zone C RFI report are to submit document revisions at the Oct. PT meeting for review.</p>
9708 - M212	Britton	<p>SWMU 166 Update ---</p> <p>Results of DPT sampling across I-26 show the lithology in these locations is very similar to the lithology on the Naval Annex. Three of the sample points were completed as temporary piezometers. GW elevation shows a slight gradient from Rivers Ave. toward I-26.</p> <p>Tony feels we have enough data across I-26 to show that there are 2 source plumes. EnSafe would like to install clusters (shallow, intermediate, deep) of piezometers along the west side of I-26 just outside the Annex to further define the influence of the interstate on shallow GW and fully delineate the extent of the contamination originating from SWMU 166.</p> <p>Progress will continue on the Zone K RFI Report. EnSafe will initiate access agreements with SCDOT for permanent wells along either side of the interstate. EnSafe was given action to propose a plan for additional wells within 3 weeks.</p>

Issue No.	Responsible	Dialogue
9708 - M213	Todd	<p>AOC 607 Update — Sampling has been completed within the sanitary sewer line. Issue for this update will focus on the storm sewer located near the site. The storm sewer did not exhibit flow, consequently no water samples were collected. DPT water samples from Zone L sample locations 37 and 38 detected PCE and TCE at 7 to 10 feet bgs. Have good indication from Zone L sample results that contaminants are not migrating down the outside of the storm sewer line.</p> <p>Jay suggests notifying the North Charleston Sewer District quickly about the contamination identified in the sanitary sewer. Tony has already started the notification process, he was waiting on the results of EnSafe's investigation of all lines in the 607 area.</p> <p>Next step is to continue progress with the Zone F RFI Report and continue development of the expedited IM work plan. Question as to whether the team needs to update the RAB on this site at next months meeting. Team Consensus to not single this one out, rather update the RAB on all the expedited IMs.</p>
9708 - M214	Todd	<p>RFI/CMS Schedule Update —</p> <p><u>RFI STATUS</u> Zone A - Additional info still in review, EnSafe will prepare isocon maps for SWMUs 2 and 39. Zone C - Revisions will be submitted 10/14, possible report approval meeting in November. Zone E - Pre-submittal of sites 21-50 planned for 10/14. Draft RFI Report submittal planned for 11/7. Zone F - Pre-submittal review planned for 11/11. Zone G - Pre-submittal review planned for 12/9. Zone I - Awaiting comments, review proposed for 10/14. Zone J - Field work ongoing. Zone K - Pre-submittal planned for 11/11. Zone L - Field work ongoing</p> <p><u>CMS STATUS</u> Zone A - Draft work plan due 11/9. Zone C - Site selection (scoping) 10/14. Draft WP will probably wait on RFI approval. Zone H - WP in regulatory review. Working toward this being standard format. Expedited IMs - Scoped 8/26 Conceptual Plans 9/15 Peer review complete by 9/22 Present plans of action to team 10/14 Performance Specifications due 10/28</p>

Issue No.	Responsible	Dialogue
9708 - M215	Kevin	<p>DET Update — 600 tons of stockpiled soil from several sites has been characterized and will soon be transported off base to a landfill. USCG has been asking for use of AOC 653 (Zone H, Auto Hobby Shop). DET is awaiting funding for removal of the stockpiled soil. Question asked: Can the stockpile be moved to Bldg. 1601 without exceeding existing funding capacity? YES - but that would increase the total disposal cost since the material would have to be handled at least twice.</p> <p>SWMU 14 - Over 100 drums of DANK have now been excavated. Drums extend under the slab of Bldg. 1897, a Butler style storage building. Team Consensus to demolish the building and complete the drum excavation. Daryle will notify the CSO of plans to demolish the building.</p> <p>SWMU 8 - Area 1 backfilling is complete. Area 2 - Design discussions for an oil collection system are still in progress. Oil is still being skimmed after visual inspection of the pit daily. Det found 2 new areas of oily sludge while re-contouring area 1 for completion. These areas are SE and SW of the original area 1 excavation. They will collectively be referred to as area 3. DET feels these areas are associated with spills from the waste oil lines feeding the sludge pits.</p> <p>SWMU 5 - Funding is in. Currently working on disposal contracts. Estimate 1.5 months to complete.</p> <p>SWMU 7 - Awaiting field GC delivery which will be instrumental in fully delineating the extent of contamination and removal area.</p> <p>SWMU 38 - Same as above.</p> <p>AOC 503 - Data interpretation has been received. Completion report due out next month.</p> <p>AOCs 500, 501, 502 - Investigation put out for bid in the CBD, which closes 10/19. Estimate work start 2 months from receipt of bids.</p> <p>AOC 611 - Awaiting DHEC approval letter. Johnny states that the letter has been mailed. Estimate work start by 9/30.</p> <p>AOC 696 - Transformer removal was started this week.</p> <p>DET distributed the sampling results from SWMU 25 soil samples for the team's review. Next step is to identify how the sample results will affect the RFI plans for the site e.g., soil IM or CMS.</p>

Issue No.	Responsible	Dialogue																								
9708 - M216	Larry	<p>Zone A CMS Site Selection — Revisit of the agreements from the June PT meeting</p> <table border="0" style="width: 100%;"> <tr> <td></td> <td style="text-align: center;"><u>NFA</u></td> <td style="text-align: center;"><u>CMS</u></td> </tr> <tr> <td>SWMU 1</td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>SWMU 2</td> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td>SWMU 39</td> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td>SWMU 38</td> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td>SWMU 43</td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>AOC 506</td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>SWMU 42/AOC 505</td> <td></td> <td style="text-align: center;">X</td> </tr> </table> <p>SWMU 43 NFA conditional on the resolution of the thallium in GW issue. Team Consensus to move 42/505 to CMS now that IM is complete.</p>		<u>NFA</u>	<u>CMS</u>	SWMU 1	X		SWMU 2		X	SWMU 39		X	SWMU 38		X	SWMU 43	X		AOC 506	X		SWMU 42/AOC 505		X
	<u>NFA</u>	<u>CMS</u>																								
SWMU 1	X																									
SWMU 2		X																								
SWMU 39		X																								
SWMU 38		X																								
SWMU 43	X																									
AOC 506	X																									
SWMU 42/AOC 505		X																								
9709 - D108	Team	Team Consensus on Zone A CMS List as it appears now.																								
9709 - M217	Jay B.	<p>CMS Zone H Comments/Concerns —</p> <ul style="list-style-type: none"> • Maps of RFI data that justify CMS sampling points would be helpful. • Need to be more specific on cleanup goals. • Suggestion made to include risk map, isocons of COCs, and risk summary tables from RFI report instead of the current sample location maps. <p>Next steps -</p> <ol style="list-style-type: none"> 1) Revisit Jay's Zone H CMS scoping comments, make sure they are addressed. 2) Provide better visual presentations. 3) Make WP focus on filling data gaps instead of stating or proposing cleanup goals. No problem with stating a range of cleanup goals; will be revisited in the actual CMS exercise. 																								

Issue No.	Responsible	Dialogue
9709 - M218	Jack	<p>Zone L 60 % Progress Review —</p> <p>The following is proposed for Phase II sampling along the sewer lines: For each sample point where organic COPCs are detected, add 4 sample points surrounding the original with; 1 sample upgradient of GW flow, 2 samples downgradient of GW off the line, and 1 final sample downgradient of GW next to the sewer line. All samples will be approximately 50-feet from the original point. EPA suggests multiple sample depths for those detects not associated with another RFI site.</p> <p>Zone E Bldg 80 focused review - The Zone E RFI detected VOCs in GW outside Bldg. 80 toward dry dock 5. Zone L DPT also detected VOCs in GW at 699GP058E1 and outside the closest manhole to Bldg. 80 at 037GP036E1.</p> <p>Question concerning what will trigger Phase II sampling. How can we ensure that the Phase II samples are correctly located? The following conditions will trigger Phase II sampling:</p> <ol style="list-style-type: none"> 1) VOC detections 2) MCL exceedances 3) Main focus will be on GW. <p>How will GW DPT metals data results be interpreted:</p> <ol style="list-style-type: none"> 1) Anomalies, or very high exceedances 2) Coordination or correlation with surrounding RFI wells. 3) Will NOT be a simple comparison with MCLs. <p>Railway sampling is complete, data is being evaluated.</p> <p>Outfall data was received a week ago and is still being evaluated. Outfall data results will be shared with the Zone J team.</p>
9709-M219	Joe	<p>Parking Lot Items —</p> <p>Attach Tier II POC expectations exercise from the May or June PT meeting to these minutes.</p> <p>CAMP Discussion —</p> <p>Team Consensus to continue to use the PT schedule for a month to month basis. Propose to update the CAMP quarterly concurrent with the quarterly RCRA Permit Reports submitted to DHEC.</p> <p>RAB Debrief from last month —</p> <p>Tony did a great job with the Environmental Update and handling of community comments.</p>

Issue No.	Responsible	Dialogue
9709 - M220	Joe	<p>Wrap Up ---</p> <p style="text-align: center;">±</p> <ul style="list-style-type: none"> • Good faith effort on Comparison/Contrast data presentation. • Zone L data package was good. • Effort was made to address some of DHECs concerns. • Agreement on data presentation. • Continued monthly DET updates. • Wednesday was very productive. • Team talks with each other very well, everyone's concerns are heard. • Decision Tree solution to very tense issue, diffused the tension. • Team self-facilitation. • Team Building Exercise at opening of meeting. • Comparison/Contrast presentation was valuable. • Facilitator input during tough parts. • Team is open and honest during wrap up sessions. <p style="text-align: center;">-/Δ</p> <ul style="list-style-type: none"> • Last minute scramble for meeting place. • Don't like having tables read to me. • Zone E Pre-Submit should have been in Technical Subcommittee meeting. • Zone J 60 % Review should have been in Technical Subcommittee meeting. • SWMU 166 presentation rambled. • EnSafe not comfortable on agreements reached on presentation of data. • Still not listening to each other. • Loss of temper • Not receiving data packages before technical presentations in meetings. • Late Agenda • Some spoke too much, others too little. • Technical presentations seem to only address 2-3 members of the team. • Rise of tension, maybe function of number of people at the table. • Need more consensus tests throughout the meeting. • Greater attention to meeting others needs. • We vs. They atmosphere this meeting. • Didn't feel effective. • Skipped review of ground rules this month, then broke many in the meeting. • You/I statements. • Did not do anything fun as a team. • SDIV management should give position on DET.

Action Items

Issue No.	Responsible	Dialogue
9709 - A124	SDIV	Provide a schedule and work plan for expedited actions to mitigate off site migration of contaminants from the following sites: SWMU 17, SWMU 39, SWMU 166, and AOC 607.
9709 - A125	Paul	Inform DHEC Trident District personnel of the dry cleaner issues across 1-26. Report progress at the next PT meeting.

Project Team Meeting Minutes

Issue No.	Responsible	Dialogue
9709 - A126	Britton	Develop a plan for additional wells at SWMU 166 by 10/3. Once the plan and maps have been distributed, a telecon will be set for discussion.
9709 - A127	Tony	Notify North Charleston Sewer District of the AOC 607 contaminants entering the sanitary sewer by next Mon. 9/15.
9709 - A128	Todd	Resubmit Zone I hits tables to Paul, make sure that the MCL column is correct for GW.
9709 - A129	Daryle	Notify CSO of DET's plans to demolish Bldg. 1897 in order for the excavation of DANK drums to be completed.
9709 - A130	DET	Provide records of pumping dates and total oil removed from the SWMU 8 Area 2 pit to Paul.
9709 - A131	Reece	Provide schedule for resolution of un-funded IM projects as part of the IM updates every month.
9709 -A132	Daryle	Invite Cdr. Berotti, Rick Davis, and Doug Dangerfield to next months PT meeting to discuss the execution of the expedited IMs. Suggestion made to make sure the team discusses this issue before SDIV management arrives at the meeting. Bring SDIV management in on Thurs. of next months meeting.

START

M-207
A-124
D-107

Naval Base Charleston
Environmental Cleanup Project Team
Draft Meeting Minutes

Date: 9/9/97 Place: SHEM CREEK INN Time: 0800

Attendees: JAY, DANN, TONY, DARYLE, JOHNNY, PAUL, ANN, JOE, TODD, DAVE REESE

Invited Guests: GLENN EASTERBY, MARK BOWERS, LARRY BOWERS, TOM FREJILLI, STEVE WALBRON, BRITTON DOTSON

Leader: JERI JOHNSON Scribe: Dave Backus

Discussion/Decisions

9709 - M207	JERI	INTRO - INTRODUCE GLENN EASTERBY - TIER II LINK TO CHS TEAM REVIEW ACTION ITEMS
DATA PRESENTATION COMPARISON / CONTRAST		
9709 - M208	DAVE	Prior to beginning the Zone E presubmittal review, AOC 559 was used to compare/contrast risk mapping vs. concentration mapping/contouring. This exercise was in response to the 8/27/97 ^{150CON} OREC letter. TEAM CONSENSUS TO LOOK AT MAPPING THOSE COCs THAT DRIVE RISK AT EACH SITE. STILL NEED TO BEFINE CONTORING METHODS
9709 - M209	GREG TEMPLE	<u>ZONE E PRE-SUBMITTAL REVIEW</u> FIXED POINT RISK EVALUATION - FOR SITES WHERE THERE IS LITTLE OR NO EXPOSURE POTENTIAL FULL BLOWN HTRA FOR SITES W/ EXPOSURE POTENTIAL <u>SUMMS 5, 18, AOC 605 -</u> LEAD, AS, BAP RISK DRIVERS RECOMMENDED FOR CHS

9709 -	GREG ↑	<p><u>SWMU 21, 54 -</u> AS, BC, Pb, BaP RISK DRIVERS RECOMMEND CWS - IWM PERFORMED</p> <p><u>SWMU 22, 25, AOC 554</u> As, Cd, Cr, Ni, PCE, TCE IWM HAS REMOVED 44 ANNEX, DIRT IS SAMPLING SOIL BENEATH SLAB GW - Cr PCE, TCE CHLORININE RECOMMEND CWS - PROB NEED DEEP WELL ALSO CONCERN OVER ELECTRICAL VAULT W/ INFILTRATING GW</p>
9709 -	↑	<p><u>SWMU 23, 63, AOC 540, 541, 542, 543 -</u> NO APPROXIMATE COCs RECOMMEND NFA</p> <p><u>SWMU 53/AOC 526</u> BaP DETECTED BUT NOT DRIVING RISK RECOMMEND NFA JAY SUGGEST</p> <p><u>SWMU 65/AOC 544, 546</u> ALDRIN DIBORIN IN SOIL METALS & VOCs IN GW RECOMMEND CWS NEED TO EXPLAIN SOURCES WELL IN REPORT</p>
9709 -	↑	<p><u>SWMU 67</u> MERURY GUAGE ROOM NO Hg DETECTS RECOMMEND NFA</p> <p><u>SWMU 70 AOCs 548, 549</u> Cu Pb BaP - COCs SOIL VOCs MET - COCs GW RECOMMEND CWS FOR GW</p> <p><u>SWMU 81</u> 3 CONC & 2 SED SWAMP NO COCs DETECTED RECOMMEND NFA</p>
9709 -	↑	<p><u>SWMU 83, 84, AOC 574</u> As Pb BaP - SOIL RISK DRIVERS As IS DRIVING GW RISK RECOMMEND CWS - SOIL, GW, DUST IN FLAG 9</p> <p><u>SWMU 87, 172, AOC 564</u> As COC IN SOIL - NOT DRIVING RISK JAY HAS QUESTION ABOUT CONTENT OF O/W SEPT ON CLENNOW PAUL WANTS TO SEE PIPING DIAGRAM FOR O/W SEPT RECOMMEND CWS - SHAW GW NFA - SOIL</p>

BLOWUP THIS AREA FOR GW DETERMINATION, LOOK AT CONTAMINANTS IN SURROUNDING SITES

9709 -	GREG ↑	<p><u>SWMU 97</u> NO SOIL COC'S FORMER SMA AS GW COC'S RECOMMEND NFA <u>SWMU 100</u> FORMER SMA NO SOIL COC'S RECOMMEND NFA <u>SWMU 102</u></p> <p style="text-align: right;">* PAUL WANTS TO SEE USAGE CHRONOLOGY (TIMING) OF ALL SITES</p> <p style="text-align: right;">NO AS EXCEEDS BLEND SCREENING</p>
9709 -	↑	<p>RECOMMEND NFA <u>SWMU 106, AOC 603</u> AS - SOIL COC, NOT DRIVING RISK MS, BS, MS - COC'S GW NOT DRIVING RISK RECOMMEND NFA <u>SWMU 145</u> MERCURY SPILL SITE DIOXIN, AS COC'S FOR GW NOT DRIVING RISK RECOMMEND CWS FOR AS IN GW</p>
9709 -	↑	<p><u>SWMU 170, 171</u> PCB MISSILE TUBE SITE AROCHLOR 1260 NOT DR RISK NFA <u>SWMU 173</u> NO COC'S IN SOIL AS IN SED FROM CATCH BASINS NFA SOIL IM FOR SED IN BASIN</p> <p style="text-align: right;">* INCLUDE UTILITY FIGURES IN APPENDIX OF REPORT</p>
9709 -	↑	<p><u>AOC 525</u> PAINT BOOTH NO COC'S SOIL OR GW NFA <u>AOC 528</u> NO COC'S RECOMMEND NFA</p>

9709 - MZ10	JWY	<p>ZONE J 60 & PROGRESS REVIEW (COOPER RIVER)</p> <p>REVIEW OF SURFACE WATER RESULTS - NO APPARENT PATTERNS</p> <p>REVIEW OF SEDIMENT RESULTS (COOPER)</p> <p>PAUL REQUESTS HITS TABLES FOR ALL THIS DATA</p> <p>ZONE J IS NOT CRITICAL IN PRIORITY, WITH EXCEPTION OF THE DREDDING AREAS FOR USCO, DATTENS, AND BRASWELL</p> <p>REVIEW OF SHIPYARD CREEK SAMPLES</p> <p>REVIEW OF NOISSETTE CREEK SAMPLES</p> <p>DECISION ON STC SURFACE WATER - SAMPLE @ POINTS 3, 11, 9, 15, 18 TEAM CONSENSUS, DAD - CHECK WITH BRITTON AND REPORT TO JMT BY THURS 9/11</p>
9709 -		EPA REQUESTED A DATA SUMMARY OF ALL ZONE J HITS WITH ACCOMPANYING LIMITS
9709 - MZ11	TODD	<p>ZONE C ADDITIONAL FIELD WORK SUMMARY</p> <p>SWMU 44 - 9 CONF SAMPLES WITHIN 1M AREA FOR VOC & METALS. RESULTS WERE COMPARED TO THEIR RESPECTIVE RGO & DATA INDICATES RESIDUAL CONTAMINATION DOES EXHIBIT RISK. RECOMMEND SITE FOR CMS SOIL & GW. NEED MORE GW MONITORING DURING CMS.</p> <p>AOC 508/511 - 2 TEMP WELLS WERE INSTALLED - ND FOR PESTS, COLLECTED GROUNDWATER AND CALCULATED SITE-SPECIFIC SSL</p> <p>RECOMMEND NO FURTHER INVESTIGATION. WELL 511-002 WAS CONVERTED TO PERM WELL DUE TO HIGH FID & SMELL</p>
9709 -	↑	<p>AOC 512 2 TEMP WELLS - ND FOR PESTICIDES</p> <p>RECOMMEND NO FURTHER INVESTIGATION</p> <p>AOC 700 - CONCERNS WITH MET, PEST, VOC'S</p> <p>SAMPLED WELL NBCC-044-08 ND FOR ALL CONSTITUENTS</p> <p>RECOMMEND NO FURTHER GW INVESTIGATION FOR THIS SITE</p> <p>PLAN TO SUBMIT DOCUMENT REVISIONS AT OCT. PT MEETING THEN</p>
9709 - MZ12	BRITTON	<p>SWMU 106 UPDATE -</p> <p>RESULTS OF DPT SAMPLING ACROSS I-26 LITHOLOGY IN THESE LOCATIONS WAS VERY SIMILAR TO THE LITHOLOGY ON THE ANNEX</p> <p>3 POINTS WERE COMPLETED AS TEMP PIEZOMETERS</p> <p>SLIGHT GRADIENT TOWARDS THE WEST (TO I-26)</p> <p>TONY STATED FEELS THAT WE HAVE ENOUGH DATA TO STOP LOOKING ACROSS I-26. ENSAFE WOULD LIKE TO HAVE CLUSTERS OF PIEZOMETERS ALONG THE WEST SIDE OF I-26 JUST OUTSIDE THE ANNEX.</p>

PROGRESS WILL CONTINUE ON THE RFI REPORT.

ENSAFE WILL INITIATE ACCESS AGREEMENTS WITH SCOOT FOR PERMANENT WELLS ALONG EITHER SIDE OF THE INTERSTATE

ENSAFE HAS ACTION TO PROPOSE A PLAN FOR ADDNL WELLS WITHIN 3 - WEEKS.

TEAM CONSENSUS

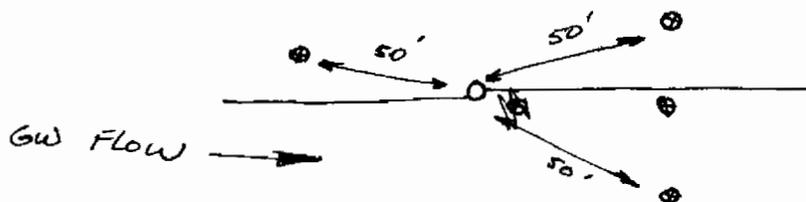
9709 - M213	TODD	<p><u>AOC 607 UPDATE -</u></p> <p>SAMPLING HAS BEEN COMPLETED WITHIN THE SEWER LINE. ISSUE FOR THIS UPDATE WILL BE THE STORM SEWER NEAR THE SITE.</p> <p>STORM SEWER DID NOT HAVE FLOW, NO WATER SAMPLES WERE COLLECTED. ZONE L SAMPLE POINTS DPT WATER SAMPLES 37 & 38 DETECTED PLE, TLE, HAVE GOOD INDICATION THAT CONTAMINANTS ARE NOT MIGRATING DOWN THE OUTSIDE OF THE STORM SEWER. JAY SUGGEST NOTIFYING THE SEWER DISTRICT QUICKLY. NEXT STEP CONTINUE PROGRESS ON THE RFI REPORT AND</p>
9709 -	↑	<p>CONTINUE WITH DEVELOPMENT OF THE EXPEDITED I/M WORK PLAN. QUESTION TO WHETHER WE NEEDED TO UPDATE THE RAB ON THIS SITE AT NEXT MONTH'S MEETING. SUGGESTION MADE TO UPDATE RAB ON ALL EXPEDITED I/Ms DON'T SINGLE THIS ONE OUT (AOC 607).</p> <p>TEAM CONSENSUS</p>
9709 - M214	TODD	<p><u>RFI/CMS SCHEDULE UPDATE -</u></p> <p>ZONE A - ADDNL INFO STILL IN REVIEW, ENSURE IS PREPARING 150CON MAPS FOR SWMS 2, 3, 9</p> <p>ZONE C - REVISIONS SUBMITTED BY 10/14, POSSIBLE APPROVAL MEETING IN NOV.</p> <p>ZONE E - PRE-SUBMITAL OF SITES 21-50 PLANNED FOR 10/14 DRAFT DOC SUBMIT 11/7/97</p> <p>ZONE F - PRE-SUBMIT 11/11</p> <p>ZONE G - DRG - SUBMIT 12/9</p> <p>ZONE I - AWAITING COMMENTS, PROPOSED FOR 10/14</p>
9709 -		<p>ZONE J - FIELD WORK ONGOING</p> <p>ZONE K - PRE SUBMIT 11/11 ON TRUCK</p> <p>ZONE L - 60% 9/10</p> <p><u>CMS</u></p> <p>ZONE A - DRAFT WP DUE 11/9</p> <p>ZONE C - SITE SELECTION (SCOPING) 10/14 DRAFT WP WILL PROBABLY WAIT ON APPROVAL OF RFI</p> <p>ZONE H - IN REGULATORY REVIEW, PLAN TO WORK ON MAKING THIS A STANDARD FORMAT</p> <p>EXPEDITED I/M - SCOPED - 8/26 CONCEPTUAL PLAN - 9/15</p> <p>PEER REVIEW - 9/22 PRESENT TO TEAM - 10/14 PERFORMANCE SPEL - 10/28</p>

7-10 FEET
bgs

9709 - MZ15	KEVIN	<p><u>DET UPDATE -</u></p> <p>600 TONS OF STOCKPILED SOIL HAS BEEN CHARACTERIZED AND WILL BE TRANSPORTED TO A LAND FILL SOON</p> <p>USCG HAS BEEN ASKING FOR USE OF AOC 653 (HOBBY SHOP ZONE H)</p> <p>DET IS AWAITING FUNDING FOR REMOVAL OF STOCKPILED SOIL</p> <p>QUESTION ASKED CAN STOCKPILE BE MOVED TO 1601 WITH EXISTING FUNDS - YES, BUT WOULD INCREASE TOTAL DISPOSAL COST.</p> <p><u>SWMU 14</u> - OVER 100 DRUMS OF DANK HAVE NOW BEEN EXCAVATED, DRUMS EXTEND UNDER THE SLAB OF A BLDG. 1897 WHICH IS A BUTLER STORAGE BLDG. TEAM NEEDS <u>CONSENSUS</u> BLDG TO BE DEMOLISHED AND FINISH EXCAVATION. DARYLE</p>
9709 -	↑	<p>GIVEN ACTION TO LOOK INTO DEMOLITION W/ CSO.</p> <p><u>SWMU 8</u> - AREA 1 BACKFILL IS COMPLETE</p> <p><u>AREA 2</u> - DESIGN DISCUSSIONS FOR A COLLECTION SYSTEM IS STILL IN PROGRESS</p> <p>OIL IS STILL BEING SKIMMED BY VISUAL CONFIRMATION OF THE PITS DAILY.</p> <p>DET FOUND 2 NEW AREAS OF OILY SLUDGE WHILE RE CONTAINING AREA 1 FOR COMPLETION. THESE AREAS ARE SE & SW OF THE ORIGINAL AREA 1. THEY WILL BE COLLECTIVELY REFERRED TO AS AREA 3. DET FEELS THESE AREAS ARE ASSOC. WITH THE PIPELINE FEEDING</p>
9709 -	↑	<p>THE PITS.</p> <p><u>SWMU 5</u> - FUNDING IS IN, WORKING ON DISPOSAL CONTRACT ESTIMATE 1.5 MD TO COMPLETE</p> <p><u>SWMU 7</u> - AWAITING FIELD GC DELIVERY TO FULLY DELINEATE CONTAMINATION AREA.</p> <p><u>SWMU 3B</u> - SAME AS ABOVE</p> <p><u>AOC 503</u> - DATA HAS BEEN RVD. COMPLETION REPORT DUE OUT NEXT MONTH</p>
9709 -	↑	<p><u>AOC'S 500, 501, 502</u> - PUT OUT FOR BID ON CBD WHICH CLOSES 10/19 ESTIMATE 2 MD FROM RECEIPT OF BIDS.</p> <p><u>AOC 611</u> - AWAITING DHEC APPROVAL LETTER</p> <p>JOHNNY STATES LETTER IN MAIL ESTIMATE START BY 9/30.</p> <p><u>AOC 696</u> - TRANSFORMER REMOVAL HAS BEEN STARTED THIS WEEK</p>

SWMU 25 SAMPLING RESULTS - DET DISTRIBUTED DATA RESULTS FOR REVIEW

9709 - MZ16	LARRY	<p><u>ZONE A CMS SITE SELECTION -</u></p> <p>AGREEMENTS AS OF JUNE PT MEETING</p> <table border="0"> <thead> <tr> <th></th> <th>NFA</th> <th>CMS</th> </tr> </thead> <tbody> <tr> <td>SWMU 1</td> <td>X</td> <td></td> </tr> <tr> <td>SWMU 2</td> <td></td> <td>X</td> </tr> <tr> <td>SWMU 39</td> <td></td> <td>X</td> </tr> <tr> <td>SWMU 38</td> <td></td> <td>X</td> </tr> <tr> <td>SWMU 43</td> <td></td> <td></td> </tr> <tr> <td>ADC 506</td> <td>X</td> <td></td> </tr> </tbody> </table> <p>X - COND. THALLIUM ISSUE TEAM CONC TO LEAVE AS NFA FOR NOW UNLESS THALLIUM BECOMES MAJOR ISSUE</p>		NFA	CMS	SWMU 1	X		SWMU 2		X	SWMU 39		X	SWMU 38		X	SWMU 43			ADC 506	X	
	NFA	CMS																					
SWMU 1	X																						
SWMU 2		X																					
SWMU 39		X																					
SWMU 38		X																					
SWMU 43																							
ADC 506	X																						
9709 -		<p>SWMU 42/ADC 505 POTENTIAL IM FOR LEAD REMOVAL HAS BEEN COMPLETED TEAM CONSENSUS TO MOVE THIS SITE TO THE CMS</p>																					
9709 - D108	TEMM	TEAM CONSENSUS ON LUT AS IT APPEARS NOW.																					
9709 - MZ17	JAY	<p><u>CMS ZONE SPECIFIC CONCERNS -</u></p> <ul style="list-style-type: none"> REALLY HELPFUL TO INCLUDE MAPS OF RFI DATA THAT JUSTIFY THE SAMPLE LOCATIONS PROPOSED IN THE CMS NEED TO BE MORE SPECIFIC ON CLEAN UP GOALS <p>SUGGESTION MADE TO INCLUDE RISK MAP WITH</p>																					
9709 - ↑		<p>ISOCONS OF COC CHEMICALS, AND RISK SUMMARY TABLES FROM RFI REPORT INSTEAD OF THE CURRENT SAMPLE LOCATION MAPS.</p> <ul style="list-style-type: none"> NEXT STEPS - ① REVISIT JAY'S ZONE H CMS SCOPING COMMENTS, MAKE SURE INCORPORATED ② PROVIDE BETTER VISUAL PRESENTATION ③ MAKE WP FOCUSED ON FILLING DATA GAPS INSTEAD OF STATING OR PROPOSING CLEAN UP GOALS <p>EPA WOULD AT LEAST LIKE A RANGE STATED IN WP.</p>																					
9709 - MZ18	JACK	<p><u>ZONE L 60% REVIEW -</u></p> <p>PROPOSAL FOR PHASE II SAMPLING ON SEWER LINES IN ZONE L</p> <p>FOR EACH SAMPLE POINT WHERE COCs WERE DETECTED COME BACK WITH 4 SAMPLES SURROUNDING THE ORIGINAL AS OUTLINED BELOW:</p>																					



27 EPA SUGGESTS MULTIPLE DEPTH SAMPLES FROM THOSE DETECTS NOT READILY ASSOCIATED WITH OTHER SITES

9709 -	↑	<p><u>ZONE L 60% REVIEW -</u></p> <p>BLDG 80 (ZONE E) FOCUSED REVIEW - ZONE L DPT ALSO DETECTED VOC'S IN GW AT 6796058E1 AND ALSO THE CLOSEST MANHOLE AT 0316P036 OUTSIDE</p> <p>QUESTION CONCERNING WHAT WILL TRIGGER PHASE II SAMPLING. ALSO IS IT IN THE CORRECT PLACE</p> <ol style="list-style-type: none"> ① VOC'S ② MCL EXCEEDANCE ③ MOST FOCUS WILL BE ON GW
9709 -	↑	<p>METALS IN GW -</p> <ol style="list-style-type: none"> ① ANOMALIES, VERY HIGH EXCEEDANCES ② COORD. WITH SURROUNDING WELLS ③ NOT SIMPLE COMPARISON TO MCL <p>RAILWAY SAMPLING IS COMPLETE, DATA BEING EVALUATED</p> <p>OUTFALL SAMPLING DATA RWD A WEEK AGO AND IS BEING EVALUATED. PACKAGE OF RESULTS WILL BE SHARED WITH ZONE J TEAM.</p>
9709 - M219	JOE	<p>WRAP UP PARKING LOT DISCUSSION</p> <p>ATTACH TIER II LINK EXPECTATIONS FROM (MAY OR JUNE) TO THESE MINUTES</p> <p>CAMP DISCUSSION - CONTINUE TO USE PT SCHEDULE ON MONTH TO MONTH BASIS. PROPOSE TO UPDATE THE CAMP CONCURRENT WITH PERMIT QUARTERLY REPORTS. TEAM CONSENSUS</p> <p>RAB DEBRIEF FROM LAST MONTH - TONY DID GREAT JOB WITH ENV. UPDATE & COMMUNITY COMMENTS</p>
9709 - M220	JOE	<p>ZONE J 60% DISCUSSION EPH</p> <p>WRAP UP -</p> <p style="text-align: center;">+</p> <ul style="list-style-type: none"> ✓ GOOD EFFORT FOR DATA PRESENT • ZONE L DATA PKG WAS GOOD • EFFORT TO ADDRESS SOME OF DITEC CONCERN • AGREEMENT ON DATA PRESENT ✓ CONTINUED DET PRESENTATION • WAS VERY PRODUCTIVE ✓ TEAM TALKS TO EACH OTHER VERY WELL
		<ul style="list-style-type: none"> • SCRAMBLE FOR MEETING PLACE • DON'T LIKE HAVING TABLES BOUND TO ME • ZONE E SHOULD HAVE BEEN IN TECH SUB • ZONE J " " " " • SLOW 166 RUMBLED • ENSURE NOT COMFORTABLE ON AGREEMENT ON DATA PRESENT • STILL NOT LISTENING TO EACH OTHER • DET LOW TEMPER • NOT RECEIVING DATA PACKAGES • LATE AGENDA • SOME SPOKE TOO MUCH, OTHERS TOO LITTLE • TECH PRESENTATIONS, SPOKE TO 2-3 PEOPLE ONLY • RISE OF TENSION, NUMBER OF PEOPLE AT TABLE • NEED MORE CONSENSUS TEST • GREATER ATTENTION TO MEETING OTHERS NEEDS. ✓ WE VS. THEY ATMOSPHERE • DIDN'T FEEL EFFECTIVE ... EDUCATION

9709 -	↑	<p>WRAP UP</p> <hr/> <p>+</p> <ul style="list-style-type: none"> • FACILITATOR DURING TOUGH POINTS • OPENNESS DURING CLOSE OUT <p>—</p> <ul style="list-style-type: none"> • SKIPPED BASIC GROUND RULES • YOU / I STATEMENTS • DO SOMETHING FUN • SDIU MGMT SHOULD GIVE POSITION ON DEF
9709 -		
9709 -		
9709 -		

Action Items

9709 - A124	SDIV	<p>39 } NEED WORK PLAN FOR EXPEDITED 166 } ACTIONS TO MITIGATE OFF SITE MIGRATION 607 } OF CONTAMINANTS FROM THESE SITES 17 } ALSO NEED A SCHEDULE FOR SUBMITTAL OF THESE PLANS</p>
9709 - A125	PAUL	<p>ACTION TO INFORM DHEC DISTRICT PERSONNEL OF THE DIRTY CLEANER ISSUES ACROSS I-26. REPORT PROGRESS AT NEXT PT MEETING</p>
9709 - A126	ENSAFE	<p>DEVELOP PLAN FOR ADDNL WELLS¹ WITHIN 3 - WEEKS. BRITTON WILL HAVE LEAD FOR FOR THE PLAN. ONCE PLAN AND MAPS HAVE BEEN DISTRIBUTED, TELECON WILL BE SET FOR DISCUSSION.</p> <p style="text-align: right;">AT 8/20/16</p>
9709 - A127	TONY	<p>NOTIFY NORTH CHS SEWER DISTRICT OF THE AOC 607 CONTAMINANTS ENTERING THE SANITARY SEWER BY NEXT MONDAY 9/15</p>

ACTION ITEMS

TO PAUL

9709 - A128	ENSAFE	RE-SUBMIT ZONE I HITS TABLES AND MAKE SURE MCL COLUMN IS CORRECT FOR GW.
9709 - A129	DARYLE	LOOK INTO DEMOLITION OF BLDG. 1897 TO PERMIT FURTHER EXCAVATION OF DUNK DRUMS AT SWMU 14
9709 - A130	DET	PAUL REQUESTED RECORDS OF OIL REMOVED AND DATES PUMPED FROM SWMU 8 AREA 2 PITS
9709 - A131	REESE	PROVIDE SCHEDULE FOR RESOLUTION OF UN-FUNDED IM PROJECTS AS PART OF THE IM UPDATES EVERY MONTH
9709 - A132	DARYLE	<p>INVITE CDR. BEROTTI AND RICK DAVIS TO, DAUG DANGERS</p> <p>A FUTURE TEAM MEETING TO DISCUSS THE EXECUTION OF THE EXPEDITED IM</p> <p>ALSO MAKE SURE DET IS IN ATTENDANCE</p> <p>SUGGESTION MADE TO SET TIME ASIDE NEXT MONTH BEFORE THIS AGENDA ITEM, THEN BRING</p> <p>CONSENSUS PASSED SDU IN ON THURS OF NEXT MONTH'S MEETING.</p>

Status of Interim Measures

at

Charleston Naval Complex

10 September, 1997

Completed Funded Projects

SDIV #	Project ID	Name	Project Description	Report Issued	Stockpiled?
96002	Swmu-44	Coal Field	Removed 15K tons of dirt/coal	7 Feb 97	no
96007	Swmu-54	Sand Blast Grit Area	Removed Approx. 37 lbs Haz waste (lead soil) and 1450 tons non-Haz blast media	7 Feb 97	no
96011	Aoc-690	Perimeter Road	Removed Debris along Perimeter Road	26 Aug 96	N/A
96014	Aoc-653	Auto Hobby Shop	Removed 3 Hydraulic Lifts and 360 cu yds of non-Haz soil (petroleum) - Stockpiled awaiting disposal	18 July 97	yes
96015	Swmu-159	Recycle Center Bldg.	Removed 18 cu yds of Non-Haz soil (Chrysene). Soil stockpiled at Bldg 1601 awaiting disposal.	23 May 97	yes
96016	Aoc-574	Bldg 9 Petroleum Spill	Removed 45 cu yds of Non-Haz soil (Petroleum). Soil stockpiled at Bldg 1601 awaiting disposal.	18 July 97	yes
96018	Aoc-626	Viaduct Road	Removed 450 cu yds of Non-Haz soil (Petroleum) and installed horizontal collection system. Soil stockpiled at Bldg 1601 awaiting disposal	23 May 97	yes
96014	Swmu-42	Former Asphalt Plant	Removed 5.4 cu yds of Non-Haz soil (lead) - Disposed of at Chambers Landfill	24 July 97	no
96018	Swmu-25 Process Closure	Bldg 44 Demolition	Demolished Annex (105' X 25') Removed 330 tons of Haz Material (Chromium/Lead Concrete), 60 tons Non-Haz waste (concrete), and 6 tons Asbestos Waste (Roofing).	15 July 97	no
96017	Swmu-83 Process Closure	Bldg 9 Foundry	Cleaned interior of Bldg 9 (Lead dust, Asbestos, PCB's, & Petroleum)	30 May 97	no
96028	Aoc 707-708	Spill Bldg 1795 (707) & Btwn NS-688 & 669 (708)	Removed 5.6 cu yds of Non-Haz soil (Petroleum) from Aoc-707. No soil was removed from Aoc-708 due to field/confirmation sampling yielding satisfactory results. Soil from Aoc-707 stockpiled at Bldg 1601 awaiting disposal.	20 Aug 97	yes

Working Funded Projects

SDIV #	Project ID	Name	Project Description	Current Status	Est. Completion	Stockpiled?
96017	Swmu-14	Chemical Disposal Pond	Detachment has surveyed field using EM-61 metal detector and is in process of uncovering and removing 34 Ensafe identified anomalies and 50 Dct identified anomalies. SCDHEC approval ltr dtd 14 Feb 97 - Field work Started 8 April 97.	35 cu yds of removed topsoil from non-DANC areas that was considered potentially Haz is stockpiled and awaiting disposition. The DET has taken 4 random visual samples for "BB's" (results: none found) and 1 composite split sample for total metals analysis and TCLP (results: Non-Haz). Workplan states to dispose of this 6" overburden as Haz waste. Informational ltr sent to SCDHEC and they responded with questions. Drum have been id's under the building but not thru to the other side.	28 Apr 98	yes
96017	Swmu-8	Oil Sludge Pits	Remove oil sludges from 2 areas - SCDHEC approval ltr dtd 7 Nov 96. Field work commenced 7 Nov 96.	Area #1 Completed - removed and disposed of 600 tons of construction debris (concrete), 380 tons of asphalt, and 437 ft of asbestos coated piping. In Area #2 - Awaiting SDIV direction on type of system to install prior to proceeding.	13 Jan 99	no
96020	Swmu-5	Battery Wrecking Pad	Remove lead contaminated soil - SCDHEC Approval ltr dtd 14 Feb 97 - Field work started 4 Mar 97.	Additional Funding received 9 Sept 97 - Checking on availability of disposal contractor.	2 Feb 98	no
96015	Swmu-7	Old Public Works Storage	Remove PCB contaminated slab/soil, lead soil, and pesticide soil. SCDHEC Approval ltr dtd 23 Jan 97 - Field work started 20 Feb 97.	Received additional funds 2 Sept 97 - awaiting arrival of Field GC to allow for deliniation of the site prior to continuing - ECD for GC arrival 30 Sept 97.	29 Jan 98	no
96014	Swmu-38	B-1605 outside Storage Area	Remove pesticide contaminated soil. SCDHEC Approval ltr dtd 31 Mar 97 - Field work started 24 April 97.	Unable to determine a volume to be excavated based on Immunoassay testing. The site has being secured and the holes covered with metal plates until further characterization and delineation of extent can be made for submittal of additional funding request. Currently awaiting arrival of Field Gas Chromatograph for screening - ECD for GC arrival 30 Sept 97	31 Mar 98	no
96016	Aoc-503	Marsh UXO	Locate 2 Mark 17 torpex depth bombs. SCDHEC Approval ltr dtd 24 Oct 96 - Field work started 29 Oct 96.	Data Evaluation for NAVEOD and a Private contractor has been received - Generating completion report.	10 Oct 97	N/A

SDIV #	Project ID	Name	Project Description	Current Status	Est. Completion	Stockpiled?
97014	Aoc-500	Waterbourne UXO Pier T	Find/Remove 2 Mark 47 Torpex Depth Bombs at end of Pier T. SCDHEC Approval ltr dtd 24 Oct 96. SDIV Notice to Proceed dtd 19 May 97.	Contract is being put in place - Commerce Business Daily closes 9/19/97 after which NWSTA will award contract - ECD for award is 17 Oct 97	20 Aug 98	N/A
97014	Aoc-501	Waterbourne UXO Channel	Find/Remove 2 Mark 47 Torpex Depth Bombs in the channel between Piers X & Y. SCDHEC Approval ltr dtd 24 Oct 96. SDIV Notice to Proceed dtd 19 May 97.	Contract is being put in place - ECD for contract award is 2 Feb 98	28 Oct 98	N/A
97014	Aoc-502	Waterbourne UXO Pier G	Find/Remove 3 five inch shells at southwest end of Pier G. SCDHEC Approval ltr dtd 24 Oct 96. SDIV Notice to Proceed dtd 19 May 97.	Contract is being put in place - Commerce Business Daily closes 9/19/97 after which NWSTA will award contract - ECD for award is 17 Oct 97	20 Aug 98	N/A
97030	Aoc-611	Former Bldg 1264 Vehicle Maint.	To remove approximately 280 cu yds of soil (metals & benzo's).	Awaiting SCDHEC approval letter - Current scheduling is based on approval by 30 Sept 97	5 Mar 98	N/A
97030	Aoc-696	Annex Radar Site PCB's	Remove 6 transformers, PCB & Arsenic contaminated soil, and a 22' by 24' concrete slab.	Site currently working	31 Jan 98	N/A

"Working" - Unfunded Projects (NTP Not Issued)

SDIV #	Project ID	Name	Project Description	Current Status	Project Lead
97005	Swmu-3	Former B-428 Pesticide Mixing Area	Remove approx 13 cu yds of soil (pesticides).	Project Execution Package (cost estimate) submitted 20 May 97. Awaiting funding to proceed. Workplan already prepared and will be sent out for review upon funding approval.	Lewis
97005	Zone G Grid PCB's	Grid Sample PCB Removal	Remove approximately 740 cu yds of PCB contaminated soil (<50 ppb).	Project Execution Package (cost estimate) submitted 20 May 97. Awaiting funding to proceed. Site was delineated by the DET using Immunoassay kits for an estimated volume of 740 cu yds. Soil is < 50 ppb and will be sent to a sub-title D landfill (Chambers) for disposal.	Stoney
96008	Aoc-699	Storm Drain Cleanout	"Jet-Rod" Storm Drain Piping and clean Identified Catch Basins from the furthest upstream to the associated outfall.	Awaiting funding from SDIV.	Morse

PT AGENDA

NAVAL BASE CHARLESTON

PROJECT TEAM MEETING AGENDA

LOCATION: Naval Research Center

October 14-16, 1997

Team Leader: Ann Ragan

Scribe: Dave Backus

Facilitator: Joe Land

October 14, 1997

Project Team Meeting

1000-1030 (Ann)

Introduction, ground rules and introductory exercise

Review of action items and agenda

1030-1100 (Joe)

Partnering

Mission and Vision

Objective: Finalize the Charleston Naval Base's Tier I team Mission and Vision.

1100-1200 (Joe)

Partnering

Tier II POC expectations and responsibilities

Objective: Define how the team envisions the roll and responsibilities of the SC Tier II POC.

1200-1300 **Lunch**

1300- 1430 (Tony)

Decision

Expedited Interim Measures

Objective: Decision by the team on proposals to be made by the Navy

1430-1530 (Team)

Information

RAB preparation

Objective: Discuss and prepare information to be presented at RAB meeting.

1800- RAB Meeting

October 15, 1997

Project Team meeting

0800-0930 (Joe)

Partnering

Team Building Exercise

Objective: Improve Team communication

0930-1000 (Jay/Joe)

Information

Exit from Team process

Objective: Define process for exit from team membership.

1000-1015 **Break**

1015-1115 (Ensafe)

Decision

Zone C Document Approval meeting

Objective: Define strategy for zone C sites going into CMS.

1115-1200(Todd/Tony)

Information

RFI/CMS/IM status

Objective: Information and update on dates on the Project Team Schedule.

1200-1300 **Lunch**

1300-1400 (Todd/Tony/Daryle)

Decision

Plan of Action and Milestones for EISMs

Objective: Discuss possible plan of action for Expedited Interim Measures sites.

1400-1445 (Daryle/Gabe)

Information

Update on UST Projects

Objective: Give the team a status report on UST projects at the base.

1445-1500 (Daryle)

Information

Environmental Condition of Property Map

Objective: Present the updated environmental condition of property at the base.

1500-1515 **Break**

1515-1545 (Ensafe)

Decision

SWMU 166 work update

Objective: Inform the team on the progress being made to characterize the off-site contamination at the Naval Annex.

1545-1730 (Paul)

Decision

Groundwater Flow Maps/ Other issues

Objective: Clarification and/or set path forward on various issues:

1. Quarterly groundwater flow maps from quarterly data by SWMU, area or zone as appropriate.
2. USGS Groundwater Flow Model:
 - One year later - resubmitting the Draft.
 - Less Data points considered
 - Have not seen new maps
3. Navy must continue groundwater monitoring on sites with likely and confirmed groundwater contamination.
4. Suggestion for Team to skip November PT Meeting.

1730-1830 (Joe)

Wrap up and Close out

October 16, 1997
Technical Committee
Location: Ensafe

1. Zone K and G Background (1 hr.)
2. Zone E pre-submittal meeting (3.0 hrs.)
3. Petroleum products screening limits (45 min.)
4. Zone H Draft CMS Work Plan (1 hr.)
5. Zone C CMS Scoping. (1.5 hrs)

PT MINUTES

PT AGENDA

PT MINUTES

PT AGENDA

PT MINUTES

**Naval Base Charleston
Environmental Cleanup Project Team Technical Subcommittee
Meeting Minutes**

Date: 12/8/97 **Place:** EnSafe Office, Mt. Pleasant **Time:** 10:45-1700

Attendees: Tony Hunt, Dann Spariosu, Todd Haverkost, Paul Bergstrand, Johnny Tapia

Invited Guests: None

Leader: Johnny Tapia **Scribe:** Todd Haverkost

Discussion/Decisions

9712S -M240	Team	<p>Review action items from October 1997 (A meeting was not held in November).</p> <p>All items were complete with the following exceptions:</p> <p>9710S-A140, Tony - proposed to complete master list of wells for abandonment/continued monitoring by 12/19.</p> <p>9710S-A143, Team - risk management decision document was deferred to the January team meeting because the subcommittee felt this item should be completed collectively as a team.</p>
9712S -M241	Todd	<p>Zone H RFI Report Addendum - Specifically SWMU 138/AOC 667</p> <p>In response to DHEC's comments on the addendum, the Navy and EnSafe presented/discussed additional data from the Zone I RFI (permeability data for the marsh clay) and Zone L RFI (DPT groundwater data) in an effort to demonstrate the site has been adequately characterized. It was informally agreed that regardless of the future course of action for the site, the addendum for this site will need to be revised to incorporate the additional data to provide the reviewers with a more thoroughly understanding of site conditions.</p> <p>The groundwater contamination appears localized but DHEC expressed a continued concern over the apparent lack of historical information regarding the operation of the OWS and the potential for vertical migration due to the physical properties of the contaminants.</p> <p>DHEC planned a site visit for 12/10 to look at the site prior to rendering a final opinion.</p>

9712S -M242	Tony	<p>SWMU 5 - The DET has performed an interim measure consisting of a excavating soil to remove lead contamination. The cleanup objective for the IM was 1300 ppm. The Navy is concerned that site soil with lead concentrations below 1300 ppm have the potential to leach lead to groundwater at concentrations greater than 15 ppb. As a result the Navy wants to backfill the site immediately to reduce the potential for creating a larger groundwater contamination concern. The possibility of mixing lime with the soil backfill material to bind the lead up in the soil matrix was discussed.</p> <p>DHEC is currently discussing lead cleanup levels and may ask the Navy to calculate a site specific number much the same as was required at the Kopper' s site. As a result, the Navy may be required to cleanup to levels less than 1300 ppm.</p> <p>In the interim the group agreed the Navy should backfill the hole and did not see the harm in adding lime even if it failed to have the desired effect. The Navy will further evaluate the proper ratio of lime to add and proceed with backfilling.</p>
9712S -M243	Todd	<p>SWMU 39 - Human health risk assessment for groundwater. At issue was the manner in which the exposure point concentration was defined using a "plume" approach.</p> <p>DHEC indicated that the Navy/EnSafe should have proposed the approach and given DHEC a chance to review it prior to using it in a document even though the approach is discussed conceptually in a supplement to RAGs.</p> <p>The Navy /EnSafe feel the plume method for defining exposure is more realistic than calculating a mean or 95% UCL for the entire area. DHEC didn' t necessarily disagree but wants a tech memo discussing the pros and cons of the approach prepared for their review prior to deciding on whether the approach is acceptable.</p> <p>The SWMU 39 discussion evolved into a bigger picture discussion regarding basic decision rules for evaluating groundwater. MCLs vs. Risk. If decisions are going to be based solely on MCLs then isn' t it irrelevant how EPCs are calculated. Should MCLs been used for screening as opposed to RBCs since DHEC is concerned some RBCs are greater than MCLs?</p>

9712S-M244	Todd	<p>Zone I RFI Report - Discussion of DHEC comments provided 11/07/97</p> <p>Because of the age of the report (submitted 1/96), an evaluation needs to be performed to look at RBCs that have changed and the impact that may have had on the screening process. If a majority of the sites appear to have been impacted the BRA may need to be re-evaluated.</p> <p>Need to incorporate grid well groundwater into SWMU/AOC specific discussions where appropriate.</p> <p>Assigning of a SWMU or AOC number to the dredge material area: The Navy feels the unit was regulated under a mechanism other than RCRA since this was a ACOE permitted disposal area under the CWA. However, this permit has since expired and the DMA has reached it' s capacity.</p> <p>DHEC feels the DMA should have a number. Tony stated that if DHEC insists that a number be assigned, the response from the Navy will likely be from legal counsel since this has implications for the Navy as a whole which reaches beyond his responsibilities for Charleston. Also, since a large percentage of the base is dredge spoil the Navy does not believe this area should be treated any different from the areas known to have been built up with dredge material.</p> <p>Need to include data from the soil samples collected after the last dredge event.</p> <p>The data presentation needs to include screening of the data and a risk evaluation to help determine how to proceed with the site.</p> <p>Assigning of a SWMU or AOC number to the former RTC facility: A number was not assigned originally because this area was not identified as needing an RFA. The only reason samples were collected was the fact NOAA was performing construction on the site prior to completion of the RFI. EPA was concerned because of several nearby sites a suggested that samples be collected at RTC for expedited analysis simply as a precautionary measure.</p> <p>DHEC agreed to take another look at the data and render an opinion in two weeks.</p> <p>AOC 684 - The RFA listed this as a Zone I site however, it was investigated with Zone H. The report should make note of that fact.</p>
------------	------	---

Action Items

9712S-A145	DHEC	Visit SWMU 138/AOC 667. Provide an opinion on the Navy's belief that the site has been adequately characterized. Due: 12/31
9712S-A146	EnSafe	Prepare a tech memo regarding the "plume" approach used for the GW assessment at SWMU 39. Due: 12/31
9712S-A147	DHEC	Review the RTC data and re-consider whether the site should receive a SWMU/AOC number. Due: 12/31
9712S-A148	EnSafe	Review DHEC's recommendation for additional RFI sampling in Zone I and prepare a proposal which reflects discussions per the comments provided. Due: 12/31

**Naval Base Charleston
Environmental Cleanup Project Team
Meeting Minutes**

Date: 12/9/97 & 12/19/97 **Place:** NISE East Conference Center **Time:** 0800

Attendees: Tony Hunt, Johnny Tapia, Paul Bergstrand, Daryle Fontenot, Dann Spariosu, Todd Haverkost, Joe Land, Mac McNeil

Invited Guests: Bobby Dearhart, Kevin Tunstall, Dan Morse, Joan Hartley, Diane Cutler

Leader: Johnny Tapia **Scribe:** Todd Haverkost

Discussion/Decisions

9712-M234	Johnny	<p>Introduction</p> <ul style="list-style-type: none"> • Review ground rules • Review action items: Carry over A134, A135, A136, A137 (Paul sent to Paul Bristol but hasn't received an answer, will try to get an answer by 12/19), A138 • Review minutes from October and provide feedback by 12/12 otherwise the comments will be considered final.
9712-M235	Daryle	<p>Environmental Condition of Property Map</p> <ul style="list-style-type: none"> • Navy wants to use the map as a tool for the CSO to quickly identify contaminated/uncontaminated property. • DHEC has concern that color coding for some areas is based on draft reports. • DHEC and EPA are not going to assume any liability for the navy's interpretation of the data. • Navy only wants to inform the regulators of the Navy's intended use of the map and acknowledges the Navy does assume all liability. The Navy emphasized the map will never be used as a sole decision making tool. It is only the first step in a process.

9712-M236	Daryle	<p>DSAN Brief</p> <ul style="list-style-type: none"> • The presentation was a "good news" story but for it to become a complete reality a lot of things have to happen right in 1998. • The brief was a property disposal strategy for the bases believed to be the 10 costliest. NAVBASE was ranked #8. The brief consisted of 2 parts - real estate and environmental. • A concern was expressed at the meeting regarding the large number of SWMUs/AOCs. Was NAVBASE the subject of a SWMU hunt? • A commander inquired why they should not take money from Charleston for bases that already have business plans and EDC applications in place. • A major concern is funding for FY99 which will be a big year for funding cleanup and the Navy is expecting a shortfall (Navy wide). This is the reason things need to go well in 1998.
9712-M237	Paul	<p>Monitored Natural Attenuation (MNA)</p> <ul style="list-style-type: none"> • DHEC wants to make sure we look at all sites where MNA may be considered and begin sampling at those sites now. • It must be demonstrated that MNA will reduce toxicity, mobility, and volume. • Monitoring will occur over a period of years. • Should consider both petroleum and chlorinated sites. • Tony would like to look at what the NRL did at SWMU 39 and possible have them attend the January PT meeting.
9712-M238	Todd/Mac	<p>SWMU 166 Update</p> <ul style="list-style-type: none"> • The Navy received the DOT encroachment permit the week of Thanksgiving. Plan to begin installing piezometers the week of 12/15. • Bechtel has been given a delivery order to begin an ISM. Mac explained the 3 step process for Bechtel to implement the delivery order. • Johnny asked if the Navy wanted to continue associating the site with SWMU 166 which is actually the sewer system or if they wanted to consider assigning the TCE contamination another number. The benefit is that it would likely keep the sewer system from being tied up later during potential property transfer. • Paul tried to work through the dry cleaner trust fund to get information on the 2 offsite facilities but hasn't received any info back yet.

9712-M239	Team	<p>Prioritization of Documents - The team evaluated the documents either currently in review or soon to be submitted (TBS) for review and prioritized the order in which documents would be reviewed. The outcome was as follows:</p> <ul style="list-style-type: none"> ① Part B Permit renewal (Submitted) ② Draft Zone H CMS Work Plan (TBS 12/10) ③ Final Zone C RFI Report (Submitted) ④ Final Zone A RFI Report (TBS 2/98) ⑤ Final Zone I RFI Report (TBS 3/98) ⑥ Draft Zone E RFI Report (Submitted) ⑦ Draft Zone K RFI Report (TBS 12/12) ⑧ Draft Zone F RFI Report (TBS 12/19) ⑨ Draft Zone G RFI Report (TBS 1/98)
9712-D110	Team	<p>Agreed by consensus to the prioritization of document review as listed in discussion item M239.</p>
9712-M240	Team	<p>Set the PT schedule/location for the next 6 months:</p> <ul style="list-style-type: none"> - January 12, 13, 14; Charleston - February 9, 10, 11; Charleston - March 9, 10, 11; Columbia - April 13, 14, 15; Charleston - May 11, 12, 13; Atlanta - June 8, 9, 10; Charleston
9712-M241	Daryle	<p>RAB Preparation</p> <ul style="list-style-type: none"> • Reviewed RFI progress update • Chicora Tank Farm <ul style="list-style-type: none"> - Initial activity will be prep for cleaning of tanks which should start the week of 12/15. - Actual cleaning will not start until the week of 1/5. The process should take 2 weeks. - Paul suggested Daryle ask the RAB again if they have noticed any odors since the carbon filter was installed. • Tony will brief on document status. • Daryle will mention UST removals/assessments. • Navy completing asbestos and lead based painting surveys in the housing area.

9712-M242	Kevin	<p>Interim Measures Update (Refer to handout dated 12/9 which was distributed at the meeting for detail on all IMs) and Zone L Dye trace update.</p> <p><u>Dye Trace/Storm Sewer Cross Connect Evaluation</u></p> <ul style="list-style-type: none"> • Building 1189 - shower and sink drains flow direct to river. • Building 69 - flow drains connect to storm sewer and discharge to outfall 38. • Building 68 - connect to storm sewer lines which discharge to outfall 41. Lines appear to go to a holding tank which overflows into a storm sewer manhole. • Building 177 - Shop floor drains connected to storm sewer lines which discharge to outfall 30.
9712-M243	Joe	<p>Training on Team Values - What is important to each of us individually and collectively as a team?</p> <p>Joe distributed a handout and an exercise was performed to help determine personal and professional traits and values expected by each member of the team.</p>

9712-M244	Johnny	<p>Post-RAB Critique</p> <hr/> <p style="text-align: center;">+</p> <ul style="list-style-type: none"> • Daryle - CTF, good phrasing, action • Daryle - Funding question well answered • Tony/Daryle - less technical language • Paul - good intervention to Hess question • Daryle - good response to school question about CTF • Tony - good public support of team member/compliment of DHEC reviews • Good support by team on permit question • Discussion on DASN briefing well done • RAB members that did attend seemed well informed • Daryle did not attempt to answer questions more appropriately directed to another agency • Daryle provide good answer to politics question • Boring - good that indicator that environmental concerns are under control/we're doing our job <hr/> <p style="text-align: center;">-Δ</p> <ul style="list-style-type: none"> • Boring • Lack of interest • Lack of RAB attendance • No closure on petroleum odor issue • Answer to funding question too long
9712-M245	Tony	<p>"Grouping" Groundwater in Zone C</p> <ul style="list-style-type: none"> • The basis for the discussion is the fact COCs (predominantly inorganics) have been identified in groundwater that do not appear to be related to releases from sites. • The Navy proposes that where groundwater concerns exist that cannot be associated with a site, the groundwater should be identified as a separate management unit. The benefit would be that sites could potentially be closed out if no soil concerns exist and groundwater could be addressed from a "big" picture perspective. • Data was not available at the meeting for the team to review a specific example so Tony agreed to prepare a submittal for the team to look at and discuss in January.
9712-M246	Mac	<p>Team Support from Bechtel</p> <p>Mac asked the team if they thought it would be beneficial for Bechtel to periodically present information on remedial strategies, remedial technologies, lessons learned from other sites, etc. The team agreed that presentations to the team would be helpful, particularly as we move into the CMS.</p>

9712-M247	Joe/Johnny	<p>Close Out/Wrap Up</p> <p style="text-align: center;">+</p> <ul style="list-style-type: none"> • Smaller group, more focused • Efficient, no posturing • DASN brief - brought out issues • Productive - well prepared • Location • Good discussion, focus • Prioritized report review • Meeting stayed on track • Meeting mechanics • Team training <p>Next Meeting Location: Charleston NAVBASE Band Room Begin on 1/12 at 1100 am Team Leader: Dann</p> <p style="text-align: right;">-Δ</p> <ul style="list-style-type: none"> • Tabled items due to missing members • BTC/RDA missed DASN brief • Asking for immediate decisions w/o prep or review time • Decisions called back into question
-----------	------------	---

Action Items

9712-A140	Tony	Formulate a flow chart/protocol outlining how the Navy will determine whether or not soil can be excavated from one area and used as fill in another. Due: By January PT meeting.
9712-A141	Todd	Develop a list of potential sites where monitored natural attenuation may be feasible as part of the remedial process. Due: By 12/31
9712-A142	Team	Be prepared to discuss and provide input to the risk management decision document by the January PT meeting.
9712-A143	Tony	Evaluate whether the Navy wants to re-number/re-name SWMU 166. Due: By January PT meeting.
9712-A144	Paul	Look into the south Carolina dry cleaning trust fund to determine if the offsite facilities near the Naval Annex are eligible. Due: By January PT meeting.
9712-A145	Tony	Provide examples where groundwater could be "consolidated" into a larger unit for management purposes. Due: By January PT meeting.
9712-A146	Todd	Prepare a tech memo regarding the detection of acetone, DEHP, MEK in samples as artifacts from the sampling process, decontamination process, laboratory, etc. Due: February 15th.
9712-A147	Dann	Discuss possible sources of DEHP with Fred Sloan. By: February 15th.