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MINUTES FROM ORLANDO PARTNERING TEAM MEETING ON 10 DECEMBER 1996 NTC
ORLANDO FL
12/10/1996
NAVFAC SOUTHERN

ORLANDO PARTNERING TEA

MEETING MINUTES

Date:	10 - 11 December 1996
Location:	Tallahassee, FL
Team Leader:	John Kaiser
Recorder:	Mac McNeil
Gate Keeper/Timekeeper:	John Mitchell
Facilitator:	Anne Marie Lyddy

ATTENDEES

OPT Members

Wayne Hansel
John Kaiser
Steve McCoy
Mac McNeil
John Mitchell
Nancy Rodriguez
Gary Whipple

Support Members

Eric Nuzie
Barbara Nwokike
Rick Allen
Mark Salvetti
Tom Conrad

Guests

Gomes Ganapathi
Mike Maughon
Dr. Frank Chappelle

ATTACHMENTS DISCUSSED AT MEETING

1. UST/IR Update and Status Reports, dated 10 December 1996
2. Transfer Status Maps and Report
3. Secondary Standards: Summary of Exceedances, Analytical Data, and Histograms for Groundwater
4. Draft Abb letter, Subj: Suggested Approach for Evaluation of Study Areas with PAH Concentrations Greater than Screening Criteria, with tables
5. Summary of Positive Detections in Surface Soil Analytical Results, PAHs only SAs 16, 17, 18, 21, 23, 26 (Background Surface Soil Samples) 27, 39, 40, and 50, 10 December 1996
6. Supplemental Screening Investigation for Study Areas 39 and 40
7. ABB letter, Subj: Additional Site Screening Results and Recommendations, Study Area (SA) 3 - Hazardous Materials Storage Area and Buildings 2816/2817, and SA 44 - Missile Training Range and Alleged Silk Screening Disposal Area, 5 December 1996
8. Technical Memorandum, Site Screening Investigation, Study Area 46
9. Technical Memorandum, Site Screening Investigation, Study Area 47
10. Technical Memorandum, Site Screening Investigation, Study Area 49
11. Technical Memorandum, Site Screening Investigation, Study Area 51
12. Technical Memorandum, Site Screening Investigation, Study Area 53
13. John Mitchell E-Mail, Subj: Background Report, 2 December 1996.
14. OU-1 RI/FS Proposed Baseline Schedule
15. ABB letter, Subj: Information for: Evaluation of Interim Remedy for OU4 IRA, 5 December 1996
16. BEI cost estimates for various technologies

I CHECK-IN, NEW MEMBER INTRODUCTION EXERCISE

Individual traits most prevalent are

- Preference for structured organization, but flexibility to adapt
- Mostly introverts by nature, but ability to be more expressive
- Strong buy-in on partnering, but it's not a natural process for everyone
- Team should acknowledge that silence is natural part of our processing of information

II GROUP COMMUNICATIONS

John Kaiser expressed a concern that discussions with the Navy were going on that the full OPT is not aware of. How can OPT function as a team if direction/control is coming from outside the team?

OPT discussed contractors' requirement to meet client (Navy) needs as well as OPT needs and what is appropriate participation by Navy RPMs and technical staff. Eric Nuzie said that one of the original partnering concepts was to consider the partnering teams as the contractors' clients.

Decision: OPT members need to do a better job communicating off-line discussions with the rest of the OPT so that the full team stays informed.

Action: Eric Nuzie to discuss perception of partnering team as client with Joe McCauley.

III TIER II UPDATE

Eric Nuzie reported the first Tier III meeting is next week. Because of the difficulty of putting together the Tier III team, the Navy and Florida may go back to the old Tier II format.

IV UST / IR UPDATE

John Kaiser distributed Attachment 1. Additional comments were as follows:

- Tank Removals: PWC Pensacola has removed about 30 tanks.
- 7211: ABB will over develop the well this week and believes results will lead to finding of NFA.
- 218: Results of benzene sampling were 18 and 370 ppb, respectively, in 2 of the 4 wells.
- 7174: PWC Pensacola removed the oil/water separator. Nick Ugolini would like to have PWC remove the asphalt and till the soil, using perimeter monitoring as a safety measure. John Mitchell doubts FDEP will approve tilling, although they would approve removing the asphalt and allowing the site to naturally attenuate with monitoring. Tilling or landfarming would require an Alternate Procedure Request. John noted the agreement at the last meeting was to remove/dispose of only the hot spot (1300-1400 cy). Transfer of the site is not imminent, so natural attenuation may have time to work once the most contaminated soil is removed.

Action: Mac check on cost to haul and incinerate petroleum contaminated soil. (Confirmed: cost on previous UST removal contract \$42.50/cy to load, cover, haul, and dispose.)

Action: John M. discuss landfarm / tilling highly contaminated soil with Tim Barr and Greg Brown. Is an APR required?

V TRANSFER UPDATE

Wayne Hansel discussed recent meeting with city and distributed Attachment 2. Navy has agreed to complete FOST/FOSL on all empty property by May/June 1997. SOUTHDIV is awarding an asbestos cleanup contract for Main Base in January. Wayne noted that for purposes of Federal agency to agency

transfer, there is no requirement to cleanup sites as long as the agencies agree on the site's environmental status. The hospital and sites transferring to the Guard and Reserves may fall into this category.

The OPT discussed the McCoy GOAA and Parks parcels. John Mitchell feels restrictive covenants on land usage must be put in place to be consistent with the ROD. Wayne noted the exact wording of such clauses will be determined when the FOST is written.

VI SECONDARY STANDARDS

Rick Allen distributed Attachment 3, summarizing groundwater exceedances of selected analytes, such as iron, aluminum, and manganese. John Mitchell has discussed the issue with Tim Barr at FDEP and noted that he could not justify writing off an aquifer as NFA if concentrations exceed both state standards and background reference values, unless the elevated levels can be explained and/or there is a defensible reason to do so. John believes no further investigation should be done, but some action is required, even if it's only to include some verbiage in the transfer documents.

Action: Rick Allen add column for NTU to the table for those wells where there is exceedance of the reference value.

Action: John Mitchell re-look at the rules and discuss it further with Tim.

VII POLYNUCLEAR AROMATIC HYDROCARBONS (PAH)

The purpose of the discussion was to receive input from EPA and FDEP on the questions of how to deal with hot spots and the definition of hot spots. Rick Allen distributed a draft letter to Wayne Hansel, Attachment 4, and table, Attachment 5. The letter adds Study Areas 39 and 40 to the PAH discussion.

Question: Can we define a threshold concentration at which we stop averaging a result with other results, consider it a hot spot and remove it? The last page of the letter proposed a definition as "ten times the mean concentration calculated from the data set..." John Mitchell and Nancy Rodriguez didn't have a problem with the general approach, but think the hot spot definition is a case-by-case decision.

Decision: PAH hot spots will be determined on a case-by-case basis.

Action: Nancy Rodriguez will discuss the issue with Ted Simons at EPA.

Action: ABB will send the letter as is, minus the paragraph defining a hot spot, and including SAs 39 and 40.

Rick Allen distributed results of supplemental site screening at SA 39 and 40, Attachment 6. More work is required to delineate PCE/TCE. The site may become an OU.

Decision: ABB perform additional sampling under site screening and then determine OU status. ABB will develop a work plan for the additional sampling.

VIII SITE SCREENING INVESTIGATION TECHNICAL MEMORANDA

Technical Memoranda for Study Area (SA) 43 was signed. SA-45 is on hold pending resolution of secondary standards issue.

ABB distributed a letter to Wayne Hansel containing results of additional site screening at SAs-3 and 44, Attachment 7. John Mitchell noted that at SA-44, which includes SA-3, a monitoring only plan (MOP) is

probably needed because there is an exceedance of MCLs. During discussion it was agreed that a RI/FS is not needed, but there is a need for a ROD or ROD-like document to go to the public for comment.

Decision: A document will be prepared, similar to a ROD, to describe the proposed plan for SAs 3 and 44. It will be put out for public review and comment. EPA and FDEP will determine whether it should be called a ROD or something else.

Action: SOUTHDIV will task ABB to produce the document.

ABB distributed Technical Memoranda for Study Areas 46, 47, 49, 51, and 53 (Attachments 8 - 12). The following comments were made:

- SA-46: Found no exceedances.
- SA-47: Found lead in 3 or 4 samples, but no exceedances.
- SA-49: Found no indication of disposal activity. Due to iron hits in groundwater, a decision on this site will await resolution of the secondary standards issue.
- SA-51: Found no PCB.
- SA-53: Found no exceedances.

Decision: The following were designated NFA: SA-46, SA-47, SA-51, SA-53.

Action: SA-47: Rick Allen to revise/clarify the second paragraph on page 7 regarding the BEHP laboratory artifact.

IX STUDY AREA 17 WORKPLAN

John Kaiser noted that SA-17 is a PAH site, but there are PCE, TCE, cis DCE and VC problems

Decision: ABB will issue its work plan by next OPT meeting to install 4 shallow and 1 deep or intermediate well to better define the PCE problem.

X BACKGROUND REPORT

OPT discussed John Mitchell's E-Mail and agreed his points on calculation of background concentrations is correct. However, the existing background report is still acceptable. See Attachment 13.

XI SUCCESS STORIES

Action: Mac McNeil: Cost Avoidances

Action: Wayne Hansel: Look at other partnering team successes for ideas

Action: Wayne Hansel: Documentation successes

Action: All: Review minutes for ideas

Action: TBD: Site screen to ROD (SA-44)

XII OU-1 SCHEDULE

John Kaiser presented and discussed the proposed schedule (Attachment 14) from developing the work plan through the site monitoring program. The RI report will be issued as final before the January OPT, and any changes will be handled as an addendum. There will be no feasibility study. The work plan and ROD can be prepared in parallel as an expediting measure. Wayne would like to get the ROD signed so that transfer can occur in January 1998. Barbara anticipates being able to award this phase of the work as soon as second quarter funds are made available.

Action: John Kaiser revise schedule as discussed for the January OPT.

XIII OU-4 DISCUSSION AND DECISION

Dr. Frank Chappelle of the USGS presented recent findings about naturally occurring conditions that contribute to reduction and oxidation of chlorinated compounds in groundwater. A key point is that degradation varies substantially according to redox conditions. Dr. Chappelle noted that site investigation results indicate that natural conditions in the groundwater are doing a good job degrading chlorinated compounds. His recommendation (absent other regulatory, community, or wetlands constraints) is aeration of the surface waters near the shoreline. This would protect the lake at low cost while taking advantage of natural attenuation in groundwater.

The team reviewed the technical/cost evaluation presented by ABB, Attachment 15. This included a mass balance calculation indicating that groundwater contributes approximately 24 pounds/year of VOC while the sediments are estimated to contain 12 pounds. John Kaiser discussed vendor information on two proprietary variations of in-well stripping, UVB and No-VOCs. BEI's cost estimates (Attachment 16) were relatively consistent with ABB's estimates, except for air sparging of groundwater.

The team discussed all of this information in reaching its decision. Key considerations include:

- Effects of treating sediments and surface waters
- Wetlands impact of various technologies
- Best place and method to intercept groundwater plume
- Locating and attacking the source
- Regulatory requirements and community concerns
- Cost

The team agreed that the solution should contribute to the final remedial action if possible, but that the immediate concern is to protect the lake, satisfy FDEP regulations, and assure the community that their concerns are being addressed.

All members stated their views on the most appropriate remedy, and concluded that air sparging and in-situ, in-well stripping were most appropriate for groundwater, while the sediments and surface waters should be left to naturally attenuate, at least during the early phases of the IRA. The team initially leaned toward air sparging, but decided the in-well system would achieve the same result, while avoiding potential problems of air sparging, and costs did not appear to be significantly different. A synopsis of team member comments during the technology selection process follows the Decision.

Decision: The OPT selected in-situ, in-well stripping as the most appropriate IRA technology. After the system is placed in operation, the sediments and surface waters will be monitored to see whether natural attenuation reduces contaminant concentrations, and if it does not, further actions will be considered at that time or incorporated in the final remedial action.

Action: John Mitchell discuss the possibility of air sparging (aeration) of the surface waters near the shore line with FDEP and the local District. This includes permit requirements.

OPT MEMBER COMMENTS ON OU-4 TECHNOLOGIES

John Mitchell

- Consider cost, long-term effectiveness, regulatory requirements, community acceptance
- Air sparging of surface water--probably need wetland permit, pilot study
- Lean toward groundwater containment: Air sparging if it will contain; in-well stripping if air sparging won't contain the plume.
- Air sparging concerns: Ability to attack lower portion of plume; potential dispersion of emissions due to hard layer of soil at 12 feet bls
- Votes for natural attenuation in sediments and surface water; in-well stripping for groundwater

Wayne Hansel

- 2-prong attack: Bubbler at shore to meet surface water standards; in-well stripping at source
- Concerns: Wetlands permit and difficulty of construction near lake shore

Nancy Rodriguez

- Concern about wetland; suggest attack near source and monitor lake
- Let natural attenuation occur; if it doesn't work, then do something at lake
- Prefers pump & treat or in-well stripping; not comfortable with air sparge because of difficulty of getting lower portion of plume

John Kaiser

- Don't know enough about sediment and lake. Study in parallel with IRA
- Let sediment naturally attenuate
- Avoid groundwater technology that requires pilot study; design system that has quantifiable results
- Don't know enough to go for source in IRA
- Tends toward pump & treat; in-well-effectiveness not as well known, but is second choice

Steve McCoy

- Phase approach to cut off plume at edge with air-sparge or in-well strip
- In-well stripping as second choice
- Delineate source in RI and attack

Gary Whipple

- Main source is probably at sump; air sparge there
- Suggest possible use of deep trench out of wetland area. Install horizontal well and intercept vapors at top of trench. Form of air sparging that overcomes problem of getting lower portion of plume and vapors migrating under hard layer of soil

Mac McNeil

- Air sparging (aeration) at shore line if we can get FDEP acceptance and if it can be done alone.
- Doesn't make sense to attack groundwater and also install bubbler, unless you find that natural attenuation isn't working as well as expected
- Second choice is air sparge or in-well-stripping of groundwater
- Long-term effectiveness important. Final RA could be very costly; might lead to decision to leave the IRA in place longer and let it become final RA.

SUMMARY

Orlando Naval Training Center

BECHTEL ESTIMATED DIRECT COST FOR OU- 4 DRYCLEANING FACILITY REMEDIATION

(Estimates are very preliminary)

	DOLLARS		
	System Installation (Note 1)	O & M 12 Months (Note 2)	Total One Year
CASE 1 EX SITU AIR STRIPPING (PUMP & TREAT)	\$ 100,000 (Note 3)	\$ 185,000	\$285,000
CASE 2 AIR SPARGING	\$ 51,000	\$ 78,000	\$ 129,000
CASE 3 IN WELL AIR STRIPPING	\$ 64,000	\$ 99,000	\$ 163,000
CASE 4 ENHANCED BIO- REMEDICATION	\$ 60,000	\$ 66,000	\$ 126,000
CASE 5 SURFACE WATER AERATION	\$ 50,000	\$ 69,000	\$ 119,000

NOTES:

1. Assumed ABB's estimate for procurement, survey, permitting and construction. management for all cases.
2. Assumed ABB's estimate for professional services, reporting and site monitoring for all cases.
3. ABB's estimate adjusted upward \$43,000 for water disposal from stripping tower to POTW.
4. Estimated costs are conceptual / order of magnitude and are not for proposal use.

Attachment 16