

FINAL MEETING SUMMARY

CH2MHILL

St. Juliens Creek Annex Partnering Team Meeting Minutes: June 18 - 19, 2008

Attendees: Tim Reisch/NAVFAC MID LANT (Day 1)
Walt Bell/NAVFAC MID LANT
John Burchette/EPA (Region III)
Karen Doran/VDEQ
Kim Henderson/CH2M HILL
Janna Staszak/CH2M HILL

Tier II Link: Tim Reisch/NAVFAC Mid-Atlantic

Guests: Adrienne Jones/CH2M HILL (Day 2, afternoon)

From: Janna Staszak/CH2M HILL

Date: September 17, 2008

Location: Virginia Beach Resort Hotel and Conference Center, Virginia Beach, Virginia

Wednesday, June 18, 2008

0800 Welcome/Check In

Roles and Responsibilities for this meeting:

Meeting Manager: Karen Doran
Timekeeper/Gatekeeper: Walt Bell
Host: Janna Staszak
Goalkeeper: Walt Bell
Facilitator: Kim Henderson
Recorder: Janna Staszak/Kim Henderson

Ground Rules

I. Review Agenda, Meeting Minutes, Action Items, and Parking Lot from the Previous Meeting

Review Agenda: No changes were made to the agenda. Topics will be adjusted throughout the meeting as necessary.

Review Meeting Minutes: The February and May 2008 meeting minutes will be reviewed on a break and discussed later in the meeting.

Review Parking Lot: Parking Lot items were reviewed and will remain in the Parking Lot:

- Site 4 Groundwater Monitoring at 5-Year Review
- Phone numbers on IR signs
- Site 21 SROD

- FY09 CNO Award Package
- Guest for DNAPL
- UFP SAP Training
- NIRIS Migration

Review Action Items: The action items were reviewed and tracked separately.

II. Site 21 Remedial Investigation Report

Objectives: Finalize the Remedial Investigation (RI) report.

Overview of Discussion: The team reviewed and made changes to the redline version of the RI report.

The team reviewed the comments Karen had distributed via email on June 13, 2008 and made redline changes to the text and figures as appropriate.

The team discussed the TCE cancer slope factor used in the HHRA. John was uncertain if EPA had endorsed a cancer slope factor in association with the development of the RSLs.

Action John - Determine if the TCE toxicity value is still provisional in the IRIS database based on the new RSLs.

The team reviewed the comments John had provided on the draft RI Report via email on February 15, 2008 to confirm that the redline changes addressed all of EPA's concerns. Redline changes were made to the text as appropriate.

EPA Comment #6: The team discussed collection of additional rounds of data to evaluate trends in support of evaluation of monitored natural attenuation. Tim indicated that trend data will not provide additional value at this time as an active remedy is planned, which will change site conditions/alter the natural attenuation properties. The active remedy will change site conditions and MNA may be evaluated as a contingency remedy. John went on to state that although an active remedy may be selected for Site 21 which may alter site conditions for an amount of time, the site will eventually return to its natural state from which we have no MNA data.

EPA Comment #23: John indicated concern based on a potential historical release from Building 68, at which it is indicated that oil was dumped into a storm sewer in Table 2-1. Kim indicated that no samples were collected in the vicinity of the storm sewer during the Site 21 RI. The Site 21 boundary did not originally include Building 68, and it was only included in the table because the site boundary had been expanded to include the groundwater plume. Building 68 and the storm sewer had not been identified previously as areas of concern or IR sites. The team decided to remove the building description from Table 2-1, as the building is not part of Site 21.

Action Walt - Check IAS reference files for Building 68 storm water drawing.

EPA Comment #38: John indicated that the comment regarding footnotes to the HHRA tables does not appear to have been addressed. CH2M HILL will work with the risk assessor to have the comment addressed.

The team discussed incorporation of consensus statement for NFA for soil and deep groundwater. CH2M HILL will draft the statement and send it to the team for approval to be incorporated into the final RI.

Action Janna - Draft Site 21 NFA consensus statements for soil and deep groundwater and distribute to the team by June 20.

The team decided that a formal response to comments would not be distributed. The cover letter for the final RI distribution will include documentation that comments were resolved during the partnering meeting.

Path Forward: The outstanding HHRA EPA comment (EPA Comment #38) will be addressed. No other comments are outstanding. A consensus statement will be drafted and distributed to the team. A conference call will be held to obtain consensus, then the consensus statement will then be incorporated into the RI and the RI will be finalized. The cover letter for the RI will address the fact that the response to comments were addressed during the meeting minutes, and that a formal response to comments will not be distributed. Due to the large number of changes, a complete new final document will be distributed rather than change pages.

III. Site 21 Vapor Intrusion Investigation

Objectives: Discuss and resolve the EPA and VDEQ comments on UFP SAP Worksheets 9 and 10 and the CSM. Develop a path forward for the investigation of the vapor intrusion pathway

Overview of Discussion: The team discussed the comments received on the approach to evaluating the vapor intrusion pathway at Site 21 buildings and developed a path forward.

Tim opened the discussion by indicating that NAVFAC acknowledges that collection of indoor air samples would be representative of a snapshot in time, and not necessarily representative of long-term conditions. Therefore, NAVFAC is open to the collection of subslab samples if the team could develop a method for evaluating the data.

The team discussed what subslab sample results would be compared to. Because of the shallow groundwater table at Site 21, the applicability of the screening values in the vapor intrusion guidance documents is questionable. Collection of subslab samples and indoor air vapor samples concurrently could allow for development of a site-specific attenuation factor to use in determining screening values. The team will work with risk assessors to develop screening values.

John indicated that EPA supports collection of the subslab sample data concurrently with indoor air data. The team discussed the number of rounds of subslab data which would be sufficient, and determined that 1 round should be sufficient. John asked if subslab samples indicate risk but indoor air samples do not, would there be a point in which indoor air would be re-evaluated? Tim indicated that the 5-year review would be a good point for re-evaluating the indoor air pathway.

The team agreed to collect subslab and indoor air samples. The revised approach will be incorporated into the UFP SAP. The team discussed Worksheets 10 and 11, including comments provided by VDEQ and EPA and the incorporation of the subslab samples.

Worksheet #10:

VDEQ has no comments on this worksheet. EPA comments were discussed and responses were incorporated into the UFP SAP pdf.

CSM: EPA requested that the floor drain depicted in Building 47 should be removed, unless it is present. Kim indicated that it may depict historical sources of contamination, as the floor drain was not observed during the building survey. Tim suggested the incorporation of an additional building survey prior to the sampling event to identify preferential pathways and collect an additional round of pressure measurements.

Worksheet #11:

The team discussed the project action levels (PALs). VDEQ (Comment #2) requested the use of $5 \mu\text{g}/\text{m}^3$ as the PAL for TCE. EPA indicated that the value was within the acceptable risk range (Comment #7). The team discussed how the RSLs impact the screening. The RSLs include an industrial air screening value, which addresses inhalation of air by an industrial worker, using worker exposure factors. The team decided to consult with risk assessors on the appropriate use of the RSL values. The team will also consult with risk assessors on the development of screening criteria for the subslab data.

The team developed a sampling strategy and identified outstanding questions for which technical staff should be consulted:

Sample strategy:

- Reference - minimum of 1 outdoor air sample per building, collected within the site boundary
- Background - 1 outdoor air sample collected off-site and upwind
- Indoor Air - indoor air samples collected within the buildings at field-determined locations (preferential pathways), including preferential pathways (2 samples in Buildings 47, 1 sample in Building 54, and 6 in Building 1556)
- Subslab - soil gas samples collected within the buildings at field-determined locations (consider 1 sample in Buildings 47 and 54 and 5 in Building 1556 [3 around the plume, 1 in an interior room, 1 in warehouse])

Outstanding questions:

- Can subslab soil gas samples be collected from underneath buildings where there is a shallow water table (e.g., less than 5 ft)?
- How far do subslab samples need to be collected away from the walls?

Action Kim/Janna - Determine if there is a minimum distance from the building edge where subslab samples can effectively be collected.

- How will the data be evaluated for risk? Will a risk screening be conducted on the subslab and indoor air data? How will NA factors be developed based on the sub slab and indoor air data? Will a direct estimate of risk be calculated for both a worker exposure and potential future resident exposure?

Path Forward: CH2M HILL will revise the UFP-SAP worksheets 10 and 11 and the decision flow chart based on the comments received and partnering discussion and resubmit for team review by July 3.

IV. Site 21 Feasibility Study Alternatives Comparison

Objectives: Review the site-related COCs, RAOs, remedial alternatives, preliminary screening of alternatives, and the schedule for the FS.

Overview of Discussion: Copies of the presentation were distributed. Janna listed the COCs in shallow groundwater to be addressed in the FS: TCE, cis-1,2-DCE, 1,1-DCE, and VC. She noted that Freon 12 is not currently being addressed in the FS; although it was identified as a potential risk driver in the draft RI based on the vapor intrusion pathway, it will be further evaluated as part of the upcoming vapor intrusion evaluation. John asked whether benzene was a COC. It was identified as a COPC in the RI report, but the report concluded it was not site-related based on the POL exclusion under CERCLA.

Janna reviewed the RAOs and discussed the screening of remedial alternatives. The alternatives retained for evaluation were (all alternatives, except no action, include LUCs and performance monitoring):

- No action
- MNA
- ISCR and ERD
- ISCO and ERD

Janna discussed the major components of each alternative. The team discussed whether a timeframe is considered for no action. No timeframe is estimated since no action consists of walking away from the site (e.g., no monitoring or follow-up). Janna noted that the costs of ISCR are rising and unpredictable based on the use of petroleum in the production of the reagent (e.g., ZVI). Some predictions indicate that the price may increase as much as 80% in the next year. Because the material cost is only a portion of the overall remedy, the +50/-30% cost estimates should cover the rising costs for ZVI. However, the variable cost will be considered in comparison to other alternatives. Janna explained that site conditions support the use of reducing technologies (e.g., ERD) based on water quality data collected (e.g., DO and ORP). Janna discussed the ISCO and ERD combination. ISCO is possible for Site 21, though not as ideal for the site because it requires oxidizing conditions and the site conditions are more appropriate for reducing technologies. Additionally, because the ERD would require reducing conditions, the oxidizing conditions created for the ISCO would have to be reduced prior to implementation of ERD, which would require the use of additional substrate and extend the duration of the remedy implementation.

The team discussed renaming "source areas" in the Site 21 RI and FS to another term, e.g., hot spots or areas of highest CVOC concentrations, to avoid confusion. Currently, the Site 21 RI uses "source" to describe areas where a historical release appears to have occurred. In other documents, "source" is often used to describe areas of extremely high CVOC concentrations/where DNAPL concentrations (10,000 ppb) exist. Because in many areas of Site 21, there appears to have been a historical release (e.g., north of Building 47), but the contaminants are present at only low concentrations, the term is confusing. Both the ISCR/ERD and ISCO/ERD remedial alternatives rely on a treatment train approach, where

the initial technology will be used to reduce TCE concentrations across the site to below 1,000 ppb, then ERD will be used for the remainder of the site. Therefore, the areas requiring the preliminary treatment (TCE concentrations greater than 1,000 ppb) will be defined as "hot spots" or "areas of highest CVOC concentrations", and the use of "source" will be abandoned.

Jama went over the evaluation criteria and the preliminary ranking of alternatives. The team discussed lowering the ranking of ISCO and ERD for long-term effectiveness; reduction of toxicity, mobility, and volume through treatment; and short-term effectiveness. Tim recommended that the comparative analysis be fully developed in preparation for incorporation into the improved ROD format.

The team discussed and decided to identify a preferred alternative in the FS.

Path Forward: The draft FS for shallow groundwater is planned for submittal by the end of July with comments due by the end of September, and the final FS will be submitted in October. If risk is identified based on the vapor intrusion evaluation, an addendum to the FS will be developed and the design for shallow groundwater remediation could be developed concurrently to keep the schedule moving.

V. Site 5 Removal Action Update

Objectives: Update the team on the status of the ESS, removal action, and path forward.

Overview of Discussion: Copies of the presentation were distributed. Mobilization was in December 2007 and work was stopped based on MEC found during silt fence installation. An ESS has been drafted and comments are currently being resolved with NOSSA to enable mobilization.

Jama reviewed the purpose and differences of an ESS and an ESS determination. The purpose of an ESS is to assign responsibility and establish procedures and reporting requirements for oversight, review, and verification of the explosives safety aspects of Navy response actions involving MEC. An ESS determination applies to sites and activities where it is unclear if an ESS is necessary and for construction or non-munitions response activities after having a single military munitions response in an area not otherwise known or suspected of having MEC. An operational risk assessment is included in the determination and is based on the likelihood of encounter and potential risk if encountered.

When the potential MEC item was encountered, NOSSA required a full ESS for the waste/burnt soil area and the directly adjacent human health and ecological risk-based areas prior to resuming work. The other human health and ecological risk-based areas are covered under an ESS determination because MEC is not expected to be encountered in those areas. The full ESS has not yet been approved. One challenge still being resolved is reaching agreement with NOSSA on the explosive arcs. This is difficult because the type and quantity of munitions used or disposed at the site is unknown; the items found to-date are not known to have an explosive or fragmentation risk; the site is located near the perimeter of the base and typical contingency items have a fragmentation radius that will affect public roadways, businesses, residences, plus other base operations; and the explosive arcs and contingencies must be established based on assumptions. To develop the arcs for Site 5, it

was assumed the Mark 1 smoke hand single contained 0.133 pound C/D 1.1 explosives. Contingency explosive arcs were determined for a non-fragmenting item with a net explosive weight of 1 pound C/D 1.1 explosives.

Management of MEC items found during the removal action must also be addressed with NOSSA. Local Navy EOD team will only respond to emergency situations (MEC that are unsafe to move). It is difficult for private contractors to dispose of MEC. Storage locations and facilities for the recovered MEC are limited due to separation distances from buildings and roadways. Off-site disposal of untreated MEC leads to highly regulated transportation and disposal issues. Therefore, it was determined that any items found will be blown on-site. Janna reviewed the draft flow chart developed to identify how to deal with MEC items found to demonstrate the complications with MEC management.

Janna reviewed the overall schedule for the removal action. The JV project team is considering re-ordering the phases of the removal action to address the areas of the site that are covered by the ESS determination (the Phases 2 and 3 areas not adjacent to the waste/burnt soil area). Tim asked how the JV plans to address the work plan. Janna indicated that the project team was aware that they could not begin work until a work plan was approved, and that they would submit the work plan when they determined what schedule made most sense. She indicated that the JV team was in contact with the FEAD regarding the project schedule. Tim indicated that because the Phases 2 and 3 work plan had relied heavily on references to the Phase 1 work plan with the intention of combining the plans into one final document, if Phases 2 and 3 proceed before the complete document, the JV will need to incorporate all of the referenced sections and appendices.

Path Forward: Seed the stockpile, purchase remaining backfill, finalize the work plan, potentially remobilize for the removal of Phases 2 and 3, and resolve ESS comments with NOSSA and resubmit the Phase 1 work plan. The "Phase 1" work plan will ideally be revised to a site-wide work plan (pending order of phases) and incorporate the Phases 2 and 3 work plan, ESS, stabilization, and revised operational procedures.

Action Walt - After the Site 5 ESS is resubmitted, schedule conference call with NOSSA to expedite comment resolution.

VI. Tier II Update

improved ROD - NAVFAC headquarters has reduced their requirements for qualifying RODs to meet their initiative for improved RODs. RODs will be considered to count toward the NAVFAC goal if the documents are streamlined and present an improved process (e.g., relying on references rather than repeating); they don't necessarily need to follow the improved ROD format. The format and content of RODs will be left to the teams.

VIII. Schedule and FY 2008 Team Goals Update

Schedule: The Schedule was updated and is included as a separate file.

FY 2008 Team Goals: The FY 2008 Goals were updated, included as an attachment, and will be posted on the Virginia/Maryland Joint IR Teams web site.

Action Kim - Set up a meeting with Walt, Tim, and Janna to review project financials.

Thursday, June 19, 2008

0800 Welcome/Check In

Reviewed Roles and Responsibilities

Reviewed Ground Rules

Reviewed Agenda

Two agenda topics (SJCA guidelines and partnering exercise) from Wednesday were not completed. They will be added to Thursday if time allows.

VII. Site 2 ERI Comments

Objective: Discuss team comments.

Overview of Discussion: VDEQ presented technical comments to the team. Kim captured the comments in the ERI files through redlines and comments in the draft ERI report.

VDEQ expressed concern over some of the COPCs proposed for risk management in the ERI report (e.g., heptachlor epoxide, which was detected above the MCL only once and for which there was RME risk but no CTE risk). The team discussed RME and CTE risk. Karen indicated VDEQ prefers the use of RME but will accept the use of CTE for risk management when it is accompanied by other lines of evidence (e.g., Site 5 groundwater). John indicated EPA also prefers the use of RME.

John presented the preliminary EPA comments. Kim captured the comments in the ERI report files through redlines and comments in the draft ERI report.

Walt discussed the primary comments received from Navy Marine Corps Public Health Center (NMCPHC).

Path Forward: CH2M HILL will prepare a response to comments to VDEQ, EPA, and NMCPHC comments. John will compile outstanding comments (toxicologist and BTAG) and submit.

VIII. Site 2 RAOs and Remedial Alternatives

Objectives: Discuss the Site 2 risk drivers and PRG development. Present the RAOs, discuss the screening of remedial alternatives, present the remedial alternatives for further evaluation, and review the schedule.

Overview of Discussion: Copies of the presentation were distributed. Kim reviewed the potential risks to human health and the environment by media and the development of PRGs. The human health PRGs for soil and sediment were calculated and the human health PRGs for shallow groundwater are MCLs. For ecological PRGs, soil and sediment PRGs were developed using BTAG/literature-based screening values, background values, and toxicity data. No ecological PRGs were developed for surface water based on minimal risks identified and the fact that surface water will be addressed by remediation of other media.

Kim presented figures showing sample locations that exceed human health PRGs for each media. The team discussed risk associated with "waste"; "inert" waste may not need to be addressed. The team will look into VDEQ requirements for waste.

Kim presented figures showing sample locations that exceed ecological PRGs. Walt asked if the samples identified as sediment were truly sediment, or if they were actually soil. Because the samples were within the tidally influenced wetland, they are truly sediment samples. Walt indicated that he will have to consider the Navy sediment policy/look into its impact on Site 2.

Kim presented the preliminary RAOs for the site. She indicated that the wetland RAO was deleted on the basis that it is an ARAR and to avoid biasing the alternative evaluation. The team agreed that it was reasonable.

Kim presented a preliminary screening of the remedial alternatives. The alternatives that were eliminated during the preliminary screening were:

- ISCO (e.g., permanganate) – High cost due to concentrations & organic carbon content, difficult to distribute effectively due to heterogeneity and waste, potential negative impact on wetland, conditions following ISCO may be unfavorable to NA.
- ISCR (e.g., ZVI) – Difficult to distribute effectively due to heterogeneity and waste, pneumatic fracturing unlikely due to buried waste and potential UXO.
- Aerobic bioremediation via cometabolism (e.g., toluene) – Difficulty creating aerobic conditions in wetland, limited evidence of effectiveness
- Thermal treatment (e.g., electrical resistance heating) – High temperatures could negatively impact the wetland, shallow water table may decrease effectiveness and implementability, uncertainty with buried waste, high O&M cost.
- AS/SVE – less effective in tight lithology and in wetland, potential risk for mobilization of contamination, high O&M cost.
- Flushing (e.g., co-solvents) – May be ineffective due to waste, potential mobilization of contaminants, high O&M cost.
- Pump and treat – Would not address contaminant mass bound in organics and fine-grained lithology, prohibited by Navy policy, high O&M cost.

John asked how organic carbon content impacts ISCO. Kim was uncertain and will consult with the engineer.

The alternatives retained for evaluation included various combinations of capping (waste), excavation (waste, source area, or plume), ERD (source area or plume), sheet piling (source area), and MNA (plume). The combinations proposed for evaluation in the FS comprised the following (all alternatives, except for no action, include LUCs and performance monitoring):

- No action
- Capping, MNA (source and plume)
- Capping, ERD (source), ERD (plume)
- Capping, ERD (source), MNA (plume)
- Capping, sheet piling (source), ERD (plume)
- Capping, sheet piling (source), MNA (plume)
- Excavation (waste), excavation (source), ERD (plume)

Karen asked if soil mixing had been considered within the source area. Janna indicated that it had, but that the waste present in the areas would make it difficult. The waste would

likely have to be removed (including potential UXO) prior to the soil mixing. John asked if soil mixing could mobilize contaminants to surface water. Karen indicated that in a recent training session, she learned that mobilization of contaminants by soil mixing was not a problem. Karen requested a technical guest to talk about soil mixing and impacts.

Karen indicated she did not think VDEQ would accept MNA as the remedial action for the plume area. She indicated that VDEQ prefers an active remedy, even in cases when the contamination is shown to be naturally degrading. Karen will look into VDEQ requirements to see if there is a maximum timeframe associated with achieving cleanup levels to consider the alternative acceptable.

Walt asked if the site lends itself to mass flux monitoring. Kim indicated that the site had been considered, but that it was not appropriate because of the tidal influence.

Kim reviewed the major components of each alternative:

- Capping would consist of the placement of a 2-ft cover over the waste, soil, and sediment areas posing potential risk to human health and ecological receptors. Capping would require compensatory wetland mitigation, O&M, and LUCs.
- ERD (source area) would consist of injection of emulsified substrate in the source area (CVOC concentrations > 10,000 ppb) via permanent injection wells. Multiple injection wells would be required. The injection well spacing would be based on the substrate and associated radius of influence, which is assumed to be 10 ft, resulting in 20-ft spacing). Walt suggested the site may require smaller spacing of wells. Janna indicated that the engineer would determine the appropriate spacing based on the substrate and site conditions, and incorporate a factor of safety.
- ERD (plume) would consist of injection of emulsified substrate in plume area (CVOC concentrations 5 to 10,000 ppb) via permanent injection wells or DPT. Multiple injections would be required.
- Sheet Piling (source) would consist of installation of steel sheet piling around the source area (CVOC concentrations > 10,000 ppb). The sheetpiling would be driven to the Yorktown confining unit to reduce/stop mass flux from the source area. Karen indicated VDEQ may not support this alternative because it would not actively be treating the source, and requested that ERD combined with sheet piling of the source area should be considered. She indicated that VDEQ would not likely support any of the alternatives that don't actively treat the source. The team discussed whether or not there active treatment of groundwater is necessary when a containment alternative is selected (e.g., landfills where only perimeter monitoring is performed, but no treatment). The team will look for examples of sites where DNAPL has been contained and not treated.

John indicated that EPA would prefer to remove the waste and not backfill/reestablish the wetland rather than excavating and backfilling if it saves money and makes the alternative more acceptable. Janna indicated that compensatory mitigation would be required, and that reducing the elevation significantly would likely result in open water, which would not be equivalent. Limiting backfill will be considered, but the compensatory mitigation requirement will need to be met.

The team requested the additional combinations be considered:

- Capping (waste), excavation (source), and ERD (plume)
- Excavation (waste), ERD (source), and ERD (plume)

Action Team - Review the Site 2 Remedial Alternatives and provide comments by July 17.

Kim presented a tool that has been developed for scoring alternatives in FSs. The tool is spreadsheet based, and allows the user/team to establish the scale and develop the criteria for evaluating each alternative. The tool also provides graphic results to better present the uncertainties associated with the scoring.

Path Forward: The team will review the remedial alternatives and discuss them on a conference call on July 17. The Draft FS preparation will continue, and will be submitted at the end of August.

IX. Site 2 Triad Poster

The team reviewed the Site 2 poster that was presented at the Triad conference.

X. Partnering Guidelines

Objective: Review the Partnering Guidelines and modify them to suit the new team.

Overview of Discussion: The team reviewed the guidelines and made changes where appropriate.

Action Walt - Talk to Tim about the hazardous waste docket at SJCA.

Path Forward: The revised partnering guidelines will be distributed to the team and posted on the web site.

XI. SMP Update

Objective: Discuss the content of the SMP, including the outline, future activities for each site, and the IR sites and SMP schedule.

Overview of Discussion: Copies of the presentation were distributed. Kim reviewed the content of the draft SMP and identified changes from last year's submission. The most significant changes from last year are the removal of Site 19 (closed NFA) and the addition of UXO-0001. Background and process information regarding the MRP were added to the text, based on the addition of the new site. The team reviewed VDEQ's comments submitted June 13, 2008.

Path Forward: The team will provide comments on the SMP by July 15. Comments will then be incorporated and the update will be distributed by the end of July.

XII. Site UXO-01 Update

Objective: Update the team on Site UXO-01 status.

Overview of Discussion: Walt summarized the status of UXO-01. He is working with Johnny Noles (biologist, NAVFAC Technical Support) on some possibilities to collect underwater data at the site. Johnny's group plans to collect underwater topography with sonar to identify irregularities of the river bed. They will also do a magnetometer to

identify metallic anomalies. Neither technology will not be able to definitively determine whether or not UXO are present, but the data will help to focus future investigations.

Walt has been doing research on dredging in the vicinity of SJCA. There is history of dredging in the vicinity of the southern wharf, but Walt has not yet identified any records from the activities. The Army Corps of Engineers has never encountered UXO during their maintenance of the channel.

Walt discussed some of the challenges coming up. A portion of the southern wharf is still operational; however, the southern-most portion is collapsing and unsafe to walk on or go under. Therefore, a safe method of conducting investigation in the area will need to be developed.

Path Forward: Walt will submit an RFP/Scope for the PA/SI for UXO-01. The PA/SI will be conducted 2008 to 2009.

XIII. Roundtable

VDEQ: VDEQ is interviewing for the Office of Remediation Programs director position (Durwood's boss).

RAB: The RAB's 10th anniversary is in 2009. Karen suggested having a 10th anniversary celebration.

ESTCP Project: The work plan is under review by ESTCP, and they are working out the well construction plans. They plan to mobilize to implement the study in mid-July, and the study will last approximately 1 year.

Action Janna - Send team the ESTCP work plan.

XIV. Agenda Building – July/August Meeting Agenda

<u>Topic</u>	<u>Goal</u>	<u>Lead</u>	<u>Time</u>
Site 21 Vapor Intrusion Investigation	Present the content of the remaining (beyond worksheets 9 & 10) worksheets	Janna	1 hr
Site 21 Draft FS	Present the outcome of the FS	Laura/Janna?	2 hr
Site 2 ERI	Resolve outstanding comments & prepare for finalization	Kim	1 hr
Site 2 FS	Present the preliminary comparative analysis of alternatives	Kim	1.5 hr
Site 4 Data Update	Present the latest results from groundwater monitoring. Discuss statistical approach for evaluation of data	Kim	1 hr
UXO-01 Update	Present results from Johnny Noles work.	Walt	0.5 hr
Site 5	????	Janna	0.5 hr
FY 2009 Goals	Draft goals for FY09	Walt	0.5 hr

Partnering Activity	Improve team working ability	Team	0.5 hr
Roundtable	Introduce new topics (ESTCP	Team	0.5 hr

Next meeting: July 31 – August 1, 2008

Location: Fife and Drum(?), Williamsburg, Virginia

Lodging: TBD, Williamsburg, Virginia (Fife and Drum)

Start time: 9 AM

Finish time: 2 PM

Chair: Kim Henderson

Host: Janna Staszak

Timekeeper: John Burchette

Goal Keeper: Walt Bell

Recorder: Janna Staszak

Facilitator: Tim Reisch (Kim backup on activity)

Tier II: Tim Reisch

Guests: TBD

Pre-Meeting Agenda Conference Call: 10:00 AM on July 21, 2008

XV. Future Meetings Schedule

September 17 – 18, 2008 Philadelphia, PA

November 19 – 20, 2008 Richmond, VA

February 4 – 5, 2009 Tidewater, Virginia RAB (5:00 PM February 3 RAB, PP Meeting?)

April 1 – 3, 2009 Philadelphia, PA (mid-day start)

XVI. Parking Lot

The team reviewed the parking lot and made the following changes:

- Site 4 groundwater monitoring during the 5-year review
- FY09 CNO Award Package

Action Walt – Look into schedule for the CNO award package.

- Guest for DNAPL

Consider addressing through FS guest.

- NIRIS Migration Training
- Site 21 RI consensus statement (re: NFA determination for soil and deep groundwater)

Action Janna – Send John a BERA.

Consensus: The team agrees to accept the meeting minutes for the February 2008 meeting as final. The final minutes will be posted on the Virginia/Maryland Joint IR Teams web site.

Consensus: The team agrees to accept the meeting minutes for the May 2008 meeting as final. The final minutes will be posted on the Virginia/Maryland Joint IR Teams web site.

XVII. Meeting Evaluation

Kim provided facilitator feedback. During the Partnering Session, the Team filled in "+" and "Δ" to list the positives and negatives of the meeting.