

St. Juliens Creek Annex Partnering Team Meeting Minutes: November 15 - 16, 2007

Attendees: Tim Reisch/NAVFAC MID LANT
Josh Barber/EPA (Region III)
Karen Doran/VDEQ
Kim Henderson/CH2M HILL
Janna Staszak/CH2M HILL

Tier II Link: Tim Reisch/NAVFAC MID LANT

Guests: John Burchette/EPA (Region III)

From: Janna Staszak/CH2M HILL

Date: November 16, 2007

Location: Wyndham Hotel, Virginia Beach, Virginia

Thursday, November 15, 2007

0830 Welcome/Check In

Roles and Responsibilities for this meeting:

Meeting Manager: Tim Reisch
Timekeeper/Gatekeeper: Kim Henderson
Host: Janna Staszak
Goalkeeper: Tim Reisch
Facilitator: Josh Barber
Recorder: Janna Staszak

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 meeting minutes were placed in the parking lot and will be reviewed later in the meeting.

Review Parking Lot: Parking Lot items were reviewed.

- Site 4 Groundwater Monitoring at 5-Year Review: Remains in Parking Lot.
- Phone numbers on IR signs.
- Site 21 SROD

- September Meeting Minutes

Review Action Items: The action items were reviewed.

Action Kim – Send final Site 2 Success Story to team.

Action Janna – Send Karen and John Tier 2 website link and access.

II. Tier II Update

Explosives Safety Submission (ESS): If you have a potential for ordnance, plan ahead because the ESS review process can cause significant project delays.

Base/Site Closure Acceleration: VDEQ and EPA have asked to identify bases for which closure can be expedited. Navy has developed a schedule and cost to complete estimate for closure of each site, and is using it to balance their spending plans. Naval Station Norfolk (last construction being funded next year) and SJCA are being accelerated. Goals have been established based on the acceleration; however, meeting them will be dependent on when funding becomes available.

Streamlined RODs: Streamlined ROD for Cherry Point signed in Region IV in 2006. EPA headquarters has not fully accepted the format, and left it up to individual teams to decide. Navy has a goal to have 50% of RODs in 2009 streamlined, and 100% in 2010 and beyond. Tier II encourages teams to shorten their RODs and streamline their content, but doesn't have to call them "streamlined".

Success Stories: Teams do not need to submit success stories to Tier II in FY 2008. However, success stories are still encouraged to support the Report to Congress effort.

FY 2008 Goals: Please update them and post them to Tier II web site.

Five Year Review: Dates vary by EPA and Navy. EPA is 5 years from concurrence, and Navy is 5 years from execution. Tim is going to send the team contacts the 5-year review dates, and the teams will need to agree to the date to conduct their review.

Partnering Training: Partnering training is tentatively scheduled for January 30 and 31, 2008 in Richmond, Virginia. Doug Dronfield is coordinating.

Training: Tier II is looking into rolling out training to the teams. It is a topic of the next Tier II meetings.

III. SJCA Introduction

Objectives: Familiarize John with the sites.

Overview of Discussion: Copies of the presentation were distributed.

Janna presented a background of SJCA, including historical and current activities. She provided the background and current status of each of the active sites, including Sites 2, 4, 5 (including Blows Creek), and 21.

Path Forward: Continue to provide support to John as he becomes involved with SJCA.

IV. Site 2 Expanded Remedial Investigation Report

Objective: Present site background; review previous site investigations; discuss the preliminary draft Expanded Remedial Investigation (RI) Report, and review the site schedule.

Overview of Discussion: Copies of the presentation were distributed.

Kim reviewed the background of Site 2 and its investigation history. She presented the objectives of the Triad Investigation, conducted from April to July of 2007, and discussed the team approach to planning the investigation. The team provided a brief explanation of the Triad process, and what makes it different from traditional investigation approaches. Kim presented the latest version of the Conceptual Site Model (CSM) and discussed its components. The CSM is a work in progress. One change that has yet to be incorporated is shading the groundwater plume to indicate the variation in VOC concentrations. Josh suggested adding the abrasive blast material and any additional potential sources, such as a drum/spill area at the highest concentration area.

Kim summarized the risk assessment updates being incorporated into the Draft Expanded RI report. Both the human health risk assessment (HHRA) and ecological risk assessment (ERA) have been updated using the most current data and latest risk evaluation methodologies and toxicity values. She presented what has been updated for each media:

- Shallow groundwater: updated HHRA to incorporate latest VOC data
- Deep groundwater: qualitative HHRA evaluation using latest VOC data
- Surface soil: updated HHRA and ERA to incorporate Site 17 samples
- Subsurface soil: qualitative HHRA evaluation using latest VOC data
- Sediment: updated HHRA and ERA to incorporate latest VOC data and incorporated new sediment pore water data into ERA
- Surface water: updated HHRA and ERA to incorporate latest VOC data

Kim reviewed the preliminary HHRA and ERA results for each media.

The team discussed the qualitative risks to construction worker, industrial worker, and future resident from CVOCs in subsurface soil up to 10 feet bgs. Kim explained that this data was not quantitatively incorporated into the risk assessment because the data objective was for CVOC delineation, and the data was therefore not validated. Tim asked where in the Expanded RI Report this qualitative evaluation would be presented, and suggested the uncertainties section. Kim said OK.

The draft Expanded RI report will recommend a Feasibility Study (FS) to develop remedial alternatives to mitigate unacceptable risks in waste, soil, sediment, and shallow groundwater.

Path Forward: The Draft Expanded RI report will be completed and submitted for review.

V. Site 21 Technical Topics

Objective: Provide site background, discuss indoor air vapor activities, refine remedial action objectives (RAOs), discuss FS alternatives, and review the path forward and site schedule.

Overview of Discussion: Copies of the presentation were distributed.

Janna reviewed the background of Site 21 and its investigation history. She presented the objectives of the Supplemental Site Investigation (SSI)/Remedial Investigation (RI), conducted from 2003 through 2007 and that the results will all be incorporated in the RI. She summarized the RI risk assessment results and recommendations of the RI, which is to complete the FS. The FS will develop and evaluate remedial alternatives to mitigate unacceptable human health risks from CVOCs in shallow groundwater.

Karen asked for the depths at which the groundwater samples were collected and used to generate the plume map. She discussed how multi-level samplers have been used at other sites to better understand the depths and lithology where contamination was prevalent so treatment can be focused on those areas. The team discussed the groundwater sample depth intervals at Site 21, that the highest concentrations are at the top of the Yorktown confining unit based on MIP data, and that all the wells have 10-ft screens that are installed to the depth of the bottom of the Columbia aquifer/top of the Yorktown confining unit. Kim explained that the remedial alternative assumptions to-date incorporate treatment of the entire extent of the shallow aquifer and that is why the vertical distribution has not been a focus of the investigations.

As discussed during the last meeting, further evaluation of potential indoor air vapor in Building 54 was necessary. Immediate actions were not considered warranted based on the following conservative model input parameters: use of groundwater concentrations from deeper portion of shallow aquifer, assumption that cracks were present in the floor slabs, assumption that buildings were depressurized relative to the subsurface, and calculation of risks based on a lifetime exposure scenario. However, building surveys were conducted at occupied Buildings 47, 54, and 1556 on October 18, 2007 to collect additional data to refine the conceptual model for the vapor intrusion pathway and verify the model assumptions were correct or conservative. Buildings 13 and 46 were not occupied, are used for storage, and were not surveyed.

Prior to the building survey, NEHC also provided risk communication to Building 54 occupants. Janna went over the building characteristics and pressure results from each building and the resulting recommendations.

Building 47

No further investigation of potential vapor intrusion pathways should be needed because the building is neutrally-pressurized and would not provide a driving force for the entry of subsurface vapors into the building, groundwater contamination under the building is unlikely, and no risks were identified based on the conservative HHRA. John asked whether there were any additional samples collected around Building 47. The team reviewed the results around Building 47 and Kim explained that it is assumed there is no significant contamination under the building based on the surrounding results.

Building 54

Further investigation of potential vapor intrusion pathways should be conducted because the building is neutrally to negatively-pressurized and in the winter depressurization may increase the potential for entry of subsurface vapors into the building, it is unknown whether

groundwater contamination exists under the building, and potential risks were identified based on the conservative HHRA.

The objective of additional vapor intrusion evaluation activities will be to refine the vapor intrusion risk at Building 54. The proposed field activities are to collect DPT groundwater samples from the top 1 to 2 feet of the water table to provide concentrations of CVOCs most likely to volatilize into the overlying soil gas and potentially into the building. The Johnson & Ettinger Model will be refined based on the results of the building survey and DPT groundwater sampling to determine if further actions are needed. The results will be incorporated into the FS.

Tim discussed the internal Navy communication and the temporary relocation of building occupants. The Navy would like to re-occupy this building as soon as possible and Tim explained the urgency for sampling to refine the model and determine if there is an actual risk to Building 54 occupants versus the potential risk identified using the conservative assumptions. The team discussed using an iterative approach to conduct conservative modeling and then refining the model with more site-specific data (building survey results and shallow depth-specific groundwater samples from the top of the aquifer) for evaluation rather than jumping directly to sub-slab sampling or indoor air monitoring. A work plan will be prepared for the collection of the data. It will include a decision tree approach, incorporation collection of sub-slab samples if the depth-specific groundwater samples further indicate potential risk.

Building 1556

No further investigation of potential vapor intrusion pathways should be needed because the building is neutrally to positively-pressurized and would not provide a driving force for the entry of subsurface vapors into the building and although groundwater contamination is present under the building, no risks were identified based on the conservative HHRA.

Janna reviewed the preliminary RAOs and preliminary remedial alternatives. Vapor may need to be worked into the RAOs. The RAOs can be refined during the next meeting.

Path Forward: The vapor intrusion evaluation work plan will be submitted to the team by December 5. An expedited team review time of no more than 30 days was requested.

The draft RI report will be reviewed by NAYFAC by November 30. Comments will be addressed, followed by team submission December 15. Comments will be due on February 15, and the document will be finalized by the end of February. The FS is ongoing, and the draft submission is planned for February, in coordination with the finalization of the RI report.

VI. Site 5 Comment Resolution and NTCRA Schedule

Objective: Provide a brief site background, discuss and resolve comments on various site documents, update the team on the removal action, and discuss the overall site schedule.

Overview of Discussion: Copies of the presentation were distributed.

Kim briefly reviewed the site history and status. An EE/CA was prepared and a removal action is planned to address waste/burnt soil, surface soil, and sediment. An Addendum to

the Expanded Remedial Investigation was prepared to evaluate risk and present the risk management approach for elevated metals in shallow groundwater.

Kim provided an overview of the upcoming removal action and its phasing. She displayed a figure showing the areas being addressed under each phase. The three phases will be conducted concurrently, under one mobilization. The first phase is different because it requires mechanical screening of the excavated material due to the historical activities of the area (e.g., burning of ordnance-related material); the second and third phases do not require screening.

Kim reviewed the objectives of and the comments received on the draft addendum to the ERI. EPA provided comments, and VDEQ deferred to EPA. A Response to Comments was distributed to the team. Josh provided reasoning for his comments: EPA's concern is that aluminum and manganese both affect the same target organ. They agree that risk management is acceptable based on the concentrations and background data, but want to further develop the risk management argument to facilitate the legal review of the upcoming NFA ROD. Josh indicated that the response to comments is acceptable.

Consensus: The Team agrees to accept the redlined Draft Addendum to the Expanded Remedial Investigation/Human Health Risk Assessment/Ecological Risk Assessment for Site 5 as Final.

Kim reviewed the objectives of and the comments received on the draft removal action work plan. The response to comments has been distributed and accepted. The MEC screening approach is being incorporated into the work plan. The final work plan will be distributed by November 21.

Kim reviewed the objectives of and the comments received on the draft confirmation sampling work plan. The comments have been addressed and the final document has been distributed.

Kim reviewed the objectives of the draft Hot Spot Delineation Report. Comments are due November 29, and finalization of the document will meet a team goal. Josh and Karen requested that when the work plan is developed to remove the southern hot spot, minimal impact to access the area is incorporated.

Path Forward: The Addendum to the ERI and Removal Action Work Plan will be finalized and distributed based on the comment resolution. The Hot Spot Delineation Report will also be finalized after comments are received.

VII. Partnering Activity

Josh facilitated a partnering activity to improve the team's working relationship and ability.

Thursday, July 26, 2007

0800 Welcome/Check In

Reviewed Roles and Responsibilities

Reviewed Ground Rules

Reviewed current agenda: The agenda was reviewed; no changes were made.

VIII. Site 20: Wharf Area Sediments

Objectives: Present the background of Site 20 and discuss the path forward.

Overview of Discussion: Copies of the presentation were not distributed, but will be posted on the SJCA website.

Tim showed the location of Site 20 and nearby ordnance buildings, and described the historical loading activities. The Initial Assessment Study (IAS) identified the wharf area and pier adjacent to Buildings M-5 and 190 that were used for loading of ordnance. Explosive Ordnance Disposal (EOD) team divers searched the wharf area and reported some metal and thick silt deposits. The IAS concluded that ordnance had been dropped into the sediments adjacent to the wharf and Site 20 area during loading and unloading operations and that they were not a hazard if the sediments are not disturbed. Therefore, it recommended that the real estate records be annotated to indicate that unexploded ordnance (UXO) may be present.

The Relative Risk Ranking (RRR) was conducted in 1996. At Site 20, site reconnaissance, a magnetometer survey, and sediment sampling was conducted. Kim displayed the historical aerial photographs of the area, and it appears that the wharf area was removed sometime between 1937 and 1949.

Action Tim – Check dredge records for SJCA wharf area.

Tim reviewed the results of the magnetometer survey. Approximately 69 buried contacts were detected around the Site 20 wharf area, concentrated in 3 areas. The contacts were not visually confirmed and could represent any type of metal, not necessarily ordnance. Four sediment samples were collected and analyzed for TCL VOCs, TCL SVOCs, TCL pesticides/PCBs, TAL inorganics, and explosives.

Tim reviewed the results of the Site Screening Assessment (SSA), which was conducted in 2001. The SSA evaluated the results of the RRR samples. One VOC, multiple SVOCs, 1 pesticide, 1 explosive, and multiple inorganics were detected. A HHRS was conducted and did not identify any potential risk to human receptors. An ERS identified minimal risk to benthic organisms. However; the risk was based on mercury and PAHs, which were detected at similar concentrations to those detected in urban water bodies; and based on the explosive, for which there is no toxicity screening value and which was only detected in 1 of the 4 samples. The SSA recommended posting signs to prohibit intrusive activities, placing a warning notice in the real estate documents, and notifying the USACE for potential for UXO in the area. Consensus was reached by the partnering team in July 2001 for no further action under CERCLA.

Tim discussed the post-SSA actions. Navy real estate and USACE were notified as recommended in the SSA. The signs were posted in the area. No Navy restrictions were implemented on the water body, and no USACE restrictions were implemented because they have no enforcement authority. The NAVFAC RPMs discussed the site with NOSSA

and recommended signs and restrictions based on the site history. The signs are to indicate that base security should be contacted.

Tim discussed the current status of Site 20. The Military Munitions Response Program has become much more developed since Site 20 was initially closed. A Preliminary Assessment (PA) was completed in 2007 for a list of identified sites. Additional sites have been identified since that list. NAVFAC Mid-Atlantic is discussing with headquarters conducting PAs for new sites, including Site 20, under the MRP. Because Site 20 is closed under CERCLA, it would likely become UXO Site 1.

Path Forward: A scope of work will be developed to conduct a PA after the CLEAN IV contract is awarded.

IX. EPA Cross Program Revitalization Measures (CPRM)

Objective: To provide an explanation of EPA's land revitalization tracking, including the CPRM.

Overview of the Discussion: Josh provided a background on the program. Back in 2004, tracking measures were developed by EPA to count the sites and acres made ready for reuse. In an effort to come up with a way to track all of the programs (CERCLA, RCRA, Brownfields, etc.) under OSWER the same, the CPRM was developed. One of the primary things being tracked is the entire universe of acres that can potentially eventually be made ready for anticipated use (Federal Facility Universe Acres) (includes proposed, final, deleted, NTCRA, non-NPL Federal Facilities and FUDs). The total areas are based on areas that have been investigated, but not necessarily remediated. If a site is closed under CERCLA and transferred to another program, it is not credited under CERCLA.

Action Josh – Check status of “sites within sites” (i.e., Sites 9 & 10, etc. within Site 21) and check on the determination of DRMO in accounting.

Another measure that was developed is “Protective for People Under Current Conditions” (PFP). It is aligned with the “human exposure” environmental indicator. It deals with sites at the OU level. Sites with no exposure pathways or no unacceptable risks are tracked as PFP. Future use conditions and ecological receptors are not taken into account when determining the human exposure status of an OU. Groundwater only sites cannot obtain a PFP status. PFP status can be changed if new information becomes available.

Action Josh – Check status of NFA sites with no decision document (e.g., sites that were eliminated via the FFA).

Ready for Anticipated Use (RAU) is the next level up in tracking. Sites must be PFP, all cleanup goals must have been met, and all institutional controls must be in place prior to being identified as RAU. RAU status can also be changed if new information becomes available.

Sitewide Ready for Anticipated Reuse is the highest level of tracking. Every site (OU) would need to be identified as RAU before the Sitewide Ready for Reuse can be counted.

Sites identified as PFP and RAU must also be tracked by their use (e.g., green space, industrial, residential).

Action Josh – Check on adding Site 19 acreage into the PFP/RAU count.

Action Josh – Check on including Site 21 as PFP.

Path Forward: Josh will complete his action items and update the team as the program is further developed.

X. Roundtable

Electronic Joint Execution Plan (JEP): DOD and states have DSMOA, where DOD funds states for regulatory oversight of the CERCLA program. Up until this year it's been done under a spreadsheet developed by the RPM. This year, it needs to be updated on a web site. Mary Margaret is going to update all of the Navy's facilities by the end of the month.

Environmental Restoration Conference: Consider presenting the Site 2 Triad Investigation and Conceptual Site Model, tying it to the UFP QAPP. Presentations are typically 15 minutes, followed by 5 to 10 minutes for questions and answers. (30 minute time slots)

Action Tim – Let Bob know SJCA plans to prepare a presentation on Site 2 for the Environmental Restoration Conference, and check to see if regulators can attend.

Innovative Emerging Technology: Tim has been asked by ESTEP (joint DOD/EPA/Universities task force) if Site 21's disassociated hot spot can be used for a study on a new, innovative, emerging technology. He doesn't have any details yet, but is working with them.

NIRIS: NIRIS is a universal system for maintaining updates in mapping that has been under development for several years. It is now up and running. Everything from ENDAT and Enterprise needs to be migrated to NIRIS this year. RPMs and Activity Managers will receive training.

VIII. Schedule and FY 2008 Team Goals Update

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

FY 2007 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.

XI. Agenda Building – February Meeting Agenda

<u>Topic</u>	<u>Goal</u>	<u>Lead</u>	<u>Time</u>
Site 21 Vapor Intrusion	Update on vapor intrusion status.	John Lowe	1 hr
Training on groundwater treatment and DNAPL	Informational	Guest	1 hr
Site 21 Feasibility Study (RAOs and remedial alternatives)	Present the Feasibility Study.	Janna/Guest	1 hr
Site 5 Removal Action Update	Update team on removal action status.	Janna	0.5 hr
Site 2 Remedial Action Objectives and Remedial Alternatives	Refine the RAOs and Remedial Alternatives in preparation for the FS.	Kim/Guest	2 hr

Site 4 Data Update	Present the latest results from groundwater monitoring.	Kim	0.5 hr
SROD and eBERA	Informational	Kim	0.5 hr
Partnering Activity	Improve team working ability.	Team	0.5 hr
Roundtable	Introduce new topics	Team	0.5 hr

Next meeting: February 7 - 8, 2008

Location: VDEQ, Richmond, Virginia

Lodging: TBD, Richmond, Virginia

Start time: 9 AM

Finish time: 2 PM

Chair: Josh Barber

Host: Karen Doran

Timekeeper: Tim Reisch

Goal Keeper: Tim Reisch

Recorder: Janna Staszak

Facilitator: John Burchette

Tier II: Tim Reisch

Guests: TBD

Pre-Meeting Agenda Conference Call: 2:00 PM on January 22, 2008

XII. Future Meetings Schedule

April 9 - 10, 2008 Philadelphia, Pennsylvania (reservations Tuesday for Kim, Karen, and Janna & Wednesday for Tim, Kim, Karen, and Janna)

June 18 - 19, 2008 Tidewater, Virginia with RAB (RAB June 17 @ 5:00 PM)

Note: Tim's kids' spring break is March 24 - 28.

XIII. Meeting Evaluation

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

XIV. Parking Lot

- Site 4 groundwater monitoring during the 5-year review
- Phone numbers on IR site signs
- SROD for Site 21
- September Meeting Minutes
- July Meeting Minutes

Consensus: The team agrees to accept these meeting minutes for the November 2007 meeting as final. The final minutes will be posted on the Virginia/Maryland Joint Installation Restoration (IR) Teams web site.