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RESTORATION ADVISORY BOARD MEETING MINUTES 13 OCTOBER 2011 NSWC INDIAN
HEAD MD
10/13/2011
RESTORATION ADVISORY BOARD

INSTALLATION RESTORATION PROGRAM



NAVAL SUPPORT FACILITY,
INDIAN HEAD
101 STRAUSS AVENUE
INDIAN HEAD, MARYLAND
20640-5035



RESTORATION ADVISORY BOARD (RAB) MEETING

Date of Meeting: October 13, 2011, 5:00 pm

Restoration Advisory Board (RAB) Member Participants:

Mr. Joseph Rail (N)	Mr. Elmer Biles (C)
Mr. Curtis DeTore (S)	Mr. William Potter (N)
Mr. Nathan Delong (N)	Mr. Nicholas Carros (N)

RAB Members Not in Attendance:

Mr. Jerry Hamrick (L)	Mr. Vincent Hungerford (C)
Mr. Dennis Orenshaw (F)	Mr. Butch Dye (S)

Additional Attendees:

Ms. Becky D'Ambrosio (N/C)	Mr. Daniel Bragunier (N/C)
Ms. Susan Yates (N/C)	

C = Community
F = Federal Official
K = Contractor
L = Local Official
N = Navy Official
R = Newspaper Reporter
S = State Official

Enclosure (1)

Major Issues Discussed/Accomplished:

1. Arrival/Welcome

Mr. Joseph Rail of the Naval Facilities Engineering Command, Washington (NAVFAC Washington) began the meeting by introducing himself and welcoming everyone to the Indian Head Senior Center. Mr. Rail then presented the meeting agenda, which is included in Attachment A.

2. FY12 Budget and Schedule Update

Mr. Rail began the presentations by talking about the anticipated budget and level of work planned for the Installation Restoration & Munitions Response Programs. Anticipated work includes investigations, remedial actions, records of decision, and long term monitoring.

A copy of Mr. Rail's presentation is provided in Attachment B.

3. Site 11 Remedial Action Update

Mr. Rail began the presentation by providing a summary of the site location and initial condition. The presentation then conveyed the various steps of the remedial action that have taken place to date and the current status of the site. Mr. Rail closed the presentation by describing the work that needed to be completed to complete the action and opened the floor to questions.

A copy of Mr. Delong's presentation is provided in Attachment C.

4. Site 66 Remedial Investigation Update

Mr. Delong began the presentations discussing the location and current conditions of the site. Mr. Delong's then presented the investigation objects and sampling plan for the investigation, followed by the preliminary results for human health and ecological risks. He closed the presentation by discussing the path forward for the site and opening the floor to questions.

A copy of Mr. Delong's presentation is provided in Attachment D.

5. Site 43 Sampling Results

Mr. Carros began by discussing the locations and release history for the site. He then discussed the location for sampling and preliminary results at the site. Mr. Carros described the some of the data gaps and the anticipated next phase of the investigation. He then concluded the presentation by opening the floor to questions.

A copy of Mr. Carros's presentation is provided in Attachment E.

6. FY12 Planned Remedial Actions Update

Mr. Carros presented the upcoming remedial actions for the installation. For each action, he discussed the site location and primary action. He closed the presentation by opening the floor to comments.

A copy of Mr. Carros's presentation is included in Attachment F.

7. Comments, Questions, and Answers

Numerous comments were made and questions asked during the meeting. These comments, questions, and answers are provided in Attachment G.

8. Conclusion of Formal Presentations

Mr. Rail presented the tentative agenda for the next RAB meeting, which is scheduled for April 12, 2012. A copy of the agenda is included in Attachment H.

Mr. Rail then concluded the formal portion of the meeting and thanked all in attendance.

**NAVAL SUPPORT FACILITY INDIAN HEAD
INSTALLATION RESTORATION (IR) PROGRAM
RESTORATION ADVISORY BOARD (RAB) MEETING AGENDA**

October 13, 2011

- | | |
|-----------------------|--|
| 5:00 - 5:05 pm | ARRIVAL/WELCOME
Mr. Joseph Rail
Naval Facilities Engineering Command, Washington (NAVFACWASH)
Remedial Project Manager |
| 5:05 – 5:15 pm | FY12 BUDGET UPDATE
Mr. Joseph Rail |
| 5:15 – 5:30 pm | SITE 11 REMEDIAL ACTION
Mr. Joseph Rail |
| 5:30 – 6:00 pm | SITE 66 RI UPDATE
Mr. Nathan Delong |
| 6:00 – 6:30 pm | SITE 43 SAMPLING RESULTS
Mr. Nicholas Carros |
| 6:30 – 7:00 pm | FY12 PLANNED REMEDIAL ACTIONS UPDATE
Mr. Nicholas Carros |
| 7:00 pm | ADJOURN |



NAVAL SUPPORT FACILITY,
INDIAN HEAD



FY12 Budget & Schedule Update

Joseph Rail
NAVFAC Washington

October 13, 2011



FY12 Budget & Schedule Update



• ***Approximate budget for FY 2012-***

\$3.7 mil for IRP

\$2.7 mil for MRP

Planned work includes:

- Remedial Investigation (RI)/Feasibility Study (FS)*
- Remedial Design (RD)*
- Proposed Plan (PP)*
- Record of Decision (ROD)*
- Remedial Action (RA or IRA)*
- Long-Term Monitoring (LTM)*



FY12 Budget & Schedule Update



- **RI/FS for:**
 - Site 43- Toluene Disposal Area
 - Site 67- Hog-Out Facility
 - UXO 4- Improvised Explosive Device (IED) Area
 - UXO 5- Inert Ordnance Disposal (IOD) Area
 - UXO 15- Old Skeet and Trap Range
 - UXO 16- Rum Point Skeet Range
 - UXO 26- The Valley Impact Area

- **RD for:**
 - Site 66- Turkey Run Disposal Area
 - SWMU 14- Photographic Lab Septic Tank System



FY12 Budget & Schedule Update



- **PP/ROD for:**
 - Site 66- Turkey Run Disposal Area
 - SWMU 14- Photographic Lab Septic Tank System

- **IRA/RA for:**
 - Site 8- Mercury Contamination from Building 766
 - Site 14- Lab Area
 - Site 38- Rum Point Landfill
 - Site 47- Mercuric Nitrate Disposal Area
 - UXO 19- Igniter Area



FY12 Budget & Schedule Update



- *LTM for:*
 - *Site 11- Caffee Road Landfill*
 - *Site 17- Disposed Metal Parts Along Shoreline*
 - *Site 21- Bronson Road Landfill*
 - *Site 42- Olsen Road Landfill*
 - *Site 57- Building 292 TCE Contamination*
 - *UXO 32- Scrap Yard*



FY12 Budget & Schedule Update



Questions?



NAVAL SUPPORT FACILITY, INDIAN HEAD



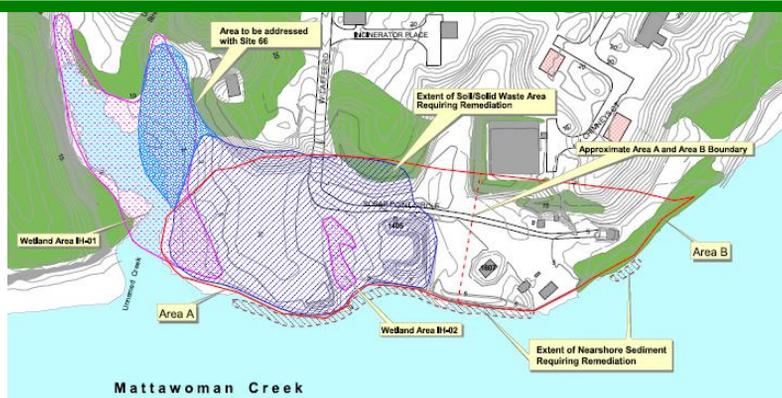
Site 11 Remedial Action Update

Joseph Rail
NAVFAC Washington

October 13, 2011



Site 11 RA Update



- LEGEND**
- | | | |
|-----------------------------------|------------------------------------|--|
| Approximate Site Boundary | Wooded Area | Topographic Index Contours (5 foot Interval) |
| Limits of Waste | Buildings | Stream |
| Area to be addressed with Site 66 | Demolished Buildings | Roads |
| Wetland Area | Boundary between Area A and Area B | 5.5 = Estimated Thickness of Waste (feet) |
| Sediment Area of Attainment | | |





Site 11 RA Update



Site 11- Initial Site Conditions



Site 11 RA Update



Area A former landfill
Approximate
boundary

Area B Shoreline work area
Approximate boundary

At Area A within the working LOD all of the vegetation is now removed.
At Area B Shoreline – trees and shoreline debris is now removed.



Site 11 RA Update



Initial site after mowing coarse vegetation



Clearing trees along shoreline



Installed silt fence along Western boundary -
Note very wet conditions



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Site 11 RA Update



Installing super silt fence (SSF)
Note: MEC screening with Schonstedt metal detector (yellow tool). Each post hole screened, as well as the digging length of where SSF is installed.



Miscellaneous metal items found

6



Site 11 RA Update



Clearing the way for Super silt fence Installation.



Site 11 RA Update



Vegetation removal along Shore at Area B

Looking West towards shore at Area A
After most vegetation removed.





Site 11 RA Update



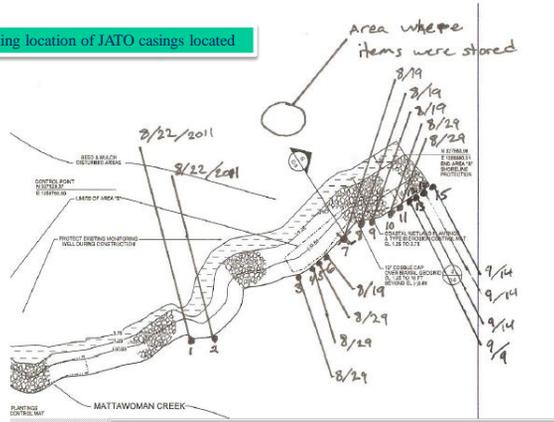
Along shore at Area B – identified and found JATO Motors – removed and initially staged for destruction.



Site 11 RA Update



Sketch depicting location of JATO casings located





Site 11 RA Update



Deploying turbidity curtain



Set up to remove JATO bottle in woody debris along shore at Area B



Site 11 RA Update



Shredding of trees and smaller vegetation. Mulch used for dust and erosion control on site access roads.



Site 11 RA Update



Getting ready to clear near shore / tidal area



Shoreline showing wood debris
Vegetation with turbidity curtain



Site 11 RA Update



Outfall E&S Controls installed and
installation of cobble blanket at Area B





Site 11 RA Update



Preparations of geotextile underlayment for cobble blanket at Area B



Site 11 RA Update



Clean up of surface debris / concrete and rubble



Site 11 RA Update



Marine Mattress Fabrication



Site 11 RA Update



Staging of fabricated Marine Mattresses



Site 11 RA Update



Staged – construction materials



Construction of sediment traps



Site 11 RA Update



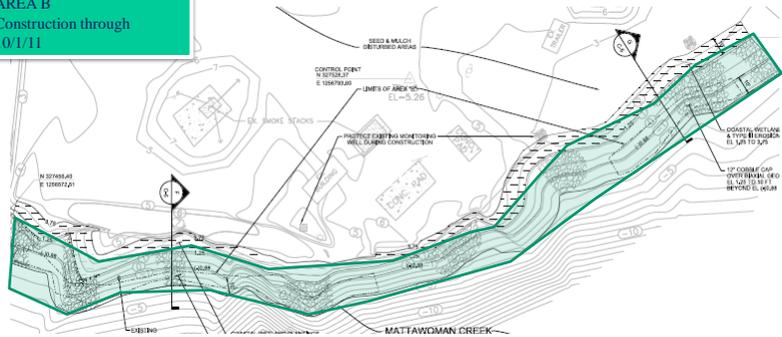
Stake out of Area A – North side for placement of swale and drainage features to be incorporated into landfill cover.



Site 11 RA Update



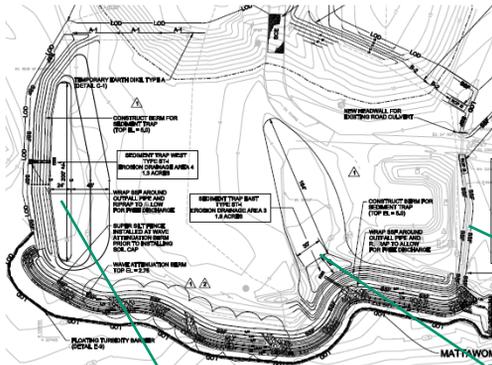
AREA B
Construction through
10/1/11



Cobble blanket – along Area B – 80% complete. Upland fill and topsoil being placed week of 10/1/11



Site 11 RA Update



- Marine Mattress fabrication continues
- Placement of Marine Mattress to start 10/12/11
- Fill material to construct cover to be installed upon completion of all E&S controls for Area A.

Outfall constructed

Sediment Trap West
Week of 10/1 – 10/7/11

Sediment Trap East
10/4/11



Site 11 RA Update



Questions?



NAVAL SUPPORT FACILITY
INDIAN HEAD



Site 66
Turkey Run Disposal Area
Remedial Investigation Summary

Nathan DeLong
NAVFAC Washington

October 13, 2011



Site 66 RI Summary



OUTLINE

- *Site Background*
- *Remedial Investigation Results*
 - *Ecological Risks*
 - *Human Health Risks*
- *Path Forward*
- *Questions*



Site 66 RI Summary



- *Site Background*
 - *Discovered during a site visit in 2003*
 - *Officially designated an IR site in late 2004*
 - *Unregulated dump area*
 - *Construction debris, metal scrap, lead flooring, laboratory bottles, etc.*
- *Site Investigation Recommendations (2008)*
 - *No further evaluation warranted*
 - *Surface water and ash*
 - *Further evaluation for human health and/or ecological risks*
 - *Surface soil, subsurface soil, groundwater, and sediment*



Site 66 RI Summary





Site 66 RI Summary



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Site 66 RI Summary



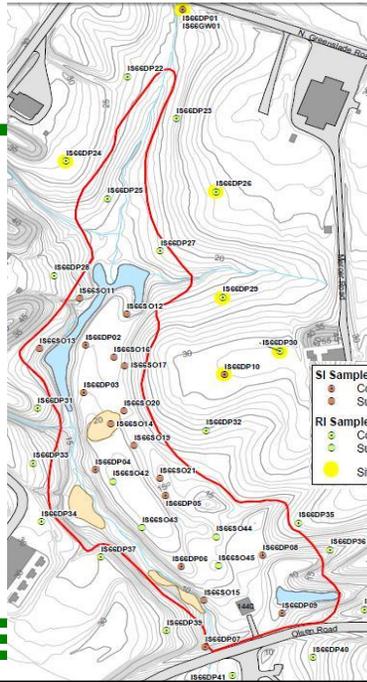
Remedial Investigation Objectives

- *What is the nature and extent of contamination in the surface and subsurface soil (including ash) within and outside the current Site 66 boundary?*
- *What is the nature and extent of contamination in the shallow groundwater at Site 66?*
- *What is the extent of sediment contamination within and downstream of the Site 66 boundary?*
- *What is the extent and thickness of the buried waste material within and outside the current Site 66 boundary?*
- *Do the concentrations of constituents detected in the soil, groundwater, sediment, or ash material present unacceptable human health or ecological risk?*
- *Do the constituent concentrations in the soil, groundwater, sediment, or ash material warrant further action?*

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- 24 surface samples and 20 subsurface samples
- VOC's
- SVOC's
- Pesticides and PCB's
- Metals
- Dioxins and Furans
- Explosives

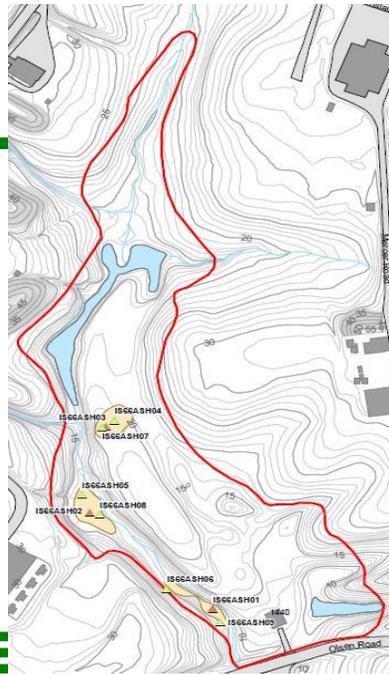


Soil Sample Locations

SI Sample Locations	
●	Co-located Surface/Subsurface Soil/In Situ Groundwater Sample
○	Surface Soil Sample
RI Sample Locations	
○	Co-located Surface/Subsurface Soil Sample
○	Surface Soil Sample
●	Site-Specific Background Sample



- 6 samples (0-0.5 feet bgs)
- Inorganics
- Dioxins and Furans

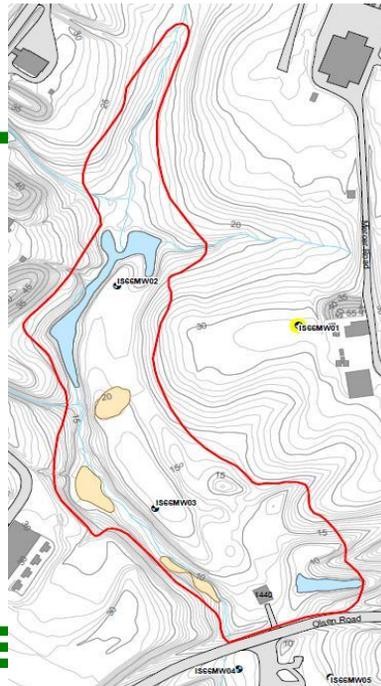


Ash Sample Locations

SI Sample Locations	
▲	Ash Sample
RI Sample Locations	
▲	Ash Sample



- 5 samples
- VOC's
- SVOC's
- Pesticides and PCB's
- Metals
- Dioxins and Furans
- Explosives
- TOC
- pH
- Hardness



Permanent MW Locations

- RI Sample Locations**
- Permanent Monitoring Well
 - Site-Specific Background Sample



- 10 samples
- VOC's
- SVOC's
- Pesticides and PCB's
- Metals
- Dioxins and Furans
- Explosives
- TOC
- pH
- Grain size



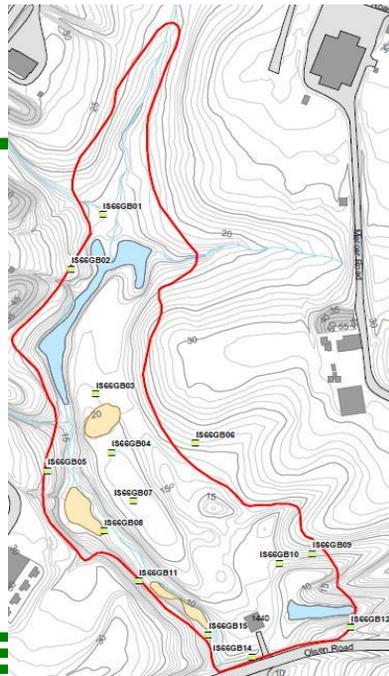
Sediment Sample Locations

- SI Sample Locations**
- Sediment/Surface Water Sample
- RI Sample Locations**
- Sediment Sample
 - Site-Specific Background Sample



- 14 locations
- Soil classification

Soil Boring Locations (Stratigraphy)



RI Sample Locations
■ Stratigraphic Soil Boring

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Site 66 RI Summary



- *Potential Ecological Risk*
 - *Invertebrates and terrestrial plants in surface soil and ash*
 - *Mercury, atrazine, and PAHs (surface soil), metals (ash)*
 - *Benthic invertebrates and aquatic plants in sediment*
 - *Lead, mercury, silver, pesticides, and PAHs*
 - *Upper trophic level semi-aquatic and terrestrial receptors in sediment and ash*
 - *Mercury (sediment), arsenic and selenium (ash)*

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Site 66 RI Summary



- *Potential Human Health Risk*
 - *Current Human Health Risk*
 - *No unacceptable risks for current or future adult and adolescent trespasser/visitor or construction worker*
 - *Future Human Health Risk*
 - *Industrial workers from combined surface and subsurface soil*
 - *Carcinogenic PAHs and chromium*
 - *Adult, children, and lifetime residents*
 - *SOIL: carcinogenic PAHs and chromium and non-carcinogenic hazard in metals (soil)*
 - *ASH: carcinogenic arsenic and chromium and non-carcinogenic arsenic*
 - *GROUNDWATER: carcinogenic arsenic and non-carcinogenic risk from arsenic, cobalt, iron, and manganese*



Site 66 RI Summary



- *Path Forward*
 - *Resolve comments and finalize Remedial Investigation Report*
 - *Additional investigation of down gradient area*
 - *Delineate extent of fill material*
 - *Characterize extent of groundwater contamination*
 - *Perform Feasibility Study*
 - *Analyze potential remedies*
 - *Surface/subsurface soil*
 - *Ash*
 - *Sediment*
 - *Groundwater*



Site 66 RI Summary



Questions?



Site 43 – Toluene Disposal

Remedial Investigation Review

*Naval Support Facility – Indian Head, Maryland
Restoration Advisory Board Meeting*

Nicholas Carros

October 13, 2011



Goal and Outcome

- *Presentation/Discussion Outcome*
 - *Review summer 2011 RI results (Phase 1 RI)*
 - *Explain complexity of Site 43's CSM*
 - *Convey path forward for Phase 2 RI*



Site Information



- *Site 43 includes two areas separated by 700 ft along Gallery Rd near Building 720*
 1. *Area near northern corner of Building 1040*
 2. *Utility pole across Gallery Rd from Building 1041*



3



Building 1040 (northern building at Site 43)



Looking at northwest side of Building 1040 and Schuyler Road

Parts cleaning operations occurred from 1960 to 1989. Historical disposal of acetone used for propellant removal in drainage ditch over ~2 yrs.

4



Bldg 1040 – Drainage Ditch



5



Building 1041 (southern building at Site 43)



Looking toward northeast along Gallery Road (Y2004)

Parts cleaning operations occurred from the late 1950s to 1989.

Historical disposal of acetone and toluene used for propellant removal at base of pole over ~2 yrs

(15-20 gallons/wk).

6



RI Work Plan Review



- *Problem Definition*
 - *Characterization at Bldg 1040*
 - *Horizontal & Vertical extent of explosives, solvent, and/or metals at Bldg 1040*
 - *Continuing VOC source at Bldg 1040?*
 - *Soil gas/vapor intrusion?*
 - *Groundwater flow*
 - *Geology and Geotechnical information*
 - *Baseline HHRA at Bldg 1040, including vapor intrusion*
 - *Characterization at Bldg 1041*
 - *Resample well to confirm cobalt and TCE.*



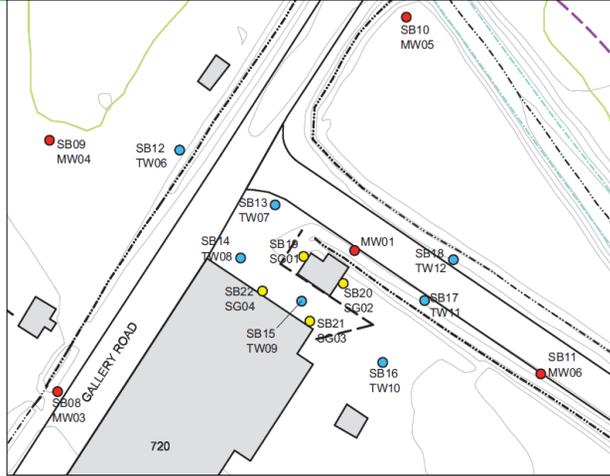
RI Work Plan Review



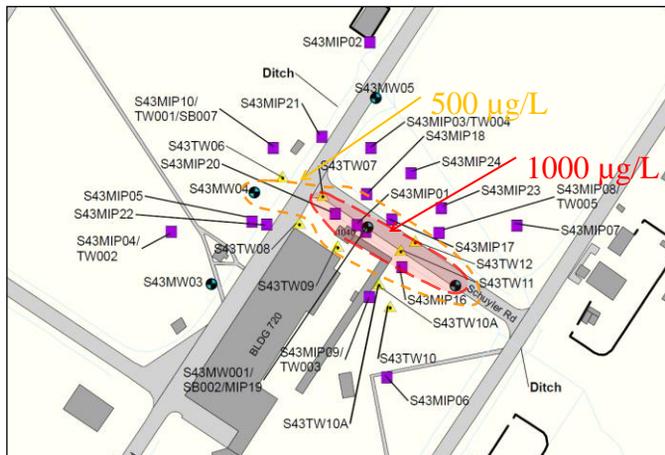
- *Soil borings for lithology – geotechnical samples and groundwater grab samples*
- *Organic vapor field screening and soil sample collection.*
- *Install four new permanent monitoring wells at (expected) boundary locations.*
- *Groundwater samples from new and existing wells, and DPT grabs. Check for non-aqueous phase liquid.*
- *Measure hydraulic conductivity of aquifer (slug tests) and gauge for groundwater flow.*
- *Collect soil gas samples at Buildings 1040 & 720 slab perimeters*



RI Work Plan Review



TCE in Groundwater





Groundwater Results Summary



- *CVOCs: TCE concentrations from 42 to ~11,000 µg/L*
 - *Elevated CVOCs in groundwater grab (DPT) samples and monitoring wells, especially MW01, MW04, and MW06*
 - *Both east and west of assumed disposal/dumping/source area*
- *Explosives & Metals: relatively low detections of explosives and metals*
 - *Potential COPC (tbd) – nitroglycerin*
 - *No apparent site-related metals throughout site; however,*
 - *Elevated cobalt confirmed again at Building 1041 utility pole (MW02)*
- *Further delineation needed*
 - *CVOCs in north portion of site*
 - *Cobalt in south portion*



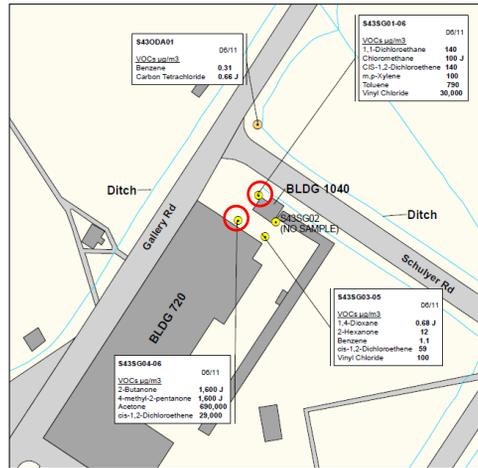
Soil Results Summary



- *Acetone: elevated, but below PAL in soil.*
 - *Correlates with elevated acetone soil gas detections near Building 720*
 - *No immediate hazard to industrial workers (OSHA), but likely will be a risk driver for other vapor intrusion receptors in CERCLA baseline HHRA (tbd)*
- *CVOCs: Only TCE exceeded PALs at the site (SB17)*
 - *Elevated TCE also at SB11 and SB18*
 - *Elevated TCE detections are 75-150 ft east of assumed disposal area, along the north side of drainage ditch (and SB18, north of road).*
 - *Extent of TCE is unknown – further delineation needed*
 - *Drainage ditch – potential soil source area throughout length of ditch (not just at Bldg 1040)*



RI Soil Gas Results



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Soil Gas Results Summary



- *Elevated soil gas concentrations of acetone, cis-1,2-dichloroethene, and vinyl chloride observed in SG01 and SG04*
- *Concentrations indicate potential vapor intrusion issue(s) for Buildings 1040 and 720*
- *Preliminary evaluation indicates no immediate threat to site workers in Bldg. 720, but potential for indoor air levels above RSLs*
- *Further evaluation of vapor intrusion pathway may be needed (sub-slab and/or indoor air sampling)*

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Phase 1 RI Results Summary



- *Soil sampling results indicate potential TCE soil source area along drainage ditch*
- *TCE is primary COC in groundwater, but extent not defined*
- *TCE in aqueous IDW failed TCLP*
- *Elevated soil gas detections near Buildings 1040 & 720 (potential intrusion issue – complete pathway ?)*
- *Cobalt confirmed in groundwater (Building 1041)*
- *Other CSM uncertainties*
 - *Groundwater flow (radial from leaking pipes)*
 - *Utilities (conduits / preferential pathway)*

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Data Gaps



- *Potential soil source along ditch – not delineated*
- *Site-related contaminants in groundwater not fully delineated*
- *Groundwater flow direction still uncertain*
- *Utilities creating some complexities*
 - *Impact on groundwater flow direction*
 - *Contaminant migration*
 - *Potential source? (industrial line from offsite building)*
- *Vapor intrusion – potential concern*
- *Cobalt in groundwater (Building 1041) not fully delineated*

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Phase 2 RI Study Goals

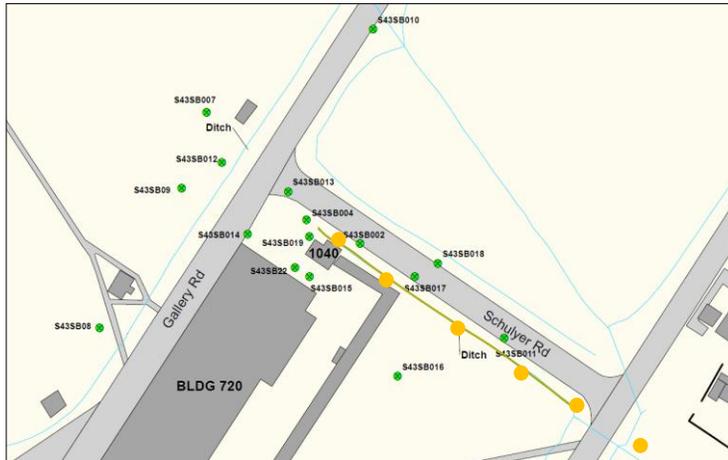


- *Delineate potential TCE soil source(s) along drainage ditch*
- *Determine extent of site contaminants in groundwater*
- *Research and investigate site utilities (effects and source potential)*
- *Determine groundwater flow direction*
- *Further evaluate potential CURRENT vapor intrusion issue(s) (Building 720 only?)*
- *Define extent of cobalt in groundwater (near building 1041).*

17



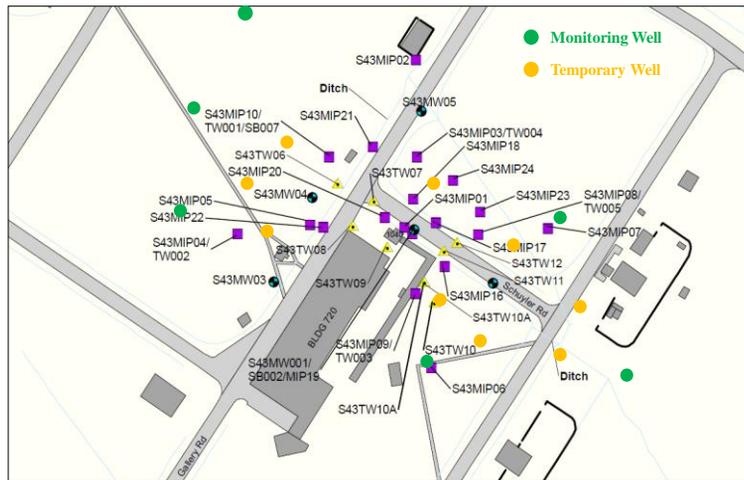
Phase 2 RI - Soil Sampling



18



Phase 2 RI - Groundwater



19



Site 43 – Phase 2 RI Questions & Research



- *Utilities*
 - Bedding material/conduit
 - Use of industrial wastewater line north of Schuyler Road
 - Water or wastewater line leaks (historical) and status of current water line leak repair (fix?)
- *Vapor Intrusion*
 - Include Bldg 1040?
 - Monitoring practices in place for OSHA ...
 - Chemicals already stored/used in Bldgs 720 and 1040.
 - Determine if sub-slab and/or indoor air samples can be collected in Building 720
- *Historical use of cobalt (Bldg 1041)*

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*Questions
and
Additional Discussion*





NSF Indian Head



FY12 Remedial Actions

Naval Support Facility – Indian Head, Maryland
Restoration Advisory Board Meeting

Nicholas Carros

October 13, 2011



IR 11 Caffee Road Landfill



- **1. Contamination:**
- Metals and polynuclear aromatic hydrocarbons (PAHs) from disposal and burning of bulk metals items.
- **2. From:**
- Disposal of building debris, open burning residues, and bulk metal items.
- **3. Action:**
- Complete Capping action





IR 17 Disposed Metal Parts Along Shoreline



- **1. Contamination:**
- Rocket motor casings, shipping containers, empty drums, solvents, and various metal parts.
- **2. Location:**
- A 1,000-foot stretch of shoreline east of the Decontamination Burning Point, along Mattawoman Creek and extending back approximately 100 feet from the shoreline in the wooded area near Building 1569.
- **3. Actions:**
- Shoreline MEC Removal, upland MEC clearance, & Soil Mixing of zero-valent iron to treat TCE



UXO 19 Igniter Area



- **1. Contamination:**
- Explosives, lead styphnate.
- **2. Location:**
- The southeastern shoreline of the main installation adjacent to Mattawoman Creek.
- **3. Action:**
- MEC Clearing



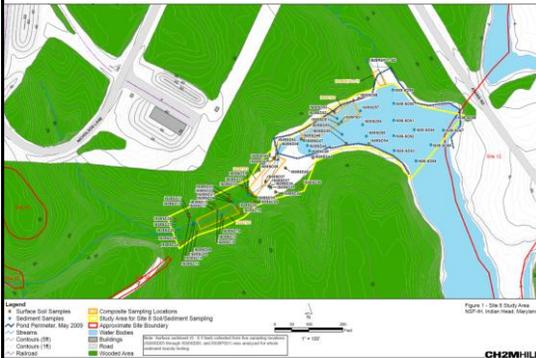
IR 1 Thorium Spill



- **1. Contamination:**
- Thorium.
- **2. Location:**
- Special Weapons Disposal Building (Building 900).
- **3. From:**
- Potential thorium contamination from ordnance training session near Building 900.
- **4. Action:**
- Soil Removal & Backfill by the Navy's Radiological Affairs Support Office.



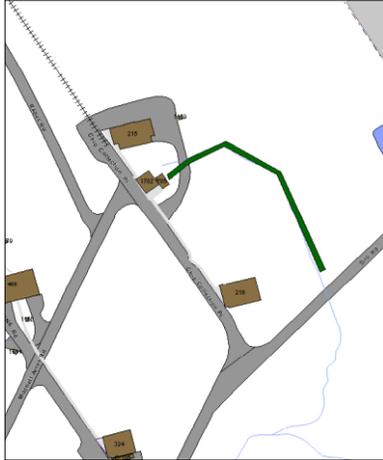
IR 8 MERCURY CONTAMINATION FROM BUILDING 766



- **1. Contamination:**
- Mercury.
- **2. Location:**
- The drainage system from Building 766, which included a stormwater manhole, a ditch, and a pond that discharges into Mattawoman Creek.
- **3. From:**
- Lab operations 1958-1981.
- **4. Action:**
- Soil Removal & wetland restoration.



IR 19 Catch Basins at Chip Collection Houses



- **1. Contamination:**
- Water contaminated with lead and copper salts.
- **2. Location:**
- Catch basins of the Chip Collection Houses (Buildings 1051 and 785).
- **3. Action:**
- Place topsoil and establish vegetation.

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IR 27 THERMAL DESTRUCTOR 1

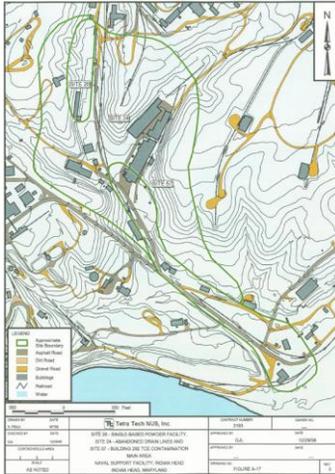


- **1. Contamination:**
- Hydrazine-contaminated water.
- **2. Location:**
- Thermal Destructor 1 facility (Building 1584).
- **3. Action:**
- Remove soil, place topsoil, and establish vegetation.

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IR 57 BUILDING 292 TCE CONTAMINATION



- **1. Contamination:**
- Trichloroethylene (TCE).
- **2. Location:**
- Building 292.
- **3. Action:**
- Treatment by injection of emulsified vegetable oil and monitoring.



Lab Area (IR 14, 15, 16, 49, 50, 51, 52, 53, 54, & 55)



- **1. Contamination**
- Mercury
- **2. Location:**
- General area bounded by buildings 600, 303, 444, 108A, and 655
- **3. Action:**
- Soil Removal, backfill, restoration of wetland area, and revegetation.



Questions?



INSTALLATION RESTORATION PROGRAM



NAVAL SUPPORT FACILITY,
INDIAN HEAD
101 STRAUSS AVENUE
INDIAN HEAD, MARYLAND
20640-5035



RESTORATION ADVISORY BOARD (RAB) MEETING COMMENTS, QUESTIONS AND ANSWERS

October 13, 2011

Arrival/Welcome

No questions were asked nor comments made during this topic.

FY12 Budget Update

Question: Is the total Fiscal Year 2012 budget for Indian Head \$6.4 mil and how does that compare to FY11?

Answer: Yes, \$6.4 mil is budgeted for Indian Head in FY12. This is an increase over the FY11 budget of \$5 mil.

Question: Does the budget distinguish between Indian Head's Main Area and the Stump Neck Annex?

Answer: No, the total budgeted funds are divided among many sites, some of which are at the Main Area and some at Stump Neck.

Question: How does Indian Head's budget compare to other bases?

Answer: Indian Head is one of the larger bases in the Navy's IR Program, therefore more funds are typically allotted to this installation. As an example, NAVFAC Washington will receive approximately \$14.5 mil total in FY12 to distribute among 10 bases for installation restoration projects. IH will get \$3.7 mil, Dahlgren, VA NSF (\$1.4 mil), PAX River Naval Air Station (\$4.5 mil), and Quantico, VA MCB (\$1.9 mil.)

Site 11 Remedial Action

Question: How much of the shoreline debris is from upstream activities?

Answer: It is speculated that in the past, base personnel dumped metal debris and munitions items along the shoreline of Site 11 next to the Mattawoman Creek. From tidal action and flooding, additional debris has accumulated along the shoreline, but an exact upgradient source would be difficult to identify. Note that all munitions items that have been recovered to date have been inert with no explosives present.

Question: Is any of the debris from the Potomac River?

Answer: No, Site 11 lies along the Mattawoman Creek and would be minimally influenced by the Potomac.

Site 66 RI Update

Question: What were the RI conclusions relating to potential human health risk?

Answer: There are no current risks to employees or contractors. However, based on the data reviewed to date, potentially unacceptable risks to adult, children, and lifetime residents from soil, ash, and groundwater may exist at Site 66 if it is developed or disturbed. The site is undergoing additional evaluation so the Navy can develop appropriate remedial/site closure action plans. Please see the Site 66 RI Update presentation (contained within this package) for the specific contaminants of potential concern for each of the media and receptors described above.

Question: How does contamination at Site 66 compare to other sites in terms of nature and extent?

Answer: The nature and extent of contamination at Site 66 is more complicated than most of the environmental restoration sites located at Indian Head. This is due to the number of contaminants exceeding preliminary risk levels and the different media containing contamination (all media except surface water). This along with the size and physical features of the site should make Site 66 one of the more challenging sites to remediate.

Site 43 Sampling Results

Question: Why are there issues identifying the direction of groundwater flow at this site?

Answer: The site is located near or along a groundwater divide and there was a recent freshwater leak in the vicinity that was causing a temporary mounding effect on the shallow water table.

FY12 Planned Remedial Actions Update

Question: Are wells going to be located around Building 856 at Site 47?

Answer: In addition to the current monitoring well and pilot study injection systems in place, we will be adding additional injection wells. Once the proposed plan has been put together, it will be advertised for public review.

Question: What is planned for Buildings 101 and 102 within the Lab Area?

Answer: Building 101 is currently planned to undergo decontamination and renovation. Building 102 has not been identified for renovation or demolition at this time.

Question: Have there been any advances in technology over the past several years for treatment of IR sites?

Answer: There have been a number of advances of which NSF Indian Head has been a part. Examples include the pilot study for the treatment of perchlorates using lactate at site 67. The anticipated in-situ chemical oxidation of chlorinated solvents at site 47 and the upcoming soil mixing of zero valent iron at site 17 are also good examples of how NSF Indian Head is making use of the newest technologies.

General Questions

Question: How have Hurricane Irene and Tropical Storm Lee affected conditions and/or current work at IR sites?

Answer: The recent weather delayed IR work on base, through lost time preparing for the weather, during the actual events, and with limited operations immediately following the rain, due to wet conditions. Due to proper preparation, we did not suffer any major washouts or equipment damage.

Question: Did the base incur any damage from the recent earthquake?

Answer: To date, no damage resulting from the earthquake has been detected.

**NAVAL SUPPORT FACILITY INDIAN HEAD
INSTALLATION RESTORATION (IR) PROGRAM
RESTORATION ADVISORY BOARD (RAB) **DRAFT** MEETING AGENDA**

April 12, 2012

- | | |
|-----------------------|--|
| 5:00 - 5:05 pm | ARRIVAL/WELCOME
Mr. Joseph Rail
Naval Facilities Engineering Command, Washington (NAVFACWASH)
Remedial Project Manager |
| 5:05 – 5:15 pm | SITE 11 REMEDIAL ACTION COMPLETION
Mr. Joseph Rail |
| 5:15 – 5:30 pm | SITE 21 REMEDIAL ACTION
Mr. Joseph Rail |
| 5:30 – 5:45 pm | SITE 17 REMEDIAL ACTION
Mr. Nicholas Carros |
| 5:45 – 6:00 pm | SITE 8/14//27 REMOVAL ACTION UPDATE
Mr. Nathan Delong |
| 6:00 – 6:15 pm | SITE 57 REMEDIAL ACTION UPDATE
Mr. Nicholas Carros |
| 6:15 – 6:30 pm | STUMP NECK SMALL ARMS RANGE UPDATE
Mr. Nathan Delong |
| 6:30 – 7:30 pm | PUBLIC MEETING??? |
| 7:30 pm | ADJOURN |

2012 **TENTATIVE RAB MEETING DATES**

Thursday, April 12
Thursday, October 11