DEPARTMENT OF THE NAVY
INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
101 STRAUSS AVE
INDIAN HEAD MD 20640-5035

5090
Ser 044SJ/28
28 Feb 03

Mr. Elmer Biles
6315 Indian Head Highway
Indian Head, MD 20640

Dear Mr. Biles:

We are forwarding the minutes from the Installation Restoration (IR) Program Restoration Advisory Board (RAB) meeting that was held on Thursday, February 20, 2003 at the Indian Head Senior Center, which is located at 100 Cornwallis Square, Indian Head, Maryland.

We would like to thank everyone that attended the RAB meeting. We hope to see all of you at the next RAB meeting, which is scheduled for Thursday, June 19, 2003, at the Indian Head Senior Center.

If you have any comments or questions concerning this matter, please contact Mr. Shawn Jorgensen on (301) 744-2263 or Ms. Heidi Morgan on (301) 744-2265.

Sincerely,

CHERYL L. DESKINS
Director, Waste Management and
Prevention Division
By direction of the Commander

Encl:
(1) Minutes from RAB Meeting of 20 Feb 03

Copy to:
RAB Members
Meeting Attendees
ATSDR (D. Jackson)
CH2M Hill (A. Estabrook)
TetraTech (G. Latulippe/A. Bernhardt)

INSTALLATION RESTORATION PROGRAM

INDIAN HEAD DIVISION,
NAVAL SURFACE WARFARE CENTER
101 STRAUSS AVENUE
INDIAN HEAD, MARYLAND
20640-5035

RESTORATION ADVISORY BOARD (RAB) MEETING

Date of Meeting: February 20, 2003

Restoration Advisory Board (RAB) Member Participants:

Mr. Elmer Biles (C)
Mr. Gary Davis (L)
Ms. Sherry Deskins (N)
Mr. Curtis DeTore (S)
Mr. Vincent Hungerford (C)*
Mr. Wayne McBain (C)
Mr. Jeff Morris (N)
CDR Peter Webb (N)

RAB Members Not in Attendance:

Mr. Stephen Elder (L)
Mr. Dennis Orenshaw (F)
Mr. Fred Pinkney (F)
Ms. Karen Wiggen (L)

Additional Attendees:

Mr. Aaron Bernhardt (K)
Mr. Scott Bohnhoff (N)
Mr. Jeff Bossart (N)
Ms. Anne Estabrook (K)
Mr. Shawn Jorgensen (N)
Ms. Sarah Gibbs (N)
Mr. Simeon Hahn (F)
Ms. Staci Hutchins (C)
Ms. Tara Landis (N)
Ms. Heidi Morgan (N)
Mr. Neal Parker (N)
Mr. Wes Pero (N)
Mr. Joe Rail (N)
Ms. Erin Rainone (N)
Mr. Alex Schuman (N)

* Co-Chair

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

ENCL (1)

Major Issues Discussed/Accomplished:

1. Arrival/Welcome

Ms. Sherry Deskins of the Indian Head Division, Naval Surface Warfare Center (IHDIV-NSWC) began the meeting by introducing herself and welcoming everyone to the Indian Head Senior Center. Because of the number of new attendees, Ms. Deskins had everyone introduce themselves.

Ms. Deskins then presented the meeting agenda, which is included in Attachment A.

2. Remedial Investigation (RI) Report for Sites 11, 13, 17, 21, and 25

Ms. Anne Estabrook of CH2M Hill discussed the findings of the RI report for Sites 11 (Caffee Road Landfill), 13 (Paint Solvents Disposal Ground), 17 (Disposed Metal Parts Along Shoreline), 21 (Bronson Road Landfill), and 25 (Hypo Discharges from X-Ray Building No. 2). The RI report recommends sites 11, 17, and 21 proceed to a feasibility study. The report also recommends no further action for Sites 13 and 25.

A copy of Ms. Estabrook's presentation is included in Attachment B.

3. Update on Site 12 Removal Action

Mr. Shawn Jorgensen of IHDIV-NSWC provided an update of the removal action that is being conducted at Site 12, the Town Gut Landfill. Due to the winter weather, work stopped on February 6, 2003. The remaining work, which includes paving the road, planting wetland plants, and installing monitoring wells, is scheduled to begin on March 10, 2003.

A copy of Mr. Jorgensen's presentation, which includes numerous photographs of the work in progress, is provided in Attachment C.

4. Site 47 Remedial Investigation (RI) Report

Ms. Anne Estabrook discussed the numerous sampling events that have occurred for Site 47, Mercuric Nitrate Disposal Area, and the results presented in the RI report. The RI report recommends that Site 47 proceed to a feasibility study to address various issues with soil and shallow groundwater at the site.

A copy of Ms. Estabrook's presentation is included in Attachment D.

5. Remedial Investigation (RI) Report for Sites 6, 39, and 45

Ms. Anne Estabrook discussed the findings in the RI report for Sites 6 (Hypo Spill), 39 (Silver Release to Sediments/Stack Emissions), and 45 (Abandoned Drums). The report recommends a focused feasibility study or the removal of soil at a couple of "hot spots" for Site 6. Site 39 is recommended for further evaluation for ecological risk from zinc. No further action is recommended for Site 45. However, due to a potential ecological risk discovered in a small wetland area near the site, the wetland area will be addressed as a new Installation Restoration site.

A copy of Ms. Estabrook's presentation is provided in Attachment E.

6. Mattawoman Creek Study Update

Mr. Neal Parker of the Engineering Field Activity Chesapeake provided an update on the Mattawoman Creek Study. The study was conducted to assess the potential ecological and human health risks associated with facility-related contaminants in the Creek. The result of the report is that some potential risks exist to human health and the environment from the Creek and there are uncertainties concerning the Creek that will need to be addressed in the future to more fully characterize those potential risks. Planned studies that will be conducted in the future will help to address these uncertainties.

The draft final Mattawoman Creek Study is expected to be submitted in the Spring after Navy and Regulator comments have been addressed and incorporated into the document.

A copy of Mr. Parker's presentation is provided 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

Ms. Sherry Deskins presented the tentative agenda for the June 19th RAB meeting, which is included in Attachment H. Ms. Deskins then concluded the meeting by thanking all in attendance.

INDIAN HEAD DIVISION,
NAVAL SURFACE WARFARE CENTER
INSTALLATION RESTORATION (IR) PROGRAM
RESTORATION ADVISORY BOARD (RAB) MEETING
AGENDA

February 20, 2003

5:00 - 5:05	**ARRIVAL/WELCOME** Ms. Sherry Deskins Indian Head Division, Naval Surface Warfare Center Director, Waste Management and Prevention Division
5:05 - 5:25	**REMEDIAL INVESTIGATION (RI) REPORT FOR SITES 11, 13, 17, 21, AND 25** Ms. Anne Estabrook CH2M Hill Project Manager
5:25 - 5:45	**UPDATE ON SITE 12 REMOVAL ACTION** Mr. Shawn Jorgensen Indian Head Division, Naval Surface Warfare Center IR Project Manager
5:45 - 5:55	**SITE 47 RI REPORT** Ms. Anne Estabrook
5:55 - 6:10	**RI REPORT FOR SITES 6, 39, AND 45** Ms. Anne Estabrook
6:10 - 6:40	**MATTAWOMAN CREEK STUDY UPDATE** Mr. Neal Parker Engineering Field Activity Chesapeake Ecological Risk Assessor
6:40 - 7:00	**COMMENTS, QUESTIONS, AND ANSWERS**
7:00	**ADJOURN**

Attachment A

NAVAL SURFACE WARFARE CENTER
INDIAN HEAD DIVISION
RESTORATION ADVISORY BOARD

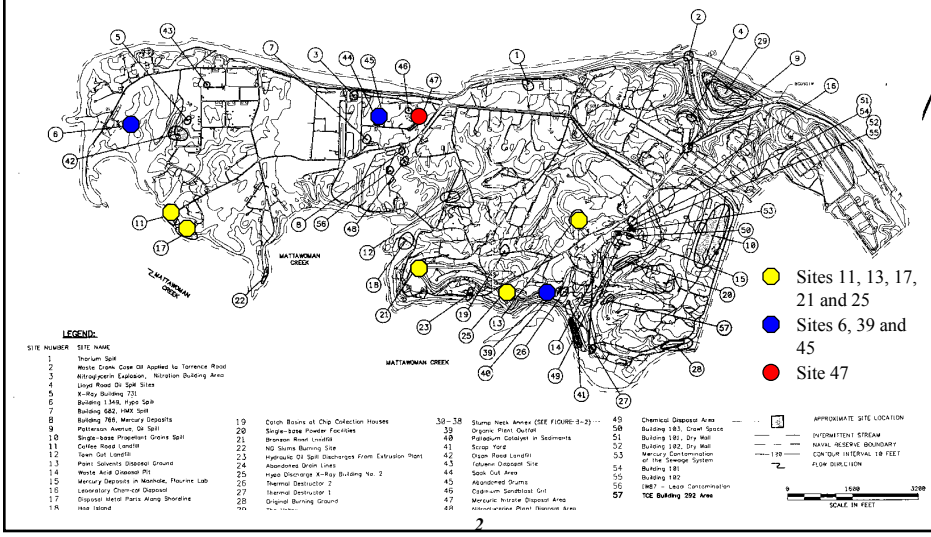
Remedial Investigations - Project Status

Sites 11, 13, 17, 21, and 25

Anne Estabrook
CH2M HILL

February20, 2003

NSWC Indian Head
IR Site Map



Attachment B

Sites 11, 13, 17, 21, and 25 - Project Status
Sites Studied

- *11 - Caffee Road Landfill*
- *13 - Paint Solvents Disposal Ground*
- *17 - Disposed Metal Parts Along Shoreline*
- *21 - Bronson Road Landfill*
- *25 - Hypo Discharges From X-ray Building No. 2*

IR Site 11
Caffee Road Landfill

Sites 11, 13, 17, 21, and 25 - Project Status
Site 11 - Caffee Road Landfill

- *Background*
  - *One to two acre area located at the end of Caffee Road on the shore of Mattawoman Creek*
  - *Contains various building debris, bulk metal items, and residue from open burning*
- *Completed initial RI fieldwork in July and August, 2000*
- *Additional investigation of burn pit area conducted in February and March, 2002*

Sites 11, 13, 17, 21, and 25 - Project Status
Site 11 - Caffee Road Landfill

- *Draft RI Report submitted July, 2001*
- *Draft Final RI Report submitted August, 2002*
  - *Unacceptable human health risk calculated in soil, groundwater and sediment due to metals.*
  - *Ecological risk screening indicated further evaluation of ecological risk due to metals in surface soils and PAHs and explosives in sediment is necessary*
  - *Recommend this site proceed to a feasibility study*
- *Draft Work Plan for Baseline Ecological Risk Assessment (BERA) submitted November, 2002*
- *Final RI Report to be submitted April, 2003*
- *Draft Feasibility Study to be submitted August, 2003*

IR Site 13
Paint Solvents Disposal Ground

Sites 11, 13, 17, 21, and 25 - Project Status
Site 13 - Paint Solvents Disposal Ground

- *Background*
  - *Approximately 200 square-foot area located behind Building 870*
  - *Contains paint-related wastes - thinners, solvents, and used paint*
  - *Disposal took place from 1953 to 1979*
  - *Estimated 20,000 pounds of waste disposed (~2,000 gallons)*
- *Completed Initial RI Fieldwork in July and August, 2000*

Sites 11, 13, 17, 21, and 25 - Project Status
Site 13 - Paint Solvents Disposal Ground

- *Draft RI Report submitted July, 2001*
- *Draft Final RI Report submitted August, 2002*
  - *Based on soil sampling results, concluded groundwater sampling unnecessary*
  - *Subsequent concerns about level of uncertainty in data prompted installation of one monitoring well in December 2002 and sampling of monitoring well in 2003*
  - *Unvalidated analytical show no significant contamination*
  - *Human health risks were calculated within acceptable ranges for current and future exposure scenarios*
  - *Ecological risk screening indicated minimal risk to ecological receptors*
  - *Pending results of groundwater sampling, no further action is recommended at this site.*

Sites 11, 13, 17, 21, and 25 - Project Status
Site 13 - Paint Solvents Disposal Ground

- *Final RI Report to be submitted April, 2003*
- *No Further Action Proposed Plan to be submitted August, 2003*

IR Site 17
Disposed Metal Parts Along Shoreline

Sites 11, 13, 17, 21, and 25 - Project Status
Site 17 - Disposed Metal Parts Along Shoreline

- *Background*
  - *1,000-foot stretch of shoreline along Mattawoman Creek located east of Caffee Road Landfill*
  - *Metal parts disposed of from 1960 - 1980*
  - *Drums disposed of in woods (dates unknown)*
- *Completed Initial RI Fieldwork in July and August, 2000*
- *Draft RI Report was submitted in July, 2001*
- *Pre-FS Fieldwork conducted in June, 2002*

Sites 11, 13, 17, 21, and 25 - Project Status
Site 17 - Disposed Metal Parts Along Shoreline/Drums in Woods

- *Draft Final RI Report submitted August, 2002*
  - *Unacceptable human health risk calculated in groundwater due to VOCs*
  - *Ecological risk is being evaluated along with Site 11*
  - *Recommend this site proceed to a feasibility study for groundwater*
- *Final RI Report to be submitted April, 2003*
- *Draft Feasibility Study to be submitted September, 2003*

IR Site 21
Bronson Road Landfill

Sites 11, 13, 17, 21, and 25 - Project Status
Site 21 - Bronson Road Landfill

- *Background*
  - *2-acre "borrow pit" near Building 1384*
  - *Contains solid waste from various manufacturing processes*
  - *Disposal occurred from 1975 to 1982*
  - *Waste and estimated amounts include*
    - *Solid waste - 1,500 tons*
    - *Barium sludge - 2.5 tons*
    - *Asbestos - 3.3 tons*
    - *Paint sludge - 3 tons*
- *Completed Initial RI Fieldwork in 2000*
- *Additional sampling to investigate perchlorate in upgradient well conducted in 2002*

Sites 11, 13, 17, 21, and 25 - Project Status
Site 21 - Bronson Road Landfill

- *Draft Final RI Report submitted August, 2002*
  - *Unacceptable human health risks calculated for ingestion of groundwater due to Iron, Manganese and Thallium.*
  - *Ecological risk screening indicated minimal risk to ecological receptors.*
  - *Because this site is a landfill, a feasibility study is recommended.*
  - *Additional investigation of upgradient well indicated perchlorate is not originating from the landfill. Upgradient area will be designated as a new area of concern and investigated separately from Site 21.*
- *Final RI Report to be submitted April, 2003*
- *Draft Feasibility Study to be submitted July, 2003*

IR Site 25

Hypo Discharges From X-Ray Building No. 2

Sites 11, 13, 17, 21, and 25 - Project Status
Site 25 - Hypo Discharges From X-Ray Building No. 2

- *Background*
  - *Drainage swales located behind Building 588*
  - *Reportedly contains silver from spent fixer and developer used to process x-ray film*
  - *Discharged from 1944 - 1964*
  - *Estimated 864 pounds of silver discharged*
- *RI Fieldwork Completed in July and August, 2000*
- *Additional groundwater sample collected in February, 2002 to confirm Mn levels*

Sites 11, 13, 17, 21, and 25 - Project Status
Site 25 - Hypo Discharges From X-Ray Building No. 2

- *Draft RI Report was submitted in July, 2001*
- *Draft Final RI Report submitted August, 2002.*
  - *Human health risk assessment calculated risk outside acceptable range for a future resident for iron in soil and manganese in groundwater. These are likely naturally occurring in soil and in groundwater, not due to activities at site.*
  - *Ecological risk screening indicated minimal risk to ecological receptors.*
  - *No further action is recommended at this site.*
- *Final RI Report to be submitted April, 2003*
- *Draft No Further Action Proposed Plan to be submitted August, 2003*

Sites 11, 13, 17, 21, and 25 - Budget

- *Total Cost for RI (all sites) - $950,000*
- *Total Cost for Feasibility Studies, Proposed Remedial Action Plans, and Records of Decision (all sites) - $370,000*

Information Repository

Indian Head Division
Naval Surface Warfare Center
Building 620 (Activity General
Library and Cross Roads
Restaurant)
101 Strauss Avenue
Indian Head, MD
20640-5035

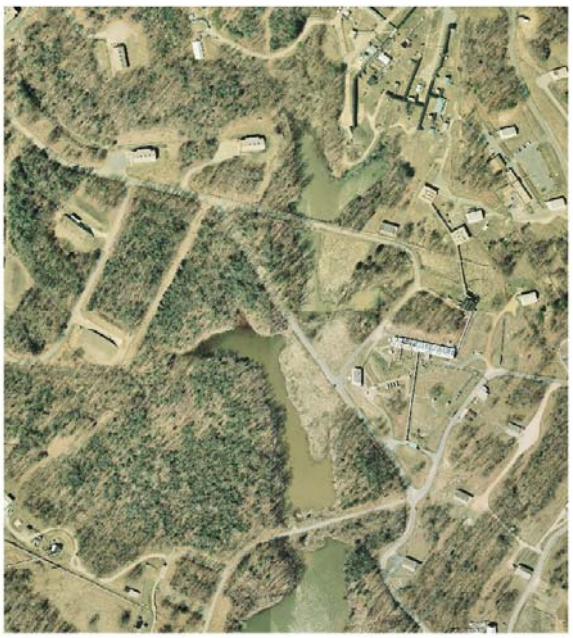
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD DIVISION
RESTORATION ADVISORY BOARD

Site 12 – Town Gut Landfill
Removal Action Update
Part 1 (9/12/02 - 10/23/02)

Shawn Jorgensen
IR Project Manager

Photos taken and slides prepared by Shaw Environmental

February 20, 2003



Aerial View of Town Gut Landfill - 1999

Attachment C

Initial Clearing and Grubbing

Miscellaneous Surface Debris

Pond Culvert and Weir After Debris Removal

Temporary Weir Modification to Lower Pond Water Level

Miscellaneous Pond Debris Prior To Lowering Water Level

Miscellaneous Pond Debris After Water Level Was Lowered

Truck Frame Along Pond

Removal of Miscellaneous Debris Along Pond Edge

Initial Installation of Super Silt Fence Along Pond Perimeter

Installed Super Silt Fence Along Pond Inlet

Excavation of Drainage Channel Along Adkins Road

Completed Rip Rap Channel

Down-sizing Concrete for Placement Within Landfill

Miscellaneous Metal Debris Removed from Around Site

Loading of Metal Debris for Off-site Disposal

Initial Grading of Landfill Prior To Off-site Fill Placement

Regraded Landfill Waste and Existing Soil

Delivery of Fill Material for the Soil Cover

Placement of select fill in Area 1

Fine grading select fill in Area 1

Compaction of select fill in Area 1

Area 1 soil erosion

Area 1 soil erosion

Area 1 soil erosion damage repair

Installation of silt fence to reduce future erosion in Area 1

Rip rap drainage channel in Area 2

Extension of Area 2 culvert

Select fill stockpile in Area 2

Select fill placement in Area 2

Stockpiled material from clearing and grubbing and pond embankment excavation to be sent off site

Over-packed drums to be sent for off-site disposal

Select fill placement in Area 3

Compaction of select fill in Area 3

Compaction testing in Area 3

Site after December 4 and 5 snowfall

Erosion damage following heavy rain over the weekend of January 3, 2003.

Effectiveness of super silt fence in holding back eroded soil.

Erosion damage following heavy rain over the weekend of January 3, 2003.

Stabilizing the silt fence in Area 1 with 12-foot steel poles.

Loosening surface to promote drying of select fill in Area 1.

Delivery of select fill to Area 3.

Delivery of topsoil to Area 3.

Survey grade support with the robotic total station.

Surveying with the robotic total station.

Delivery and unloading of Leafgrow.

Placing Leafgrow in wetlands area.

Southern channel in Area 2 after topsoil placement, but prior to tracking to loosen surface.

Installation of erosion control matting in the drainage channel.

Installation of permanent erosion control matting in the drainage channel in Area 3.

Hydroseeding Area 3.

Hydroseeding Area 1.

Hydroseeding Area 1.

Hydro-blanket protective surface over Area 1.

Hydro-blanket protective surface over Areas 2 and 3.

Hydro-blanket protective cover.

Cleaning the road.

Cutting asphalt for Atkins Road Extension modification.

Grading the road subbase.

Obtaining delivery ticket from RC-6 delivery truck.

Compacting the road subbase with a vibratory smooth drum roller.

Compaction testing of the road subbase.

Reinstalling road sign along Atkins Road Extension.

Removing debris on a daily basis from weir caused by beavers.

Site 12 – Town Gut Landfill Removal Action Update

- *Waste Disposed*
  - *10 Tons of Scrap Steel*
  - *2 Tons of Tires*
  - *104 Tons of Debris (concrete, wood, etc.)*
  - *5 85-Gallon Drums of Hazardous Waste*
- *Materials Used*
  - *6,180 Tons of Topsoil*
  - *21, 840 Tons of Select Fill*
  - *508 Tons of RC-6 (Recycled Concrete)*
  - *302 Tons of Rip Rap*
  - *223 Tons of Stone*

Site 12 – Town Gut Landfill Removal Action Update

- *Future Schedule*
  - *Temporarily Demobilized on February 7, 2003 due to winter weather*
  - *Remobilization scheduled for March 10, 2003 to complete work*
    - *Pave Atkins Road*
    - *Install New Monitoring Wells*
    - *Plant Wetland Plants*
  - *Final Demobilization to occur on March 20, 2003*

NAVAL SURFACE WARFARE CENTER
INDIAN HEAD DIVISION
RESTORATION ADVISORY BOARD

Remedial Investigation
Project Status

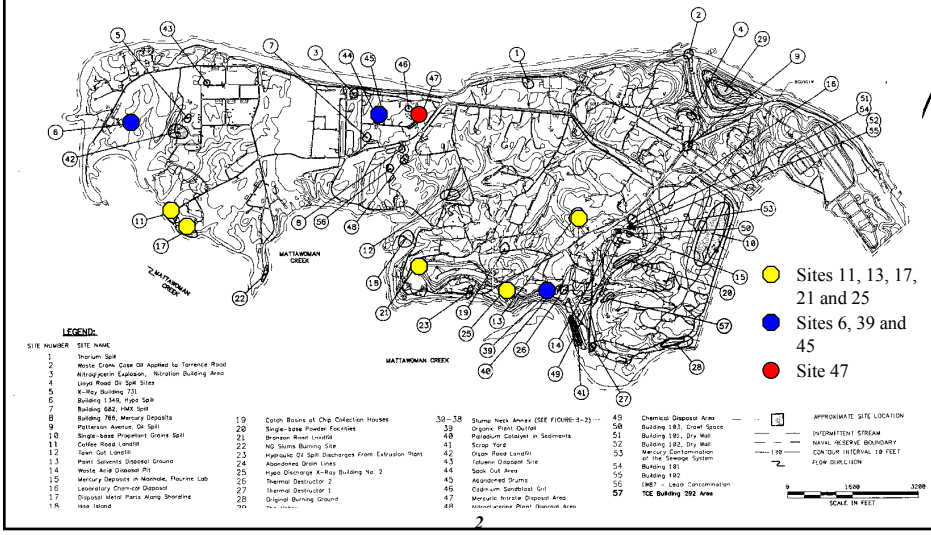
Site 47 - Mercuric Nitrate Disposal Area

Anne Estabroook
CH2M HILL

February 20, 2003

1

NSWC Indian Head
IR Site Map



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Attachment D

IR Site 47

Remedial Investigation Project Status - Site 47

- ***Background of Site 47 - Mercuric Nitrate Disposal Area***
  - *Mercuric Nitrate was reportedly disposed in approximately 24 sq. ft. area*
  - *Limestone chips reportedly used to neutralize spent nitric acid*
  - *Procedure carried out between 1957 and 1965*
  - *Interviews with former employees also indicated disposal of barium slurry in pit adjacent to Building 856 and use/disposal of carbon tetrachloride in processes conducted in building.*
  - *Initial sampling performed for Site Inspection (SI) in 1992 and 1993*
  - *Final SI Report (March 4, 1994) recommended further study*

Remedial Investigation Project Status - Site 47

- *Remedial Investigation (RI) Work at Site 47*
  - *Project awarded in November 1998*
  - *Mobilization for field work began July 6, 1999*
  - *RI work included:*
    - *Installing 4 shallow groundwater monitoring wells around Building 856 and sampling the wells*
    - *Taking 10 surface soil samples from around Building 856*
    - *Taking 4 sediment samples from the ditch south of Building 856*
  - *Draft RI report received May 2000 (was expected in December 1999) recommended further investigation*

Remedial Investigation Project Status - Site 47

- *Initial Remedial Investigation Fieldwork*
  - *July, 1999*
  - *January, 2000*
- *Draft RI report submitted May 2000*
- *Draft Final RI Report submitted August 2000*
- *Subsequent Sampling to Verify Extent of Groundwater Contamination:*
  - *March - April, 2001*
  - *October - November, 2001*
  - *June - August, 2002*
- *Revised Draft Final RI Report to be submitted this month*

Remedial Investigation Project Status - Site 47

- *Primary concern is VOCs detected in groundwater:*
  - *Carbon Tetrachloride and breakdown products (chloroform, methylene chloride and chloromethane)*
  - *Perchloroethene and breakdown products (trichloroethene, dichloroethene, and vinyl chloride)*
  - *Dichloroethane*
- *Human health risk was calculated at unacceptable levels for both current and future use scenarios due to VOCs and arsenic in groundwater and VOCs in soil*
- *Ecological risk screening determined that further evaluation of ecological risk is necessary.*

Remedial Investigation Project Status - Site 47

- *A work plan for a baseline ecological risk assessment to be submitted in March, 2003.*
- *Final RI report to be submitted June, 2003*
- *Draft Feasibility Study to be submitted September, 2003.*

Site 47 Budget

- *Dollars Spent to-date on IR Site 47 - $220,000*
- *Total projected cost:*
  - *Field investigation and RI report - $270,000*
  - *Feasibility Study, Proposed Plan, Record of Decision - $80,000*

NAVAL SURFACE WARFARE CENTER
INDIAN HEAD DIVISION
RESTORATION ADVISORY BOARD

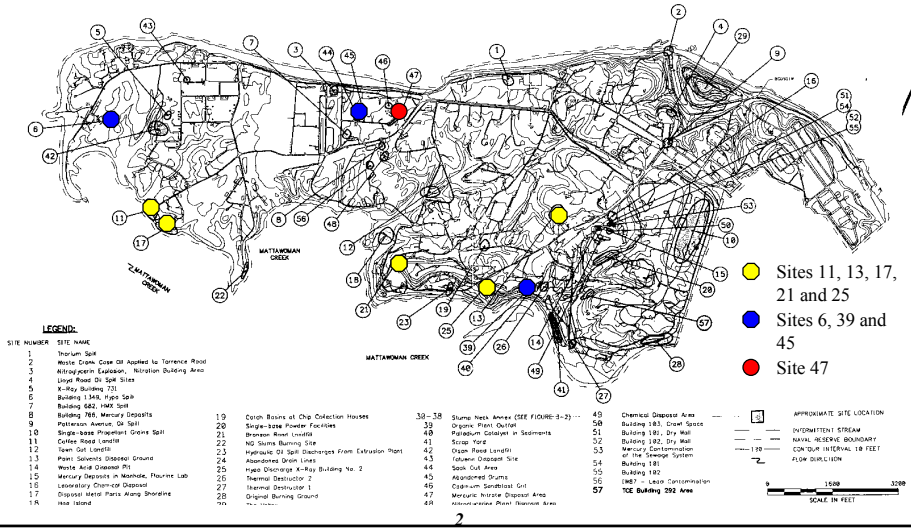
Remedial Investigations - Project Status

Sites 6, 39 and 45

Anne Estabrook
CH2M HILL

February 20, 2003

NSWC Indian Head
IR Site Map



Attachment E

Sites 6, 39 and 45 - Project Status
Sites Studied

- *6 - Hypo Spill, Radiographic Facility Accelerator Control Building and Open Drain*
- *39 - Silver Release to Sediments/Stack Emissions*
- *45 - Abandoned Drums*

Sites 6, 39 and 45 - Project Status
Site 6 - Hypo Spill

- *Background*
  - *Area around Buildings 1349, 1718 and 1140*
  - *Building 1140 contained an X-ray facility - spent fixer and developer were reportedly discharged into a nearby ditch prior to 1977*
  - *Ten gallons of fixer were reportedly spilled on the ground behind Building 1349 in 1973*

IR Site 6
Hypo Spill

Looking north at Buildings 1349 and 1718

Looking southeast from Buildings 1349 and 1718

Sites 6, 39 and 45 - Project Status
Site 6 - Hypo Spill

- *Remedial Investigation Fieldwork Completed 2001*
- *Draft RI Report Submitted July 2002*
  - *A potential human health risk was calculated for the future construction worker or child resident due to exposure to silver in soils at two distinct locations*
  - *Ecological risk screening determined silver in soils should be evaluated more thoroughly for potential ecological risk.*
  - *A focused feasibility study or engineering evaluation/cost assessment for removal of soil in a couple of "hot spots" is recommended.*
- *Final RI to be submitted July 2003*
- *Draft FS or EE/CA to be submitted October 2003*

Sites 6, 39 and 45 - Project Status
Site 39 - Silver Release to Sediments/Stack Emissions

- *Background*
  - *Area around Buildings 497, 497A and 498 was originally identified as an IR site due to reported silver and silver nitrate releases to Mattawoman Creek between 1961 and 1965*
  - *These buildings have also been used for large-scale manufacture of chemicals and explosives including UDMH and NG*
  - *Silver releases were studied under Mattawoman Creek study; this investigation addressed whether emissions from the stacks have caused surface soil contamination in the vicinity of these buildings*

IR Site 39
Silver Release to Sediments

Building 497

Building 498

Sites 6, 39 and 45 - Project Status
Site 39 - Silver Release to Sediments/Stack Emissions

- *Remedial Investigation Fieldwork completed in 2001*
- *Draft RI Report Submitted July 2002*
  - *The human health risk assessment calculated potential risks to future residents within EPA's acceptable risk ranges for both carcinogenic and noncarcinogenic risks.*
  - *Ecological risk screening determined zinc in soils should be evaluated more thoroughly for potential ecological risk.*
- *Final RI Report to be Submitted July 2003*

Sites 6, 39 and 45 - Project Status
Site 45 - Abandoned Drums

- *Background*
  - *Wooded area 300 feet west of Site 44 (Soak Out Area)*
  - *Site previously consisted of 21 empty 55-gallon drums and 2 overpack drums*
  - *Drums may have originated at Site 44 and therefore contained hazardous solvent (probably Pennchem 901B, containing mercaptan)*
  - *Drums were removed several years ago, this investigation focused on underlying soil and groundwater and surface water and sediment in nearby wetland*

IR Site 45
Abandoned Drums

Looking northeast at Site 45

Looking southeast at Site 45

Sites 6, 39 and 45 - Project Status
Site 45 - Abandoned Drums

- *Remedial Investigation Fieldwork Completed in 2001*
- *Draft RI Report Submitted July 2002*
  - *Determined during RI investigation that the nearby wetlands area does not receive runoff from the site, but receives discharge from an adjacent tank area*
  - *Decision was made to consider the wetlands area separately, as not truly part of the Site 45.*
  - *The human health risk assessment calculated potential risks to future residents within EPA's acceptable risk ranges for both carcinogenic and noncarcinongenic risks.*

Sites 6, 39 and 45 - Project Status
Site 45 - Abandoned Drums

- *Draft RI Report (continued)*
  - *Ecological risk screening determined copper, zinc, lead, aluminum and silver in surface water in wetlands area should be evaluated more thoroughly for potential ecological risk.*
  - *Based on the HHRA and ERA, no further action is being considered for this site*
  - *It is recommended that further assessment of ecological risk be performed in the wetlands area (no longer considered part of Site 45).*
- *Final RI Report to be Submitted July 2003*
- *No Further Action Proposed Plan to be submitted October 2003*

Sites 6, 39 and 45 - Project Status
Budget

- *Remedial Investigation*
  - *Cost for RI - $280,000*
- *Feasibility Studies*
  - *$50,000 budgeted (total for all three sites)*
- *Proposed Plans and Records of Decision*
  - *$80,000 budgeted (total for all three sites)*

MATTAWOMAN CREEK INVESTIGATION UPDATE

FEBRUARY 20, 2003

Presented by:

Neal Parker, P.E.

(Engineering Field Activity Chesapeake)

Purpose of Mattawoman Creek Investigation

- Assess the potential ecological and human health risks associated with facility-related contaminants in Mattawoman Creek.

Attachment F

SPAWAR Screening Event

- Conducted August 15 to 18, 2001
- Screening data for select metals (Cr, Cu, Pb, and Zn), total PAHs and total PCBs
- Available data were reviewed prior to main sampling event

Main Sampling Event

- Conducted September 5 to 9, 2001
  - Sediment
    - Chemistry
    - Toxicity Tests
    - Benthic Community Survey
  - Surface Water
  - Fish Tissue (whole body and fillet)
  - Vegetation (Hydrilla)

Ecological Risk Assessment

- Risks to benthic invertebrates from metals in the sediment are high offshore of Site 28 (Original Burning Ground). Negligible to moderate risks elsewhere.
- Risks to birds and mammals are low from ingestion of fish, sediment, and surface water from Mattawoman Creek

Ecological Risk Assessment

- Risks to fish from chemicals in their tissue are low
- Risks to aquatic vegetation are negligible
- Risks to aquatic organisms from chemicals in the surface water are low (with the exception of cadmium which slightly exceeds water quality criteria in some samples)

Human Health Risks- Surface Water and Sediment

- Risks from exposure to surface water were within acceptable risk levels
- Risks to construction workers from exposure to lead in sediment exceeded acceptable risk levels due to an elevated lead concentration at sampling location IS11SD01 (Caffee Rd. Landfill)
  - Source of elevated lead may be a lead fragment
  - All risks due to exposure to other chemicals in sediment were within acceptable levels

Human Health Risk – Fish Ingestion

- Calculations indicate some potential risk due to fish contamination
- Other evidence indicates chemicals resulting in a potential risk did not come from the facility
  - Generally not found in sediment or surface water
  - Fish move over a wide range
  - Some fish transported to MC during tournaments
  - MC “reflects” Potomac River conditions
  - PCB concentrations comparable to Potomac River fish

Human Health Risk- Fish Ingestion

- Best Advice:
  - Pay attention to MDE fish advisories

Uncertainties

- The extent of the contamination in sediment has not been defined near some IR locations
- Source of elevated lead detection in sediment by Caffee Rd. Landfill is not known
  - Suspected to be a lead fragment from lead floor tiles?

Uncertainties

- Transport of chemicals across Mattawoman Creek not fully characterized
- The sediment dynamics/transport in Mattawoman Creek are not fully understood
- Limitations in the biological study data

Studies in Mattawoman Creek to Address some of the Uncertainties

- Site 28 (Original Burning Ground)
  - Additional sediment sampling proposed for Mattawoman Creek (sampling planned for 2003)
    - Further bound sediment contamination
    - Evaluate depositional areas
    - Evaluate sediment transport

Studies in Mattawoman Creek to Address some of the Uncertainties

- Sites 11 and 17 (Caffee Rd. Landfill and Metal Parts Disposal Area)
  - Baseline risk assessments being conducted
  - Additional sediment samples will be collected in Mattawoman Creek
- Site 25 (Hypo Discharges from X-Ray Bldg. No. 2)

Next Steps

- Meet with EPA's BTAG tomorrow to discuss ways to reduce uncertainties and to develop recommendations for the Mattawoman Creek Report
- Conduct a future site visit to identify potential sediment sample locations/depositional areas

Next Steps

- The Draft Final Mattawoman Creek Report will be submitted the Spring after Navy and Regulator comments are addressed and incorporated into the document

Questions/Comments??

- Recommendations for areas to be sampled?
- Any additional issues related to the study?

INSTALLATION RESTORATION PROGRAM

INDIAN HEAD DIVISION,
NAVAL SURFACE WARFARE CENTER
101 STRAUSS AVENUE
INDIAN HEAD, MARYLAND
20640-5035

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

February 20, 2003

Arrival/Welcome

No questions were asked nor comments made during this topic.

Remedial Investigation (RI) Report for Sites 11, 13, 17, 21, and 25

Question: How many landfills are involved in this program?

Answer: There are four landfills at Indian Head. There are also a couple of landfills at Stump Neck.

Question: How do these landfills differ from county landfills? The objective is to be able to use them for something else. How will these landfills be used?

Answer: These landfills will most likely be capped and will have restrictions put on them, such as no digging. The Navy and regulators will work out any alternative uses that the Activity may require.

Question: Do we currently have any active landfills?

Answer: No. All waste is shipped off-site for disposal.

Question: Have we received all of the money requested for this project?

Answer: Yes, for this site. However, all other money has been cut by ten percent for the rest of the year.

Update on Site 12 Removal Action

Question: What was the cost for this project?

Attachment G

Answer: The original cost was $900,000. However, because of weather delays and repair of erosion from heavy rains, the cost was increased by $200,000.

Question: Will the silt fence be the only thing holding the dirt in place at this site?

Answer: No. After the wetland plants and grasses are planted and begin to grow, they will hold the dirt in place. At that time, the silt fences will be removed.

Site 47 Remedial Investigation (RI) Report

No questions were asked nor comments made concerning this site.

Remedial Investigation (RI) Report for Sites 6, 39, and 45

Site 6

No questions were asked nor comments made concerning this site.

Site 39

No questions were asked nor comments made concerning this site.

Site 45

Question: Are we assigning the wetlands by this site a new Installation Restoration (IR) Site number?

Answer: There is a process of how to enter additional sites into the IR program.

Comment: The site may become an area of concern, rather than an IR site. Regardless, the site will not be forgotten about and will resurface in the future.

Mattawoman Creek Study Update

Comment: There was a recommendation before that there are uncertainties with the sediment on the other side of the Creek. There are areas with heavy usage and recreational activities. Also, the path of sediment migration is unknown in the Creek.

Question: Since there is a low health risk to ingestion of Mattawoman Creek water, are you suggesting that we drink the water?

Answer: No. The small amount of water ingestion used in the human health risk assessment model is based on recreation users that inadvertently intake some water from the Creek while swimming. The scenario does not include drinking water use.

Comment: Boats congregate and people and children swim and walk around on the western side of Thoroughfare Island. A lot of personal watercraft are used in this area, too.

Comment: This also occurs on the eastern shore line by Smallwood State Park. The triathelon event occurs there one or two times per year.

Comment: There is a "swimming beach" on the eastern shore line, but I have not seen anyone swimming there.

Comment: We would like you to mark our maps after the meeting as to where you believe additional samples should be taken in the Creek.

Question: Since you designated Mattawoman Creek for study, and we have included Stump Neck in the hazardous waste site, have you given any thoughts to studying Chicamuxen Creek?

Answer: Not with this study. Are you thinking transport of sediments?

Comment: No, drainage of hazardous waste sites. I'm not familiar with sites at Stump Neck.

Answer: Some of the seven site screening areas are on the Chicamuxen Creek, which we discussed at a previous meeting. Sediments in the Chicamuxen Creek are being sampled along with each individual site.

Comment: The Chicamuxen Creek is difficult to get to because it is shallow and full of grass in the summer.

INDIAN HEAD DIVISION,
NAVAL SURFACE WARFARE CENTER

INSTALLATION RESTORATION (IR) PROGRAM
RESTORATION ADVISORY BOARD (RAB)
MEETING AGENDA
(Tentative)

June 19, 2003

1. **Final Results of Site 12 Removal Action**

2. **Site 28 Remedial Investigation (RI) Activities**

3. **Site 57 Pilot Scale Study**

4. **Site 42 Benthic Study**

Attachment H