



DEPARTMENT OF THE NAVY

INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
101 STRAUSS AVE
INDIAN HEAD MD 20640-5035

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NSWC INDIAN HEAD
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Ser 044HM/64
10 Jul 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, June 19, 2003 at the Indian Head Senior Center, which is located at 100 Cornwallis Square, Indian Head, Maryland.

We are also forwarding the 2002 Consumer Confidence Report for Indian Head Division, Naval Surface Warfare Center for your information (Enclosure (2)).

Attachment E of Enclosure (1) is a formal response to Elmer Biles' letter of 30 May 2003 concerning the Site Screening Process Report for Sites 32, 33, 34, 36, 37, 51, and 52 of March 2003.

We would also like to inform you that on June 11th, 2003 the Navy and Environmental Protection Agency signed a "No Action Decision Document" for Sites 32 (Suspected Tool Burial Site), 34 (Tool Burial Site), 51 and 52 (Buildings 101 and 102 Dry Wells). These sites were included in the Final Site Screening Process Report of March 2003 that was distributed for your review on April 30th, 2003.

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, October 16, 2003, at the Indian Head Senior Center.

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Ser 044HM/64

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,



SCOTT A. BOHNHOFF
Acting, Director, Waste Management
and Prevention Division
By direction of the Commander

Encl:

- (1) Minutes from RAB Meeting of 19 Jun 03
- (2) 2002 Consumer Confidence Report

Copy to:

RAB Members
Meeting Attendees
ATSDR (D. Jackson)
CH2M Hill (A. Estabrook)
TetraTech (G. Latulippe)

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: June 19, 2003

Restoration Advisory Board (RAB) Member Participants:

Mr. Elmer Biles (C) Mr. Jeff Morris (N)
Mr. Curtis DeTore (S) CDR Peter Webb (N)
Mr. Vincent Hungerford (C)*

RAB Members Not in Attendance:

Mr. Gary Davis (L) Mr. Dennis Orenshaw (F)
Mr. Stephen Elder (L) Mr. Fred Pinkney (F)
Mr. Wayne McBain (C) Ms. Karen Wigger (L)

Additional Attendees:

Mr. Shawn Jorgensen (N) Mr. Joes Rail (N)
Mr. Gary Koerber (N) Mr. Alex Schuman (N)
Ms. Heidi Morgan (N) Mr. George Wilmot (C)
Mr. Wes Pero (N)

* Co-Chair

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

Major Issues Discussed/Accomplished:

1. Arrival/Welcome

Mr. Shawn Jorgensen of the Indian Head Division, Naval Surface Warfare Center (IHDIIV-NSWC) began the meeting by introducing himself and welcoming everyone to the Indian Head Senior Center.

Mr. Jorgensen then presented the meeting agenda, which is included in Attachment A.

2. Update of Site 12 Removal

Mr. Shawn Jorgensen of IHDIIV-NSWC provided an update of the removal action at Site 12 (Town Gut Landfill). The installation of the shallow groundwater monitoring wells will complete the project. The installation of the wells is scheduled to be performed 14 - 17 July 2003.

A copy of Mr. Jorgensen's presentation is included in Attachment B.

3. Site 28 Remedial Investigation Activities

Ms. Heidi Morgan of IHDIIV-NSWC provided an update of the remedial investigation activities that took place in May 2003 at Site 28 (Original Burning Ground/Zinc Reclamation Furnace). The fieldwork consisted on taking surface and subsurface soil, sediment and groundwater samples. Installation of shallow groundwater monitoring wells will be performed in August 2003.

A copy of Ms. Morgan's presentation is included in Attachment C.

4. Site 57 Pilot Scale Study

Mr. Shawn Jorgensen discussed the injection of Hydrogen Release Compound (HRC) at Site 57 (Trichloroethylene (TCE) Building 292) to remediate the groundwater of TCE. A small area adjacent to Building 292 was selected as the test area. This area has the highest concentration of TCE in the groundwater. The HRC degradation process supplies food and an environment in which microbes are stimulated. Stimulated microbes breakdown TCE. The initial results of the study should be available by February 2004.

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

6. Discussion of Site 36 Closed Landfill and Chicamuxen Creek

Ms. Morgan formally addressed Mr. Biles' comment letter of May 30, 2003. Mr. Biles' letter commented on the close proximity of Site 36 to the Chicamuxen Creek and requested some information on the size of the creek and whether any studies have been performed on the creek. An aerial slide was shown of the site and the Chicamuxen Creek. The dimensions of the creek in this particular area were described. The Department of Natural Resources conducted a spawning of fish survey and the Activity's Natural Resources Office has performed water quality studies. Mr. Biles also inquired in his letter to whether the creek would be evaluated. Ms. Morgan stated that the sediment samples would be collected in the creek when the remedial investigation is performed at the site and the creek could potentially be included in the Munitions Response Program (MRP), which is part of the Installation Restoration Program. The creek is part of Site 30 (Stump Neck Impact Area), which will be addressed under the MRP.

A copy of Mr. Biles' letter of 30 May 2003 and Ms. Morgan's presentation is provided in Attachment E.

7. Preliminary Assessments For Munitions Response Sites

Ms. Morgan informed the meeting members of an upcoming Preliminary Assessment for Munitions Response Sites (closed, transferred and transferring ranges) at Indian Head and Stump Neck. The assessment will be conducted the week of 21 June 2003. Ms. Morgan explained the objectives of the Preliminary Assessment. She noted that there are six sites at Indian Head and 16 at Stump Neck. Ms. Morgan provided slides that showed the locations of the sites.

A copy of Ms. Morgan's presentation is provided in Attachment F.

8. Comments, Questions, and Answers

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

9. Conclusion

Mr. Shawn Jorgensen presented the tentative agenda for the October 16th RAB meeting, which is included in Attachment H. Mr. Jorgensen 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**

June 19, 2003

- 5:00 - 5:10** **ARRIVAL/WELCOME**
- Mr. Shawn Jorgensen
Indian Head Division, Naval Surface Warfare Center
IR Project Manager
- 5:10 - 5:30** **UPDATE ON SITE 12 REMOVAL ACTION**
- Mr. Shawn Jorgensen
- 5:30 - 5:50** **SITE 28 REMEDIAL INVESTIGATION ACTIVITIES**
- Ms. Heidi Morgan
Indian Head Division, Naval Surface Warfare Center
IR Project Manager
- 5:50 - 6:10** **SITE 57 PILOT SCALE STUDY**
- Mr. Shawn Jorgensen
- 6:10 - 6:30** **DISCUSSION OF SITE 36 CLOSED LANDFILL AND
CHICAMUXEN CREEK**
- Ms. Heidi Morgan
- 6:30 - 6:40** **PRELIMINARY ASSESSMENT FOR MUNITIONS RESPONSE
SITES**
- Ms. Heidi Morgan
- 6:30 - 7:00** **COMMENTS, QUESTIONS, AND ANSWERS**
- 7:00** **ADJOURN**



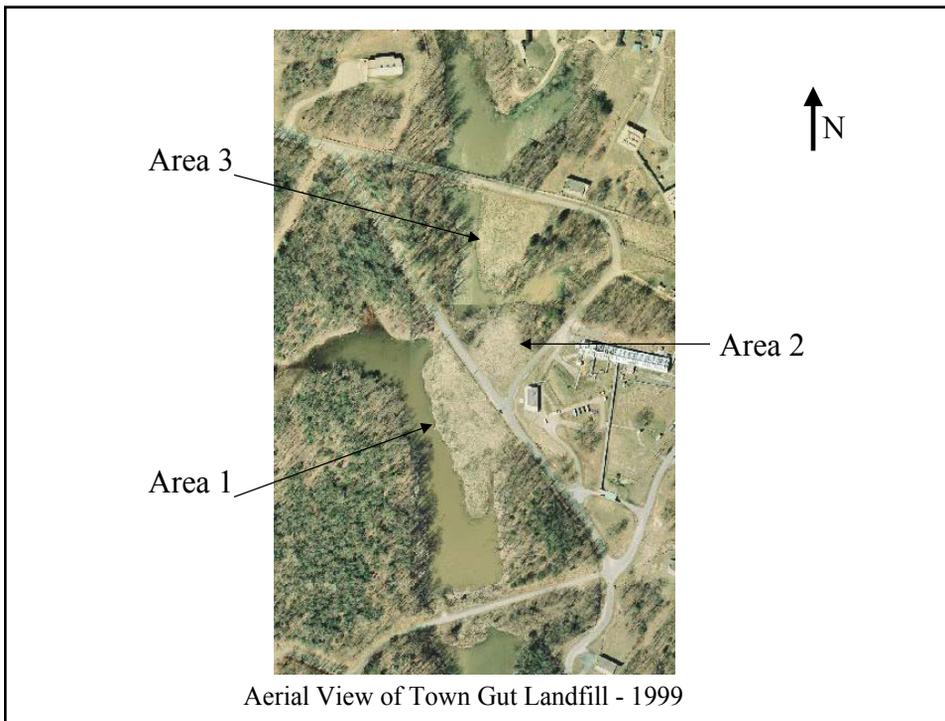
**NAVAL SURFACE WARFARE CENTER
INDIAN HEAD DIVISION
RESTORATION ADVISORY BOARD**



Site 12 – Town Gut Landfill
Removal Action Update

*Shawn Jorgensen
IR Project Manager*

June 19, 2003





Initial Clearing and Grubbing



Area 1 – Waste Removal Along Shoreline



Area 1 - Initial Grading of Landfill Prior To Off-site Fill Placement



Area 1 - Regraded Landfill Waste and Existing Soil



Area 1 - Soil Erosion Damage Repair



Area 1 - Fine Grading Select Fill



Area 1 - Site After December 4 and 5 Snowfall



Area 1 – Application of Hydroblanket



Area 1 – Grass Grown



One of 15 Signs Surrounding the Landfill



Area 2 – Placement of Geotextile Material on Channel



Area 2 – Placement of Rip Rap on Channel



Area 2 - Completed Rip Rap Channel



Area 2 - Rip Rap Channel with Grass



Area 1 - Rip Rap Channel with Grass



Area 1 and 2 – Atkins Road Paved



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



- *Schedule*
 - Removal Action began September 4, 2002
 - Temporarily demobilized on February 7, 2003 due to winter weather
 - Remobilized April 4, 2003
 - Planted Wetland Plants
 - Paved Atkins Road
 - Demobilized April 16, 2003 (too wet to install wells)
 - Plan to remobilize July 14, 2003 to install monitoring wells
 - Plan to demobilize July 17, 2003
- *Cost to Date of Removal Action - ~\$1.2 M (increased \$243K in FY03 due to weather delays)*
- *Total Cost to Date for Site 12 - ~\$1.6 M*



Great Blue Heron Enjoying the Site 12 Pond



Area 3 – Geese and Goslings - May 6, 2003



Area 3 – Geese, Goslings, and Great Blue Heron – May 16, 2003



Area 3 – Geese and Goslings – May 16, 2003



Area 1 – Geese and Goslings – May 16, 2003



Pond Upgradient of Area 3 – Geese and Goslings – June 6, 2003



**NAVAL SURFACE WARFARE CENTER
INDIAN HEAD DIVISION
RESTORATION ADVISORY BOARD**



**Remedial Investigation
Project Status**

***Site 28 - Original Burning Ground and Zinc Recovery
Furnace***

*Heidi Morgan
IR Project Manager*

1



***Remedial Investigation Project
Site 28***



- ***Background of Site 28 - Original Burning Ground and Zinc Recovery Furnace***
 - *Approximately 1.8 acres near the Activity's Boundary Line Adjacent to Mattingly Ave on the Mattawoman Creek*
 - *Burning Cages located on the shoreline of the Mattawoman Creek*
 - *Materials burned Smokeless Powder*
 - *Zinc Recovery Furnace Built prior 1926*
 - *Appears to have been used as Central Area for Salvaging Zinc (for the Navy)*
 - *1926 - 212,000 lbs. of Pig Zinc Reclaimed*
 - *1927 - 435,000 lbs. of Pig Zinc Reclaimed*

2



Remedial Investigation Project Status - Site 28



- *Remedial Investigation (RI) Work at Site 28*
 - *RI Field Sampling May 2003*
 - *Surface and Subsurface Samples: 27 (plus 2 background)*
 - *Shallow Groundwater Samples: 12 (plus 2 background)*
 - *Surface Water Samples: 3*
 - *Sediment Samples: 18*



Remedial Investigation Project Status - Site 28





*Remedial Investigation Project
Status - Site 28*





Remedial Investigation Project Status - Site 28



7



Remedial Investigation Project Status - Site 28



- *Contract Awarded – September 2001*
 - *Draft Work Plan – December 2001*
 - *Final Work Plan – April 2003*
 - *Field Work*
 - *May 2003*
 - *August 2003 (Groundwater Well Installation)*
 - *Draft RI Report – End of Calendar Year*
- *Cost to Date \$480,000*

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**NAVAL SURFACE WARFARE CENTER
INDIAN HEAD DIVISION
RESTORATION ADVISORY BOARD**



**Site 57 – Trichloroethylene
Hydrogen Release Compound® (HRC®)
Pilot Study**

*Shawn Jorgensen
IR Project Manager*

June 19, 2003



Pilot Study Area

Aerial View of Site 57 Trichloroethylene - 1999



Site 57 Pilot Study



- *Purpose of Pilot Study*
 - *To determine if Hydrogen Release Compound® (HRC®) could be used to accelerate bioremediation of trichloroethylene in the shallow groundwater at IR Site 57.*
- *HRC®*
 - *Degrades in the environment by hydrolysis to lactic acid and glycerol*
 - *Provides food for microbes*
 - *Fosters anaerobic conditions*
 - *Facilitates breakdown of trichloroethylene (TCE) by microbes*
 - *Is Propanoic acid, 2-[2-[2-(2-hydroxy-1-oxopropoxy)-1-oxopropoxy]-1-oxopropoxy]-1,2,3-propanetriyl ester*



Site 57 Pilot Study



- *Pilot Study includes:*
 - *Installing two monitoring wells downgradient of pilot study area*
 - *Sampling shallow groundwater in monitoring wells upgradient and downgradient of pilot study area prior to using HRC®*
 - *Injecting HRC® into the shallow groundwater (6 to 12 feet deep) at 12 locations in a 10-foot by 28-foot grid downgradient of Building 292*
 - *Resampling wells at predetermined intervals after injection of HRC® into the shallow groundwater to determine effectiveness*



Site 57 Pilot Study



Site 57 Pilot Study



- *Six-month pilot study began week of 12 May 2003*
 - *Groundwater samples taken 13 May 2003 prior to HRC® injection*
 - *Groundwater samples to be taken in the future*
 - *Month 1: 19 and 20 June 2003*
 - *Month 2: 29 and 30 July 2003*
 - *Month 4: 25 and 26 September 2003*
 - *Month 6: 20 and 21 November 2003*
- *Findings report of pilot study expected in early 2004*



Site 57 - Pilot Study Area Prior to HRC® Injection



Site 57 - Installing Downgradient Monitoring Well



Site 57 – Obtaining Sample for Metals Analysis



Site 57 – Obtaining Sample for Volatile Organic Compound (VOC) Analysis



Site 57 – Setup for HRC® Injection into Shallow Groundwater



Tank Used to Heat HRC®



Site 57 – Equipment Used to Pump HRC® into the Shallow Groundwater



Site 57 – Pouring Heated HRC® into Feed Tank



Site 57 – Heated HRC® in Feed Tank



Site 57 – Geoprobe Used to Inject HRC®



Site 57 – Hose Carrying HRC® Attached to Geoprobe



Site 57 – Injecting HRC® into the Shallow Groundwater (6 – 12 Feet Deep)



Site 57 – Downgradient Well Before Adding Concrete



Site 57 – Completed Downgradient Well with Cover Removed



Site 57 – Downgradient Wells Completed



Site 57 – Surveying HRC® Injection Locations



Site 57 – Storing Investigative Derived Waste (IDW) Awaiting Sample Results



Site 57 – Pilot Study Fieldwork Completed



Site 57 Pilot Study



- *Dollars Spent on Site 57*
 - *HRC® Pilot Study - \$163 K*
 - *Total Spent to Date - ~\$1.6 M*
 - *Remedial Investigation (RI)*
 - *Soil removal for dock extension*
 - *Soil vapor extraction (SVE) pilot study*
 - *Removal Action – pipe relining*
 - *HRC pilot study*
 - *Feasibility Study (FS)*
 - *Proposed Plan*
 - *Record of Decision (ROD)*



**NAVAL SURFACE WARFARE CENTER
INDIAN HEAD DIVISION
RESTORATION ADVISORY BOARD**



Site Screening Area

Sites 36 Closed Landfill

Field Investigation Conducted February 2002

*Heidi Morgan
IR Project Manager*

June 19, 2003



**Site Screening Area
Site 36 - Closed Landfill**



- ***Background of Site 36 - Closed Landfill***
 - *Filled in Wetland/Marsh Area Approximately 1 to 2 Acres*
 - *Fill believed to be made up of Inert Mines, Bombs and Torpedos.*
 - *The Landfill was used from 1972 to 1974.*

- ***Investigation Concluded***
 - *Based of the Geophysical Survey and Site History there is Evidence that a Relatively Large Quantity of Waste has been Disposed at this Site.*
 - *RI and FS recommended for this Site.*



Site Screening Area Site 36 - Closed Landfill



- *Future Investigations*
 - *Site 36 is a low risk site, because there no evidence suggesting that anything of a hazardous nature was disposed of at this site, therefore due to scheduling and funding issues it will be a couple years before any further evaluation is performed at this site.*
 - *When the Remedial Investigations is conducted risk to ecological receptors will be evaluated.*
 - *The Chicamuxen Creek is part of a site currently in the Munitions Response Program (MRP) (IR Site 30 Stump Neck Impact Area). MRP Sites are undergoing a Preliminary Assessment (PA) the week of June 23rd, 2003.*
- *Site Tours*
 - *We would be more than happy to schedule a site visit of the Stump Neck Annex, but because no IR work is scheduled to be performed for another couple of years, we may want to wait until then.*





Site Screening Area Site 36 - Closed Landfill



5



Site Screening Area Site 36 - Closed Landfill



6



Site Screening Area Site 36 - Closed Landfill





6315 Indian Head Highway
Indian Head, Maryland 20640

FAX 744-4180

Ms. Heidi A. Morgan
Waste Management and Prevention Division
Indian Head Division, Naval Surface Warfare Center
101 Strauss Avenue
Indian Head, MD 20640-5035

May 30, 2003

REF: Comments on Final Site Screening Process Report for Sites 32 (Suspected Tool Burial), 33 (Scrap Metal Pit), 34 (Tool Burial), 36 (Closed Landfill), 37 (Causeway), 51 (Dry Well) and 52 (Dry Well).

Dear Ms Morgan:

This is in reply to Ms. Deskins letter of April 30, 2003 requesting comments on the above referenced sites.

I concur with the recommendations for all of the above sites. Since five of the above sites are located in the Stump Neck area and since it has been many years since I was last in that area I think it would be appropriate to schedule a visit to the area for members of RAB to acquaint them with the area, its past and present mission, etc. and some of the sites that we may be asked to comment on.

Of the above sites, site 36 the "Closed Landfill" seems to have the potential for containing some "items of interest." This particular site is in close proximity to Chicamuxen Creek. Could you furnish the committee some information on the Creek, its depth and width in this area (near site 36). Have any studies been done by the Fish and Wildlife Commission or any other group on this Creek in recent years? Do you have any plans to do an evaluation of the Creek or will that depend on the results of the planned RI and FS?

Thanks for the opportunity of commenting.

Sincerely,

A handwritten signature in black ink, appearing to read "E. S. Biles", written over a horizontal line.

Elmer S. Biles
Community Member, RAB
301 283 6298



**NAVAL SURFACE WARFARE CENTER
INDIAN HEAD DIVISION
RESTORATION ADVISORY BOARD**



**Preliminary Assessment For Munitions Response
Sites**

Indian Head – 6 Sites
Stump Neck – 15 Sites

*Heidi Morgan
IR Project Manager*

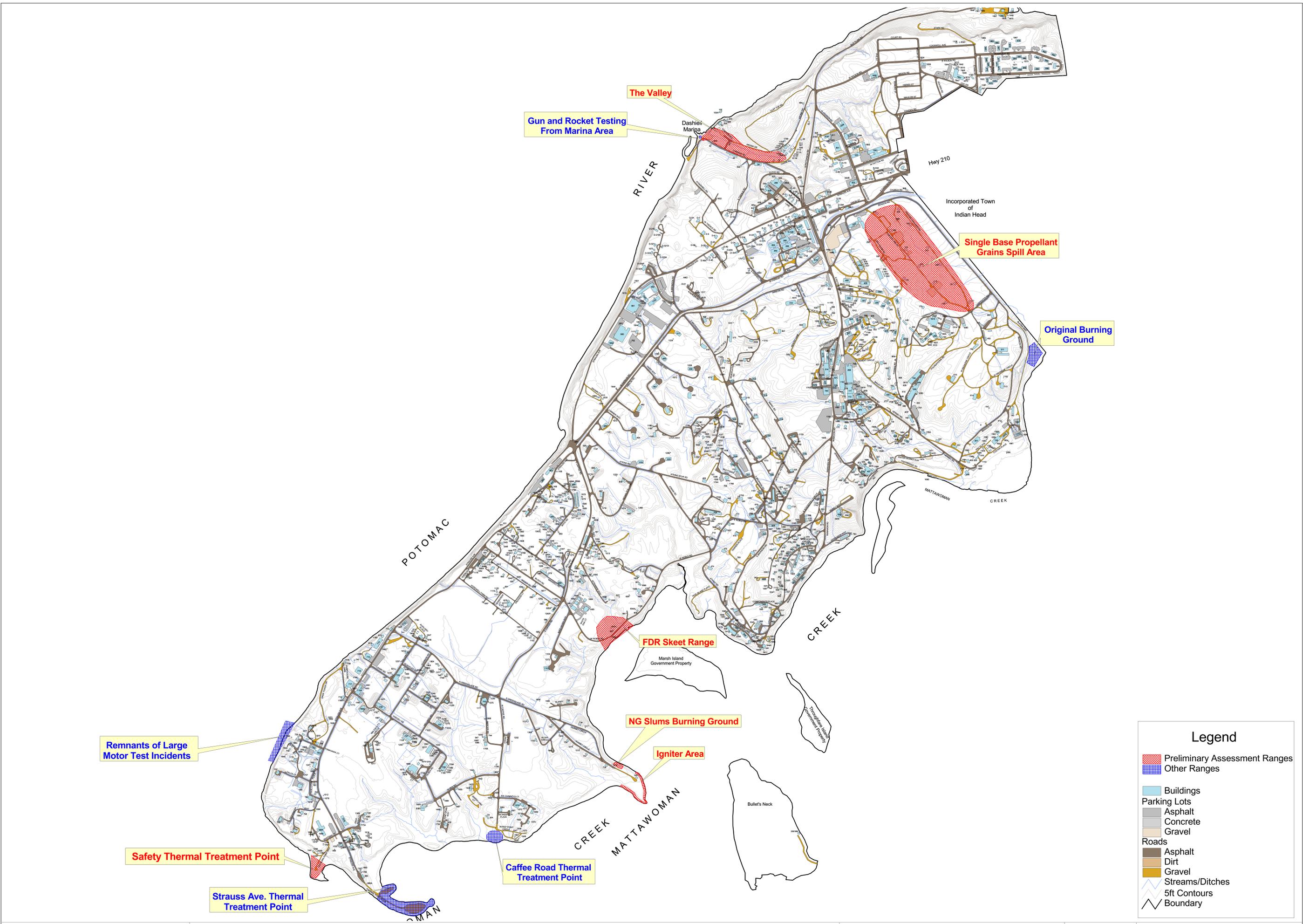
June 19th, 2003



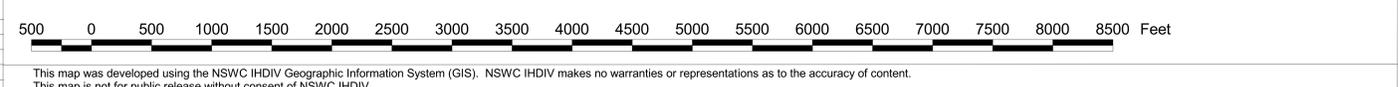
***Indian Head and Stump Neck
Preliminary Assessments for Munitions
Response Sites***



- *Objective of the Preliminary Assessment*
 - *Determine if Munitions and Explosives of Concern (MEC) and/or Munitions Constituents (MC) sites pose potential threats to human health or the environment;*
 - *Identify if nature of the threat is from explosive hazard, MC contamination, or both;*
 - *Set priorities for further remedial investigation.*
 - *Provide the necessary information to eliminate from further consideration those areas that pose no threat to public health or the environment;*
 - *Differentiate MEC and/or MC sites that may not require further action from MEC and/or MC sites that will require further investigations and/or response actions*
 - *Determine if an imminent hazard is present which will require an Accelerated Response*
 - *Prioritizing and sequencing MEC and/or MC sites for further action and determining baseline costs to complete cleanup.*

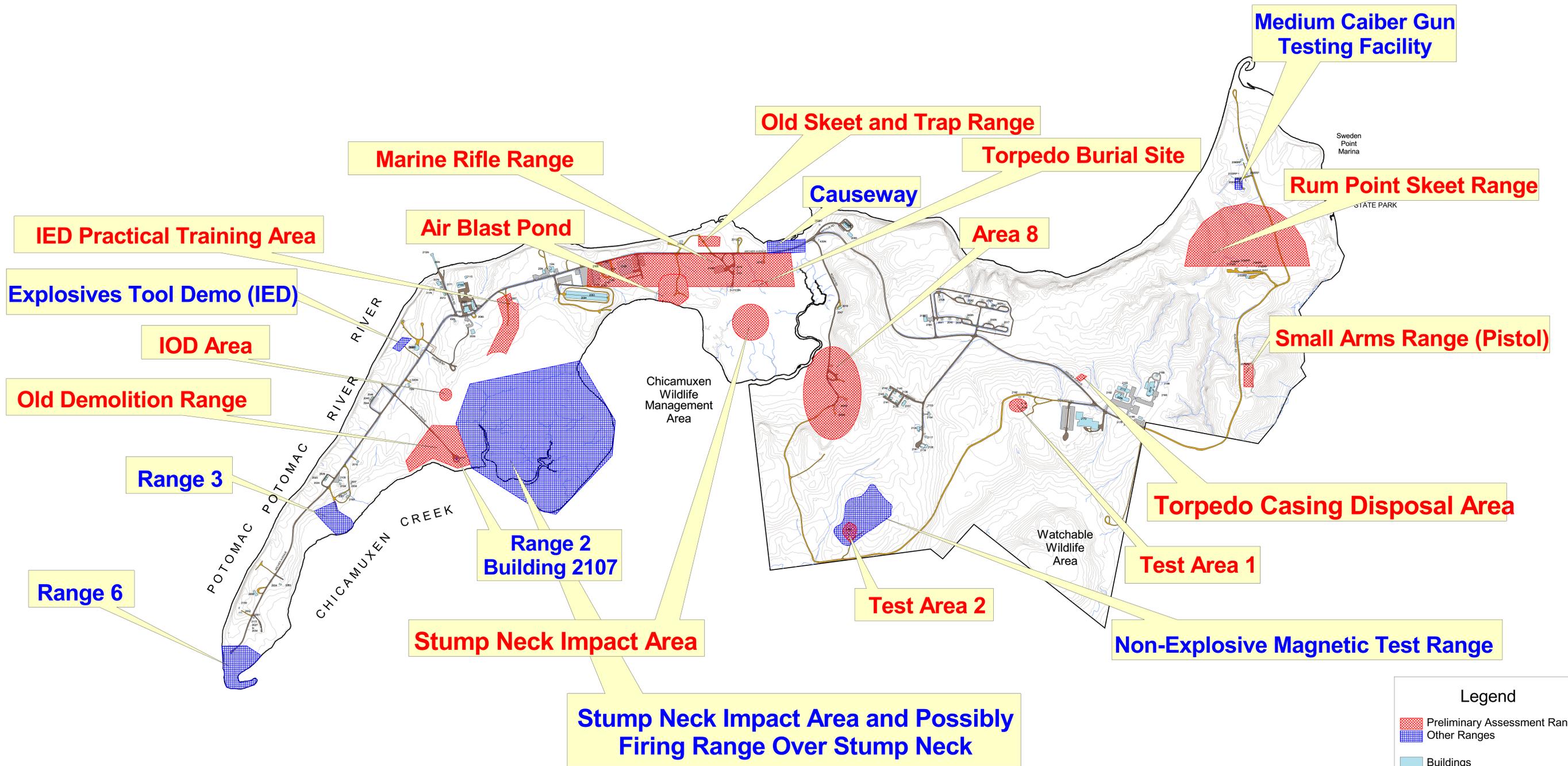


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 Indian Head, Maryland

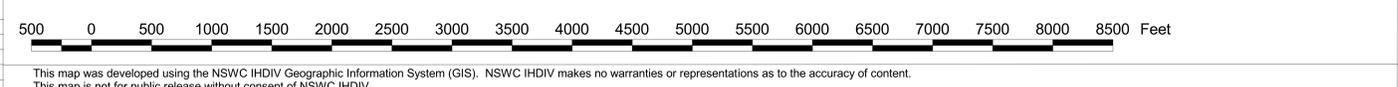




Legend

- Preliminary Assessment Ranges
- Other Ranges
- Buildings
- Parking Lots
- Asphalt
- Concrete
- Gravel
- Roads**
- Asphalt
- Dirt
- Gravel
- Streams/Ditches
- 5ft Contours
- Boundary

Date: 10 June 2003
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Naval Surface Warfare Center
 Indian Head Division
 Indian Head, Maryland



INSTALLATION RESTORATION PROGRAM



INDIAN HEAD DIVISION,
NAVAL SURFACE WARFARE CENTER
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RESTORATION ADVISORY BOARD (RAB) MEETING COMMENTS, QUESTIONS AND ANSWERS

June 19, 2003

Arrival/Welcome

No questions were asked nor comments made during this topic.

Update On Site 12 Removal Action

Question: What types of material were dumped in the landfill?

Answer: Details of what was removed from the landfill will be discussed later in the presentation.

Question: Are you going to continue to monitor the groundwater wells?

Answer: Yes, the wells will be monitored and sampled.

Question: Have you sampled the surface water in the pond?

Answer: Yes, we have and other media such as sediment, fish and biota.

Question: When will the silt fences be removed?

Answer: When the contractor determines there is no longer an erosion issue.

Update on Site 28 Remedial Investigation (RI) Activities

No questions were asked nor comments made concerning this site.

Site 57 Pilot Scale Study

Question: What is the depth of the Hydrogen Release Compounds (HRC)?

Answer: The groundwater flow ranges from 6 to 11 feet, so the HRC was placed at 6 to 12 feet.

Question: When will we have results from the pilot study?

Answer: Tentatively February 2004.

Discussion Of Site 36 Closed Landfill And Chicamuxen Creek

Question: Do we have the reports on the Chicamuxen Creek (Department of Natural Resources and Jeff Bossart's internal reports)?

Answer: We can obtain them if you would like, but they will be included in the RI Report for Site 36.

Comment: I can wait until the report is available.

Preliminary Assessment For Munitions Response Sites

Question: What precipitated the Preliminary Assessment?

Answer: The Vieques Island issue and other range issues.

Question: Did the issue at Spring Valley in Washington, DC also prompt this action?

Answer: It was related, but was not the driver.

Question: Who collected the history at Stump Neck?

Answer: Jim Dolph from Naval Shipyard in Portsmouth, New Hampshire. He performs all our literature searches.

Question: Do we have access to the literature?

Answer: It will be part of the Preliminary Assessment Report.

Comment: I would like to have an update to the Mattawoman Creek Study at the next RAB Meeting.

**INDIAN HEAD DIVISION,
NAVAL SURFACE WARFARE CENTER**

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

October 16, 2003

- 1. Site 28 Remedial Investigation (RI) Preliminary Results**
- 2. Sites 13 and 25 No Further Action Proposed Plans**
- 3. Site 57 Pilot Study Preliminary Results**
- 4. Site 17 Removal Action (Hot Spot and Drum Removal)**
- 5. Site 42 Feasibility Study Update**