



DEPARTMENT OF THE NAVY
NAVAL DISTRICT WASHINGTON
1014 N STREET SE SUITE 200
WASHINGTON NAVY YARD DC 20374-5001

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NSWC INDIAN HEAD
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27 Oct 04

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, October 21, 2004, at the Indian Head Senior Center, which is located at 100 Cornwallis Square, Indian Head, Maryland.

We are also forwarding the minutes from the public meeting that was held immediately after the RAB meeting on October 21, 2004. This meeting, which was a poster session, focused on the Proposed Plans for IR Site 39 - Stack Emissions, and IR Site 45 - Abandoned Drums.

RAB members that attended the poster session were provided copies of the Proposed Plans for Sites 39 and 45. Therefore, copies of the Proposed Plans are included with this letter for those RAB members that were not in attendance.

Please be aware that all comments on the proposed plans must be postmarked by November 17, 2004, as stated in the public notice that was placed in the *Maryland Independent* on Friday, October 15, 2004. Therefore, if you have any comments on the proposed plans and would like to have your comments included in the Responsiveness Summary of the Records of Decision for these sites, please forward them to us no later than November 17, 2004.

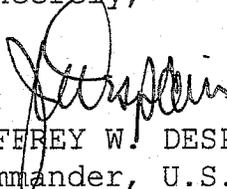
In addition, we want to remind you that comments on the Engineering Evaluation and Cost Analysis for Site 17 must be postmarked no later than November 15, 2004, as stated in the public notice that was placed in the *Maryland Independent* on Friday, October 15, 2004.

We would like to thank everyone who attended the RAB and Proposed Plan meetings. We hope to see all of you at the next RAB meeting, which is scheduled for Thursday, February 17, 2005, at the Indian Head Senior Center.

5090
27 Oct 04

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

Sincerely,



JEFFREY W. DESPAIN
Commander, U.S. Navy
By direction

- Encl: 1. Minutes from RAB Meeting of 21 Oct 04
2. Minutes from Proposed Plan Meeting of 21 Oct 04
3. Proposed Plans for Site 39 - Stack Emissions
4. Proposed Plans for Site 45 - Abandoned Drums

Distribution:
RAB Members
Meeting Attendees

Copy to:
ATSDR (D. Jackson)
CH2M Hill (M. Kasim)
HydroGeologic (C. Crane)
TetraTech (G. Latulippe)

INSTALLATION RESTORATION PROGRAM



NAVAL DISTRICT WASHINGTON,
INDIAN HEAD
101 STRAUSS AVENUE
INDIAN HEAD, MARYLAND
20640-5035



RESTORATION ADVISORY BOARD (RAB) MEETING

Date of Meeting: October 21, 2004

Restoration Advisory Board (RAB) Member Participants:

Mr. Gary Davis (L)	Mr. Wayne McBain (C)
Mr. Curtis DeTore (S)	Mr. Jeff Morris (N)
Mr. Vincent Hungerford (C)*	Mr. Joseph Rail (N)
Mr. Shawn Jorgensen (N)*	

RAB Members Not in Attendance:

Mr. Elmer Biles (C)	Mr. Fred Pinkney (F)
Mr. Jerry Hamrick (L)	Ms. Karen Wigger (L)
Mr. Dennis Orenshaw (F)	

Additional Attendees:

Mr. Jeff Bossart (N)	Mr. Gene Peters (K)
Ms. Cindy Crane (K)	Mr. Alex Schuman (N)
Mr. Butch Dye (S)	

* 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

Mr. Shawn Jorgensen of the Naval District Washington, Indian Head (NDW-IH) 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. Site 17 Engineering Evaluation and Cost Analysis (EE/CA)

Mr. Shawn Jorgensen discussed the EE/CA for Site 17 - Disposed Metal Parts Along Shoreline. Although the metal parts were removed from the shoreline in the early 1990s, drums were later found in the woods in the area of the site. Some of the drums contained a waxy substance. Sampling conducted for the remedial investigation found heavy metals in the soil and volatile organic compounds in the groundwater.

The EE/CA was prepared to address the metal-contaminated soil. The action proposed in the EE/CA is to remove the metal-contaminated soil and place it on Site 11 - Caffee Road Landfill. The soil will be incorporated under the future cap that will be placed on the landfill.

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

3. Site 28 Metal Sequestration Pilot Study

Mr. Shawn Jorgensen discussed a pilot study that is currently being conducted on the sediment at Site 28 - Original Burning Ground and Zinc Recovery Furnace. The sediment at this site contains metals, especially zinc. The purpose of the pilot study, which is being conducted with Jim Ryan of the Environmental Protection Agency (EPA), is to determine if in-situ selected metals sequestration works well in a field environment, the sediment in Mattawoman Creek. The technology being used includes adding Apatite (a natural form of calcium phosphate mineral) and high iron biosolids material (compost) to the sediment to reduce the bioavailability of the metals.

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

4. Military Munitions Response Program (MMRP)

Mr. Jeffrey Morris of the Naval Facilities Engineering Command, Washington (NAVFACWASH) provided the status of the Navy's MMRP at NDW-IH. Important to note is that the final preliminary

assessment of the main installation is scheduled to be completed in February 2005 and the final preliminary assessment for Stump Neck Annex is scheduled to be completed in March 2005.

A copy of Mr. Morris' presentation is included in Attachment D.

5. Recently Signed Records of Decision (RoDs)

Mr. Jeffrey Morris discussed three RoDs for NDW-IH that were recently signed by the Navy and the EPA. These RoDs were for Site 12 - Town Gut Landfill, Site 13 - Paint Solvents Disposal Grounds, and Site 25 - Hypo Discharges from X-Ray Building No. 2. The RoD for Site 12 includes institutional controls, such as prohibiting residential development on the site, shallow groundwater use, and unauthorized digging.

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

6. No Further Action Sites (Decision Documents)

Mr. Joseph Rail of NAVFACWASH discussed a cost and time saving method of removing sites from the Installation Restoration (IR) Program that do not require additional sampling and do not pose unacceptable risks to human health or the environment, or should be addressed under a regulation other than the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Decision documents, which are typically from three to five pages in length, are prepared for these sites. These documents describe the rationale for the decision. A signature page, which is signed by the Navy and the EPA with concurrence from the Maryland Department of the Environment (MDE), is included with the document.

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

7. Site Screening Process Investigations

Mr. Joseph Rail provided an update on site screening process investigations being conducted at NDW-IH. Twenty-three sites have recently been contracted to under site screenings. Of those, fifteen sites are currently being investigated. Additional details of the sites and the investigations planned will be discussed at the next RAB meeting.

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

8. Fiscal Year 2005 (FY2005) Budget Update

Mr. Joseph Rail provided an update on the planned budget for FY2005 for NDW-IH. Mr. Rail stated that approximately \$3.5

million is budgeted for work to be conducted at NDW-IH for this year. By comparison, Mr. Rail stated that approximately \$2.7 million was executed in FY2004 for NDW-IH. Work planned for FY2005 includes four remedial actions, two removal actions, long-term monitoring at Site 12, remedial designs for three sites, and the required five-year review.

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

8. Comments, Questions, and Answers

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

9. Conclusion

Mr. Shawn Jorgensen provided the dates of the RAB meetings scheduled for calendar year 2005: February 17, June 16, and October 20. These dates are the third Thursday of the months of February, June, and October.

Mr. Jorgensen then presented the tentative agenda for the February 17, 2005 RAB meeting, which is included in Attachment J. Mr. Jorgensen announced that a Proposed Plan Poster Session would be held immediately after the RAB meeting until 7:30 pm. He then concluded the meeting at 5:50 pm and thanked all in attendance.

**NAVAL DISTRICT WASHINGTON, INDIAN HEAD
INSTALLATION RESTORATION (IR) PROGRAM
RESTORATION ADVISORY BOARD (RAB) MEETING
AGENDA**

October 21, 2004

- 5:00 - 5:05** **ARRIVAL/WELCOME**
Mr. Shawn Jorgensen
Naval District Washington, Indian Head (NDW-IH)
IR Project Manager
- 5:05 - 5:20** **SITE 17 ENGINEERING EVALUATION AND COST ANALYSIS**
Mr. Shawn Jorgensen
- 5:20 - 5:35** **SITE 28 METAL SEQUESTRATION PILOT STUDY**
Mr. Shawn Jorgensen
- 5:35 - 5:55** **MILITARY MUNITIONS RESPONSE PROGRAM (MMRP)**
Mr. Jeffrey Morris
Naval Facilities Engineering Command, Washington
Remedial Project Manager
- 5:55 - 6:00** **RECENTLY SIGNED RECORDS OF DECISION**
Mr. Jeffrey Morris
- 6:00 - 6:10** **NO FURTHER ACTION SITES (DECISION DOCUMENTS)**
Mr. Joseph Rail
Naval Facilities Engineering Command, Washington
Remedial Project Manager
- 6:10 - 6:20** **SITE SCREENING PROCESS INVESTIGATIONS**
Mr. Joseph Rail
- 6:20 - 6:30** **FISCAL YEAR 2005 BUDGET UPDATE**
- 6:30** **ADJOURN**
- 6:30 - 7:30** **PROPOSED PLAN MEETING FOR SITES 39 AND 45**



NAVAL DISTRICT WASHINGTON
INDIAN HEAD
RESTORATION ADVISORY BOARD



Engineering Evaluation and Cost Analysis

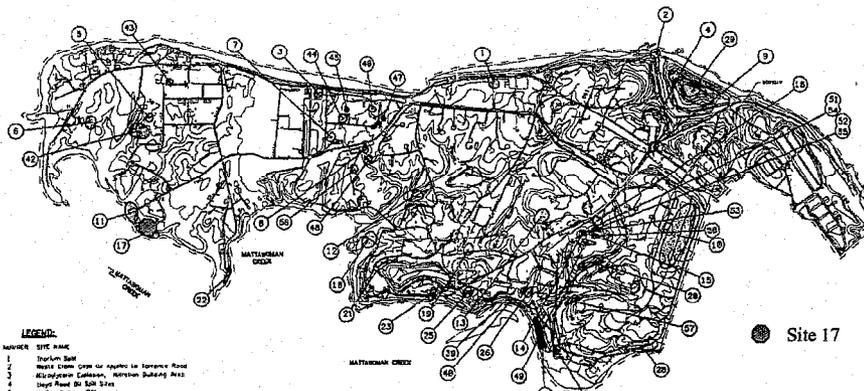
Site 17 – Metal Parts Along Shoreline

Shawn Jorgensen
IR Project Manager
Naval District Washington, Indian Head

October 21, 2004



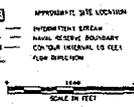
NDW - Indian Head
IR Site Map



LEGEND

SITE NUMBER	SITE NAME
1	Boiler Room
2	Boiler Room (see also adjacent to Torrance Road)
3	Aluminum Containers, Nitrogen Building Area
4	Steel Road Dr Split Sites
5	U-Boat Building 721
6	Building 158, Steel Shop
7	Building 642, JMC Shop
8	Building 160, Storage Structure
9	Freight House, Oil Tank
10	Single-Stage Pressure Engine Bldg
11	Crane Road Lymphs
12	Iron Cut Lymphs
13	Heat Exchanger Cabinet Change
14	Heat Exchanger Pile
15	Storage Deposits in Warehouse, Heating Lab
16	Laboratory Chemical Deposits
17	Original Metal Parts Along Shoreline
18	Heat House
19	Crane Room of the Detection House
20	Single-Stage Power Factor
21	Storage Room Inside
22	NO Burns Building Site
23	Hydraulic Oil Salt Storage from Liberation Plant
24	Inventory Salt Line
25	High Strength 8-1/2 Building No 7
26	Storage Structure 2
27	Storage Structure 1
28	Original Storage Structure
29	...
30-38	Storage Tank Array (SEE FIGURE 8-2)
39	Grain Plant Output
40	Material Storage in Warehouse
41	Scrap Yard
42	Oil Tank Lymphs
43	Inventory Storage Site
44	Small Oil Tank
45	Abandoned Storage
46	Inventory Storage Site
47	Inventory Storage Site
48	Inventory Storage Site
49	Chemical Deposits Area
50	Building 183, Crane Tower
51	Building 182, Dry Well
52	Building 181, Dry Well
53	Inventory Storage Structure of the Storage System
54	Building 181
55	Building 187
56	IMP - Lower Construction
57	IMP - Upper Construction
58	IMP - Lower Construction
59	IMP - Upper Construction

Site 17





IR Site 17

Disposed Metal Parts Along Shoreline



3



Engineering Evaluation and Cost Analysis

Site 17

Background



- *1,000-foot stretch of shoreline along Mattawoman Creek located east of Caffee Road Landfill*
- *Metal parts disposed along shoreline from 1960 – 1980*
- *Drums disposed of in woods (dates unknown)*
- *Metal parts removed from shoreline in early 1990s*
- *Rusted pieces of drums removed from site in 2002*
- *Remedial Investigation Report completed in April 2004*

4



*Engineering Evaluation and Cost Analysis
Site 17
Background*



- *Findings of Remedial Investigation Conducted July and August 2000*
 - *VOCs and metals in groundwater pose a potential risk to human health*
 - *Metals in surface soil pose a potential ecological risk*
 - *Metals in sediment pose a potential ecological risk*
- *Recommendations of Remedial Investigation Report of April 2004*
 - *Conduct a baseline ecological risk assessment for sediment at Site 17 along with the sediment at Site 11*
 - *Conduct a feasibility study to address potential risks from groundwater*
 - *Prepare an Engineering Evaluation and Cost Analysis to address the potential risks from soil.*



*Engineering Evaluation and Cost Analysis
Site 17*



- *EE/CA includes:*
 - *Excavating soil (metals)*
 - *Removing rusted drums (Possible source/future source of VOCs)*
 - *Screening soil to remove pieces of metal*
 - *Disposing of drums and metal pieces at an approved off-site landfill*
 - *Stockpiling excavated soil at Site 11 and stabilizing soil*
 - *Conducting confirmatory sampling to ensure Preliminary Remediation Goals (PRGs) are met*
 - *Backfilling excavation with clean soil and seeding with native grasses*



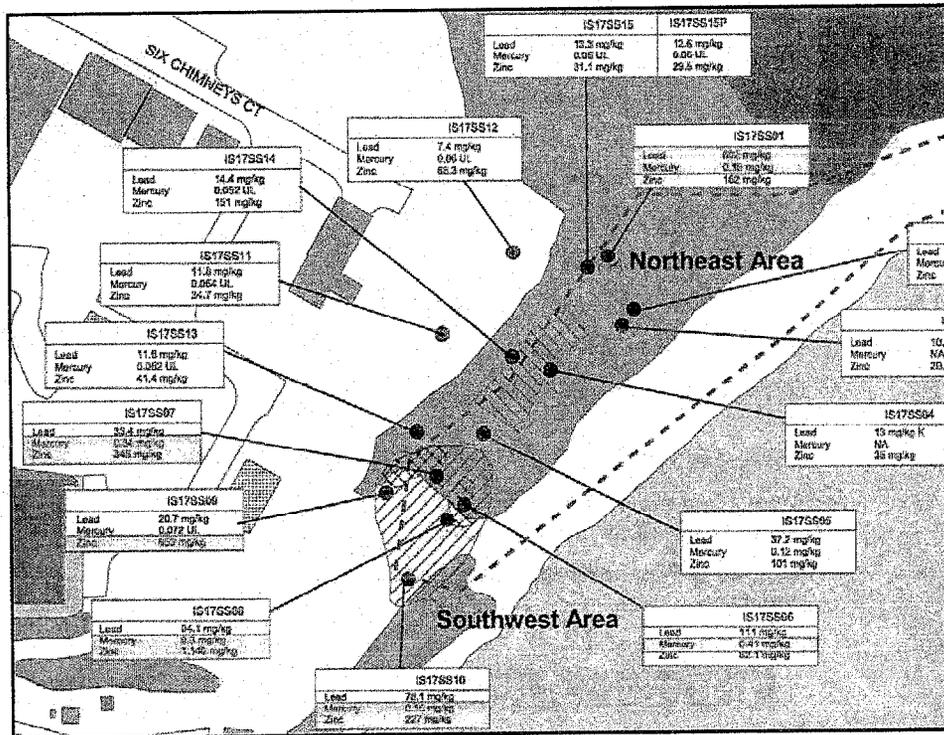
Engineering Evaluation and Cost Analysis Site 17



TABLE 2-1
Summary of Ecological Soil PRGs for COCs in Site 17 Soil
Site 17 EE/CA, NDWIH, Indian Head, Maryland

Constituent	Facility Background Average (mg/kg)	Calculated Soil (mg/kg)	Maximum Detected Concentration in Site 17 Soil (mg/kg)	Basis for PRG
Lead	20	500	602	ORNL-Soil Invertebrate Effects Level
Mercury	0.043	0.15	0.41	ORNL-Effects Level for Short-tailed Shrew
Zinc	18.1	200	1,140	ORNL-Soil Invertebrate Effects Level

Grey shading indicates applicable PRG for the given constituent.





***Engineering Evaluation and Cost Analysis
Site 17
Budget***



- *Cost for Work Performed at Site 17 - \$240,000*
 - *Remedial Investigation*
 - *Drum Removal*
 - *Pre-FS Sampling*
- *Estimated Cost for Future Work at Site 17 - \$465,000*
 - *EE/CA*
 - *Removal Action (soil removal)*
 - *BERA (sediment)*
 - *FS (groundwater)*
- *Total Estimated Cost for Site 17 - \$705,000*
(Does not include cost for Remedial Design, ROD, or Remedial Action)



NAVAL DISTRICT WASHINGTON,
INDIAN HEAD
RESTORATION ADVISORY BOARD



Metal Sequestration Pilot Study

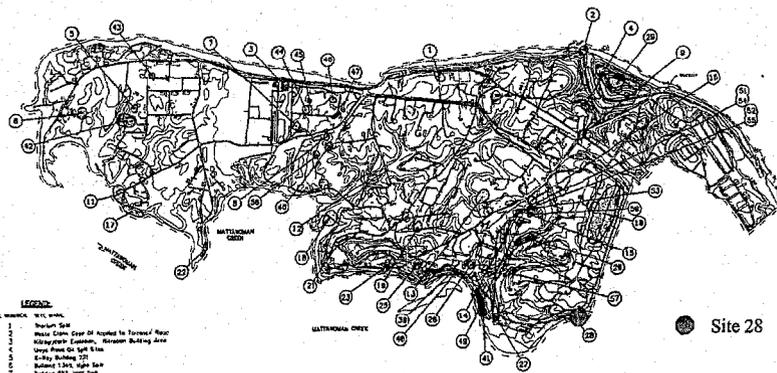
Site 28 - Original Burning Ground
and Zinc Recovery Furnace

Shawn Jorgensen
IR Project Manager
Naval District Washington, Indian Head

October 21, 2004



NDW - Indian Head
IR Site Map



LEGEND

1. Inland Site	18. Control Room of the Collector Reactor	32. Storage Area (SEE FIGURE 5-2)	45. Chemical Storage Area
2. Waste Control Dept. (located in Terminal Area)	19. Supportable Power Facility	33. Storage Area (SEE FIGURE 5-2)	46. Building 183, Steel Tank
3. Administration Building, Research Building Area	20. Storage Area (SEE FIGURE 5-2)	34. Storage Area (SEE FIGURE 5-2)	47. Building 181, Oil Tank
4. Waste Area (SEE FIGURE 5-2)	21. High Voltage Switching Station	35. Storage Area (SEE FIGURE 5-2)	48. Building 182, Oil Tank
5. Life Support Building	22. High Voltage Switching Station	36. Storage Area (SEE FIGURE 5-2)	49. Building 184, Oil Tank
6. Building 185, Oil Tank	23. High Voltage Switching Station	37. Storage Area (SEE FIGURE 5-2)	50. Building 186, Oil Tank
7. Building 187, Oil Tank	24. High Voltage Switching Station	38. Storage Area (SEE FIGURE 5-2)	51. Building 188, Oil Tank
8. Building 189, Oil Tank	25. High Voltage Switching Station	39. Storage Area (SEE FIGURE 5-2)	52. Building 190, Oil Tank
9. Petroleum Storage, Oil Tank	26. High Voltage Switching Station	40. Storage Area (SEE FIGURE 5-2)	53. Building 192, Oil Tank
10. Supportable Power Plant	27. High Voltage Switching Station	41. Storage Area (SEE FIGURE 5-2)	54. Building 194, Oil Tank
11. Control Room (located in Terminal Area)	28. High Voltage Switching Station	42. Storage Area (SEE FIGURE 5-2)	55. Building 196, Oil Tank
12. Waste Area (located in Terminal Area)	29. High Voltage Switching Station	43. Storage Area (SEE FIGURE 5-2)	56. Building 198, Oil Tank
13. Fuel Oil Storage	30. High Voltage Switching Station	44. Storage Area (SEE FIGURE 5-2)	57. Building 200, Oil Tank
14. Fuel Oil Storage	31. High Voltage Switching Station	45. Storage Area (SEE FIGURE 5-2)	
15. Fuel Oil Storage		46. Storage Area (SEE FIGURE 5-2)	
16. Fuel Oil Storage		47. Storage Area (SEE FIGURE 5-2)	
17. Fuel Oil Storage		48. Storage Area (SEE FIGURE 5-2)	
18. Fuel Oil Storage		49. Storage Area (SEE FIGURE 5-2)	
19. Fuel Oil Storage		50. Storage Area (SEE FIGURE 5-2)	
20. Fuel Oil Storage		51. Storage Area (SEE FIGURE 5-2)	
21. Fuel Oil Storage		52. Storage Area (SEE FIGURE 5-2)	
22. Fuel Oil Storage		53. Storage Area (SEE FIGURE 5-2)	
23. Fuel Oil Storage		54. Storage Area (SEE FIGURE 5-2)	
24. Fuel Oil Storage		55. Storage Area (SEE FIGURE 5-2)	
25. Fuel Oil Storage		56. Storage Area (SEE FIGURE 5-2)	
26. Fuel Oil Storage		57. Storage Area (SEE FIGURE 5-2)	

Site 28

APPROPRIATE SITE LOCATION
PROPERTY BOUNDARY
ADJACENT PROPERTY BOUNDARY
CONTIGUOUS INTERVAL 10 FEET
PLUM LINE/STATION

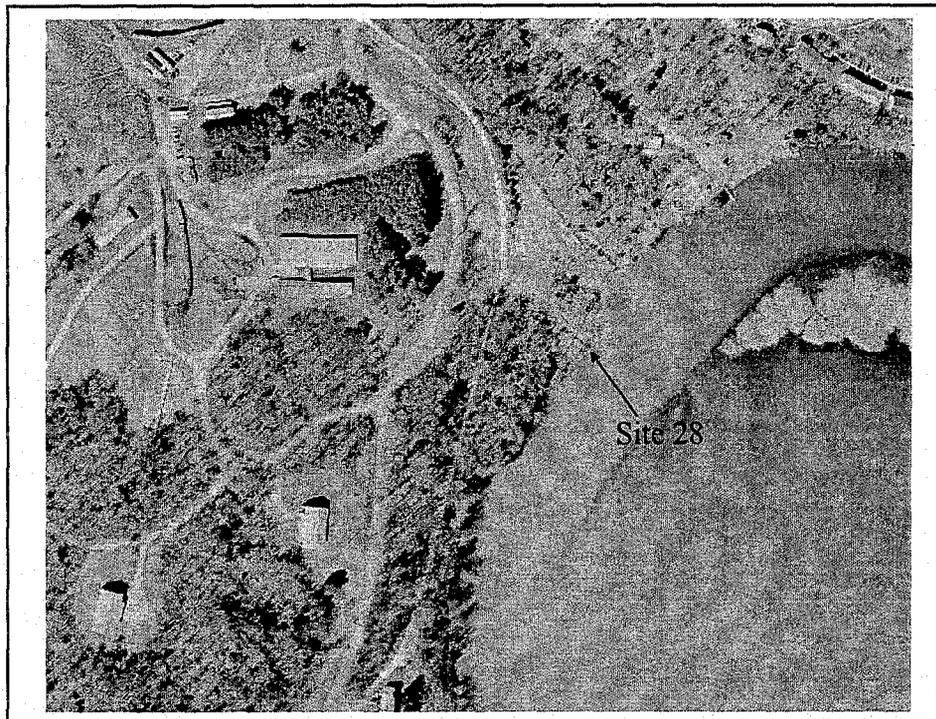
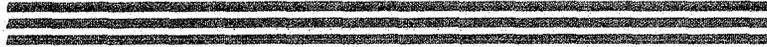
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Scale: 1" = 50 FEET



Metal Sequestration Pilot Study Site 28



- ***Background of Site 28 - Original Burning Ground and Zinc Recovery Furnace***
 - *Approximately 1.8 acres near Slavin's Dock on Mattawoman Creek*
 - *Burning cages were located on the shoreline of Mattawoman Creek*
 - *Smokeless powder burned in cages*
 - *Zinc recovery furnace built prior to 1926*
 - *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*





Metal Sequestration Pilot Study
Site 28



5



Metal Sequestration Pilot Study
Site 28



6



Metal Sequestration Pilot Study Site 28



7



Metal Sequestration Pilot Study Site 28



- *Findings of Remedial Investigation Conducted May through September 2003*
 - *Soil around the former zinc recovery furnace contains elevated levels of metals, especially zinc.*
 - *Elevated levels of zinc and other metals are present in the sediment downgradient of the former zinc recovery furnace and in groundwater samples collected at the site.*
 - *VOCs, SVOCs, and explosives compounds were detected at the site, but they contribute negligibly to human health and ecological risk.*

8



Metal Sequestration Pilot Study Site 28



- *Purpose of Pilot Study*
 - *To determine if in-situ selected metals sequestration works well in a field environment (Mattawoman Creek sediment).*
 - *Site 28 sediments provide a good field test bed for the technology, which has been successfully used on soil.*
- *In-Situ Selected Metals Sequestration*
 - *Apatite (a natural form of calcium phosphate mineral) acts as a scavenger for metals thus reducing their bioavailability. (Biological Apatite is fish bone!)*
 - *High iron biosolid material (compost) forms extremely stable complexes with metals.*



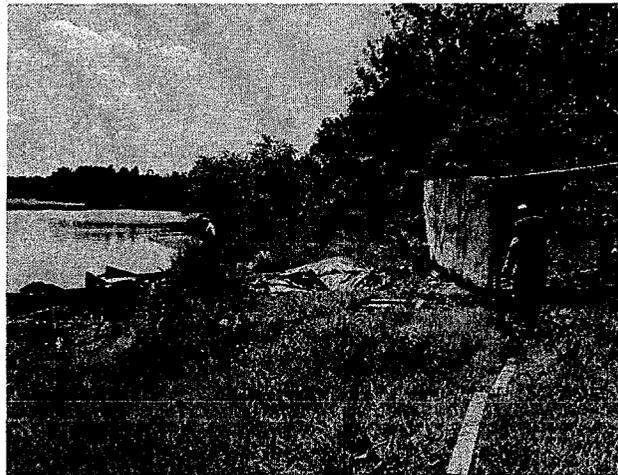
Metal Sequestration Pilot Study Site 28



- *Experimental groups include:*
 - *Control area that has not been impacted by zinc (upgradient of site)*
 - *Area that has been impacted by zinc that will not be treated*
 - *A few areas impacted by zinc that will be treated with varying amounts of phosphate material (Apatite) and biosolids*
- *Pilot Study work performed to date*
 - *Sediment samples taken in April 2004 prior to treatment with Apatite and biosolids*
 - *Apatite and biosolids applied in early July 2004*
 - *Next round of sampling scheduled for November 2004*



Metal Sequestration Pilot Study
Site 28



Metal Sequestration Pilot Study
Site 28





Metal Sequestration Pilot Study
Site 28
Budget



- *Cost for Work Performed at Site 28 to date – \$480,000*
 - *Remedial Investigation*
- *Estimated Cost for Future Work at Site 28 - \$350,000*
 - *Pilot Study (Metals Sequestration) ** FREE to us ***
 - *BERA*
 - *Feasibility Study*
 - *Proposed Plan*
 - *ROD*
 - *Remedial Design*
- *Total Estimated Cost for Site 28 - \$830,000*
(Does not include cost for Remedial Action)



NAVAL DISTRICT WASHINGTON,
INDIAN HEAD
RESTORATION ADVISORY BOARD



Military Munitions Response Program (MMRP)

NDWIH Budget = \$29 million

Main Installation – 8 sites

Stump Neck Annex – 17 sites

Water Areas – 5 sites

Jeff Morris

NAVFAC Washington

October, 2004

1



**Military Munitions Response
Program**



- ✓ *Established by DoD to address munitions and explosives of concern at other than operational ranges and other sites*
- ✓ *Closed, transferred, and transferring ranges are considered “other than operational”*
- ✓ *Not applicable to active and inactive ranges*

2



Military Munitions Response
Program



Current Process

- ✓ ***Range Inventory***
- ✓ ***Historical Records Investigation***
- ✓ ***Site Visits***
- ✓ ***Conceptual Site Models***
- ✓ ***Preliminary Assessment***
- ✓ ***Recommendations, Prioritization, Estimates***



Military Munitions Response
Program



Main Installation Sites

- ***Scrap Yard (former IR Site 41)***
- ***FDR Skeet Range***
- ***NG Slums Burning Ground***
- ***Safety Thermal Treatment Point***
- ***Single Base Propellant Grain Spill Area***
- ***The Valley***
- ***Gate 3 Burning Ground***
- ***Southwestern Pistol Range***



Military Munitions Response
Program



Stump Neck Annex Sites (a)

- *Air Blast Pond*
- *Area 8*
- *Basic IED Area*
- *Advanced IED Area*
- *Marine Rifle Range*
- *Old Demolition Range*
- *Old Skeet and Trap Range*
- *Rum Point Skeet Range*



Military Munitions Response
Program



Stump Neck Annex Sites (b)

- *Small Arms (Pistol) Range*
- *Stump Neck Impact Area*
- *Test Area 1*
- *Test Area 2*
- *Torpedo Burial Site*
- *Torpedo Casing Disposal*
- *EOD School Demolition Area*
- *Roach Road Rifle Range*
- *The Valley Impact Area*



Military Munitions Response
Program



Water Area Munitions Study (WAMS)

By definition, munitions sites located in water are not addressed under the MMRP

The purpose of the WAMS is to document the history of such sites



Military Munitions Response
Program



Water Area Munitions Study (WAMS)

✓ Main Installation

- Igniter Area***
- Water Impact Area***

✓ Stump Neck Annex

- Battle Range Firing Area***
- Sonar Training Area***

✓ Off Installation

- Pope's Creek Site***



Military Munitions Response
Program



Schedule

- ✓ *Final Main Installation PA – February 2005*
- ✓ *Final Stump Neck Annex PA – March 2005*
- ✓ *Final WAMS Report – February 2005*
- ✓ *Scrap Yard Remediation ~ FY07 or FY08*
- ✓ *Next Investigation Phase – funded beginning FY10*
- ✓ *Complete by FY14*



NAVAL DISTRICT WASHINGTON,
INDIAN HEAD
RESTORATION ADVISORY BOARD



Recently Signed Records of Decision (RoDs)

Site 12 – Town Gut Landfill

Site 13 – Paint Solvents Disposal Ground

Site 25 – Hypo Discharges from X-Ray Bldg No. 2

Jeff Morris
NAVFAC Washington

October, 2004

1



Recently Signed RoDs



Site 12 – Town Gut Landfill

- ✓ *Physical part of remedy (soil cover) completed previously as removal action*
- ✓ *RoD documents Institutional Controls required*
 - *Land use controls to prohibit residential development, shallow groundwater use, and unauthorized digging*
 - *Monitoring of shallow groundwater and adjacent ponds*

2



Recently Signed RoDs



Site 13 – Paint Solvents Disposal Ground
Site 25 – Hypo Discharges from X-Ray Bldg No. 2

✓ Existing conditions are protective of human health and the environment

✓ No further action required



NAVAL DISTRICT WASHINGTON,
INDIAN HEAD
RESTORATION ADVISORY BOARD



No Further Action Sites
(Decision Documents)

Joseph Rail
NAVFAC Washington

October, 2004

1



NFA Sites



- *Desktop evaluation process was used to close out several sites.*

A desktop evaluation includes:

- *Review of existing or easily obtainable documentation/information on identified sites through partnering.*
- *A decision by project managers to proceed to an investigative phase (e.g. Site Screening Process) or require no further action.*
- *For NFA sites, the Navy and EPA prepare a brief closeout document with concurrence from MDE.*
- *A decision document includes rationale behind the decision and a signature page.*

2



NFA Sites



- *Advantages of the desktop evaluation process:*
 - *Cost savings*
 - *Time savings*
 - *No restrictions for use of the property*
 - *Satisfied regulators*
 - *Fast verification that site conditions were already protective of human health and the environment for NFA sites.*



NFA Sites



Recent desktop evaluation Decision Documents signed for NFA include:

- Site 5- X-Ray Building 731*
- Site 40- Palladium Catalyst in Sediment*
- SWMU 74 (AOC)- Unlined Overland Drainage Ditches*
- Site 9- Patterson Avenue Oil Spill*
- Site 33- Scrap Metal Pit*
- Site 46- Cadmium Sandblast Grit*
- Site 48- Nitroglycerin Plant Disposal Area*



NFA Sites



NFA Decision Documents are pending for:

- Site 8- Mercury Contamination from Building 766*
- Site 20- Single-Base Powder Facilities*
- Site 24- Abandoned Drain Lines*
- Site 56- Lead Contamination at IW Outfall 87*
- Site 58- Range 3 Burn Point*
- Site 61- Range 6*



**NAVAL DISTRICT WASHINGTON,
INDIAN HEAD
RESTORATION ADVISORY BOARD**



Site Screening Process Investigations

*Joseph Rail
NAVFAC Washington*

October, 2004

1



SSP Investigations



The Site Screening process.....

- Gathers existing information about a site.*
- Distinguishes between sites that pose little or no threat to human health and the environment and sites that require further investigation.*
- Can recommend no further action, a removal action, or additional investigation.*

2



SSP Investigations



- *Recent Sites contracted to undergo SSP investigations include:*
 - *Sites 1, 2, 3, 4, 7, 8, 9, 18, 19, 20, 23, 24, 26, 27, 33, 36, 38, 43, 46, 48, 56*
 - *SWMUs 14 & 30*

SSP investigations are in process for:

- *Sites 1, 2, 3, 4, 7, 18, 19, 23, 26, 27, 36, 38, 43*
- *SWMUs 14 & 30*



**NAVAL DISTRICT WASHINGTON,
INDIAN HEAD
RESTORATION ADVISORY BOARD**



**FY05
Budget Update**

*Joseph Rail
NAVFAC Washington*

October, 2004

1



FY05 Budget Update



- ***Approximately \$3.5 mil budgeted for FY 2005.***

Planned work includes:

- *Remedial Action Contracts*
- *Removal Actions*
- *Long-Term Monitoring*
- *Five-Year Review*
- *Remedial Designs*

2



FY05 Budget Update



- *Remedial Action Contracts for:*
 - *Site 11- Caffee Road Landfill*
 - *Site 42- Olsen Road Landfill*
 - *Site 47- Mercuric Nitrate Disposal Area*
 - *Lab Area*

- *Removal Actions for:*
 - *Site 6- Hypo Spill, Radiographic Facility Accelerator*
 - *Site 17- Disposed Metal Parts Along Shoreline*



FY05 Budget Update



- *Long-Term Monitoring for:*
 - *Site 12- Town Gut Landfill*

- *Five-Year Review:*
 - *A five-year review for the facility is planned to be awarded.*

- *Remedial Designs for:*
 - *Sites 11, 47, and Lab Area*

INSTALLATION RESTORATION PROGRAM



NAVAL DISTRICT WASHINGTON,
INDIAN HEAD
101 STRAUSS AVENUE
INDIAN HEAD, MARYLAND
20640-5035



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

October 21, 2004

Arrival/Welcome

No questions were asked nor comments made during this topic.

Site 17 Engineering Evaluation and Cost Analysis

Question: Did you look for drums in the water?

Answer: No. We didn't specifically look for drums in the water, but we did not see any during our sampling events, including when we sampled the sediments in the Creek in this area.

Comment: There are areas along the shoreline that have a lot of metal and concrete, but drums have not been observed in those areas.

Site 28 Metal Sequestration Pilot Study

Question: Was the observation well at this site sampled?

Answer: We did not sample the well in the IR Program.

Comment: Even though the well is only an observation well and not used for potable water, it should be sampled since dissolved metals and other contaminants are in the shallow groundwater and could potentially get down to the deep aquifer.

Question: When was the well constructed and how deep is it?

Answer: The well was constructed in 1915 or 1918 and is screened at a depth greater than 200 feet.

Comment: It is important to note that the well is located hydraulically upgradient of the majority of the

groundwater contamination, that a clay layer separates shallow groundwater from the deeper aquifer, and that any metals seen in the well could be from the casing (if degraded) and that we might not be able to discriminate between site-related contamination and that which is well-related.

Resolution: The Navy will search for sampling data for this well. If no data exists, then the well will be sampled.

Military Munitions Response Program (MMRP)

Question: Has there been any resolution on how to fund the State of Maryland to review the documents on these sites?

Answer: The Navy provides funding to the State of Maryland to review IR documents. Since the MMRP is a new program, there is no funding in place, yet.

Question: Has a level of cleanup been established for these sites?

Answer: The cleanup levels will be site-specific. As a side note, this is a great program to try innovative technologies, since remediation for these sites will be costly, as shown by what is occurring in Vieques, Puerto Rico.

Recently Signed Records of Decision

No questions were asked nor comments made during this topic.

No Further Action Sites (Decision Documents)

No questions were asked nor comments made during this topic.

Site Screening Process Investigations

No questions were asked nor comments made during this topic.

Fiscal Year 2005 Budget Update

No questions were asked nor comments made during this topic.

**NAVAL DISTRICT WASHINGTON,
INDIAN HEAD**

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

February 17, 2005

- 1. Update on Site 28 Pilot Study**
- 2. Site 17 EE/CA Update**
- 3. Possible Pilot Study at Site 17**
- 4. BERAs for Sites 11, 17, 47, and Lab Area**
- 5. Update on Site Screening Process Sites**
- 6. Site 57 Update**



INSTALLATION RESTORATION PROGRAM

NAVAL DISTRICT WASHINGTON, INDIAN HEAD

101 STRAUSS AVENUE
INDIAN HEAD, MARYLAND
20640-5035



RESTORATION ADVISORY BOARD (RAB) MEETING Proposed Plans for Sites 39 and 45

Date of Meeting: October 21, 2004

Restoration Advisory Board (RAB) Member Participants:

Mr. Gary Davis (L)	Mr. Wayne McBain (C)
Mr. Curtis DeTore (S)	Mr. Jeff Morris (N)
Mr. Vincent Hungerford (C)*	Mr. Joseph Rail (N)
Mr. Shawn Jorgensen (N)*	

RAB Members Not in Attendance:

Mr. Elmer Biles (C)	Mr. Fred Pinkney (F)
Mr. Jerry Hamrick (L)	Ms. Karen Wiggen (L)
Mr. Dennis Orenshaw (F)	

Additional Attendees:

Mr. Jeff Bossart (N)	Mr. Gene Peters (K)
Ms. Cindy Crane (K)	Mr. Alex Schuman (N)
Mr. Butch Dye (S)	

* Co-Chair

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

Meeting Summary

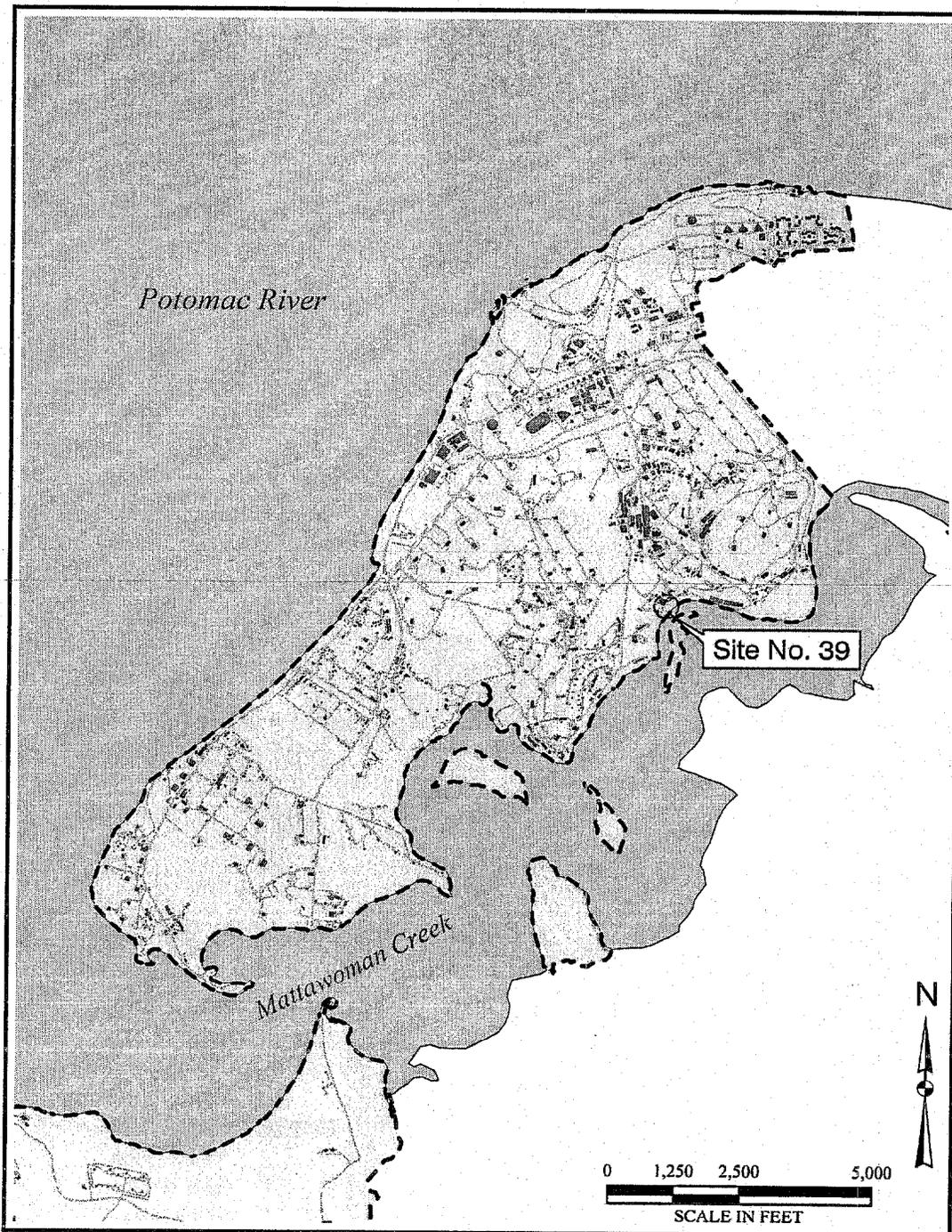
The meeting, which was scheduled to be held from 6:30 to 7:30 pm at the Indian Head Senior Center, 100 Cornwallis Square, Indian Head, MD, 20640, was actually held from 5:50 pm (immediately after the RAB meeting) to 7:30 pm. It was held to provide the public the opportunity to ask questions and provide comments on the Proposed Plans for Installation Restoration (IR) Site 39 - Stack Emissions, and Site 45 - Abandoned Drums. The proposed plans for both sites recommend no further action because the sites do not pose unacceptable risks to human health or the environment.

Posters on display that summarized the proposed plans for each site were available for public review. Copies of the posters are included in Attachments A and B. In addition, copies of the proposed plans and comment sheets were made available to the public at the meeting. No written comments were received at the meeting. The comment period for these proposed plans ends on November 17, 2004.

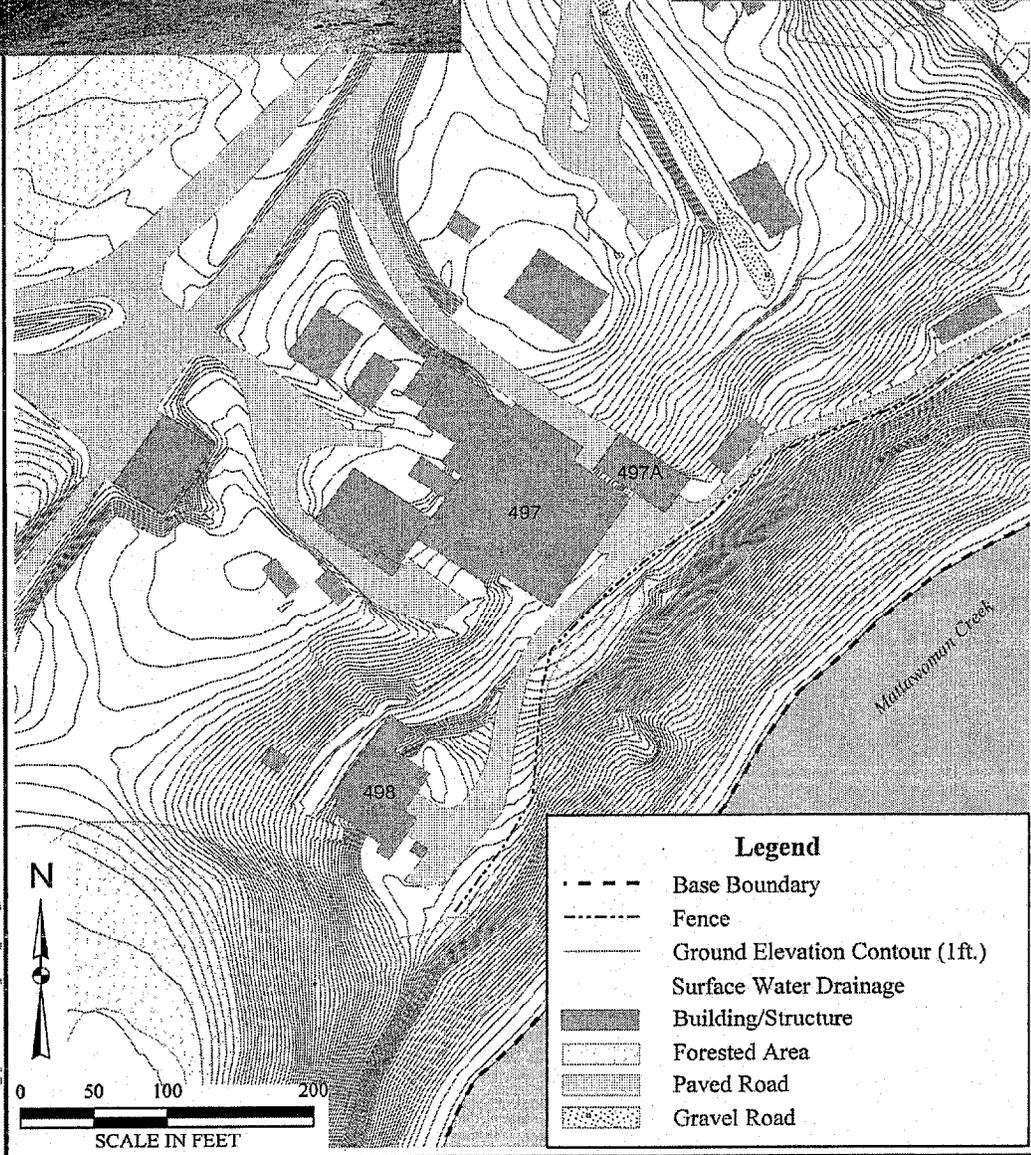
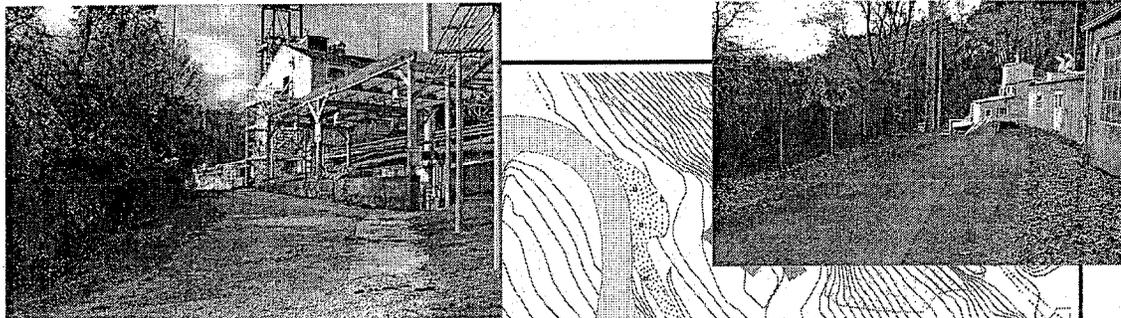
Individuals other than Navy, Federal, and State officials left the poster session by 6:15 pm, while Navy, Federal, and State officials remained at the Senior Center until 7:30 pm

The meeting adjourned at 7:30 pm.

Site Location Site 39 – Stack Emissions Naval District Washington, Indian Head



Pictorial Description Site 39 – Stack Emissions Naval District Washington, Indian Head



Site Operational History/Description

Site 39 – Stack Emissions

Naval District Washington, Indian Head

HISTORY

- ◆ Site 39 is on the southeast side of the Naval District Washington, Indian Head and encompasses the area around Buildings 497, 497A, and 498.
- ◆ Originally constructed in 1942, these buildings were used in the production of explosives until 1994.
- ◆ Emissions from stacks on Buildings 497 and 498 may have caused surface soil contamination in the vicinity of these buildings.

DESCRIPTION

- ◆ The area immediately surrounding the Site 39 buildings is covered with grass. The site perimeter is forested with a mixture of oaks and pines.
- ◆ Paved roads along the edge of Mattawoman Creek and on the northwestern side of the site provide access.



Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Process Site 39 – Stack Emissions Naval District Washington, Indian Head

GENERAL PROCESS

SI

Site Inspection (SI): A preliminary evaluation of the site during which samples are collected and analyzed to determine what hazardous substances may be present. The SI evaluates whether a release has occurred and whether the release has reached nearby targets.

1994 – Final Site Inspection Report

- ▶ Two sediment samples were collected from the outfall of Building 497 discharge pipe to Mattawoman Creek.
- ▶ Four sediment samples were collected from Mattawoman Creek.
- ▶ Recommended further investigation of Site 39 and the separation of the sediment from Site 39 for incorporation into the Mattawoman Creek Study.

RI

Remedial Investigation (RI): Analyzes contaminants, determines possible contamination migration from a site, and quantifies risk to human health and the environment.

2004 - Remedial Investigation Report

- ▶ Collected surface soil samples and shallow subsurface soil samples.
- ▶ Analyzed samples for semi-volatile organic compounds, metals, and explosives.
- ▶ Determined that chemicals present in the soil did not pose a threat to underlying groundwater.
- ▶ Performed human health and ecological risk assessments.
- ▶ Determined that the CERCLA release presents no unacceptable human health or ecological risks.
- ▶ Recommended no further action.

FS

Feasibility Study (FS): Evaluates feasible cleanup methods to achieve environmental standards to protect human health and the environment.

No feasibility study necessary because remediation is not required.



Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Process Site 39 – Stack Emissions Naval District Washington, Indian Head

GENERAL PROCESS (continued)

PP

Proposed Plan (PP): Outlines feasible alternatives and recommends a course of action.

October 2004 – Proposed Plan

Present to public.

PC

Public Comment (PC) Period/Meeting/Hearing: Allows for public examination of the proposed plan and expression of public comments; public meeting held to present plan and answer questions.

2004 – Public Comment Period

Start: October 19, 2004

End: November 17, 2004

ROD

Record of Decision (ROD): Specifies the cleanup method and responds to public comments.

Record of Decision

- ▶ Will consider public comments
- ▶ Will specify selected remedy
- ▶ Navy and EPA will sign and issue ROD, with concurrence from MDE

RD

Remedial Design (RD): Involves preparing construction specifications and other design plans for remediation.

No remediation planned

RA

Remedial Action (RA): Remediates or cleans up the site to approved environmental standards.

No remediation planned



Human Health and Ecological Risks Site 39 – Stack Emissions Naval District Washington, Indian Head

HUMAN HEALTH RISK

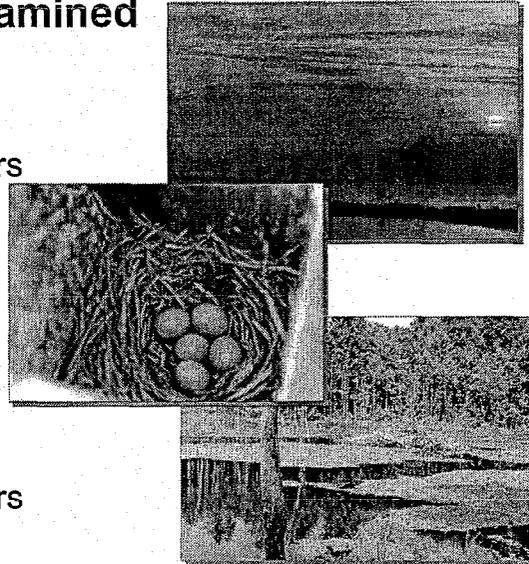
Potential Receptor Groups Examined

◆ Current Use

- ▶ Adult trespassers/visitors
- ▶ Adolescent trespassers/visitors
- ▶ Industrial workers

◆ Future Use

- ▶ Adult residents
- ▶ Child residents
- ▶ Adult trespassers/visitors
- ▶ Adolescent trespassers/visitors
- ▶ Industrial workers
- ▶ Construction workers



Risk Assessment Conclusions

- ◆ No unacceptable risk for any receptor group

ECOLOGICAL RISK

Risk Assessment Conclusions

- ◆ The CERCLA release presents no unacceptable risk to ecological receptors



MEASURES TO ADDRESS RISK

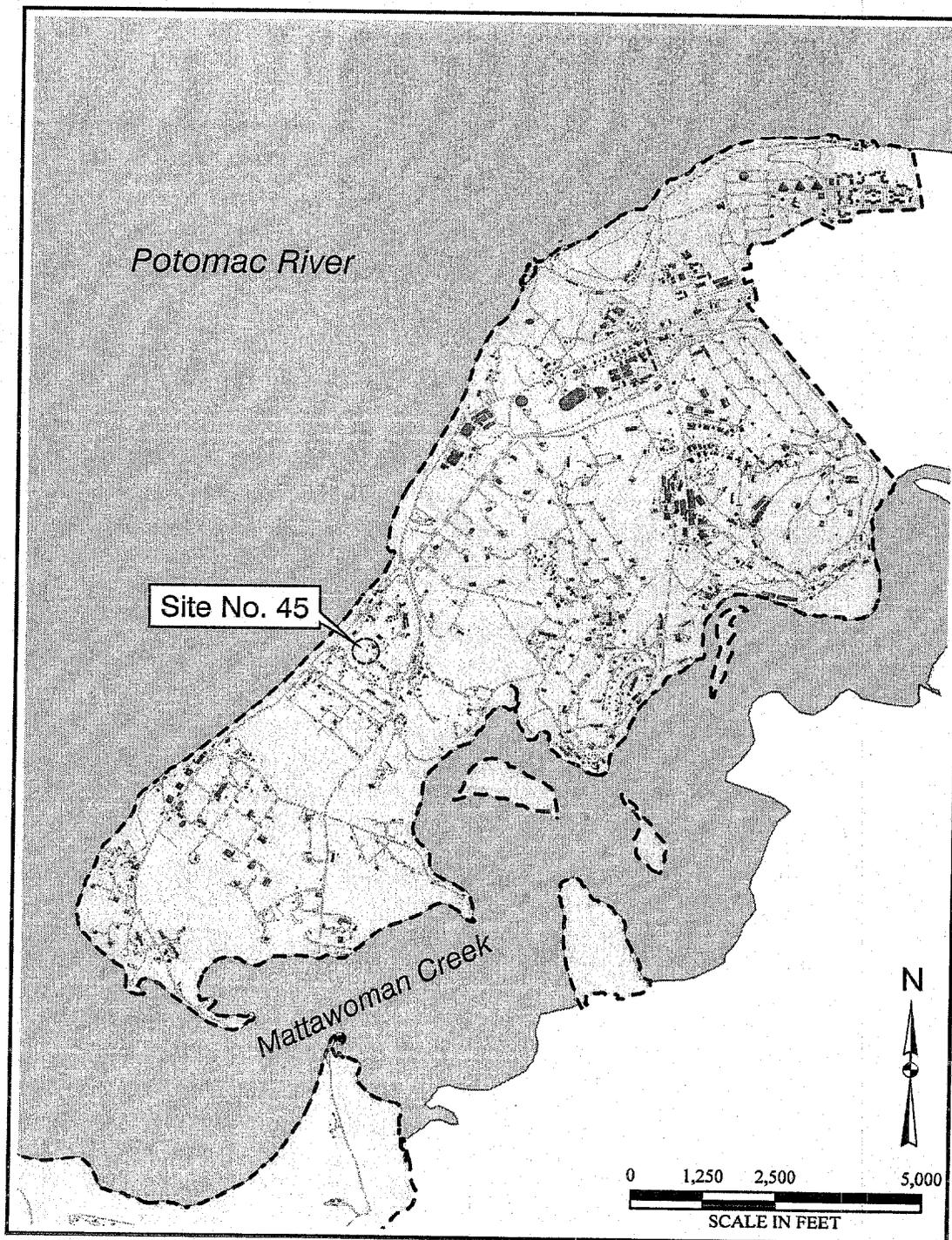
- ◆ No remedial measures required



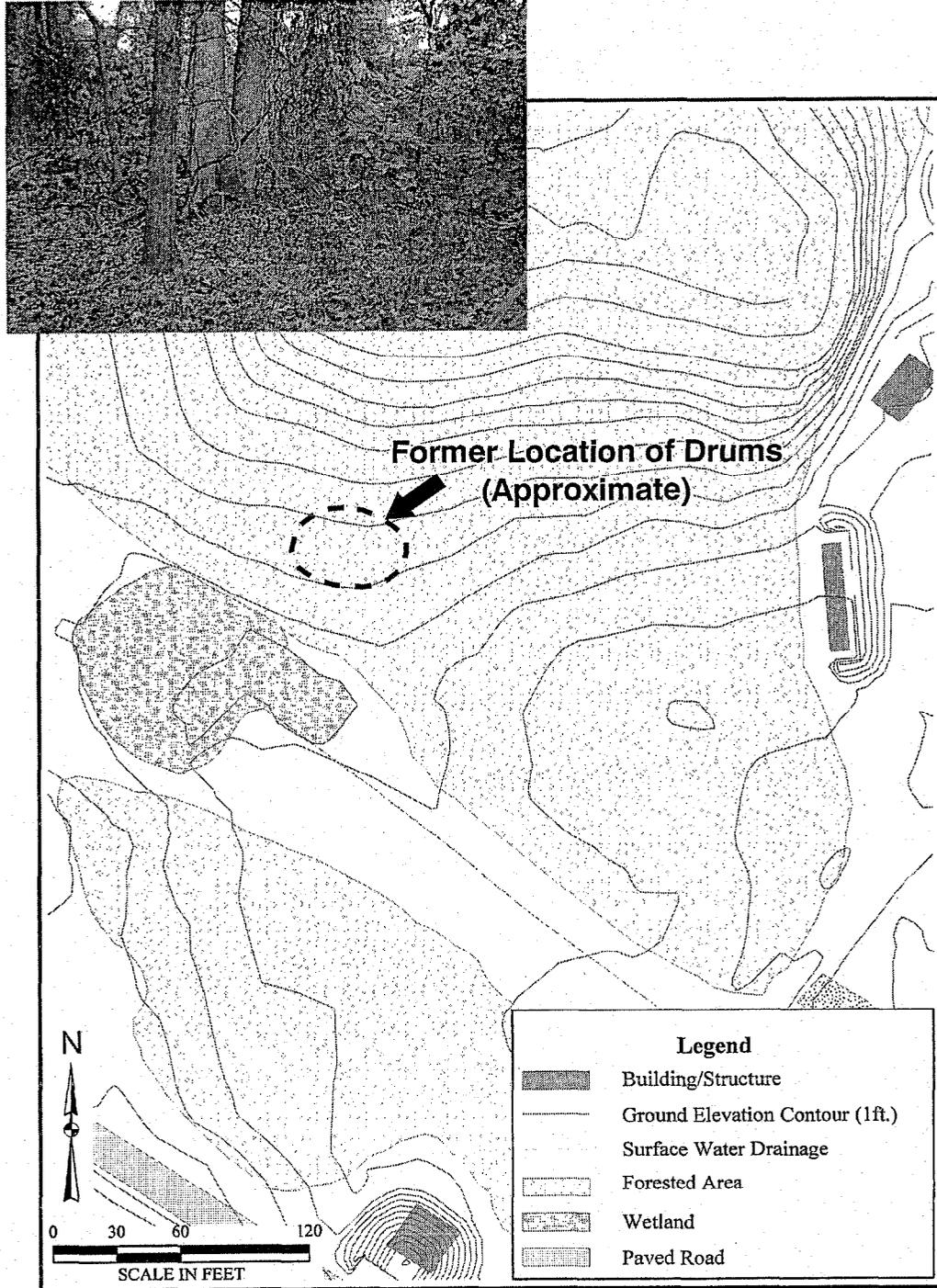
Site Location

Site 45 – Abandoned Drums

Naval District Washington, Indian Head



Pictorial Description Site 45 – Abandoned Drums Naval District Washington, Indian Head



Site Operational History/Description

Site 45 – Abandoned Drums

Naval District Washington, Indian Head

HISTORY

- ◆ Site 45 is in a wooded area in the northwest-central portion of the Naval District Washington, Indian Head.
- ◆ Remnants of rusted drums were removed from Site 45 in 1995.
- ◆ It is believed that these drums originated from the process at Site 44 (located approximately 300 feet east of Site 45).

DESCRIPTION

- ◆ Site 45 is a small clearing approximately 60 feet in diameter located in a mixed hardwood and pine forest.
- ◆ The site is surrounded by several clusters of industrial complexes, but is not used for any industrial activity.



Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Process Site 45 – Abandoned Drums Naval District Washington, Indian Head

GENERAL PROCESS



Preliminary Assessment (PA): A limited-scope investigation to collect readily available information about a site and its surrounding area. The PA distinguishes between sites that clearly pose no threat to human health or the environment from sites that require further investigation.

1992 – Supplemental PA

- ▶ Recommended that Site 45 be further investigated.



Site Inspection (SI): A preliminary evaluation of the site during which samples are collected and analyzed to determine what hazardous substances may be present. The SI evaluates whether a release has occurred and whether the release has reached nearby targets.

1994 – Final Site Inspection Report

- ▶ Collected three surface soil and four soil gas samples.
- ▶ Detected cadmium and cobalt in the soil at concentrations slightly greater than background levels.
- ▶ Detected carbon disulfide and dimethylphenol in soil samples and total volatiles, xylene, and tetrachloroethene in soil gas samples. All concentrations were less than U.S. EPA Region III risk-based screening values.
- ▶ Recommended further investigation for Site 45.



Remedial Investigation (RI): Analyzes contaminants, determines possible contamination migration from a site, and quantifies risk to human health and the environment.

2004 - Remedial Investigation Report

- ▶ Collected and analyzed surface soil samples, subsurface soil samples, and shallow groundwater samples.
- ▶ Determined that chemicals identified at the site pose no unacceptable risks to human health or ecological receptors.
- ▶ Recommended no further action.



Feasibility Study (FS): Evaluates feasible cleanup methods to achieve environmental standards to protect human health and the environment.

No feasibility study necessary because remediation is not required.



Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Process Site 45 - Abandoned Drums Naval District Washington, Indian Head

GENERAL PROCESS (continued)

PP

Proposed Plan (PP): Outlines feasible alternatives and recommends a course of action.

October 2004 – Proposed Plan

Present to public.

PC

Public Comment (PC) Period/Meeting/Hearing: Allows for public examination of the proposed plan and expression of public comments; public meeting held to present plan and answer questions.

2004 – Public Comment Period

Start: October 19, 2004

End: November 17, 2004

ROD

Record of Decision (ROD): Specifies the cleanup method and responds to public comments.

Record of Decision

- ▶ Will consider public comments
- ▶ Will specify selected remedy
- ▶ Navy and EPA will sign and issue ROD, with concurrence from MDE

RD

Remedial Design (RD): Involves preparing construction specifications and other design plans for remediation.

No remediation planned

RA

Remedial Action (RA): Remediate or cleans up the site to approved environmental standards.

No remediation planned



Human Health and Ecological Risks Site 45 – Abandoned Drums Naval District Washington, Indian Head

HUMAN HEALTH RISK

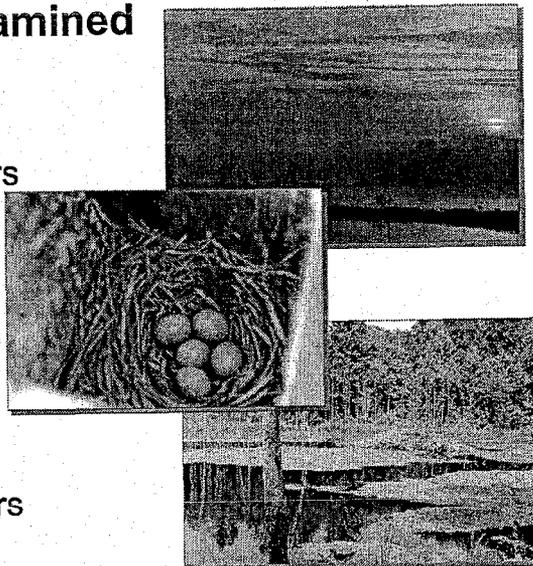
Potential Receptor Groups Examined

◆ Current Use

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- ▶ Adolescent trespassers/visitors
- ▶ Industrial workers

◆ Future Use

- ▶ Adult residents
- ▶ Child residents
- ▶ Adult trespassers/visitors
- ▶ Adolescent trespassers/visitors
- ▶ Industrial workers
- ▶ Construction workers



Risk Assessment Conclusions

- ◆ No unacceptable risk for any receptor group

ECOLOGICAL RISK

Risk Assessment Conclusions

- ◆ No unacceptable risk to ecological receptors



MEASURES TO ADDRESS RISK

- ◆ No remedial measures required

