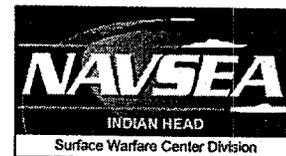


# INSTALLATION RESTORATION PROGRAM



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



## RESTORATION ADVISORY BOARD (RAB) MEETING

Date of Meeting: October 19, 2000

### Restoration Advisory Board (RAB) Member Participants:

CAPT Marc A. Siedband (N)	Mr. Curtis DeTore (S)
Ms. Susan Adams (N)*	Mr. Vincent Hungerford (C)*
Mr. Elmer Biles (C)	Mr. Robert Sadorra (N)

### RAB Members Not in Attendance:

Mr. Gary Davis (L)	Mr. Dennis Orenshaw (F)
Mr. Stephen Elder (L)	Mr. Fred Pinkney (F)
Mr. Karen Wiggon (L)	

### Additional Attendees:

Ms. Sherry Deskins (N)	Mr. Russell Hamilton (C)
Ms. Sharon Geil (C)	Mr. Shawn Jorgensen (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. Meeting Introduction**

Ms. Susan Adams of the Indian Head Division, Naval Surface Warfare Center (IHDIV-NSWC) began the meeting by welcoming everyone to the Indian Head Senior Center and introduced the current Commander of IHDIV-NSWC, Captain Marc A. Siedband. Captain Siedband expressed his appreciation for the work that the Restoration Advisory Board (RAB) is doing and hopes that we will continue to forge ahead in the Installation Restoration (IR) Program.

Ms. Adams then presented the meeting agenda, which is included as Attachment A.

### **2. Funding and Plans for Fiscal Year (FY) 2001**

Mr. Robert Sadorra of the Engineering Field Activity, Chesapeake (EFACHES), provided project and funding information for work performed in FY 2000, which amounted to almost \$2.8 million. Mr. Sadorra also provided planned project and funding information for FY 2001. The work planned for FY 2001 is estimated at over \$2.8 million.

A copy of Mr. Sadorra's presentation, which shows this information, can be found in Attachment B.

### **3. Federal Facilities Agreement (FFA)**

Mr. Sadorra discussed the FFA or Interagency Agreement, which is a document signed by the Navy and the EPA and is required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Among other things, the FFA sets a process for regulatory involvement and includes schedules and deadlines for cleanup actions.

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

### **4. Update on IR Site 57**

Mr. Sadorra provided an update on the work being performed at IR Site 57 - Building 292 Trichloroethylene (TCE) Spill. A brief background of the site was provided and the status of the Feasibility Study (FS) discussed. The Navy plans to have a draft of the FS Report for this site available for public review in May 2001.

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

5. IR Sites 12, 41, and 44 Update

Mr. Sadorra discussed the information contained in the FS Report for IR Sites 12 (Town Gut Landfill) and 41 (Scrap Yard), including possible cleanup alternatives and costs of the alternatives for these sites. Since the Risk Assessment performed in the Remedial Investigation Report for IR Site 44 (Soak Out Area) did not show a potential human health or ecological risk, cleanup is not required at IR Site 44.

Proposed Plans for the cleanup of IR Sites 12 and 41 will be available in January 2001. A copy of Mr. Sadorra's presentation for these sites can be found in Attachment E.

6. IR Site 42 --Olsen Road Landfill Toxicity Testing Update

Mr. Sadorra provided an update of the Toxicity Identification Evaluation (TIE) testing that is being performed at IR Site 42. The TIE report is expected in February 2001, which will be used to complete the FS Report for IR Site 42. The anticipated completion date of the IR Site 42 FS Report is March 2001.

A copy of Mr. Sadorra's presentation is located in Attachment F.

7. Mattawoman Creek Study Update

Mr. Sadorra provided an update of the work performed to date on the Mattawoman Creek Ecological Risk Study and the future schedule for the study. Although the study appears to be going slowly, a lot of effort has been put forth for this study. In fact, the more work completed at the beginning stages of the study, the better the results will be when the study is completed.

A draft work plan containing the finalized problem formulation and the sampling and analysis plan is scheduled to be completed in February 2001. This work plan will require review from the RAB.

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

8. Remedial Investigation (RI) Project Status for IR Sites 11, 13, 17, 21 and 25

Mr. Shawn Jorgensen of the Indian Head Division, Naval Surface Warfare Center discussed five sites on which RIs are being conducted. These include: IR Site 11 - Caffee Road Landfill, IR Site 13 - Paint Solvents Disposal Ground, IR Site 17 - Disposed Metal Parts Along Shoreline, IR Site 21 - Bronson Road Landfill, and IR Site 25 - Hypo Discharges From X-ray Building No. 2.

Mr. Jorgensen discussed data (which is not yet validated) received for two of the sites, 17 and 25, where additional samples are being taken. TCE was discovered in some of the samples at IR Site 17. Metals and low levels of volatile organic compounds were detected at IR Site 25. The additional work, which will be completed on October 20, 2000, includes obtaining surface, subsurface and groundwater samples. The draft RI Report for these sites is expected in March 2001.

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

9. Remedial Investigation (RI) Work Plan for Sites 15, 16, 49, 50, 53, 54, and 55

Mr. Jorgensen discussed seven sites on which RIs will be conducted in FY 2001. These include: IR Site 15 - Mercury Deposits in Manhole, Fluorine Lab; IR Site 16 - Laboratory Chemical Disposal; IR Site 49 - Chemical Disposal Pit; IR Site 50 - Building 103 Crawl Space; IR Site 53 - Mercury in the Sewage System; IR Site 54 - Building 101 Mercury Contamination; IR Site 55 - Building 102 Mercury Contamination. Mr. Jorgensen provided a brief background on these sites and stated that due to the close proximity of these sites to one another, and the similar suspected chemicals involved, they will be studied as one area.

The anticipated completion date of the final work plan for these sites is December 2000, delayed from August 2000, with fieldwork scheduled to begin in December 2000. The cost of this RI work is estimated at \$950,000.

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

10. Comments, Questions, and Answers

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

11. Conclusion

Ms. Adams concluded the meeting by thanking all in attendance. Ms. Adams then presented the schedule for the meetings in 2001, which are the third Thursdays in the months of February (15<sup>th</sup>), June (21<sup>st</sup>), and October (18<sup>th</sup>), as shown in Attachment K.

In addition, Ms. Adams provided the tentative agenda for the next meeting scheduled for Thursday, February 15, 2001, from 7:00 to 9:00 p.m. at the Indian Head Senior Center. A copy of the agenda is included as Attachment L.

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

October 19, 2000

**7:00 - 7:10**

**ARRIVAL/WELCOME**

Ms. Susan P. Adams  
Indian Head Division, Naval Surface Warfare Center  
Head, Safety Department

**7:10 - 7:20**

**FUNDING AND PLANS FOR FISCAL YEAR 2001**

Mr. Robert Sadorra  
Engineering Field Activity Chesapeake  
Remedial Project Manager

**7:20 - 7:30**

**FEDERAL FACILITIES AGREEMENT**

Mr. Robert Sadorra

**7:30 - 7:40**

**IR SITE 57 UPDATE**

Mr. Robert Sadorra

**7:40 - 7:50**

**UPDATE ON IR SITES 12, 41, AND 44**

Mr. Robert Sadorra

**7:50 - 8:00**

**UPDATE ON TOXICITY TESTING AT IR SITE 42 - OLSEN  
ROAD LANDFILL**

Mr. Robert Sadorra

**8:00 - 8:10**

**MATTAWOMAN CREEK STUDY UPDATE**

Mr. Robert Sadorra

**RESTORATION ADVISORY BOARD (RAB) MEETING  
AGENDA  
(continued)**

October 19, 2000

**8:10 - 8:25                    UPDATE ON RI WORK AT SITES 11, 13, 17, 21, AND 25**

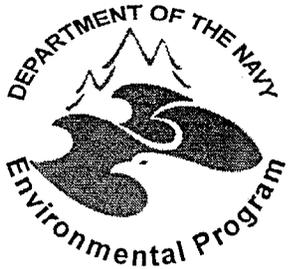
Mr. Shawn Jorgensen  
Indian Head Division, Naval Surface Warfare Center  
IR Project Manager

**8:25 - 8:40:                UPDATE ON RI WORK PLAN FOR SITES 15, 16, 49, 50, 53, 54,  
AND 55**

Mr. Shawn Jorgensen

**8:40 - 9:00                COMMENTS, QUESTIONS, AND ANSWERS**

**9:00                         ADJOURN**



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



***Installation Restoration  
Funding and Plans for Fiscal Year 2001***

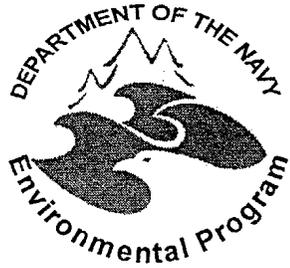
*Rob Sadorra, PE*

*Project Manager*

*Engineering Field Activity Chesapeake*

*October 19, 2000*

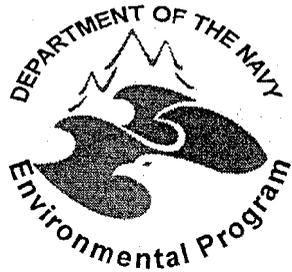
Attachment B



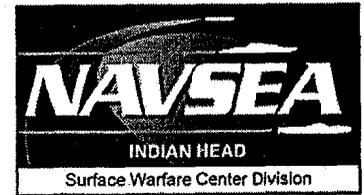
# *NSWC Indian Head IR Program FY 2000 Execution*



<i><b>Sites</b></i>	<i><b>Project</b></i>	<i><b>Awarded</b></i>
<i>Sites 12,41,42,44</i>	<i>PRAPs / RODs and RDs</i>	<i>\$ 573,112</i>
<i>Site 57</i>	<i>Feasibility Studies</i>	<i>\$ 125,000</i>
<i>Site 47</i>	<i>Remedial Investigations</i>	<i>\$ 24,000</i>
<i>Sites 49,53,15,16,50,54,55</i>	<i>Remedial Investigations</i>	<i>\$ 956,918</i>
<i>Sites 11,13,17,21,25</i>	<i>Remedial Investigations</i>	<i>\$ 798,175</i>
<i>Mattawoman Creek</i>	<i>Risk Assessment</i>	<i>\$ 307,496</i>
<i><b>Total</b></i>		<i><b>\$ 2,784,701</b></i>



# NSWC Indian Head FY 2001 Planned Execution



<u>Sites</u>	<u>Project</u>	<u>Planned Award</u>
Site 12	Remedial Action	\$ 1,271,310
Site 57	Remedial Design	\$ 195,160
Site 47	Feasibility Studies	\$ 200,000
Sites 49,53,15,16,50,54,55	FS and PRAP / ROD	\$ 280,000
Sites 11,13,17,21,25	FS and PRAP / ROD	\$ 350,000
Sites 5,6,39,45	Remedial Investigations	\$ 550,000
<b>Total</b>		<b>\$ 2,846,470</b>



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



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***Federal Facilities Agreement***

*Rob Sadorra, PE*

*Project Manager*

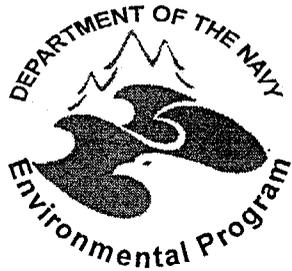
*Engineering Field Activity Chesapeake*

*October 19, 2000*

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# *Federal Facilities Agreement*

## *Purpose of the FFA*



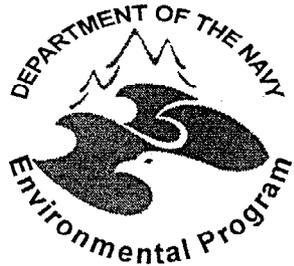
- *Defines the procedural framework and schedule for developing, implementing, and monitoring response actions at the site*
- *Sets a process for Regulatory involvement*
  - *Review and comment time limits*
  - *Documents can be finalized by the Navy if comments not received*
- *Preserves Navy's lead agency status*
- *EPA has final authority on final Records of Decision*
- *Integrates CERCLA and RCRA Corrective Action Requirements*



## *Federal Facilities Agreement Purpose (continued)*



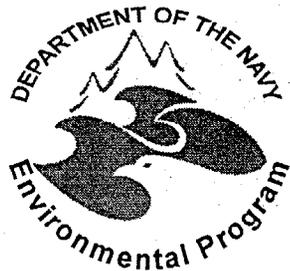
- *Provides monetary penalties for Navy's failure to meet deadlines and perform certain work according to plans*
  - *Installation will be reported to Congress if penalties assessed*
  - *Penalties are paid from ER,N*
- *Site Management Plan process provides for new schedules and deadlines*
  - *negotiated every year*
  - *in accordance with the Budget Process*



# *Federal Facilities Agreement Background*



- *1988 - First Model Language*
  - *agreement between DOD and EPA*
- *Since 1988 - Several new Model Language agreements*
- *1998 - Navy and EPA Region III used Washington Navy Yard FFA as the Model for NAS Patuxent River*
- *NAS Patuxent River FFA is expected to be signed within the next month and will serve as the model for the NSWC Indian Head Division FFA*



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



***Site 57 - Building 292 TCE Spill***  
***Update***

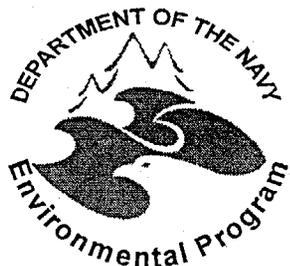
*Rob Sadorra, PE*

*Project Manager*

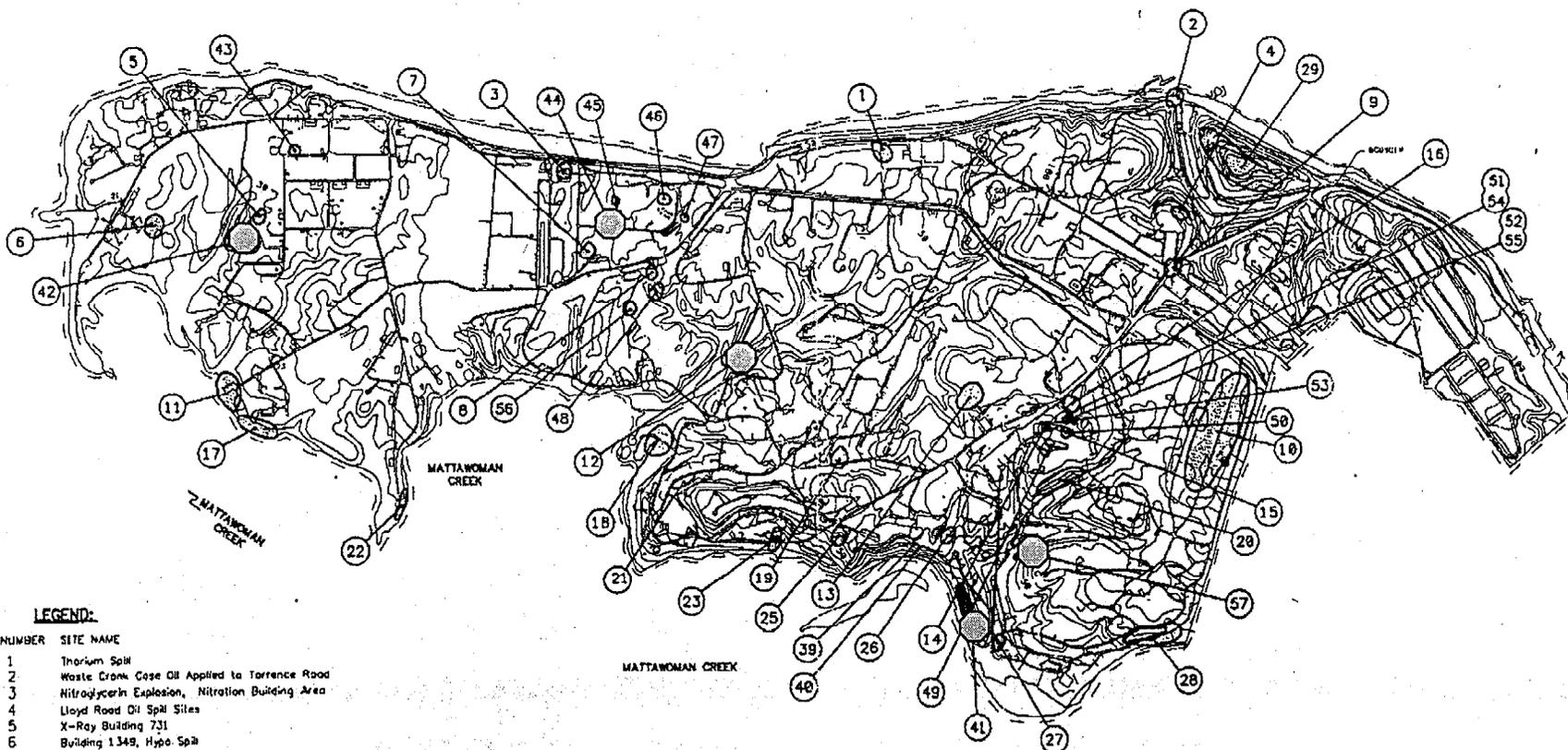
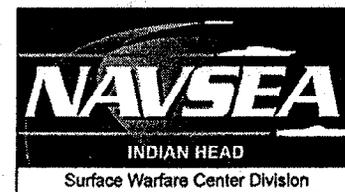
*Engineering Field Activity Chesapeake*

*October 19, 2000*

Attachment D



# NSWC Indian Head IR Site Map



**LEGEND:**

SITE NUMBER SITE NAME

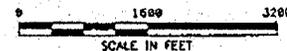
- 1 Thorium Spill
- 2 Waste Crank Case Oil Applied to Torrence Road
- 3 Nitroglycerin Explosion, Nitration Building Area
- 4 Lloyd Road Oil Spill Sites
- 5 X-Ray Building 731
- 6 Building 1348, Hypo Spill
- 7 Building 682, HMX Spill
- 8 Building 766, Mercury Deposits
- 9 Patterson Avenue, Oil Spill
- 10 Single-base Propellant Grains Spill
- 11 Coffee Road Landfill
- 12 Town Cut Landfill
- 13 Paint Solvents Disposal Ground
- 14 Waste Acid Disposal Pit
- 15 Mercury Deposits in Manhole, Fluorine Lab
- 16 Laboratory Chemical Disposal
- 17 Disposal Metal Parts Along Shoreline
- 18 Hax Island

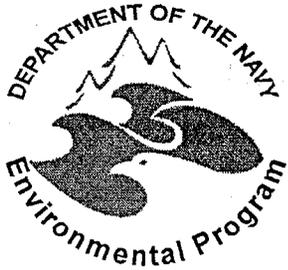
- 19 Catch Basins at Chip Collection Houses
- 20 Single-base Powder Facilities
- 21 Bronson Road Landfill
- 22 NG Slums Burning Site
- 23 Hydraulic Oil Spill Discharges From Extrusion Plant
- 24 Abandoned Drain Lines
- 25 Hypo Discharge X-Ray Building No. 2
- 26 Thermal Destructor 2
- 27 Thermal Destructor 1
- 28 Original Burning Ground
- 29

- 38-38 Stump Neck Annex (SEE FIGURE 3-2)---
- 39 Organic Plant Outfall
- 40 Palladium Catalyst in Sediments
- 41 Scrap Yard
- 42 Olson Road Landfill
- 43 Toluene Disposal Site
- 44 Sook Cut Area
- 45 Abandoned Drums
- 46 Cadmium Sanitization Grit
- 47 Mercuric Nitrate Disposal Area
- 48 Nitrocellulose Plant Flammant Area

- 49 Chemical Disposal Area
- 50 Building 103, Crawl Space
- 51 Building 101, Dry Wall
- 52 Building 102, Dry Wall
- 53 Mercury Contamination of the Sewage System
- 54 Building 181
- 55 Building 182
- 56 IWB7 - Lead Contamination
- 57 TCE Building 292 Area

- [ ] --- APPROXIMATE SITE LOCATION
- INTERMITTENT STREAM
- NAVAL RESERVE BOUNDARY
- [ ] --- CONTOUR INTERVAL 10 FEET
- [ ] --- FLOW DIRECTION

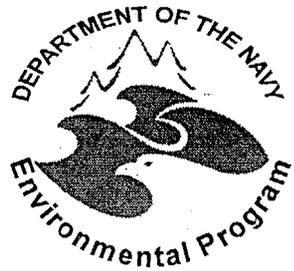




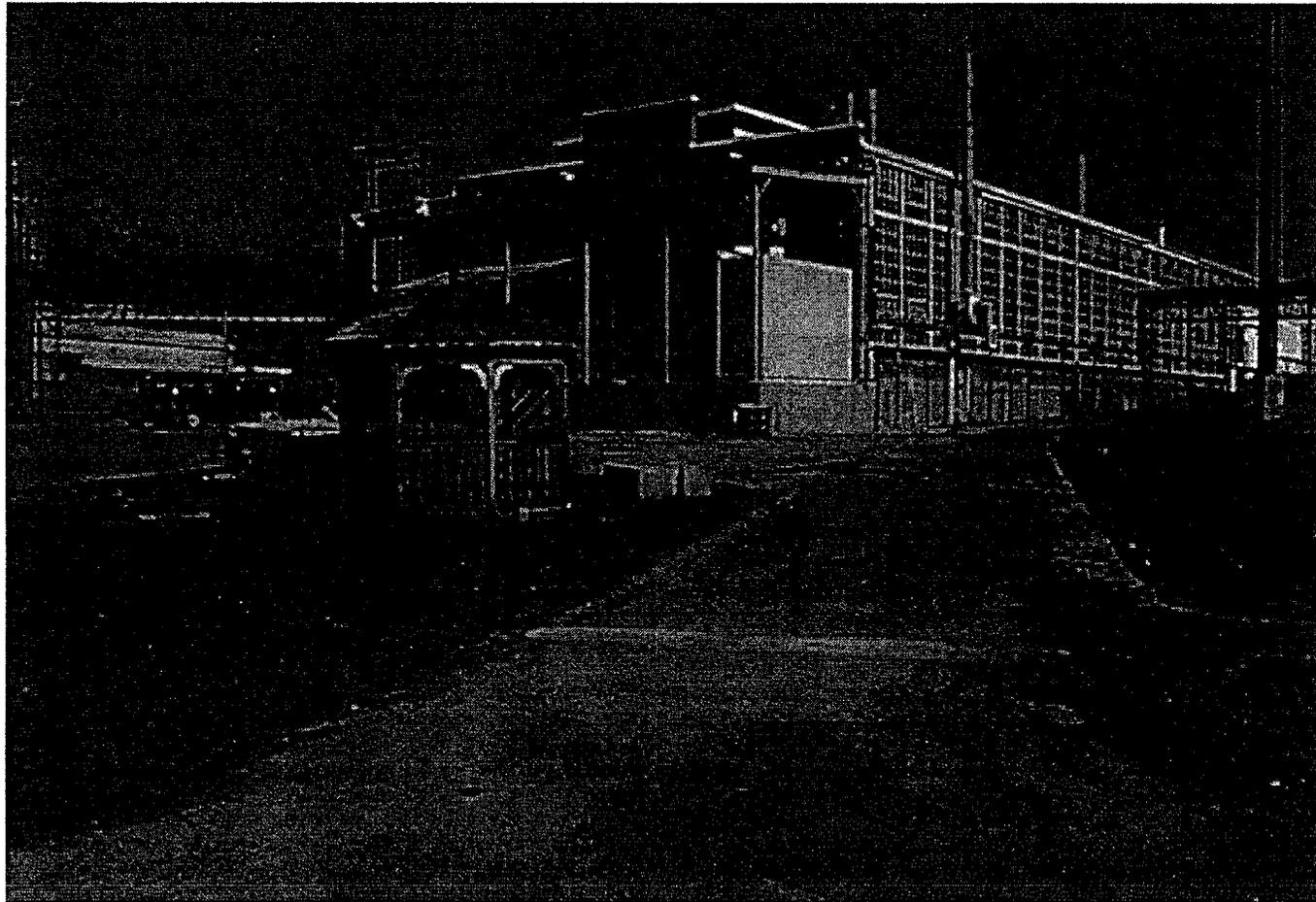
## *IR Site 57 Background*

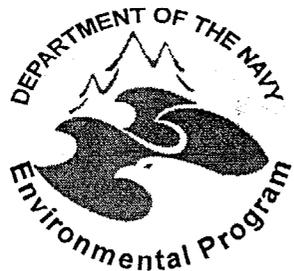


- *TCE discovered in IW-80*
- *Bldg. 292 used TCE for degreasing until 1989 and decanted TCE to drums located outside of the building near storm sewer manhole (MH-1)*
- *Sampling in MH-1 revealed TCE contamination while upstream manholes had no contamination*
- *Soil gas, soil, and groundwater sampling TCE in soil and groundwater*
- *Concern of TCE migration from groundwater infiltration into the storm sewer*

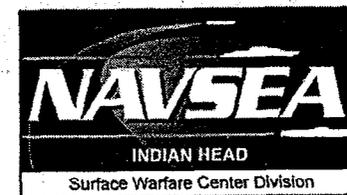


# *IR Site 57*

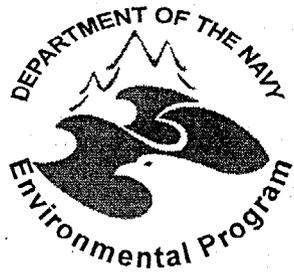




## *IR Site 57 Work Completed*



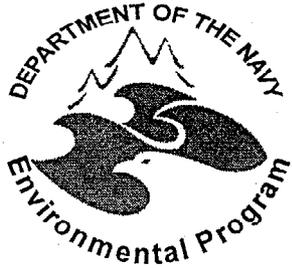
- *September 1995 - Limited sampling of soil-gas, soil, and groundwater conducted*
- *October 1998 - Removal Action (pipe relining) completed*
- *October 1998 - Field work for Phase I of RI (soil data) completed*
- *January 1999 - Field work for Phase II of RI (groundwater, sediment, surface water) completed*
- *June 1999 - Draft RI Report*
- *February 2000 - Draft Final RI Report Completed*
- *July 2000 - Final RI Report Completed*



## *IR Site 57 Future Schedule*



- *March 2000 - Began Feasibility Study (FS)*
  - *Evaluate alternatives to mitigate potential risk to construction workers due to arsenic in soil*
  - *Evaluate alternatives to mitigate high concentrations of TCE in soil and groundwater near southern corner of Building 292*
- *Mid December 2000 - FS Field work*
- *May 2001 - Draft FS Report available for public review*



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



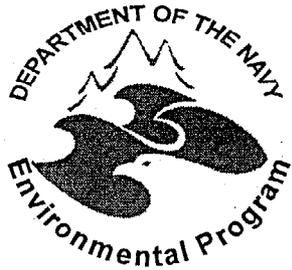
**Site 12 - Town Gut Landfill  
Site 41 - Scrap Yard  
Site 44 - Soak Out Area  
Update**

*Rob Sadorra, PE*

*Project Manager*

*Engineering Field Activity Chesapeake*

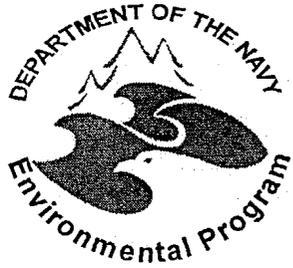
*October 19, 2000*



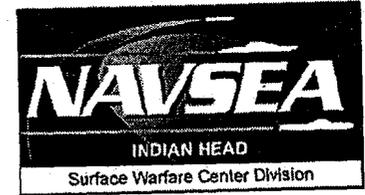
## *Sites 12, 41, 44 - Project Status Background*



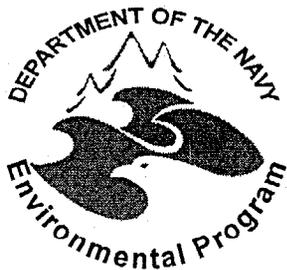
- *Site 12 - Town Gut Landfill*
  - *Approximately 3.3 acres landfill bisected by Atkins Road extension. (Northwest of Building 471) used from 1968 to 1980 for disposal of landscaping waste, fill material, rubble, and construction debris.*
- *Site 41 - Scrap Yard*
  - *From the 1960's to 1988 electrical transformers containing PCBs were stored at the northwestern end of the Scrap Yard prior to off-site disposal*



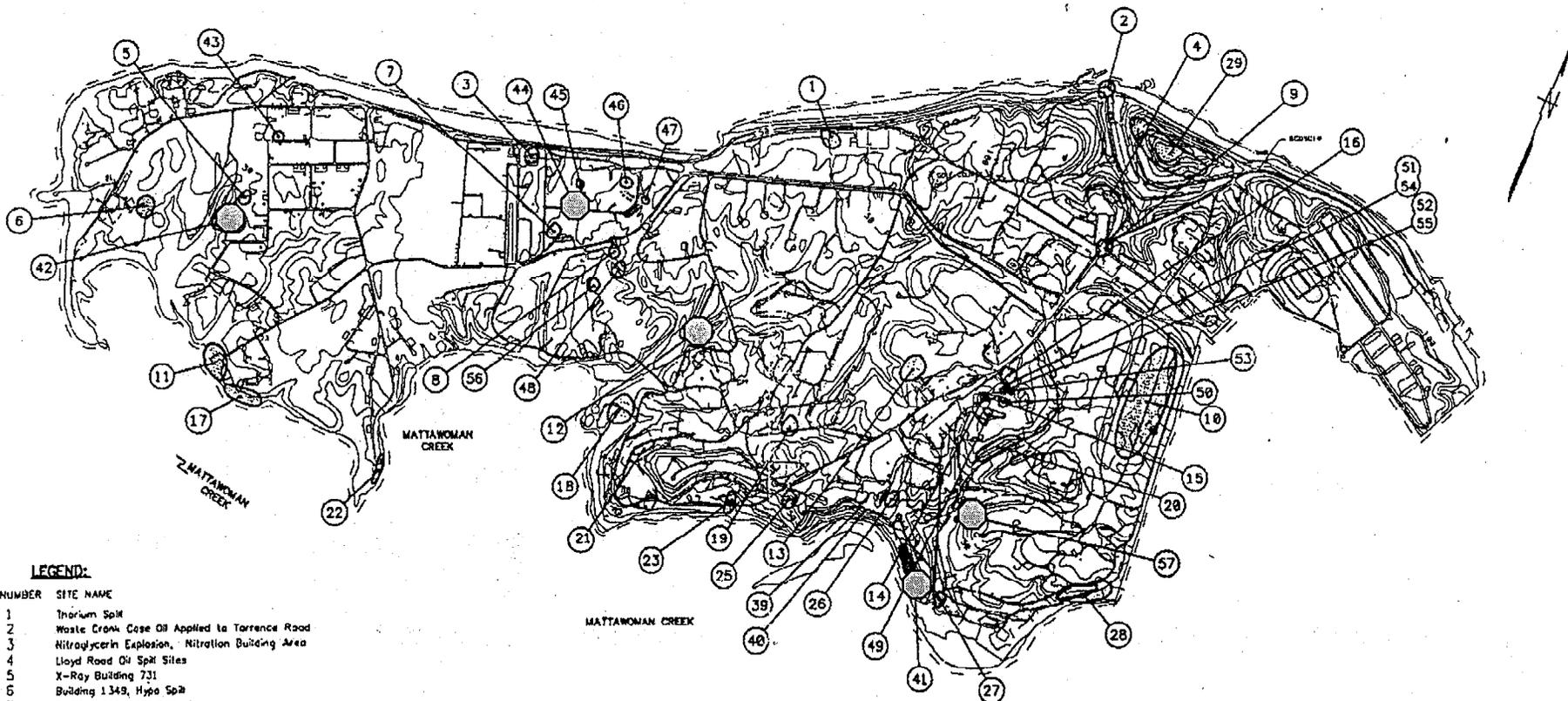
## *Sites 12, 41, 44 - Project Status Background*



- *Site 44 - Soak Out Area*
  - *Area approximately 75 feet east of Building 1363 used in removal of propellant from rocket motor catapult tubes using Pennchem 901A in the late 1960's to early 1970's.*
  - *Rocket motor catapult tubes were allowed to soak in the solvent contained in two 55 gallon drums that were welded together.*



# NSWC Indian Head IR Site Map



### LEGEND:

SITE NUMBER SITE NAME

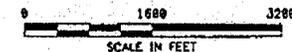
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- 4 Lloyd Road Oil Spill Sites
- 5 X-Ray Building 731
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- 7 Building 682, HMX Spill
- 8 Building 766, Mercury Deposits
- 9 Patterson Avenue, Oil Spill
- 10 Single-base Propellant Grains Spill
- 11 Coffee Road Landfill
- 12 Teen Cut Landfill
- 13 Paint Solvents Disposal Ground
- 14 Waste Acid Disposal Pit
- 15 Mercury Deposits in Manhole, Flourite Lab
- 16 Laboratory Chemical Disposal
- 17 Disposal Metal Parts Along Shoreline
- 18 Hoo Island

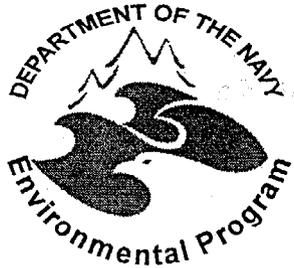
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- 20 Single-base Powder Facilities
- 21 Bronson Road Landfill
- 22 NG Slums Burning Site
- 23 Hydraulic Oil Spill Discharges From Extrusion Plant
- 24 Abandoned Drain Lines
- 25 Hygo Discharge X-Ray Building No. 2
- 26 Thermal Destructor 2
- 27 Thermal Destructor 1
- 28 Original Burning Ground
- 29

- 38-38 Slump Neck Annex (SEE FIGURE 3-2)
- 39 Organic Plant Outfall
- 40 Potassium Catalyst in Sediments
- 41 Scrap Yard
- 42 Organ Road Landfill
- 43 Solvent Disposal Site
- 44 Spill Cut Area
- 45 Abandoned Drums
- 46 Cadmium Sandblast Cit
- 47 Mercuric Nitrate Disposal Area
- 48 Nitrochlorine Plant Disposal Area

- 49 Chemical Disposal Area
- 50 Building 103, Crank Space
- 51 Building 101, Dry Wall
- 52 Building 102, Dry Wall
- 53 Mercury Contamination of the Sewage System
- 54 Building 181
- 55 Building 182
- 56 (W87 - Lead Contamination)
- 57 TCE Building 292 Area

- APPROXIMATE SITE LOCATION
- INTERMITTENT STREAM
- NAVAL RESERVE BOUNDARY
- CONTOUR INTERVAL 10 FEET
- FLOW DIRECTION

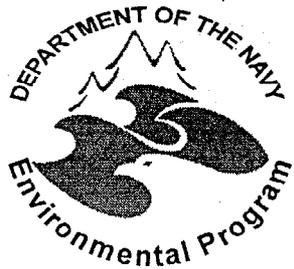




## *Sites 12, 41, 44 - Project Status*



- *Final RI Report was completed in July 1999*
- *Draft FS Report for Sites 12, 41 and 42 was completed February 2000*
- *Revised Draft Report for Sites 12 and 41 has been available for public comment since July 2000*



# *Sites 12 and 41 - Project Status Feasibility Study*

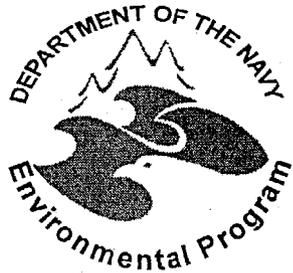


## *Purpose*

- *Describe, evaluate and compare alternatives*
- *Select Remedy*

## *Tasks*

- *Alternative development*
- *Alternative evaluation and comparison*
  - *Overall protection of human health and the environment*
  - *Compliance with ARARs*
  - *Long-term effectiveness and permanence*
  - *Reduction of toxicity, mobility or volume through treatment*
  - *Short-term effectiveness*
  - *Implementability*
  - *Cost*
  - *State Acceptance*
  - *Community Acceptance*

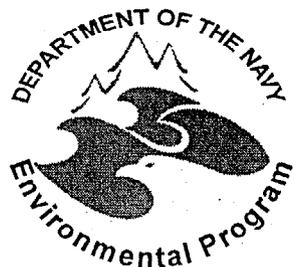


## *Project Status*

### *Site 12 - Town Gut Landfill*



- 
- *Alternative 1 – No Action*
  - *Alternative 2 – Soil Cover with LTM & Institutional Controls*
  - *Alternative 3 - Soil Cap with LTM & Institutional Controls*
  - *Alternative 4 – Engineered Cap with LTM & Institutional Controls*
  - *Alternative 5 – Landfill Removal*

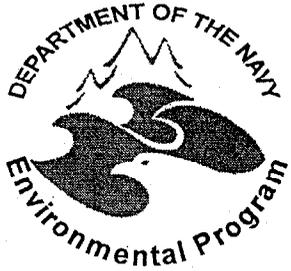


# Project Status

## Site 12 - Town Gut Landfill



	<i>Protect HH&amp;Env</i>	<i>ARAR Comp</i>	<i>LT Effect</i>	<i>ST Effect</i>	<i>Imp</i>	<i>Cost</i>	<i>MDE/ EPA</i>	<i>Community</i>
<i>1-No Action</i>	<i>low</i>	<i>low</i>	<i>low</i>	<i>low</i>	<i>high</i>	<i>\$ 0</i>	<i>TBD</i>	<i>TBD</i>
<i>2-Soil Cover</i>	<i>med</i>	<i>med</i>	<i>med</i>	<i>med</i>	<i>med</i>	<i>\$ 1,257,000</i>	<i>TBD</i>	<i>TBD</i>
<i>3-Soil Cap</i>	<i>med</i>	<i>med</i>	<i>med</i>	<i>med</i>	<i>med</i>	<i>\$ 2,266,000</i>	<i>TBD</i>	<i>TBD</i>
<i>4-Eng Cap</i>	<i>med</i>	<i>high</i>	<i>med</i>	<i>med</i>	<i>med</i>	<i>\$ 3,590,000</i>	<i>TBD</i>	<i>TBD</i>
<i>5-Removal</i>	<i>high</i>	<i>high</i>	<i>high</i>	<i>med</i>	<i>low</i>	<i>\$ 4,868,000</i>	<i>TBD</i>	<i>TBD</i>

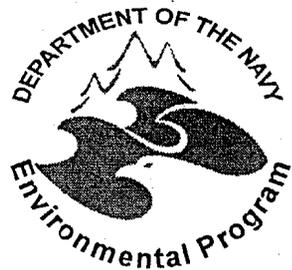


## *Project Status*

### *Site 41 - Scrap Yard*

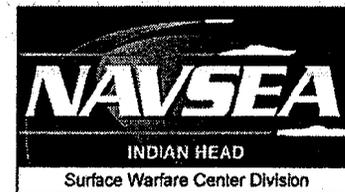


- *Alternative 1 – No Action*
- *Alternative 2 – Soil Removal*
  - *Approximately 1,500 cubic yards*
  - *6 inch average depth to concrete pad*
  - *6 to 18 inches of soil would be excavated in areas outside of the fence line*

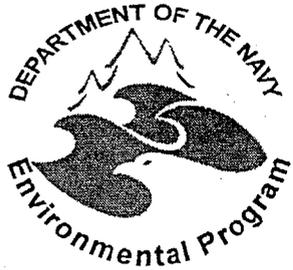


# *Project Status*

## *Site 41 - Scrap Yard*



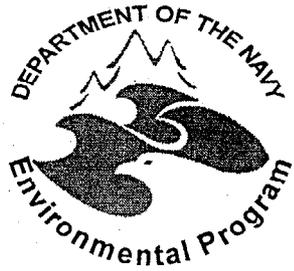
	<i>Protect HH&amp;Env</i>	<i>ARAR Comp</i>	<i>LT Effect</i>	<i>ST Effect</i>	<i>Imp</i>	<i>Cost</i>	<i>MDE/ EPA</i>	<i>Community</i>
<i>1-No Action</i>	<i>low</i>	<i>low</i>	<i>low</i>	<i>low</i>	<i>high</i>	<i>\$ 0</i>	<i>TBD</i>	<i>TBD</i>
<i>2-Removal</i>	<i>high</i>	<i>high</i>	<i>high</i>	<i>high</i>	<i>med</i>	<i>\$ 1,076,000</i>	<i>TBD</i>	<i>TBD</i>



## *Sites 12, 41, 44 - Project Status Projected Milestones*



- 
- *Proposed Plans will be available January 2001*
  - *Final Record of Decisions - April 2001*
  - *Site 12 Remedial Action Design - August 2001*
  - *Site 12 Remedial Action Award - August 2001*



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



**Site 42 - Olsen Road Landfill  
Toxicity Testing Update**

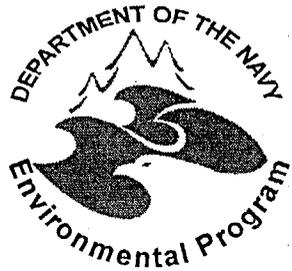
*Rob Sadorra, PE*

*Project Manager*

*Engineering Field Activity Chesapeake*

*October 19, 2000*

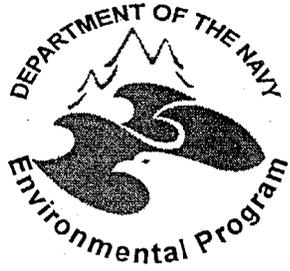
Attachment F



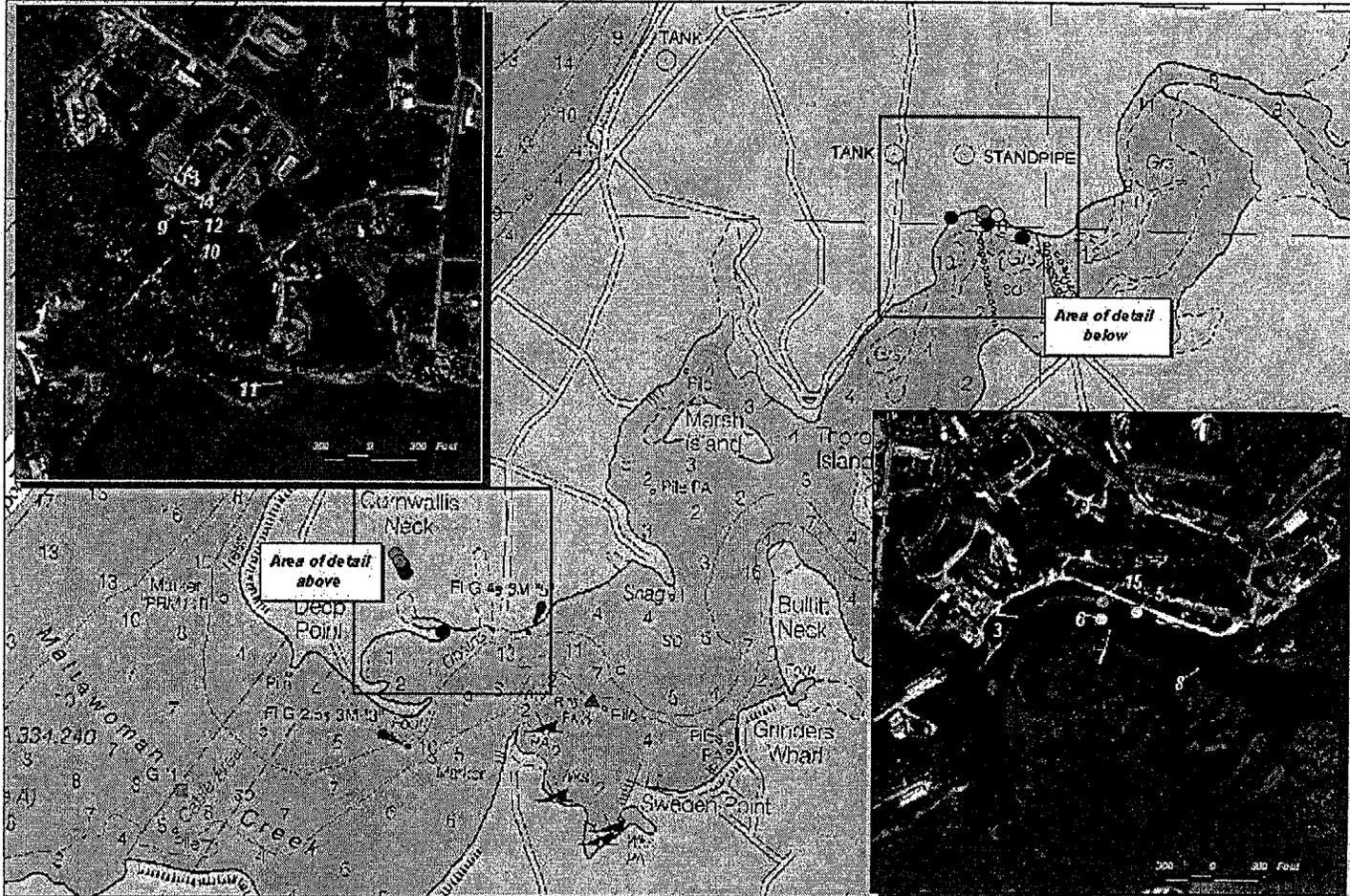
## *Site 42 - Project Status*



- *Toxicity Identification Evaluation (TIE) Demonstration project for the Naval Facilities Engineering Service Center is underway*
- *TIE Field work completed last week*
- *TIE Report - February 2001*
- *Site 42 FS Report - March 2001*



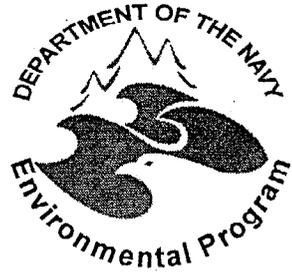
# Site 42 - Project Status



## STATIONS SELECTED FOR INDIAN HEAD TIE DEMONSTRATION



- Legend**
- High TPH or Nitrocellulose
  - High Mixed Metals
  - High Ag
  - High Ag (Repeaters)
  - ⊙ To be incorporated with Toxicity



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



***Mattawoman Creek Study Update***

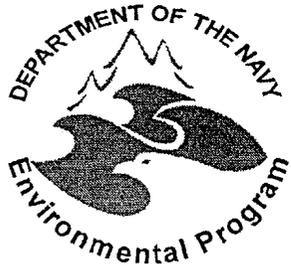
*Rob Sadorra, PE*

*Project Manager*

*Engineering Field Activity Chesapeake*

*October 19, 2000*

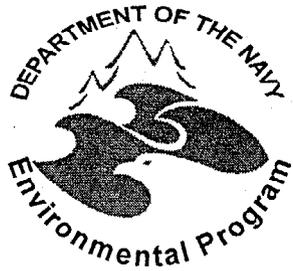
Attachment G



## *Problem Formulation Tasks Completed to Date*



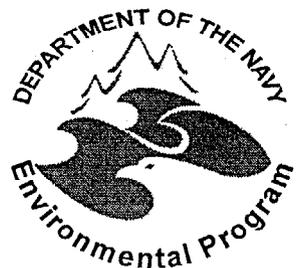
- *Evaluation of existing Mattawoman Creek chemistry data for Sites 39/41 and 57.*
- *Evaluation of outfalls and IRP sites that have or still could be impacting Mattawoman Creek.*
- *Assessment of other projects that have been conducted or are currently in progress at Mattawoman Creek (e.g., Charles Co. study, previous FWS studies)*



## *Problem Formulation Tasks Completed to Date*



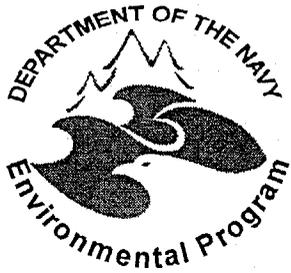
- *Evaluation of historical photographs for assessment of hydrogeology; enlisted the help of USGS*
- *Conducted a boat tour of Mattawoman Creek with BTAG. Evaluated habitat types and locations, potential receptors, hydrogeology, possible sources of chemicals (photo log in progress).*
- *Evaluated upgradient sources of chemicals in Mattawoman Creek. Indian Head WWTP appears to be the only “major” point source.*



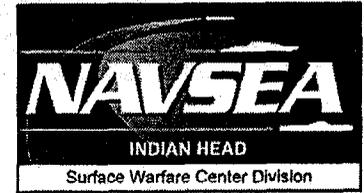
## *Problem Formulation Tasks Completed to Date*



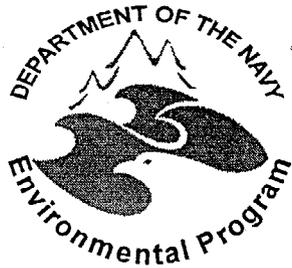
- *Obtained information about chemicals presently used or stored on the base to supplement similar historical information.*
- *Evaluated the base NPDES permit to obtain information about possible chemicals to be included in any chemistry analysis.*
- *Visited Nanjemoy Creek as a potential reference location.*



## *Decision on Approach*



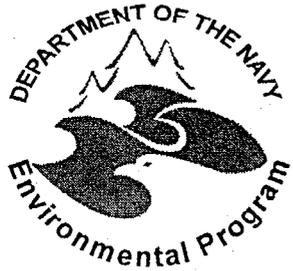
- *The Navy, EPA, and MDE evaluated two possible approaches to starting the study; a chemical screening approach vs. a baseline approach.*
- *The Navy, EPA, and MDE agreed on the baseline approach, which will likely be based for the most part on the “sediment triad” (chemistry, toxicity, benthic analysis)*



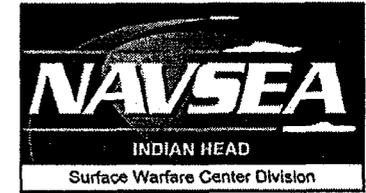
# *Information Gathered to Date Has Been Coalesced to Build the Elements of Problem Formulation*



- *List of Chemicals of Potential Concern (COPCs)*
- *Fate and Transport Models*
- *Conceptual Model*
- *Proposed Assessment and Measurement Endpoints*



## *Projected Milestones*



- *November 2000 - Finalized problem formulation*
  - *draft November 15, 2000*
  - *final November 30, 2000*
- *February 2001 - Draft Work Plan (containing the finalized problem formulation) and Sampling and Analysis Plan*
- *April 2001 - Final WP and SAP*
- *April 2001 - Field Work*
- *September 2001 - Draft risk assessment report*



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INDIAN HEAD DIVISION  
RESTORATION ADVISORY BOARD**



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**Remedial Investigations - Project Status**

***Sites 11, 13, 17, 21, and 25***

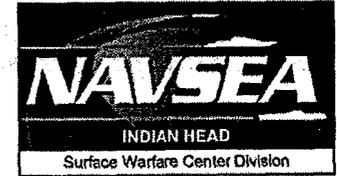
*Shawn Jorgensen  
IR Project Manager*

*October 19, 2000*

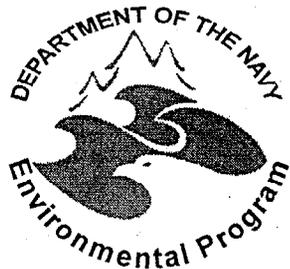
Attachment H



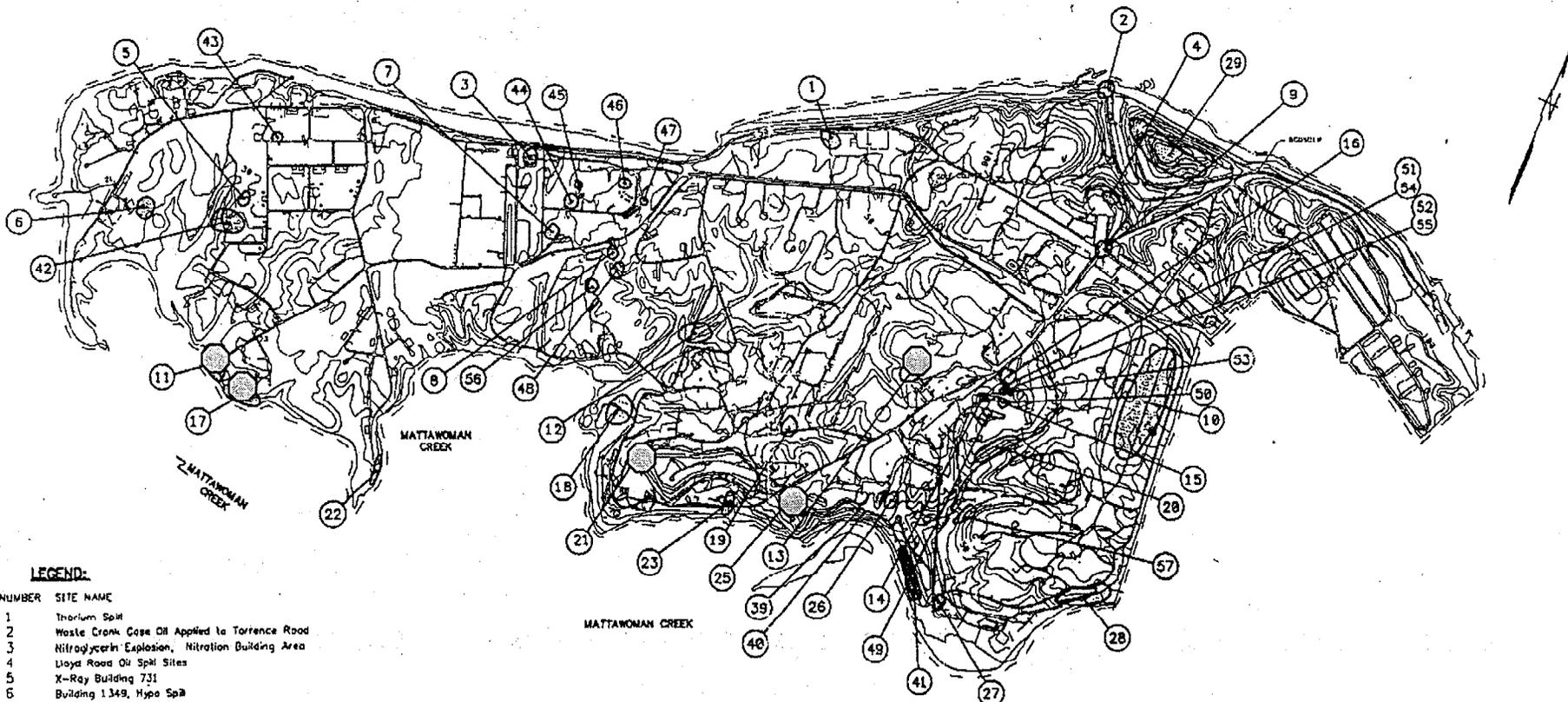
## *Sites 11, 13, 17, 21, and 25 - Project Status Sites To Be Studied*



- 
- *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*
- 
- 
-



# NSWC Indian Head IR Site Map



**LEGEND:**

SITE NUMBER SITE NAME

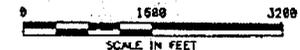
- 1 Thorium Spill
- 2 Waste Crank Case Oil Applied to Torrence Road
- 3 Nitroglycerin Explosion, Nitration Building Area
- 4 Lloyd Road Oil Spill Sites
- 5 X-Ray Building 731
- 6 Building 1349, Hyno Spill
- 7 Building 682, HMX Spill
- 8 Building 766, Mercury Deposits
- 9 Patterson Avenue, Oil Spill
- 10 Single-base Propellant Grains Spill
- 11 Coffee Road Landfill
- 12 Town Cut Landfill
- 13 Paint Solvents Disposal Ground
- 14 Waste Acid Disposal Pit
- 15 Mercury Deposits in Manhole, Flourine Lab
- 16 Laboratory Chemical Disposal
- 17 Disposal Metal Parts Along Shoreline
- 18 Hoo Island

- 19 Catch Basins at Chip Collection Houses
- 20 Single-base Powder Facilities
- 21 Bronson Road Landfill
- 22 NG Slums Burring Site
- 23 Hydraulic Oil Spill Discharges From Extrusion Plant
- 24 Abandoned Drain Lines
- 25 Hyno Discharge X-Ray Building No. 2
- 26 Thermal Destructor 2
- 27 Thermal Destructor 1
- 28 Original Burring Ground
- 29

- 38-38 Stump Neck Annex (SEE FIGURE 3-2)---
- 39 Organic Plant Outfall
- 40 Palladium Catalyst in Sediments
- 41 Scrap Yard
- 42 Oxon Road Landfill
- 43 Isobutene Disposal Site
- 44 Sook Cut Area
- 45 Abandoned Drums
- 46 Cadmium Sandblast Cit
- 47 Mercury Nitrate Disposal Area
- 48 Nitrocellulose Plant Blanket Area

- 49 Chemical Disposal Area
- 50 Building 103, Crawl Space
- 51 Building 101, Dry Wall
- 52 Building 102, Dry Wall
- 53 Mercury Contamination of the Sewage System
- 54 Building 101
- 55 Building 102
- 56 (W87 - Lead Contamination)
- 57 TCE Building 292 Area

- [Symbol] --- APPROXIMATE SITE LOCATION
- [Symbol] --- INTERMITTENT STREAM
- [Symbol] --- NAVAL RESERVE BOUNDARY
- [Symbol] --- CONTOUR INTERVAL 10 FEET
- [Symbol] --- FLOW DIRECTION





## *Sites 11, 13, 17, 21, and 25 - Project Status*

### *Site 11 - Caffee Road Landfill*



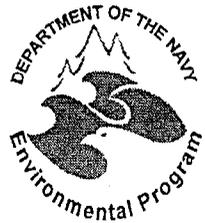
- *Background*
  - *One to two acre area located at the end of Caffee Road on the shore of Mattawoman Creek*
  - *Contains various building debris, bulk metal items, and residue from open burning*
- *Completed Sampling*
  - *Surface Soil Samples: 36*
  - *Subsurface Soil Boring Samples: 7*
  - *Groundwater Samples: 11*
  - *Surface Water Samples: 7*
  - *Sediment Samples: 7*
  - *Waste Samples: 2*
- *No additional sampling proposed*



# *IR Site 11*

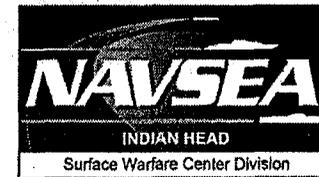
## *Caffee Road Landfill*





## *Sites 11, 13, 17, 21, and 25 - Project Status*

### *Site 13 - Paint Solvents Disposal Ground*

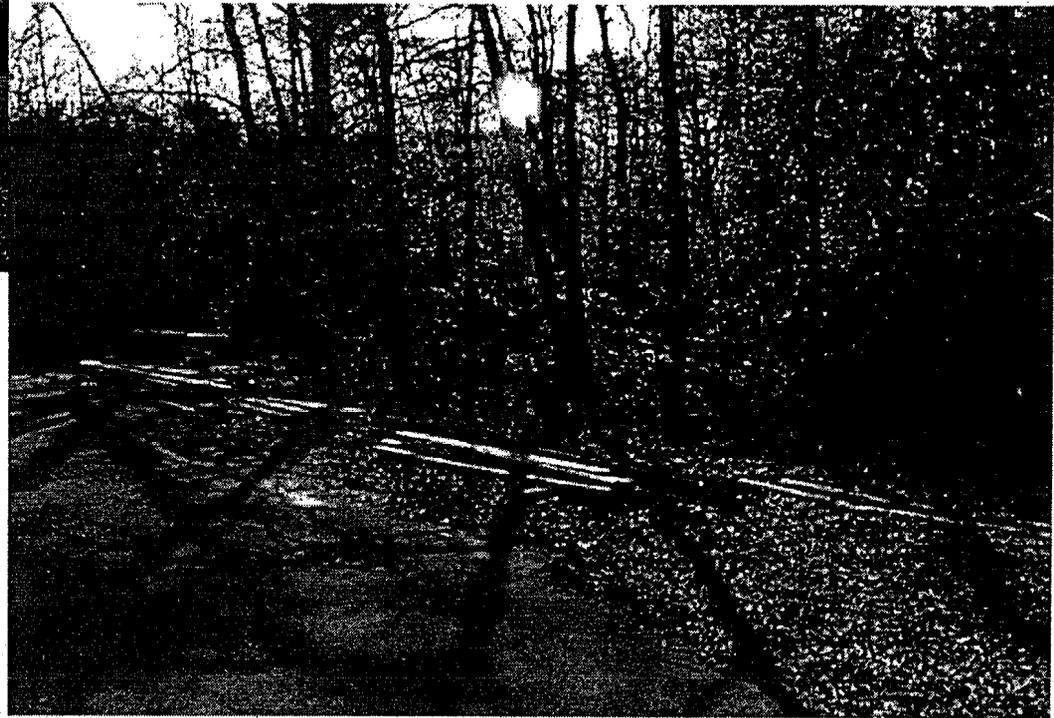
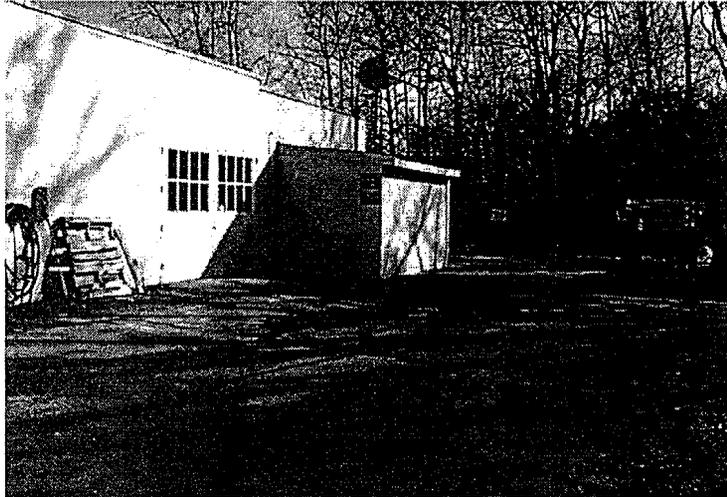


- *Background*
  - *Approximately 200 square-foot area located behind Building 870*
  - *Contains paint-related wastes - thinners, solvents, and used paint*
  - *Disposal took place from 1953 to 1979*
  - *Estimated 20,000 pounds of waste disposed (~2,000 gallons)*
- *Completed Sampling*
  - *Surface Soil Samples: 7*
  - *Subsurface Soil Boring Samples: 4*
  - *Groundwater Samples: 0*
- *No additional sampling proposed*



# *IR Site 13*

## *Paint Solvents Disposal Ground*





# *Sites 11, 13, 17, 21, and 25 - Project Status*

## *Site 17 - Disposed Metal Parts Along Shoreline*



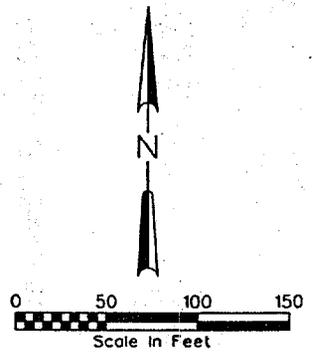
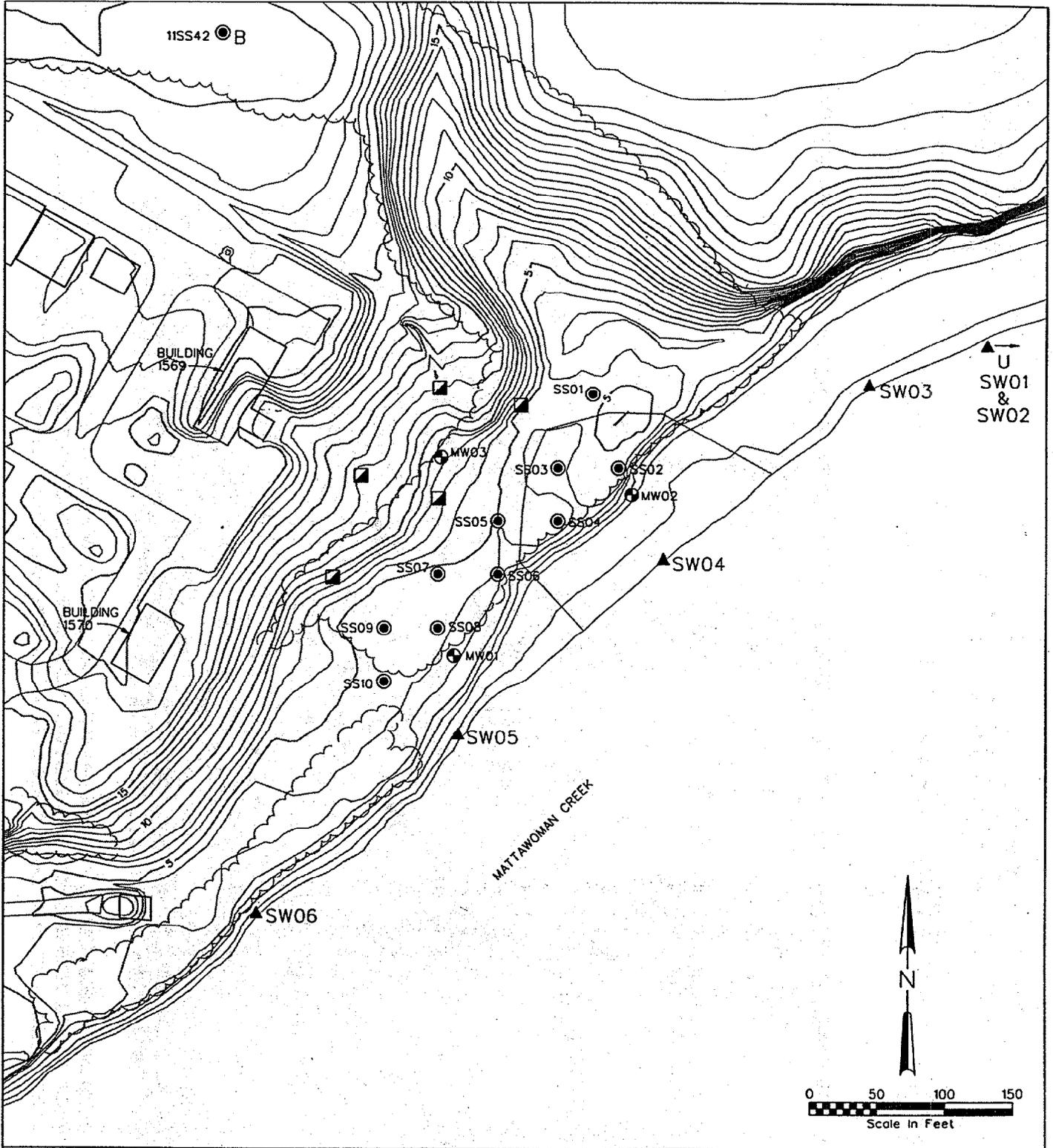
- *Background*
  - *1,000-foot stretch of shoreline along Mattawoman Creek located east of Caffee Road Landfill*
  - *Metal parts disposed from 1960 - 1980*
- *Completed Sampling*
  - *Surface Soil Samples: 11*
  - *Subsurface Soil Boring Samples: 11*
  - *Sediment Samples: 6*
  - *Surface Water Samples: 6*
- *Phase 2 Sampling (to be completed by 10/20/00)*
  - *Surface Soil Samples: 5*
  - *Subsurface Soil Boring Samples: 5*
  - *Groundwater Samples: 3*



# *IR Site 17*

## *Disposed Metal Parts Along Shoreline*





**LEGEND**

- PHASE 2 SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION
- PHASE 2 MONITORING WELL LOCATION
- ▲ PHASE 1 SEDIMENT SAMPLE LOCATION
- B PHASE 1 BACKGROUND SAMPLE LOCATION
- U PHASE 1 UPGRADIENT SAMPLE LOCATION
- SW PHASE 1 SURFACE WATER SAMPLE LOCATION
- PHASE 1 SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION

SITE 17 - PHASE 2  
 SAMPLING LOCATIONS  
 RI WORK PLAN  
 NAVAL SURFACE WARFARE CENTER,  
 INDIAN HEAD DIVISION

**CH2MHILL**



## *Sites 11, 13, 17, 21, and 25 - Project Status*

### *Site 21 - Bronson Road Landfill*

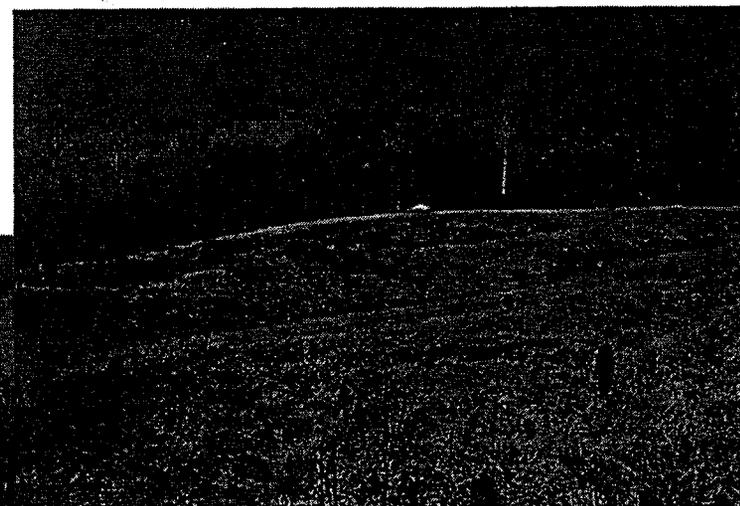
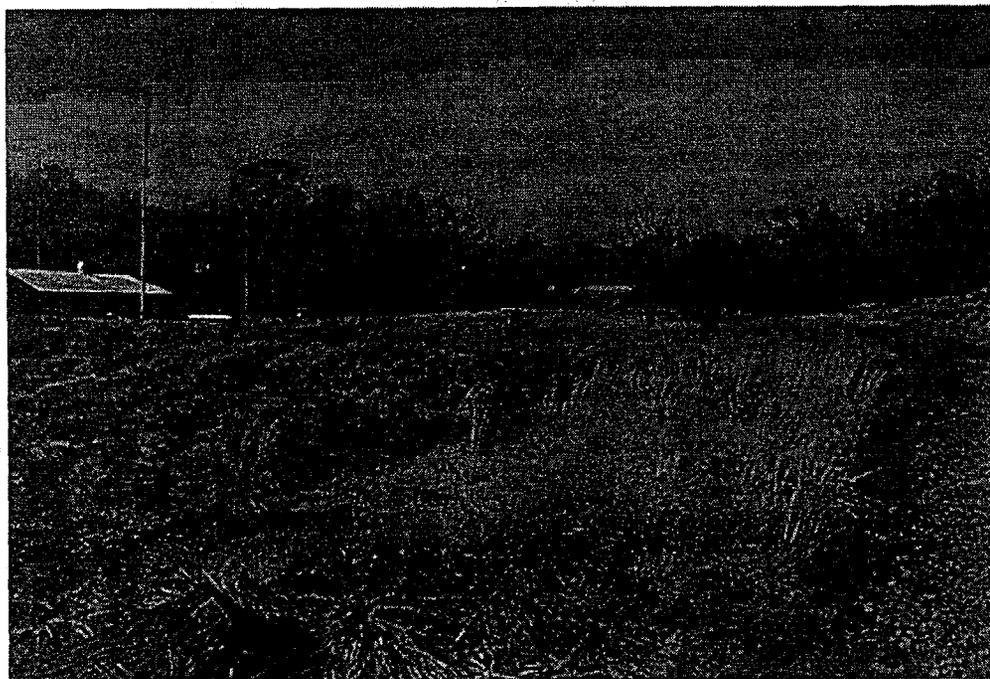
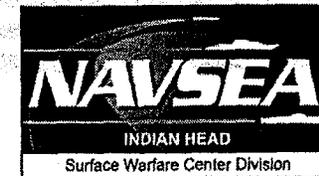


- *Background*
  - *2-acre "borrow pit" near Building 1384*
  - *Contains solid waste from various manufacturing processes*
  - *Disposal occurred from 1975 to 1982*
  - *Waste and estimated amounts include*
    - *Solid waste - 1,500 tons*
    - *Barium sludge - 2.5 tons*
    - *Asbestos - 3.3 tons*
    - *Paint sludge - 3 tons*
- *Completed Sampling*
  - *Surface Soil Samples: 22*
  - *Groundwater Samples: 4*
- *No additional sampling proposed*



# *IR Site 21*

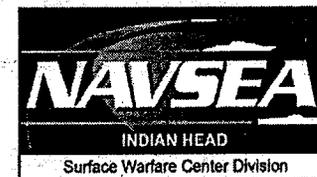
## *Bronson Road Landfill*





# *Sites 11, 13, 17, 21, and 25 - Project Status*

## *Site 25 - Hypo Discharges From X-Ray Building No. 2*

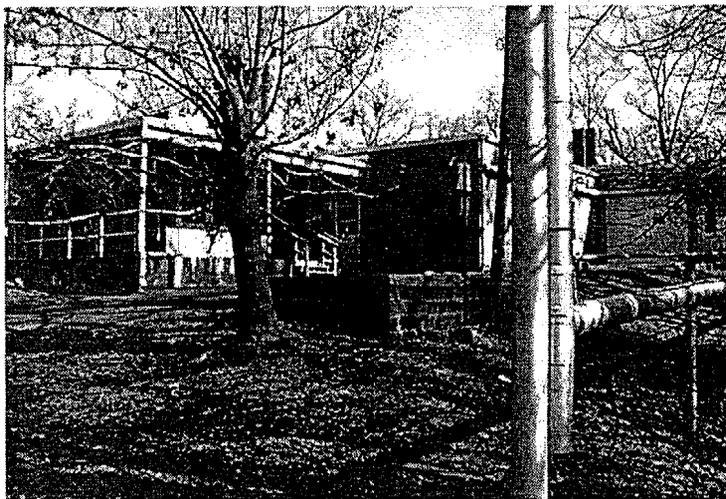


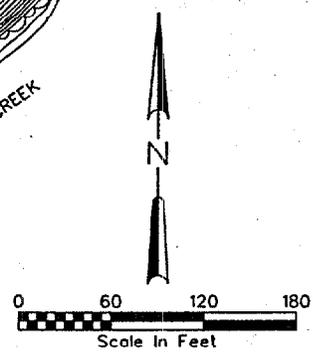
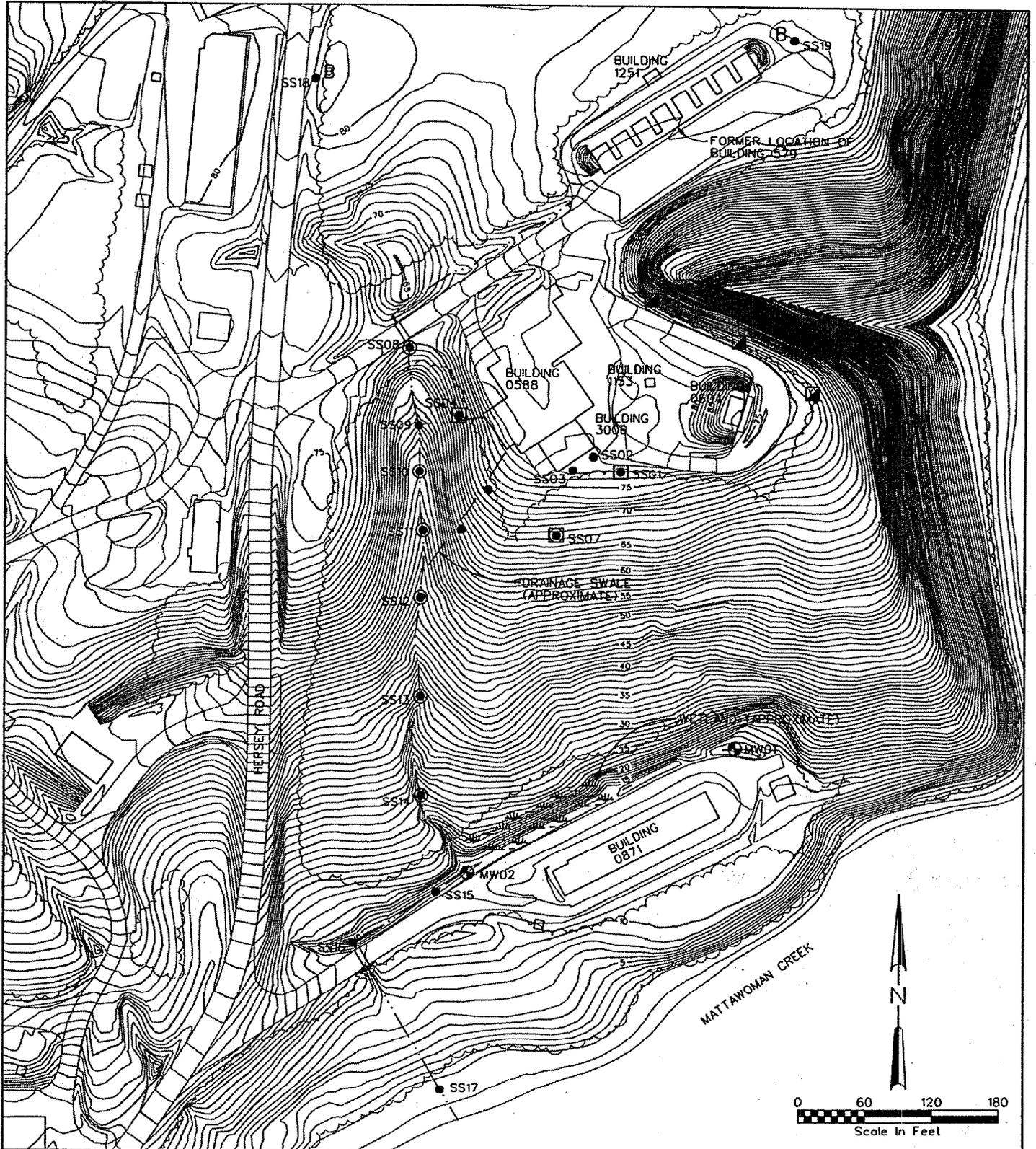
- *Background*
  - *Drainage swales located behind Building 588*
  - *Contains silver from spent fixer and developer used to process x-ray film*
  - *Discharged from 1944 - 1964*
  - *Estimated 864 pounds of silver discharged*
- *Completed Sampling*
  - *Surface Soil Samples: 21*
- *Phase 2 Sampling (to be completed by 10/20/00)*
  - *Surface Soil Samples: 3*
  - *Subsurface Soil Samples: 6*
  - *Groundwater Samples: 2*



# *IR Site 25*

## *Hypo Discharges From X-Ray Building No. 2*





**LEGEND**

- PHASE 2 SUBSURFACE SOIL SAMPLE LOCATION
- ◻ PHASE 2 SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION
- PHASE 2 MONITORING WELL LOCATION
- B PHASE 1 BACKGROUND SAMPLE LOCATION
- PHASE 1 SURFACE SOIL SAMPLE LOCATION
- PHASE 1 SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION

SITE 25 - PHASE 2  
 SAMPLING LOCATIONS  
 RI WORK PLAN  
 NAVAL SURFACE WARFARE CENTER  
 INDIAN HEAD DIVISION

**CH2MHILL**



## *Sites 11, 13, 17, 21, and 25 - Project Status Future Schedule*



- *Remedial Investigation*
  - *Contract Award - February 2000*
    - *Draft Work Plan - May 2000*
    - *Final Work Plan - July 2000*
    - *Field Work*
      - *Phase 1 - July 2000*
      - *Phase 2 - October 2000*
    - *Draft RI Report - March 2001*
  - *Cost for RI - \$798,000*



# *Sites 11, 13, 17, 21, and 25 - Project Status Additional Information*



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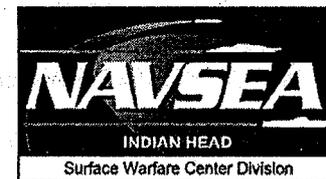
## *Information Repositories*

Indian Head Division  
Naval Surface Warfare Center  
Building 620 (Powder Keg)  
101 Strauss Avenue  
Indian Head, MD  
20640-5035

Charles County Public Library  
La Plata Branch  
Charles & Garrett Streets  
La Plata, MD 20646



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INDIAN HEAD DIVISION  
RESTORATION ADVISORY BOARD**



**Remedial Investigation  
Work Plan**

***Sites 15, 16, 49, 50, 53, 54 and 55  
Lab Area - Project Status***

*Shawn Jorgensen  
IR Project Manager*

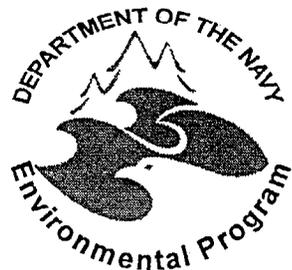
*October 19, 2000*



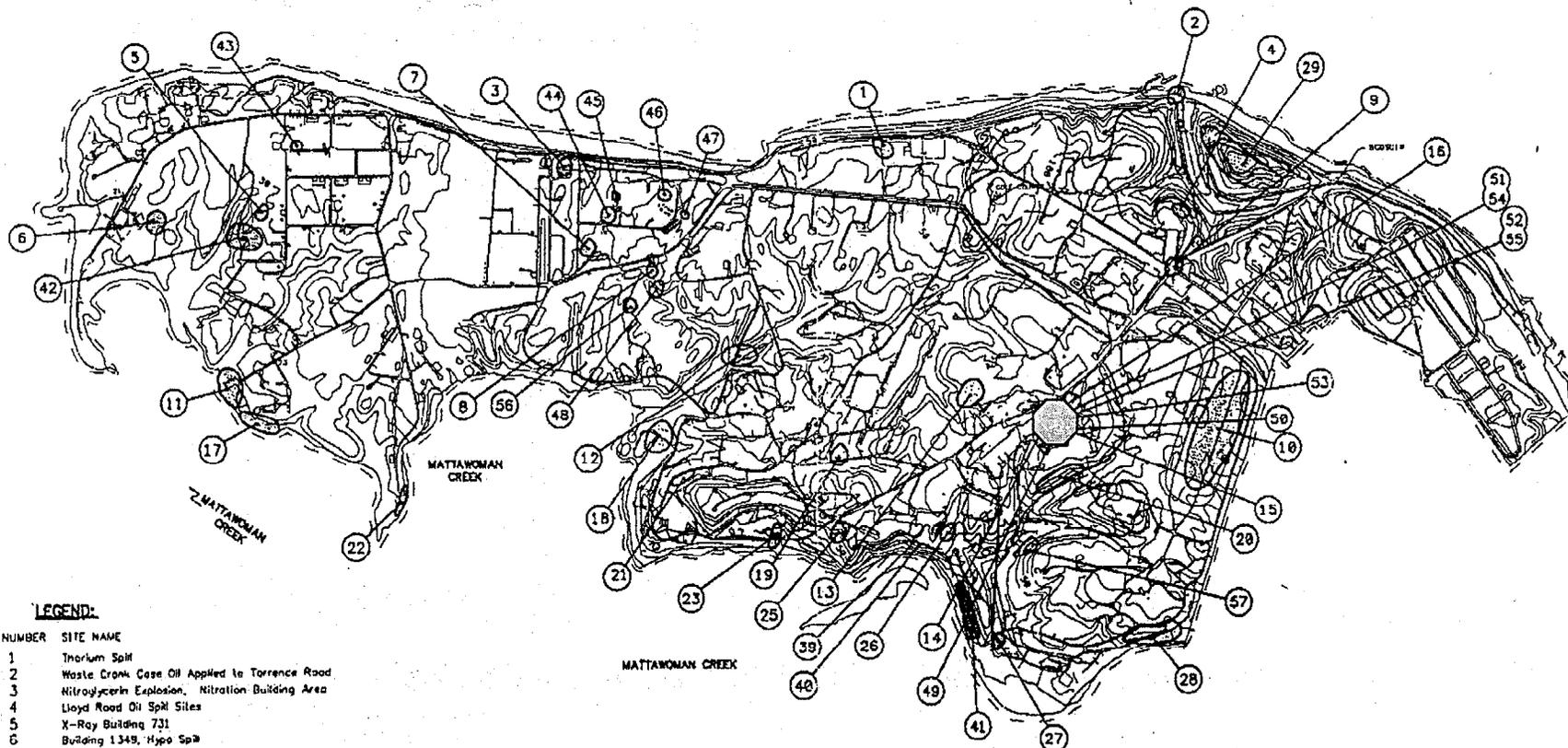
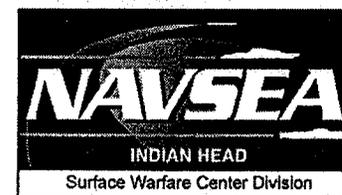
## *Lab Area - Project Status Sites To Be Studied*



- *15 - Mercury Deposits in Manhole, Fluorine Lab*
  - *16 - Laboratory Chemical Disposal*
  - *49 - Chemical Disposal Pit*
  - *50 - Building 103 Crawl Space*
  - *53 - Mercury Contamination of Sewage System*
  - *54 - Building 101 Mercury Contamination*
  - *55 - Building 102 Mercury Contamination*
- *Due to the close proximity of these sites to one another, and the similar suspected chemicals involved, these sites will be studied as one area.*



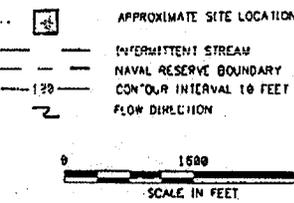
# NSWC Indian Head IR Site Map



### LEGEND:

#### SITE NUMBER SITE NAME

1	Thorium Spill	38-38	Sluice Neck Annex (SEE FIGURE 3-2)
2	Waste Crank Case Oil Applied to Torrence Road	39	Organic Plant Outfall
3	Nitroglycerin Explosion, Nitration Building Area	40	Falladium Catalysts in Sediments
4	Lloyd Road Oil Spill Sites	41	Scrap Yards
5	X-Ray Building 731	42	Ocean Road Landfill
6	Building 1349, Hypo Spill	43	Polychlorinated Biphenyl Disposal Site
7	Building 682, HMX Spill	44	Soak Gut Area
8	Building 766, Mercury Deposits	45	Abandoned Drums
9	Patterson Avenue, Oil Spill	46	Cadmium Sandblast Unit
10	Single-base Propellant Grains Spill	47	Mercuric Nitrate Disposal Area
11	Coffee Road Landfill	48	Original Burning Ground
12	Town Cut Landfill	49	Chemical Disposal Area
13	Paint Solvents Disposal Ground	50	Building 183, Crawl Space
14	Waste Acid Oxidation Pit	51	Building 181, Dry Wall
15	Mercury Deposits in Manhole, Flourine Lab	52	Building 182, Dry Wall
16	Laboratory Chemical Disposal	53	Mercury Contamination of the Sewage System
17	Disposal Metal Parts Along Shoreline	54	Building 181
18	Hoa Island	55	Building 182
19	Catch Basins at Chip Collection Houses	56	(WB7 - Lead Contamination)
20	Single-base Powder Facilities	57	TCE Building 292 Area
21	Branson Road Landfill		
22	NO Sluice Burning Site		
23	Hydraulic Oil Spill Discharges From Extrusion Plant		
24	Abandoned Drain Lines		
25	Hypo Discharge X-Ray Building No. 2		
26	Thermal Destructor 2		
27	Thermal Destructor 1		
28	Original Burning Ground		
29			
30			





# *Lab Area - Project Status*

## *Site Background*



- 
- *Site 15 - Mercury Deposits in Manhole, Fluorine Lab*
    - *Laboratory waste released from Buildings 502 and 103 to storm sewer from 1942 to 1981*
    - *Approximately 1 pound of mercury and 64 pounds of lead*
  
  - *Site 16 - Laboratory Chemical Disposal*
    - *Laboratory waste released from wastewater collection system in Building 600 from 1944 to present*
    - *Potential chemicals include acids, amines, cyanide compounds, metals, chlorinated solvents and non-chlorinated solvents*
    - *Actual chemicals and amounts released unknown*



# *Lab Area - Project Status*

## *Site Background*



- *Site 49 - Chemical Disposal Pit*
  - *Disposal of laboratory waste into a brick pit*
  - *Had limited use up to the early 1970's*
  - *Actual chemicals and amounts disposed unknown*
  
- *Site 50 - Building 103 Crawl Space*
  - *From 1902 to 1985, the two sinks in Building 103 drained to the ground under the building*
  - *Mercury-containing equipment was once used in the building.*
  - *Actual chemicals and amounts discharged unknown*



## *Lab Area - Project Status Site Background*



- *Site 53 - Mercury Contamination of Sewage System*
  - *Mercury from Building 102 released to storm and sanitary sewer systems from 1909 through 1986*
  - *Laboratory workers estimated one liter of mercury lost per month. This translates into 28,000 pounds over the 77 year history.*
- *Site 54 - Building 101 Mercury Contamination and  
Site 55 - Building 102 Mercury Contamination*
  - *Mercury contamination in flooring of buildings*
  - *Possible discarding of small amounts of mercury outside of these buildings*



# *Lab Area - Project Status*

## *Sites 15, 16, 53, 54, and 55*





# *Lab Area - Project Status*

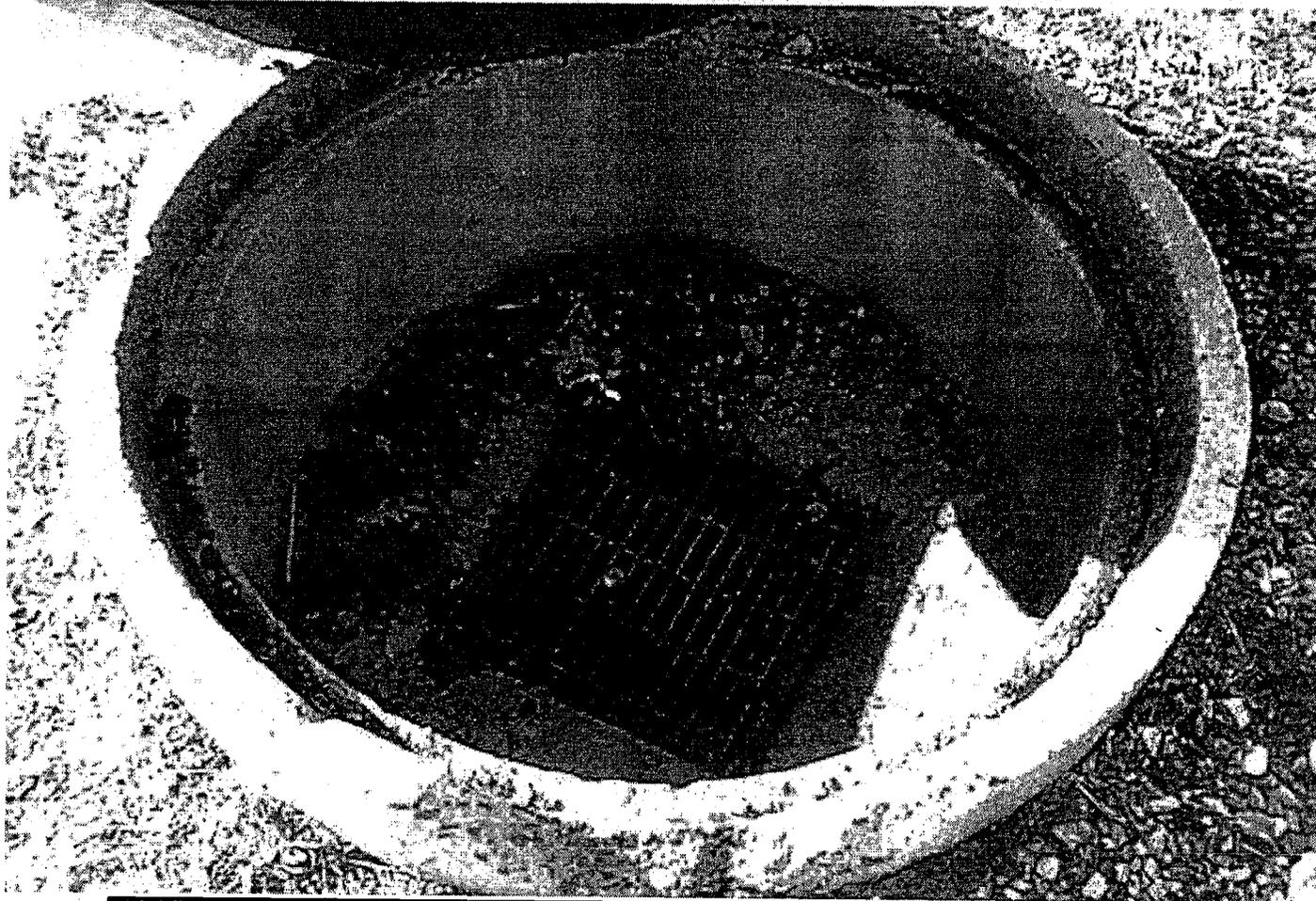
## *Sites 15, 16, 50, 53 and 55*





# *Lab Area - Project Status*

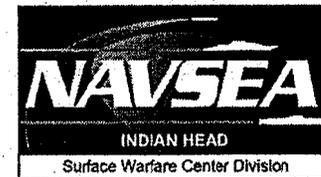
## *Site 49*

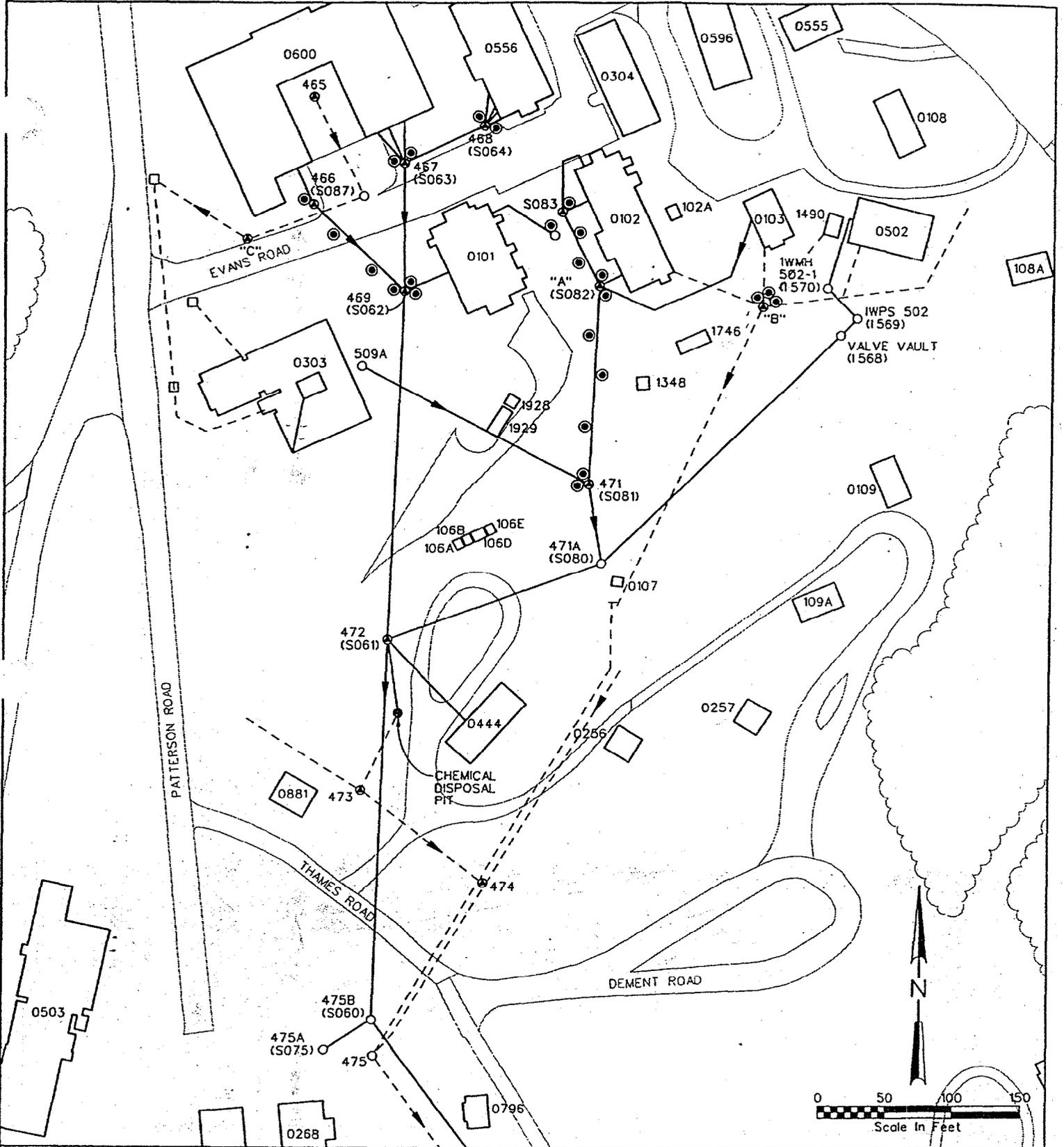




# *Lab Area - Project Status*

## *Site 49*





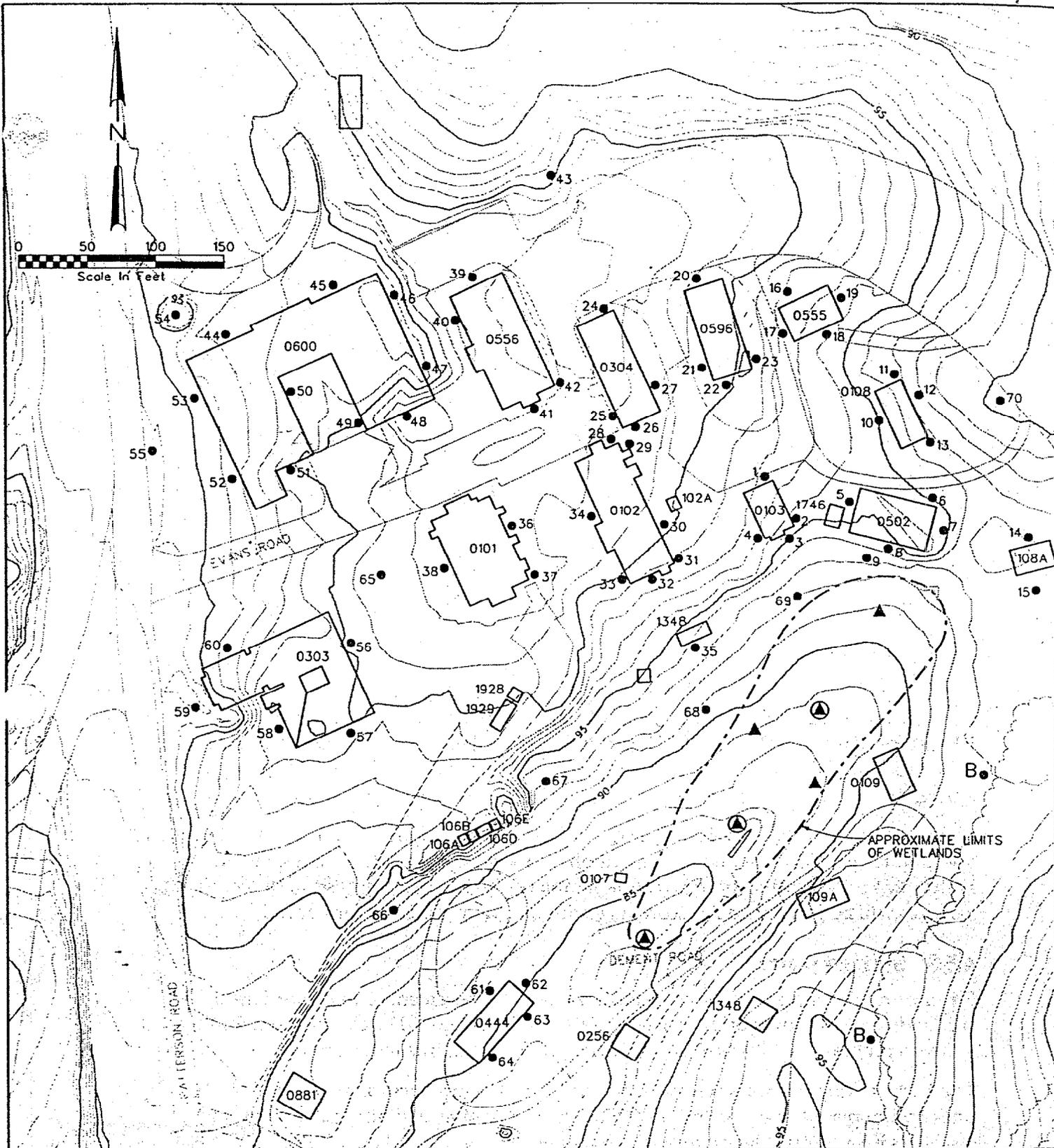
**LEGEND**

- PROPOSED SEDIMENT SAMPLE LOCATION
- ⊙ PROPOSED SUBSURFACE SOIL SAMPLE LOCATION
- MANHOLE
- GRATE
- - - STORM SEWER
- SANITARY SEWER

**NOTES:**

1. REFER TO TABLE 3-4 FOR SAMPLE ID'S.
2. SEE TABLE 3-1 FOR PIPE SIZE AND TYPE.
3. SEVERAL MANHOLES HAVE MULTIPLE DESIGNATIONS AS ASSIGNED IN PAST INVESTIGATIONS.
4. SEWER SYSTEMS SHOWN ONLY IN VICINITY OF SITE 53. ONLY SEWER SEGMENTS AND MANHOLES OF CONCERN ARE SHOWN.
5. FIGURE DEVELOPED FROM BUREAU OF YARDS AND DOCKS, DRAWINGS NO. 670, 579 AND 15,699.

Figure 3-6  
 LAB AREA -  
 PROPOSED SUBSURFACE SOIL  
 AND SEDIMENT LOCATIONS  
 RI WORK PLAN  
 NAVAL SURFACE WARFARE CENTER  
 INDIAN HEAD DIVISION



**LEGEND**

- PROPOSED SURFACE SOIL SAMPLE LOCATION
- B BACKGROUND SURFACE SOIL SAMPLE LOCATION
- ▲ SEDIMENT SAMPLE LOCATION
- SEDIMENT AND SURFACE WATER SAMPLE LOCATION

- NOTES:**
1. REFER TO TABLE 4-8 FOR FULL SAMPLE ID'S AND EXACT LOCATIONS.
  2. UP TO SIX ADDITIONAL SAMPLES TO BE LOCATED AT FIELD TEAM'S DISCRETION NOT SHOWN ON FIGURE.

Figure 4-3  
 LAB AREA PROPOSED  
 SURFACE SOIL SAMPLE LOCATIONS  
 RI WORK PLAN  
 NAVAL SURFACE WARFARE CENTER  
 INDIAN HEAD DIVISION



## *Lab Area - Project Status Future Schedule*



- 
- *Remedial Investigation (RI)*
    - *Contract Award - February 2000*
      - *Draft RI Work Plan - July 2000*
      - *Final RI Work Plan - December 2000 (delayed from August 2000)*
      - *Field Work - December 2000 (delayed from October 2000)*
      - *Draft RI Report - June 2001 (delayed from April 2001)*
    - *Cost for RI - \$950,000*

# 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

October 19, 2000

### Funding and Plans for Fiscal Year 2001

Question: Do you have the cumulative totals on each site?

Answer: We will put that in the meeting minutes.

Question: This includes two landfills sites?

Answer: Yes.

Question: Is venting at the landfills necessary?

Answer: No. These are rubble landfills and were mainly used for wastes such as building debris, bricks, wood, etc.

Question: A lot of money is being spent on studies. Is there a rule of thumb for the ratio of actual remediation to study?

Answer: Navy guidance states that 60-80 percent should be spent on actions, while 20-40 percent should be spent on studies.

Question: A total of \$307,000 was scheduled for the Mattawoman Creek Study in fiscal year 2000 (FY00), but nothing for FY01. Can this money be carried over?

Answer: Yes. The limitation of funds is seven or eight years. The money obligated for this study in FY00 will be used in FY01.

Question: Can this money be pulled back?

Answer: It can, but it is extremely rare to take money back once it has been obligated. Only if an extreme crisis were to arise would the money be taken.

### Federal Facilities Agreement (FFA)

Question: Will having the signed FFA change the way we do business?

Answer: No. The FFA just formalizes the process we are currently doing.

Question: The decision on which contractor to use to cleanup sites resides with whom?

Answer: The Navy retains their role as lead agency even after the signing of the FFA. Therefore, the Navy will continue to determine the contractors used for studies and for remediations.

Comment: Since the Resource Conservation and Recovery Act (RCRA) Corrective Action sites at Stump Neck Annex will be included in the FFA, we envision using the RAB to discuss issues at Stump Neck, too.

Comment: Although the FFA will allow for penalties if the Navy misses deadlines, the money to pay for penalties would be taken away from cleanup projects.

Comment: There is also a public relations aspect to it.

### Update on IR Site 57 - Building 292 TCE Spill

Question: Is there a difference between a removal action and a remedial action? The budget shows studies for Site 57 but there have been removals.

Answer: An immediate problem is addressed under a removal action. The entire site is address under a remedial action.

Question: As a minimum, shouldn't the remedial action bring the site up to current use of the property, not to residential use?

Answer: During the remedial investigation, we decide how clean we can and will get the site. Cost is a factor in the process.

Question: What is the hazard with TCE?

Answer: TCE is a carcinogen. The hazard is from dermal contact, ingestion, and inhalation.

Comment: TCE levels in the shallow groundwater are above the Maximum Contaminant Levels (MCLs) allowed for drinking water, which helped to initiate study of the site.

Comment: Arsenic was also discovered at the site.

Comment: One can also pick up contaminants by eating animals that contain TCE.

Comment: We have to look at the human health risk assessment and the ecological risk assessment to determine the potential risks.

Question: Are we concerned when conducting a feasibility study (FS) with groundwater levels at the site?

Answer: Yes. We check the levels while conducting the study.

Question: Is there any concern with the time of year and groundwater levels?

Answer: Groundwater levels are important and range from 8 to 11 feet at this site.

Comment: Typically, the end of January through April is when percolation tests are performed.

Comment: The FS report is expected in May. This is the report where we look at the various alternatives for this site.

#### Sites 12, 41, and 44 Update

Question: How are the reports available to the public?

Answer: Copies are sent to the RAB and copies are also available in the information repositories.

Question: Are the evaluations and comparisons in the FS report ranked by importance?

Answer: No. There are a list of criteria provided in the National Contingency Plan (NCP). They include threshold criteria, balancing criteria, and modifying criteria.

Comment: State and community acceptance is extremely important in the decision-making process and can affect the final remediation decision.

Comment: Community acceptance is accomplished through the RAB and by putting information in the repositories and advertising the proposed remediation plans in the newspaper.

Comment: Institutional controls include administrative controls, such as deed restrictions, and engineering controls, such as fences.

Question: Aren't the deeds to Navy land controlled by the Government Services Administration (GSA)? I would like to see some language placed in the deed for sites that are not cleaned to residential use standards.

Answer: GSA restricts putting land use restrictions within the deed while the land is still be operated by the Navy.

Comment: We use National Environmental Policy Act (NEPA) reviews to catch potential land disturbance at IR sites. In addition, we have a Geographical Information System (GIS mapping system) in place that identifies all IR sites. However, the Base Master Plan needs to be updated.

Comment: We will bring a GIS map with IR sites on it to the next meeting.

Comment: The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) takes care of this. When land is transferred, then restrictions are placed in the deed. This is reviewed every five years.

#### Site 12

Question: Who made the decision of which alternative will be used for remediation?

Answer: The Remedial Project Manager (RPM), Rob Sadorra, makes the initial decision. The Proposed Response Action Plan (proposed plan) is the result of the initial decision with comments incorporated from regulatory review (EPA, MDE) and review of the EPA's Biological Technical Assistance Group (BTAG) and EPA's toxicologists.

Site 41

Question: Where is the scrap from the Scrap Yard going?

Answer: A Defense Reutilization Marketing Office (DRMO) contract will be in place soon. The items are sold as scrap for reuse.

Comment: We will discuss proposed plans at the next RAB meeting.

IR Site 42 - Olsen Road Landfill Toxicity Testing Update

No comments made or questions asked.

Mattawoman Creek Study Update

Question: Does the time of year have any impact on the study?

Question: Wasn't this study supposed to be done in the spring?

Answer: We expect to have the work plan completed in late winter with work performed in the spring.

Comment: We will discuss the work plan at the next RAB. The BTAG was impressed with the amount of wildlife in the Creek.

Question: Will tidal influence be a factor?

Answer: Not really.

Question: Are U.S. Fish and Wildlife Service (USF&WS) planning any studies of the Creek?

Answer: Not that we are aware of. We have been working with someone from the USF&WS, who is on the BTAG.

Question: Will all the samples be done with sediment?

Answer: We will also take water samples. However, no borings will be taken.

Question: What do we hope to get out of this study?

Answer: We hope to find that there are no adverse impacts from operations at and past spills from the Navy at Indian

Head. However, if we find an impact, we need to consider cleanup.

Comment: We want to reduce the influence that the Activity has on the Creek.

**RI Project Status for IR Sites 11, 13, 17, 21, and 25**

Site 17

Question: Were all these drums above or below the surface and were they full, and if so, of what?

Answer: The drums were on the surface and contained wax.

Question: What prevents us from removing them now?

Answer: There may be potential human health risks associated with removing the drums. The drums are rusted and open.

Site 25

Comment: There is a question whether we actually discharged spent fixer from this building.

Question: Are the monitoring wells upgradient of the ovens at Building 871.

Answer: Yes. The wells are between Building 588 and Building 871.

**RI Work Plan for Sites 15, 16, 49, 50, 53, 54, and 55 (Lab Area)**

Question: Up to what year was the chemical pit used?

Answer: The 1980s.

Question: Where do those pipes go?

Answer: We believe they drain to the Creek at Industrial Wastewater Outfall (IW) 87.

Question: For Building 600, where does the sewer go? Are you going to do smoke tests?

Answer: The sewer from Building 600 goes to our sanitary sewage treatment plant. We do not intend to perform smoke testing of the lines in this area.

**PROPOSED DATES FOR  
RESTORATION ADVISORY BOARD  
MEETINGS  
IN  
2001**

- 1. Thursday, February 15, 2001**
- 2. Thursday, June 21, 2001**
- 3. Thursday, October 18, 2001**

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

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

**February 15, 2001**

- 1. IR Sites 11, 13, 17, 21, and 25 Update**
- 2. IR Sites 15, 16, 49, 40, 53, 54 and 55 Update**
- 3. IR Site 47 Update**
- 4. IR Site 57 Update**
- 5. Mattawoman Creek Study Update**
- 6. IR Site 42 Toxicity Identification Evaluation (TIE)  
Results**

**DOLLARS SPENT AT INSTALLATION RESTORATION SITES  
AS OF OCTOBER 31, 2000  
(arranged by cost)**

<b>Group</b>	<b>Site Number and Name</b>	<b>Amount Spent</b>
	5 - Grain Manufacture & X-ray Building 731	\$1,890,673
	12 - Town Gut Landfill	\$1,823,607
	41 - Scrap Yard	
	42 - Olsen Road Landfill	
	44 - Soak Out Area	
	11 - Caffee Road Landfill	\$1,356,998
	13 - Paint Solvents Disposal Ground	
	17 - Disposed Metal Parts Along Shoreline	
	21 - Bronson Road Landfill	
	25 - Hypo Discharges from X-Ray Building No. 2	
	57 - Former Drum Loading Area Building 292	\$1,204,543
Lab Area	15 - Mercury Deposits in Manhole, Fluorine Lab	\$784,906
	16 - Laboratory Chemical Disposal	
	49 - Chemical Disposal Pit	
	50 - Building 103 Crawl Space	
	53 - Mercury Contamination of the Sewage System	
	54 - Building 101 Mercury Contamination	
55 - Building 102 Mercury Contamination		
	8 - Mercury Deposits in Manhole, Biazzi Plant	\$756,304
	56 - Lead Contamination of Industrial Wastewater Outfall (IW) 87	\$701,571
	N/A - Mattawoman Creek Study	\$307,496
	47 - Mercuric Nitrate Disposal Area	\$142,428
	<b>TOTAL</b>	<b>\$8,968,526</b>