



UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION III

STATEMENT OF BASIS

National Support Activity Bethesda  
BETHESDA, MARYLAND

Prepared by  
Office of Remediation  
Land and Chemicals Division  
May 29, 2013

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## Section 1: Introduction

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The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for the Naval Support Activity Bethesda (NSA) facility located in Bethesda, Maryland northwest of Washington, D.C. in Montgomery County, Maryland (Facility). EPA's review of available information indicates that there are no unaddressed releases of hazardous waste or hazardous constituents from a number of units at the Facility. Based on that assessment, EPA's proposed decision is that no further investigation or cleanup is required for these units at the Facility. EPA has determined that its proposed remedy is protective of human health and the environment and that no further corrective action or land use controls are necessary at this time for these units at the Facility. The remaining units at the Facility will be further investigated under the Permit (discussed later) and at a later time EPA will be soliciting comments on a proposed remedy for the remaining portions of the Facility. This SB highlights key information relied upon by EPA in making its proposed remedy.

The Facility is subject to EPA's Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq. (Corrective Action Program). The Corrective Action Program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and hazardous constituents that have occurred at their property. The State of Maryland (Maryland) is not authorized for the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in Maryland for the Corrective Action Program.

The Administrative Record (AR) for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed remedy is based. See Section 6, Public Participation, for information on how you may review the AR. The Index to the AR may be found in Attachment #1.

Concurrently with this SB, EPA is soliciting comments on a draft Corrective Action Permit (Permit). Pursuant to 40 C.F.R. §124.7, EPA has prepared this SB to describe the background and basis for the draft Permit and the reasons supporting the proposed remedy. The draft Permit incorporates the remedies proposed in this SB. EPA's proposed final remedy as described in this SB supports EPA's proposal to remove the units addressed in this SB from the Facility's Corrective Action permit requirements.

EPA will make a final decision on the draft Permit after considering all information submitted during the public comment period. If no comments are received during the public comment period on the draft Permit, the final Permit will be signed and will become effective upon signature. Otherwise, the final Permit will become effective forty-five (45) days after the service of notice of the final remedy or upon conclusion of any appeals filed. EPA will issue a Final Decision and Response to Comments (FDRTC) after considering all comments submitted with respect to this SB. The FDRTC will be incorporated into the final Permit and made a part thereof.

Information on the Corrective Action Program as well as a fact sheet for the Facility can be found by navigating <http://www.epa.gov/reg3wcmd/correctiveaction.htm>.

## **Section 2: Facility Background**

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The Facility consists of approximately 243 acres located in Bethesda, Maryland northwest of Washington, D.C. in Montgomery County, Maryland. The Facility is bounded by Wisconsin Avenue (State Route 355, also known as Rockville Pike) to the west; Jones Bridge Road to the south; Stone Ridge School and the Parkview Estates residential neighborhood to the north; Interstate 495 to the northeast; and a local park and Chevy Chase View residential area to the east. The National Institutes of Health (NIH) complex is located on the west side of Wisconsin Avenue, adjacent to and west of the NSA property. A location map and a Facility layout are attached as Figures 1 and 2, respectively.

The Naval Medical Command, National Capital Region (NMCNCR) was commissioned on February 5, 1942. In 1973 the Naval Hospital and NMCNCR were consolidated into one command, the National Naval Medical Center (NNMC). On Oct 1, 2011 the name of the facility was changed to NSA Bethesda.

A new, state-of-the-art hospital replaced the older one and was dedicated on November 21, 1980. This Facility consists of two buildings: a three-story outpatient structure, which adjoins a seven-story inpatient building with 500 replacement beds. The two buildings have a combined area of more than 880,000 square feet.

The NSA and its tenant activities employ more than 6,500 employees, about two-thirds of whom are military personnel, whose activities result in the generation and storage of general solid, medical, mixed, radioactive, and hazardous wastes.

## **Section 3: Summary of Environmental History**

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On December 30, 2000, EPA issued a RCRA Corrective Action Permit, EPA ID No. MD4170024687 (Initial Permit), under RCRA Section 3004(u), 42 U.S.C. Section 6924(u), to NNMC for the Facility. The Initial Permit, which on its terms expired on December 30, 2010, has been administratively extended. The Initial Permit currently governs corrective action at the Facility. Numerous investigations and actions have been completed and various reports have been submitted to the EPA since the issuance of the Initial Permit.

Twenty-two Solid Waste Management Units (SWMUs) and nine Areas of Concern (AOCs) were identified in the Initial Permit. In 2001, this number was changed to 23 SWMUs and 10 AOCs based on units being combined as well as added to the investigation. Subsequently, the RCRA Facility Investigation (RFI) addressed 25 SWMUs and 10 AOCs. Attachment 2 lists the SWMUs and AOCs. Figure 2 shows the location of each unit.

Table 1 below describes the 15 SWMUs and five (5) AOCs covered in this SB. The remaining 10 SWMUs and five (5) AOCs are still under investigation and EPA proposes to address them in the final Permit.

Complete details, including sampling data, can be found in the individual reports which are listed in the Index section of this SB and located in the AR. Sampling included surface and subsurface soil, groundwater, sediment and surface water sampling, wipe sampling and concrete sampling at the Facility. Chemicals of concern (COCs) included Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), Pesticides and PCBs, Metals, Dioxins and Furans, and Radionuclides.

Table 1

| <b>Solid Waste Management Units/ Areas of Concern</b>   | <b>Description</b>  | <b>Current status</b>  |
|---|---|--|
| SWMU # 4 – Pesticide Shop Former Temporary Storage Area | Area formerly occupied by a 10-foot wooden shed used to temporarily store outdated pesticides that had exceeded their shelf life.   | Human Health Risk Assessment (HHRA) indicated no further action required   |
| SWMU # 5 – Roadside Laboratory Waste Disposal Area      | Located in the northeastern portion of the Facility, comprised of roadside areas adjacent to Taylor Road  | HHRA indicated no further action required  |
| SWMU # 6 – Carpenter Shop Temporary Storage Area        | Consists of a 55-gallon drum that was used, starting in 1988, to collect used paint thinner in the Carpenter Shop in Building 15.   | No evidence of release   |
| SWMU #8 – Former Building 224 Storage Area              | Operated as the controlled hazardous substance facility for hazardous waste for NSA prior to 1988   | No COCs detected in surface and subsurface soil exceeded residential risk-based concentrations (RBCs) or generic soil screening levels (SSLs)                |
| SWMU #9 – NMRC Xylene Disposal Area                     | An approximately 100- by 200-foot area southeast of Buildings 21, 150, and 146 where unknown quantities of waste xylene generated by the Naval Medical Research Center (NMRC) were reportedly buried and poured onto the ground | HHRA indicated no further action required  |
| SWMU #12 – Naval Hospital Xylene Distillation Unit      | A 6-foot-high brass and glass distillation column, located on a concrete floor in Room 0268A of the Naval Hospital (Building 9)   | No evidence of release   |
| SWMU #13 – Dental Lab Temporary Storage Area            | An inactive 90-day temporary storage unit consisting of a yellow hazardous materials locker in Room 2604 of Building 2  | No evidence of release   |
| SWMU #14 – NCI Temporary Storage Area                   | A 2-foot by 4-foot by 5-foot white wooden cabinet, originally located in the NCI laboratory on the fifth floor of Building 8  | No evidence of release   |
| SWMU #15 – NMRI Temporary Storage Area                  | A 20-foot by 20-foot room in Bldg 17 that was used for temporarily storing wastes   | EPA agreed in the Corrective Action Permit Response to Comments that there was no evidence of release so this SWMU should not be part of the Initial Permit. |

|  |   |  |
|--|---|--|
| SWMU #16 – NMRI Current Temporary Storage Area       | A 15-foot by 10-foot room with concrete floors and walls that was used to temporarily store Naval Medical Research Institute (NMRI) laboratory wastes for less than 90 days   | No evidence of release   |
| SWMU #18 – Military Gas Station Solvent Storage Unit | A self-contained automotive-parts cleaning unit inside the military gas station (Building 155) along the western corner of the northern wall of the building  | No evidence of release   |
| SWMU #21 – AFRRRI Satellite Accumulation Area        | An 8-foot by 8-foot room in the basement of Armed Forces Radiobiology Research Institute (AFRRRI) Building 42 in the southeast portion of NSA   | No evidence of release   |
| SWMU #25 – USUHS Current Temporary Storage Area      | A 20-foot by 40-foot concrete block room with a concrete floor in Bay 8 of Building 74  | No evidence of release   |
| SWMU #28 – Base Exchange Gasoline Recovery System    | A system used to recover gasoline from groundwater adjacent to the Base Exchange Gas Tanks (SWMU 27)  | No evidence of release   |
| SWMU 34 – Pesticide Handling and Mixing Building     | A one-story 4,040 square foot metal building where pesticide handling and mixing previously took place  | HHRA indicated no further action required  |
| AOC #1 – Mercury Removal Actions in Building 17      | The buildings' interiors and the drain pipes, sanitary sewer, and soil beneath the buildings  | Interim measures for mercury vapor readings lower than Interim Measures (IM) criteria after remediation  |
| AOC #4 – Bldg 21 UST                                 | A steel 1,000-gallon fuel oil underground storage tank (UST) located near Building 21   | HHRA indicated no further action required  |
| AOC #7 – Building 256 Pesticide Spill                | Spill of approximately 15 gallons of methoxychlor on the pavement outside of Building 256 (SWMU #1)   | Clean-up completed and documented in RFI report. The results of RFI soil sampling indicated that no residual pesticides exists in the area of the spill.   |
| AOC #8 – NMRI radioactivity Contaminated Bldg        | Centrally located in the Facility boundaries (Figure 25-1) and encompasses Building 150, which was constructed in the early 1950s to irradiate animals and analyze the effects of ionizing radiation to organs and cellular systems | Decontamination and decommissioning activities reduced Cobalt concentrations to acceptable levels based on the criteria set forth in 10 CFR 20, Subpart E. |

|  |  |   |
|--|--|---|
| AOC #12 – Basin 5 Sanitary Sewer<br>Outside of Bldgs 17, 18 and 21 | Sanitary sewer system and associated<br>manholes, leading from the buildings to<br>the main sewer line | IM included removal or<br>abandoned in place of all<br>sanitary piping that<br>drained janitor closets<br>and laboratories in<br>Buildings 17, 18, and 21 |
|--|--|---|

## **Section 4: Proposed Remedy**

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EPA has found that the units described in Table I do not pose any unacceptable risk to human health or the environment and EPA proposes these units for No Further Action. The remaining 10 SWMUs and five (5) AOCs are still under investigation and EPA proposes to address them in the final Permit.

## **Section 5: Environmental Indicators**

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EPA sets national goals to measure progress toward meeting the nation's major environmental goals. For Corrective Action, EPA evaluates two key environmental indicators for each facility: (1) current human exposures under control and (2) migration of contaminated groundwater under control. The EPA has determined that the Facility met the current human exposures under control indicator on July 9, 2004. The EPA has determined that the Facility met the migration of contaminated groundwater under control indicator on August 23, 2004.

## **Section 6: Public Participation**

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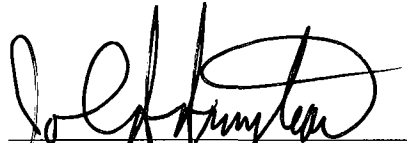
Before EPA makes a final decision on its proposal for the Facility, the public may participate in the decision selection process by reviewing this SB and documents contained in the Administrative Record (AR) for the Facility. The AR contains all information considered by EPA in reaching this proposed remedy. It is available for public review during normal business hours at:

U.S. EPA Region III  
1650 Arch Street  
Philadelphia, PA 19103  
Contact: Estena McGhee  
Phone: (215) 814-3433  
Fax: (215) 814-3113  
Email: mcghee.estena@epa.gov

Interested parties are encouraged to review the AR and comment on EPA's proposed remedy. The public comment period will last forty-five (45) calendar days from the date that notice is published in a local newspaper. You may submit comments by mail, fax, or e-mail to Ms. Estena McGhee. EPA will hold a public meeting to discuss this proposed remedy upon request. Requests for a public meeting should be made to Ms. Estena McGhee.

EPA will respond to all relevant comments received during the comment period. If EPA determines that new information warrants a modification to the proposed remedy, EPA will modify the proposed remedy or select other alternatives based on such new information and/or public comments. EPA will announce its final decision and explain the rationale for any changes in a document entitled the Final Decision and Response to Comments (FDRTC). All persons who comment on this proposed remedy will receive a copy of the FDRTC. Others may obtain a copy by contacting Ms. Estena McGhee at the address listed above.

6-3-13  
Date

  
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John A. Armistead, Director  
Land and Chemicals Division  
US EPA, Region III



## Attachment #1

### **Index to Administrative Record**

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|                    |  |
|--------------------|--|
| June 1, 2000       | EPA response to comments on Corrective Action Permit   |
| September 13, 2000 | NNMC letter to EPA with NNMC comments on draft Corrective Action permit for NNMC Bethesda, MD  |
| November 21, 2000  | EPA letter to NNMC transmitting Corrective Action Permit   |
| November 21, 2000  | Corrective Action Permit issued to NNMC by EPA (includes Attachments A thru G)   |
| October 16, 2001   | EPA letter to NNMC for no further action determination at SWMU 16  |
| May 2002           | Addendum I Final QAPP for Priority I RFI   |
| July 2002          | Final Priority I RCRA Facility Investigation Project Plan <ul style="list-style-type: none"><li>• NNMC Executive Summary</li><li>• Project Management Plan for Priority I</li><li>• Description of Current Conditions Report</li><li>• Sample Collection Methods and Procedures Plan</li><li>• Data Management Plan</li><li>• Health &amp; Safety Plan</li></ul> |
| October 2002       | Final Interim Measures Implementation Report for AOC 1   |
| January 31, 2003   | EPA No Further Action determination for AOC1 – Bldg. 17 Mercury Removal Action   |
| March 15, 2003     | EPA letter to NNMC comments on AOC 1 Interim Measures Implementation Report  |
| June 2003          | Draft Final Interim Measures Implementation Report for AOC 12  |
| July 2003          | Interim RCRA Facility Investigation Report No. 1   |
| July 31, 2003      | NNMC response to EPA's comments dated 3/15/2003 on AOC 1 Interim Measures Implementation Report  |
| September 2003     | Project Plan for Priority II RCRA Facility Investigation   |

|                   |  |
|-------------------|--|
| September 2003    | Draft-Final Basewide Ecological Risk Assessment Work Plan  |
| November 4, 2003  | EPA letter to NNMC comments on AOC 1 Interim Measures Implementation Report  |
| December 31, 2003 | EPA letter to NNMC comments on AOC 12 Interim Measures Implementation Report   |
| January 6, 2004   | Building 150 Underground Storage Tank Decommissioning Project Report   |
| March 15, 2004    | Technical Memorandum, Response to USEPA Comments on the AOC 12 Interim Measures Implementation Report                          |
| July 9, 2004      | Human Health Environmental Indicator Form completed  |
| August 23, 2004   | Groundwater Environmental Indicator Form completed   |
| October 8, 2004   | EPA letter to NNMC approving Draft Final Interim Measures Implementation Report  |
| June 2005         | Sampling and Analysis Plan for the Priority III RFI  |
| June 2006         | Interim Draft Basewide Ecological Risk Assessment  |
| November 2, 2007  | Technical Memorandum Risk Evaluation for SWMU 5 Roadside Laboratory Waste Disposal Area  |
| April 30, 2008    | Technical Memorandum Risk Evaluation for AOC 1 – Buildings 17, 18 and 21 Mercury Removal Actions                               |
| April 30, 2008    | Technical Memorandum Risk Evaluation for AOC 2 – Building 42 Underground Storage Tank and Building 53 Underground Storage Tank |
| April 30, 2008    | Technical Memorandum Risk Evaluation for AOC 4 – Building 21 Underground Storage Tank  |
| April 30, 2008    | Technical Memorandum Risk Evaluation for AOC 8 – NMRI Radioactivity Contaminated Building                                      |
| April 30, 2008    | Technical Memorandum Risk Evaluation for SWMU 9 NMRI Xylene Disposal Area  |
| April 30, 2008    | Technical Memorandum Risk Evaluation for SWMU 13 Dental Lab Temporary Storage Area   |
| April 30, 2008    | Technical Memorandum Risk Evaluation for SWMU 14 National Cancer Institute (NCI) Temporary Storage Area                        |

|                   |   |
|-------------------|---|
| April 30, 2008    | Technical Memorandum Risk Evaluation for SWMU 18 Military Gas Station Solvent Storage Area  |
| June 2008         | RCRA Facility Investigation Report  |
| February 18, 2011 | EPA letter transmitting comments on RFI Report  |
| March 15, 2011    | Meeting summary report  |
| May 5, 2011       | EPA letter to NNMC for no further action determination at SWMUs 6, 12, 13, 14, 16, 18, 21, 25, 28, AOCs 1, 12   |
| May 11, 2011      | EPA letter to NNMC for no further action determination for AOC 4  |
| August 17, 2011   | Technical Memorandum Response to USEPA Comments on the Draft-Final RCRA Facility Investigation Report- Section 9 – SWMU 4 Pesticide Shop Former Temporary Storage Area and SWMU 34 Pesticide Mixing and Handling Building |
| August 17, 2011   | Technical Memorandum Response to USEPA Comments on the Draft-Final RCRA Facility Investigation Report- Section 10 – SWMU 5 Roadside Laboratory Waste Disposal Area  |
| August 17, 2011   | Technical Memorandum Response to USEPA Comments on the Draft-Final RCRA Facility Investigation Report- Section 11 – SWMU 8 Former Building 224 Storage Area   |
| August 17, 2011   | Technical Memorandum Response to USEPA Comments on the Draft-Final RCRA Facility Investigation Report- Section 12 – SWMU 9 NMRI Xylene Disposal Area  |
| August 17, 2011   | Technical Memorandum Response to USEPA Comments on the Draft-Final RCRA Facility Investigation Report- Section 13 – SWMU 17 Military Gas Station Waste Oil Tank   |
| August 25, 2011   | Meeting Notes, USEPA Site Visit at NNMC   |
| May 23, 2012      | EPA letter to NSA for no further action determination at SWMU 4 and 34  |
| May 23, 2012      | EPA letter to NSA for no further action determination at SWMU 5   |
| May 23, 2012      | EPA letter to NSA for no further action determination at SWMU 8   |
| May 23, 2012      | EPA letter to NSA for no further action determination at SWMU 9   |

May 23, 2012 EPA letter to NSA for no further action determination at SWMU 17

June 27, 2012 Meeting Notes, NSA meeting with EPA to discuss RFI report

June 27, 2012 Meeting summary report

March 20, 2013 Technical Memorandum Solid Waste Management Unit (SWMU) 15 –  
Naval Medical Research Institute (NMRI) Former Temporary Storage  
Unit

**Attachment # 2**  
**LIST of SWMUS and AOCs**

| <b>SWMU/ AOC</b> | <b>Description</b>   |
|------------------|--|
| SWMU 1           | Bldg 256 Storage Facility  |
| SWMU 2           | Former Laboratory Waste Disposal Area  |
| SWMU 3           | Asbestos Burial Area   |
| SWMU 4           | Pesticide Shop Former Temporary Storage Area   |
| SWMU 5           | Roadside Laboratory Waste Disposal Area  |
| SWMU 6           | Carpenter Shop temporary Storage Area  |
| SWMU 8           | Former Building 224 Storage Area   |
| SWMU 9           | NMRC Xylene Disposal Area  |
| SWMU 12          | Naval Hospital Xylene Distillation Unit  |
| SWMU 13          | Dental Lab Temporary Storage Area  |
| SWMU 14          | NCI Temporary Storage Area   |
| SWMU 15          | NMRI Former Temporary Storage Unit   |
| SWMU 16          | SWMU   |
| SWMU 17          | Military Gas Station Waste Oil Tank  |
| SWMU 18          | Military Gas Station Solvent Storage Unit  |
| SWMU 20          | AFRRI Mixed Waste Underground Storage Tanks  |
| SWMU 21          | AFRRI Satellite Accumulation Area  |
| SWMU 22          | Uniformed Services University of the Health Services Scintillation Fluid Disposal Facility |
| SWMU 23          | Storm Sewer System   |
| SWMU 25          | USUHS Current Temporary Storage Area   |
| SWMU 28          | Base Exchange Gasoline Recovery System   |
| SWMU 32          | Metal Storage Yard   |
| SWMU 33          | Million Dollar Hill  |
| SWMU 34          | Pesticide Handling and Mixing Building   |
| SWMU 35          | Debris Disposal Area Near Buildings 147 and 239  |
| AOC 1            | Mercury Removal Actions in Building 17   |
| AOC 2            | Bldg 42 UST and Bldg 53 UST  |
| AOC 3            | Removed UST  |
| AOC 4            | Bldg 21 UST  |
| AOC 5            | Bldg 188 UST   |
| AOC 6            | Power Plant Spill  |
| AOC 7            | Bldg 256 Pesticide Spill   |
| AOC 8            | NMRI radioactivity Contaminated Bldg.  |
| AOC 11           | USUHS Hydraulic Fluid Spill  |
| AOC 12           | Basin 5 Sanitary Sewer Outside of Bldgs 17, 18 and 21                                      |

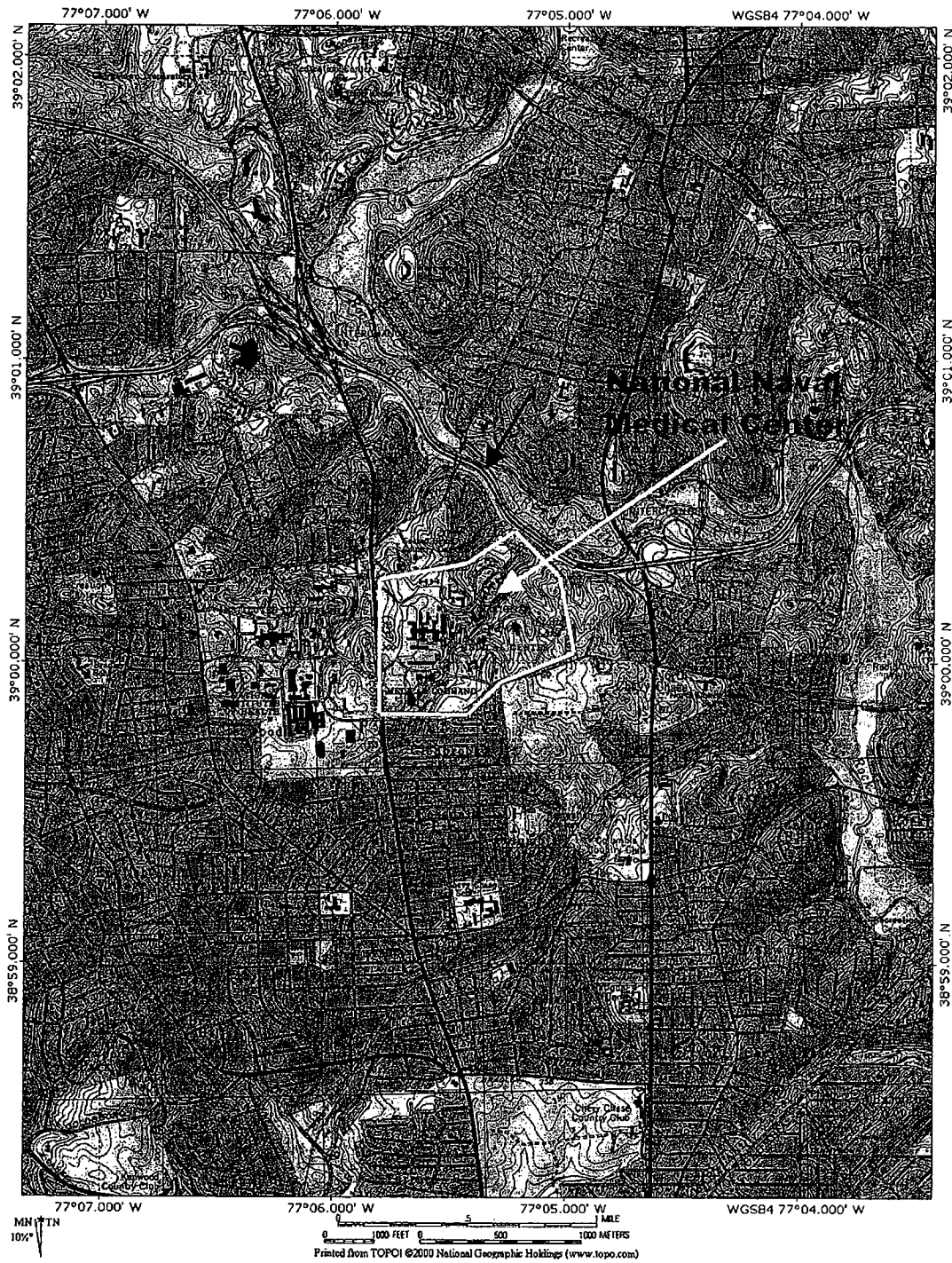


Figure 1-1  
 Facility Location Map  
 RCRA Facility Investigation Report  
 National Naval Medical Center, Bethesda, Maryland

