



# Proposed Plan

## Site 39, Stack Emissions

U.S. Navy Announces the Site 39 Proposed Plan

**Naval District Washington, Indian Head  
Indian Head, Maryland**

October 2004

### Introduction

This **Proposed Plan** recommends that no further action be taken to address the Stack Emissions (Site 39) at Naval District Washington, Indian Head (NDWIH), in Indian Head, Maryland. The Proposed Plan provides the rationale for this recommendation based on all of the investigation activities performed at Site 39 to date, and explains how the public can participate in the decision-making process. The location of NDWIH and Site 39 are shown on Figure 1.

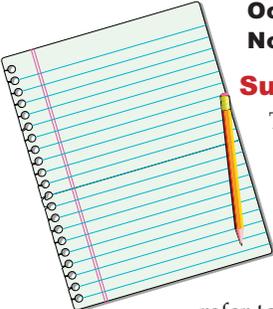
The Department of the Navy (the lead agency for the site activities) and the U. S. Environmental Protection Agency Region III (EPA) (support agency) in consultation with the Maryland Department of the Environmental (MDE) (support agency) issue this document as part of the public participation responsibilities under Section 300.430(f)(2) of the **National Oil and Hazardous Substances Pollution Contingency Plan (NCP)**. This Proposed Plan summarizes information that can be found in greater detail in the **Remedial Investigation (RI)** report and other documents contained in the **Administrative Record File** for this site.

The Navy and EPA, in consultation with MDE, will make a final decision on the **response action** for the Site after reviewing and considering all information submitted during the 30-day public **comment period** and may modify the preferred response action or select another action based upon any new information or public comments. Therefore, community involvement is critical and the public is encouraged to review and comment on this Proposed Plan. After the public comment period has ended and the comments and information submitted during that time have been reviewed and considered, the Navy and EPA, in consultation with the MDE, will document the action selected for the site in a **Record of Decision (ROD)**.

### Mark Your Calendar for the Public Comment Period

**Public Comment Period**  
**October 19, 2004 through**  
**November 17, 2004**

**Submit Written Comments**

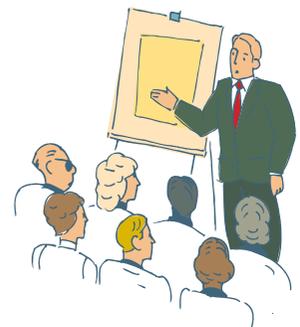


The Navy, EPA, and MDE will accept written comments on the Proposed Plan during the public comment period. To submit comments or obtain further information, please refer to the insert page.

**Attend the Public Meeting**  
**October 21, 2004, at 6:30 pm**

Indian Head Senior Center  
100 Cornwallis Square  
Indian Head, MD

The public comment period will include a public meeting during which the Navy, EPA, and MDE will provide an overview of the site, previous investigation findings, remedial alternatives evaluated, and the Preferred Alternative, answer questions, and accept public comments.



### Location of Administrative Record

The Administrative Record is available for public viewing at the following location:

Naval District Washington, Indian Head  
General Library  
Building 620 (The Crossroads)  
101 Strauss Avenue, Indian Head, MD

Phone: 301.744.4747

Hours:  
M-F 9:00 am - 5:30 pm  
Sat/Sun closed

A glossary of specialized terms used in this Proposed Plan is attached. Words included in the glossary are indicated in **bold print** the first time they appear in the plan.

## Site History

Site 39 is located on the southeast side of NDWIH overlooking Mattawoman Creek and encompasses the area around Buildings 497, 497A and 498 (Figure 2). The approximate area of the site is 6 acres. Buildings 497, 497A, and 498 were constructed in 1942 and were used for the production of explosives until 1994 (Dolph, 2000). A variety of explosives, including Explosive D (also known as ammonium picrate), nitroguanidine, Composition D-2, dinitropropanol (DNPOH), bis-dinitropropyl acetal/formal, plas-tisol nitrocellulose, dimethyl ammonium nitrate, dimethyl nitramine, unsymmetrical dimethylhydrazine (UDMH), and high-bulk-density nitroguanidine (HBNQ) were processed at Site 39 (Naval Energy and Environmental Support Activity (NEESA), 1983, and Dolph, 2000). Buildings 497, 497A and 498 were used for the curing and drying of the explosives. Emissions from the curing and/or drying processes were released to the atmosphere through one stack at Building 497, which was used in the production of UDMH, and two stacks on the roof of 498, which were used in the production of nitroguanidine. Emissions from these stacks may have caused surface soil **contamination** in the vicinity of these buildings, but the quantities of contaminants are not known.

In addition to the stack emissions, other historical releases of chemicals to the environment occurred through the disposal of wastewaters to the sanitary wastewater collection system, building drains and stormwater drains. These wastewater collection systems discharged to Mattawoman Creek (Dolph, 2000) via aboveground piping. However, the sediment in the vicinity of and downstream from these outfalls is not part of Site 39, but was addressed as part of the Mattawoman Creek Study. Site 39 encompasses only the soils in the area surrounding Buildings 497, 497A and 498. The only contaminant source for these soils was the stack emissions from Buildings 497 and 498.

## Site Characteristics

Site 39 overlooks Mattawoman Creek, which flows along the southeastern side of the site (Figure 2). From the edge of the site, the land slopes steeply to the creek. On the southwestern side of the site,

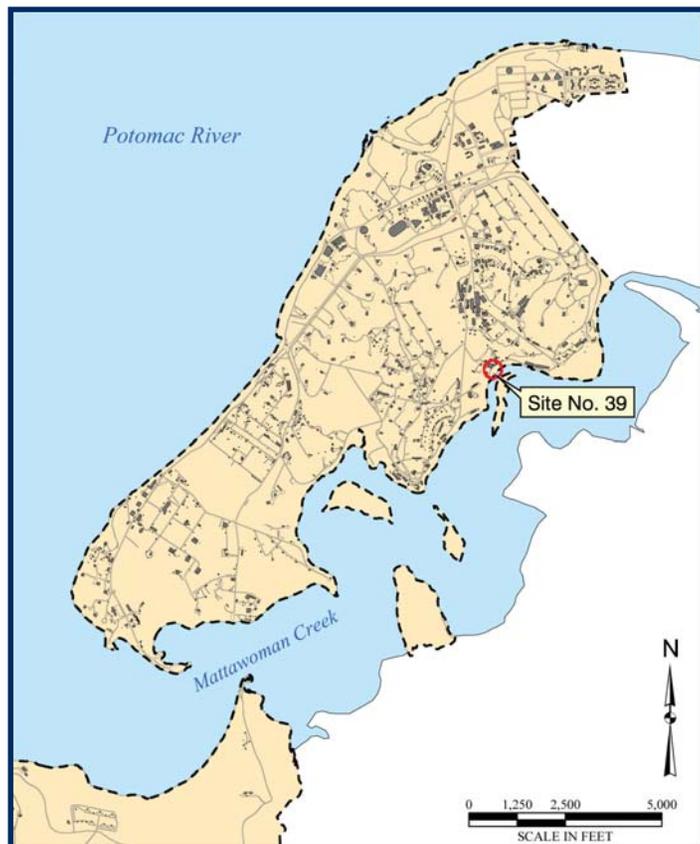


Figure 1 - NDWIH, Indian Head, MD

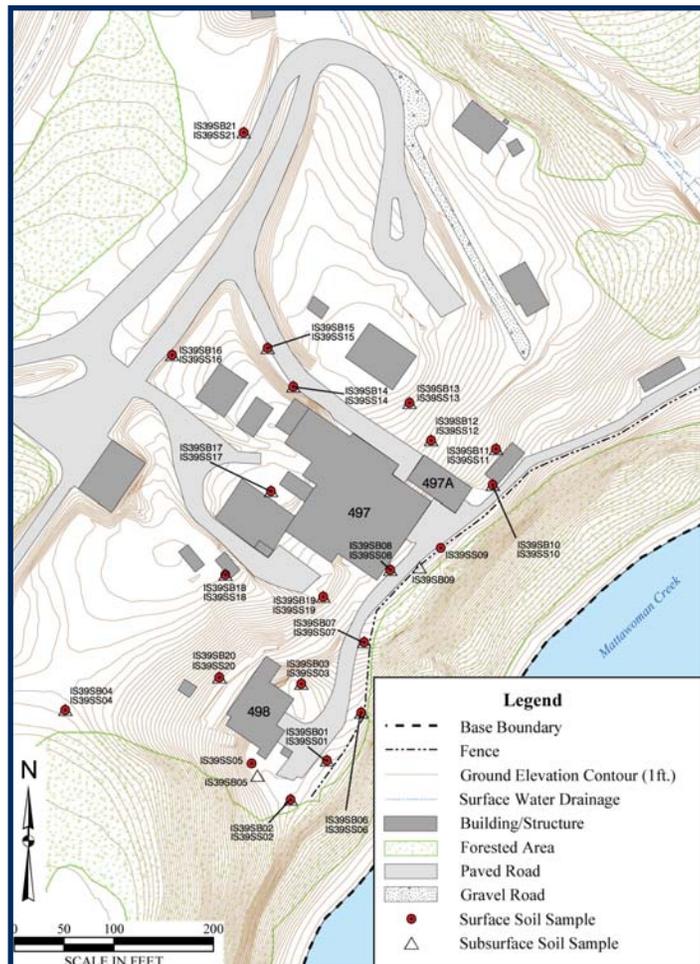


Figure 2 - Site 39 Map

the land slopes steeply up. On the northern part of the site, the land slopes gently downwards from the buildings. The area immediately surrounding the buildings is covered with grass, while the perimeter of the site is forested with mixed oak and pine. Paved roads provide access from along the edge of Mattawoman Creek and from the northwestern side of the site. Shallow stormwater runoff ditches parallel the access road along the northwestern side of the site.

## Investigation History

### Site Inspection (SI)

An SI was performed in 1992 and documented in the 1994 Final SI Report, Phase II (Ensafe/Allen & Hoshall, 1994). During this investigation, two sediment samples from the outfall of a discharge pipe from Building 497 to Mattawoman Creek and four sediment samples from Mattawoman Creek were collected. No soil samples were collected. Based on the results, it was recommended that additional samples be collected from the sediment and the soil. Subsequently, evaluation of the sediment was separated from Site 39 and incorporated into the Mattawoman Creek Study (TtNUS, 2004).

### Remedial Investigation (RI)

The RI included the collection and analysis of 20 surface soil samples and 20 shallow subsurface soil samples from Site 39, and one surface soil sample and one subsurface soil sample from a location near Site 39 believed to be unaffected by the Site 39 contaminant source. All samples were analyzed for semi-volatile organic compounds (SVOCs), metals, and explosives. The upslope samples were collected in order to provide **site-specific background** information. **Basewide background conditions** were evaluated in the 2002 Background Soil Investigation Report (TtNUS, 2002).

Twenty-five SVOCs were detected in the surface soil samples. Several of the SVOCs were polyaromatic hydrocarbons (PAHs). These chemicals tended to be clustered near the Site 39 buildings and access roads. One of the major sources of PAH emissions is automobile and truck exhaust (Agency for Toxic Substances and Disease Registry, 1995). In addition, PAHs are found in asphalt. It is likely that the PAHs resulted from historical use of the access road. Of the 25 SVOCs detected in the surface soil, 18 SVOCs were detected in samples collected during the basewide background study. This observation suggests that some of the SVOCs resulted from human activities not associated with the stack emissions.

Only seven SVOCs were detected in the shallow subsurface soil. In general, the SVOCs were detected in only a few samples and at low concentrations. These data indicate that minimal downward migration of the SVOCs has occurred.

Of the 23 metals detected in the surface soil, 20 were present at concentrations greater than basewide background conditions. The site-specific background sample contained 10 metals at concentrations greater than basewide background conditions. Based on this observation and the lack of pattern in the distribution of the metals throughout the site, it is likely that the presence of the metals is not due to Site 39 stack emissions. Zinc concentrations above naturally-occurring levels were detected along the access roads, near buildings, and along the fenceline. Based on this distribution and on the site history, it is likely that the zinc resulted from galvanized fencing, degraded exterior building paint, and historical use of the access roads (fragments from the wearing of tires on road surfaces contain zinc). These zinc sources represent consumer products (e.g., paint) used in the ordinary manner. As such, these sources are exempt from regulation under CERCLA (CERCLA specifically excludes consumer products in consumer use from the definition of a "facility" (40 Code of Federal Regulations 300.5)).

The subsurface soil data indicate that some of these metals have leached from the surface soil into the subsurface soil, but that the majority of the metals in the surface soil have not migrated downwards.

Nitrocellulose was detected in seven surface soil samples and seven subsurface soil samples. An EPA Region III **Risk-Based Concentration (RBC)** for nitrocellulose is not available. Based on the toxicity information available, nitrocellulose appears to be relatively non-toxic. In addition, at the detected concentrations the nitrocellulose does not pose an explosion hazard. It was determined that the nitrocellulose detected at Site 39 does not pose a threat to human health. A low concentration of perchlorate was detected in one surface soil sample, and a low concentration of 2-amino-4,6-dinitrotoluene was detected in one shallow subsurface soil sample.

Based on a comparison of the shallow subsurface soil concentrations to the EPA Region III **Soil Screening Levels**, it was determined that the chemicals present in the soil did not pose a threat to the **groundwater** quality. Therefore, it was not necessary to sample the groundwater at Site 39.

## Principal Threats

There are no principal threats in any of the media at Site 39. Principal threats are explained in the box on this page.

## Scope And Role Of The Action

This Proposed Plan addresses the evaluation of the preferred alternative, no further action, for Site 39 only. This Proposed Plan does not include or directly affect any other sites at the facility. The purpose of the Proposed Plan is to summarize activities performed to date to investigate Site 39 and to provide the rationale for the proposed response action of no further action. As described in following sections, no human health or ecological risks requiring further action were identified at this site.

## Summary Of Site Risks

This section summarizes the results of the baseline risk assessment for Site 39. A baseline risk assessment evaluates the potential for chemicals at a site to pose an adverse effect to human and ecological **receptors** if no action is taken to clean up the site. A detailed discussion of the Site 39 risk assessment can be found in the *Final Remedial Investigation Report, Sites 6, 39, and 45, Naval District Washington, Indian Head, Maryland* (HydroGeoLogic, April, 2004).

There is minimal potential for the chemicals at Site 39 to adversely affect people. Based on the ecological risk assessment, zinc was identified as having the potential to adversely affect plant and animal receptors. The presence of zinc at concentrations greater than naturally-occurring conditions, however, is due the historical use of consumer products such as galvanized fencing. These sources are exempt from regulation under CERCLA.

### Human Health Risks

A baseline human health risk assessment was performed to determine the current and future effects of chemicals in the Site 39 soil on human health. The receptors evaluated in the risk assessment included:

- For current uses - adolescent and adult trespassers/visitors, and industrial workers.
- For future uses - adult and child residents, adult and adolescent trespassers/visitors, industrial workers, and construction workers.

## What is a “Principal Threat”?

The National Contingency Plan establishes an expectation that EPA will use treatment to address “principal threats” posed by a site wherever practicable [40 CFR Section 300.430 (a)(1)(iii)(A)]. The “principal threat” concept is applied to the characterization of “source materials” at a **Superfund** site. A source material is material that includes or contains hazardous substances, pollutants, or contaminants that act as a reservoir for migration of contamination to groundwater, surface water, or air or act as a source for direct exposure. Contaminated groundwater generally is not considered to be a source material; however, non-aqueous-phase liquids (NAPLs) in groundwater may be viewed as a source material. Principal threat wastes are those source materials considered to be highly toxic or highly mobile that generally cannot be reliably contained or would present a significant risk to human health or the environment should exposure occur. The decision to treat these wastes is made on a site-specific basis through a detailed analysis of the alternatives using the nine remedy selection criteria. If through this analysis, a treatment remedy is selected, then this selection is reflected in the Record of Decision, which will include a finding that the remedy uses treatment as a principal element.

The Navy evaluated the residential exposure scenario to confirm that no land use restrictions would be necessary at the site. The site is on an industrial facility. It is unlikely that this land use will change in the future.

**Chemicals of potential concern (COPCs)** were identified in the initial screening of site chemicals against values based on the EPA Region III RBCs. The Site 39 COPCs were benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, perchlorate, aluminum, arsenic, chromium, iron, lead, manganese, and thallium for current exposure to soil. The same COPCs plus 2-amino-4,6-dinitrotoluene were identified for future exposure to soil. Because the screening process is conservative, the identification of COPCs does not necessarily mean that a risk exists. As described in the box on human health risk assessment, after COPCs are identified, the potential for risk is quantified. At Site 39, exposure to the soil under both current and future land uses results in cancer risks in the middle to lower end of the EPA target risk range ( $10^{-6}$  to  $10^{-4}$ ). The calculated cancer risks ranged from  $4.5 \times 10^{-7}$  for the adolescent trespasser to  $3 \times 10^{-5}$  for the hypothetical future resident. The **target organ hazard indices (HIs)** calculated for the different receptors demonstrate no potential for a non-cancer health effect. All target organ HIs calculated for the Site 39 human receptors were less than one. For an explanation of the human health risk assessment process, please see the text box on page 5.

## What is Human Health Risk and How is it Calculated?

A human health risk assessment estimates “baseline risk.” This is an estimate of the likelihood of health problems occurring if no cleanup action were taken at a site. The Navy undertakes a four-step process to estimate baseline risk at a site:

### Step 1: Analyze Contamination

### Step 2: Estimate Exposure

### Step 3: Assess Potential Health Dangers

### Step 4: Characterize Site Risk

**In Step 1**, the Navy looks at the concentrations of contaminants found at a site as well as past scientific studies on the effects these contaminants have had on people (or animals, when human studies are unavailable). Comparisons between site-specific concentrations and concentrations reported in past studies help the Navy to determine which contaminants are most likely to pose the greatest threat to human health.

**In Step 2**, the Navy considers the different ways that people might be exposed to the contaminants identified in Step 1, the concentrations that people might be exposed to, and the potential frequency and duration of exposure. Using this information, EPA calculates a “reasonable maximum exposure” (RME) scenario that portrays the highest level of human exposure that reasonably could be expected to occur.

**In Step 3**, the Navy uses the information from Step 2, combined with information on the toxicity of each chemical, to assess potential health risks. The Navy considers two types of risk: cancer risk and non-cancer risk. The likelihood of any kind of cancer resulting from a site is generally expressed as an upper-bound probability, for example, a “1 in 10,000 chance.” In other words, for every 10,000 people that could be exposed, one extra cancer may occur as a result of exposure to site contaminants. An extra cancer case means that one more person could get cancer than would normally be expected to from all other causes. For non-cancer health effects, the Navy calculates a “**hazard index** (HI).” The key concept here is that a “threshold level” (represented as a hazard index of less than or equal to 1) exists below which adverse, non-cancer health effects are no longer predicted.

**In Step 4**, the Navy determines whether site risks are great enough to cause health problems for people at or near the site. The results of the three previous steps are combined, evaluated, and summarized. The Navy adds together the potential risks from the individual contaminants to determine the total risk resulting from the site.

In summary, the risk assessment indicates that no unacceptable health threats (both cancer and non-cancer) are posed to people potentially exposed to the chemicals present at Site 39. Therefore, it is the Navy’s, the EPA’s, and the MDE’s current judgment that no further action is necessary to protect human health from chemicals in the soil at Site 39.

## Ecological Risks

The Navy also conducted an ecological risk assessment (Steps 1-3A)(EPA, 1997) at the site, including an

evaluation of the risks to plants and animals. For an explanation of the ecological risk assessment process, please see the text box below.

Six metals, aluminum, chromium, iron, lead, vanadium, and zinc, were identified as **chemicals of potential ecological concern** (COPECs). The presence of aluminum, chromium, iron, and vanadium was due to natural conditions. The lead concentration exceeded the **ecological soil screening level** at seven sample locations. These locations tended to be near buildings with degraded exterior paint. The source of these elevated lead concentrations, degraded building paint, is a consumer product in ordinary consumer use. Because the lead used in paint is an insoluble form, the lead present at the site

## What is Ecological Risk and How is it Calculated?

An ecological risk assessment evaluates the potential adverse effects that human activities have on the plants and animals that make up ecosystems. The ecological risk assessment process follows a phased approach similar to that of the human health risk assessment. The risk assessment results are used to help determine what measures, if any, are necessary to protect plants and animals.

Ecological risk assessment includes three steps:

### Step 1: Problem Formulation

The problem formulation includes:

- Compiling and reviewing existing information on the site habitat, plants, and animals that are present
- Evaluating how the plants and animals may be exposed
- Identifying and evaluating area(s) where site-related chemicals may be found
- Evaluating potential movement of chemicals in the environment
- Evaluating routes of exposure (for example, ingestion)
- Identifying receptors (plants and animals that could be exposed)
- Identifying exposure media (soil, air, water)
- Developing how the risk will be measured for all complete pathways (determining the risk where plants and/or animals can be exposed to chemicals)

### Step 2: Risk Analysis

The second step of the ecological risk assessment is risk analysis, in which potential exposures to plants and animals are estimated and the concentrations of chemicals at which an effect may occur are evaluated.

### Step 3: Risk Characterization

The third step in the ecological risk assessment is risk characterization, in which all of the information identified in the first two steps are used to estimate the risk to plants and animals. Also included is an evaluation of the uncertainties (potential degree of error) that are associated with the predicted risk evaluation and their effects on the conclusions that have been made.

is likely in a form that is not **bioavailable**. In addition, if the ecological risk assessment was performed with all data except for the maximum detected lead concentration, the average lead concentration would be less than the ecological soil screening level and lead would not be identified as a COPEC. This observation indicates that it is the lead concentration from an isolated location that is resulting in the identification of lead as a COPEC. Based on these lines of evidence, the lead detected at Site 39 is expected to pose minimal risk to ecological receptors.

Eleven PAHs, benzaldehyde, di-n-octylphthalate, perchlorate, bis(2-ethylhexyl)phthalate, and nitrocellulose were identified as COPECs. Based on low detected concentrations and isolated occurrences in only one sample, benzaldehyde, di-n-octylphthalate, and perchlorate are expected to pose minimal risk to ecological receptors. Based on a comparison to a total phthalate screening value obtained from the Dutch Ministry of Housing, Spatial Planning and Environment (MHSPE) (MHSPE, 1994), bis(2-ethylhexyl)phthalate is expected to pose minimal risk to ecological receptors. In addition, based on a comparison of the PAH concentrations to MHSPE screening values and on the observation that the highest PAH concentrations were detected in areas of poor habitat (e.g., adjacent to the asphalt access roads), it is expected that the PAHs pose minimal risk to ecological receptors. Based on a comparison of the nitrocellulose concentrations to the limited available ecological toxicity information, the nitrocellulose is expected to pose minimal risk to ecological receptors.

In summary, the only chemical identified as having potential to adversely affect ecological receptors is zinc. As noted above, the zinc at Site 39 is related to the historical use of consumer products, such as galvanized fencing and paint, at the site. These sources are exempt from regulation under CERCLA.

## Preferred Alternative

The Navy, with the support of EPA and MDE, is proposing no further action as the preferred alternative for Site 39. Based upon the results of investigations conducted at Site 39, the Navy, EPA, and MDE have determined that the site does not pose an unacceptable risk to people, plants, and animals. Therefore, no alternative other than the no further action alternative was evaluated. Under the no further action alternative, no response action will be performed at the site, resulting in no remedy schedule, no capital cost estimation, and no annual operation and maintenance.

The Navy may modify the preferred alternative or select another alternative if public comments or additional data indicate that another alternative will yield a more appropriate result.

## Community Participation

The Navy, EPA, and MDE provide information regarding the cleanup of the NDWIH to the public through public meetings, the **information repository**, which contains the Administrative Record file, and announcements published in the newspaper. The Navy, EPA, and MDE encourage the public to gain a more comprehensive understanding of the site and the CERCLA activities that have been conducted at the site.

The 30-day public comment period is October 19, 2004 through November 17, 2004. The public meeting will be held Thursday, October 21, 2004 at 6:30 pm at the Indian Head Senior Center, 100 Cornwallis Square, Indian Head, Maryland [for information, please contact Ms. Tara Landis at 301-744-4627]. The location of the Administrative Record and Information Repository are provided on Page 1 of this Proposed Plan.

Minutes of the public meeting will be included in the Administrative Record file. All written comments received during the public meeting and comment period will be summarized and responses will be provided in the **Responsiveness Summary** section of the ROD. The ROD is the document that will present the selected remedy and will be included in the Administrative Record file.

Written comments can be submitted via mail, email, or fax and should be sent to the following addressee:

**Ms. Tara Landis - Public Affairs Officer**

Naval District Washington, Indian Head  
101 Strauss Avenue, Building 1601  
Indian Head, MD 20640-5035  
Phone: 301-744-4627  
FAX: 301-744-6743  
Email: LandisTS@ih.navy.mil

For further information, please contact:

**Mr. Shawn Jorgensen**  
**Installation Restoration Project Manager**

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Indian Head, MD 20640-5035  
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## References

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TtNUS, 2002, *Background Soil Investigation Report for Indian Head and Stump Neck Annex, Naval Surface Warfare Center, Indian Head, Maryland*

## Glossary of Terms

**Administrative Record File:** A record that includes all information considered and relied on in selecting a remedy for a site.

**Basewide background conditions:** Concentrations of chemicals or elements that occur in areas of the base unaffected by human activities.

**Bioavailable:** The chemical is in a form that is readily absorbed by the body of the exposed receptor, either human, plant, or animal.

**Chemicals of Potential Concern:** Many chemicals detected at a site are present at concentrations that pose no risk to humans. In order to reduce the number of calculations necessary for the human health risk assessment, the maximum concentration of each detected chemical is compared to a screening value determined to be protective of human health (such as the RBC). Those chemicals with a maximum concentration that exceeds the screening value are identified as chemicals of potential concern, and are evaluated in detail in the quantitative risk assessment.

**Chemicals of Potential Ecological Concern:** Chemicals of potential ecological concern are the ecological equivalent of COPCs. Chemicals of potential ecological concern are initially identified by comparing the maximum detected concentration to a soil screening level and the maximum chemical intake to a no observed adverse effect level.

**Comment period:** A time for the public to review and comment on various documents and actions taken, either by the Navy, EPA, or MDE. A minimum 30-day comment period is held to allow community members to review the Administrative Record file and review and comment on the Proposed Plan.

**Contamination:** The presence of a chemical that is due to prior human activity, such as waste disposal or accidental releases. A metal is not considered to be a contaminant unless the site concentrations exceed what would be expected from the background conditions.

**Ecological Soil Screening Level:** Concentration of a chemical conservatively considered to be protective of ecological receptors not exposed via the food chain.

**Feasibility Study (FS):** A document that identifies the site cleanup criteria, identifies the different approaches that may be used to clean up the site, and evaluates these cleanup approaches.

**Groundwater:** Water beneath the ground surface that fills spaces between materials such as sand, soil, or gravel to the point of saturation. In aquifers, groundwater occurs in quantities sufficient for drinking water, irrigation, and other uses. Groundwater may transport substances that have percolated downward from the ground surface as it flows towards its point of discharge.

**Hazard Index:** A measure of whether exposure to a chemical has the potential to cause a non-cancer, adverse health effect in a human.

**Information Repository:** A file, available to the public, containing information, technical reports, and reference documents regarding an NPL site. This file is usually maintained in a place with easy public access, such as a public library. Interested members of the public should contact the Public Affairs Officer to gain access to the information repository.

**National Oil and Hazardous Substances Pollution Contingency Plan (NCP):** The purpose of the NCP is to provide the organizational structure and procedures for preparing and responding to discharges of oil and releases of hazardous substances, pollutants, or contaminants.

**Proposed Plan:** A public participation requirement of SARA in which the lead agency summarizes the preferred cleanup strategy and rationale for the public. This agency also reviews the alternatives presented in the detailed analysis of the feasibility study. The Proposed Plan may be prepared either as a fact sheet or as a separate document. In either case it must actively solicit public review and comment on all alternatives under consideration.

**Receptor:** An individual, either a human, plant or animal, which may be exposed to a chemical present at the site.

**Remedial Investigation (RI):** An in-depth study designed to gather data needed to determine the nature and extent of contamination at a Superfund site and to evaluate whether the chemicals present at

the site pose a risk to human health and the environment.

**Record of Decision (ROD):** An official public document that explains which cleanup alternative(s) will be used at NPL sites. The ROD is based on information and technical analysis generated during the RI/FS and consideration of public comments and community concerns. The ROD explains the remedy selection process and is issued by the Navy following the public comment period.

**Response Action:** As defined by Section 101(25) of CERCLA, means removal, remedy, or response action, including related enforcement activities.

**Responsiveness Summary:** A summary of significant written public comments received by the lead agency during a comment period and the responses to these comments prepared by the lead agency. Oral comments provided during the public meeting are included in the Responsiveness Summary if the commenter provides his/her comment on the written comment form. The responsiveness summary is an important part of the ROD, highlighting for the decision-maker the community concerns.

**Risk-Based Concentration (RBC):** Chemical concentrations that are conservatively protective of human health.

**SARA:** Superfund Amendments and Reauthorization Act of 1986. Legislation that reauthorized CERCLA, strengthened EPA's mandate to focus on permanent solutions and to involve the public in the decision-making process, and strengthened EPA's enforcement authority.

**Site-Specific Background:** In order to provide additional information, samples are collected from areas adjacent to a site but thought to be unaffected by the previous use of the site. The purpose of collecting these samples is to identify whether the site was affected by human activities not related to the prior site use.

**Soil Screening Level:** Concentration of a chemical in soil that is conservatively considered to be protective of the quality of the underlying groundwater.

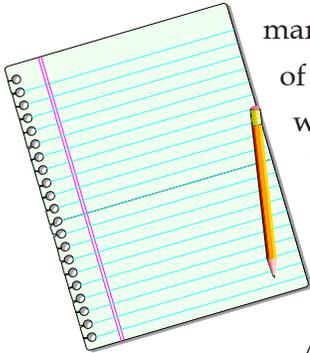
**Target Organ Hazard Index (HI):** A measure of the potential for the chemicals present at the site to cumulatively cause an adverse effect to a particular organ, such as the liver or the kidneys.



**Mark Your Calendar for the Public Comment Period**

**Public Comment Period**  
**October 19 - November 17, 2004**

**Submit Written Comments**



Written comments must be post-marked no later than the last day of the public comment period, which is November 17, 2004.

Based on the public comments or on any new information obtained, the Navy may modify the Preferred

Alternative. The insert page

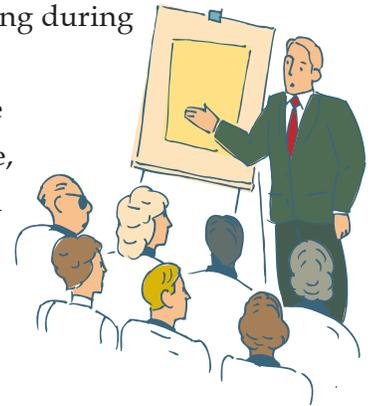
of this Proposed Plan may be used to

provide comments, although use of the form is not required. If the form is used to submit comments, please fold page, seal, add postage where indicated, and mail to addressee as provided.

**Attend the Public Meeting**  
**October 21, 2004 at 6:30 p.m.**

Indian Head Senior Center  
100 Cornwallis Square  
Indian Head, MD 20640

The public comment period will include a public meeting during which the Navy, EPA, and MDE will provide an overview of the site, previous investigation findings, remedial alternatives evaluated and the Preferred Alternative; answer questions; and accept public comments on the Proposed Plan.



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Naval District Washington, Indian Head  
101 Strauss Avenue, Building 1601  
Indian Head, MD 20640-5035