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NAS WHITING FIELD
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PROPOSED PLAN FOR OPERABLE UNIT 9 (OU 9) SITE 10 NAS WHITING FIELD FL
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PROPOSED PLAN

OU 9 - Site 10, Southeast Open Disposal Area A

In accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) Section 300.430(f) and Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this document summarizes the Navy's Preferred Alternative for OU 9 - Site 10 (Southeast Open Disposal Area A) at NAS Whiting Field.

The Department of Defense and the Navy have completed the investigation of surface and subsurface soil at Naval Air Station Whiting Field Operable Unit 9 - Site 10, Southeast Open Disposal Area A. The site history and current conditions indicate a response action is necessary, and future land use will be restricted to non-residential activities by Land Use Controls.

Introduction

In accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) Section 300.430(f) and Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this Proposed Plan identifies the Preferred Alternative to address contaminated surface and subsurface soils at Operable Unit (OU) 9 - Site 10, Southeast Open Disposal Area A, at Naval Air Station (NAS) Whiting Field (Figure 1).

Cleanup of contaminated groundwater at Site 10 is being addressed separately as part of the NAS Whiting Field base-wide groundwater investigation (Site 40).

This Proposed Plan was developed by the Navy, the lead agency, with approval from the United States Environmental Protection Agency (USEPA), a support agency, and concurrence from Florida Department of Environmental Protection (FDEP), a support agency. The Navy will implement the Preferred Alternative for Site 10 after considering and addressing significant comments from the public.

published as a permanent part of the Administrative Record for NAS Whiting Field.

This Proposed Plan summarizes information found in greater detail in the Remedial Investigation (RI) Report, Sites 9 and 10; the Feasibility Study (FS) for Surface and Subsurface Soil, Sites 9 and 10; the Feasibility Study Addendum (FSA) for Surface and Subsurface Soil, OU 9 - Site 10, Southeast Open Disposal Area A; and other site documents. These materials are available for review at the NAS Whiting Field Information Repository, West Florida Regional Library, Milton Branch, 805 Alabama Street, Milton, Florida, 32570; (850) 623-5565.

The public is invited to participate in the remedy selection process by reviewing and commenting on all the alternatives in this Proposed Plan. New information or comments received by the Navy during the public comment period could result in the selection of a remedial action that differs from the Preferred Alternative.



Comments

The Navy will be accepting written comments (see insert) from 1 August through 30 August 2007. The comment period includes an opportunity to request a public meeting at which the Navy would present more detailed site information. A meeting will be held if there is a request from members of the public before the end of the comment period. All comments will be considered before a final decision about site cleanup is reached.

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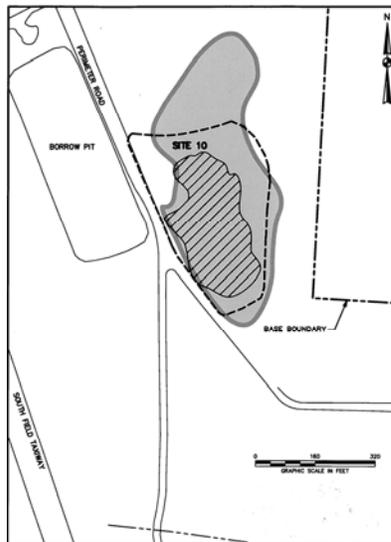


Figure 1 - Site 10 Location Map

The NAS Whiting Field Restoration Advisory Board (RAB) has provided input into the development of the Preferred Alternative.

The final response action will be selected to ensure protection of human health and the environment and will be detailed in a Record of Decision (ROD) document for the site. This Proposed Plan and the ROD will be

Site Background

Location: Site 10, Southeast Open Disposal Area A, is located along the eastern boundary of NAS Whiting Field near the South Air Field and is approximately 4 acres in size. The approximate location of the disposal area is shown on Figure 1.

Operational and Waste Disposal History: From 1965 to 1973, this site was used for the disposal of inert wastes such as construction debris, trees, brush, metal cans, and similar materials not suitable for sanitary landfill disposal. Transformer oil and empty pesticide/herbicide containers were also reportedly disposed at the site. Historically, access to the site was uncontrolled, and other potentially hazardous wastes also may have been disposed at the site. These activities have resulted in the presence of contaminated surface [0 to 1 foot (ft)] and subsurface (below 1 ft) soil at the site.

The precise locations of the disposal areas at Site 10 are unknown; however, the approximate locations of the disposal areas were determined based on a geophysical survey conducted during the RI Phase IIA field investigation.

Investigation Activities

The RI at Site 10 was conducted in phases from 1995 through 1996. Fieldwork included a range of environmental studies to collect the data needed to determine the presence, nature, and extent of contamination. The field activities included the following:

Soil Gas Survey: Conducted to determine the need for surface and subsurface soil sampling. Soil gas samples

were collected from 0 to 1.5 ft below land surface (bls) and various depths below 2 ft bls.

Soil Sampling: Conducted to determine surface and subsurface soil characteristics and contaminant concentrations by laboratory chemical analysis.

Interim Remedial Action: In 1999, a soil cover consisting of a 24-inch permeable soil layer and native grass cover was placed over the surface of the site. Clean fill material was used to construct the soil cover.

The RI Report provided an understanding of soil conditions at Site 10. Groundwater conditions at Site 10 will be investigated and evaluated separately in the basewide groundwater investigation (Site 40). After the RI Report was completed in 1999, an FS was conducted to identify the best approach to address the soil contamination at the site.

Since this time, the following site conditions changed:

- Arsenic, originally identified in the FS as a constituent of concern (COC), was determined to be naturally occurring at Site 10. Aluminum, iron, and vanadium were also determined to be naturally occurring at NAS Whiting Field.
- The USEPA changed its screening criteria for evaluation of hazardous waste-related sites.

Based on updated site conditions, an FSA was prepared in 2007.

Site Characteristics

Current Conditions: At this time, Site 10 consists of vacant, unused land approximately 4 acres in size (Figure 1). There are currently no buildings at the site, and no permanent surface water bodies exist.

The current findings of environmental conditions at the site are summarized below.

General Site Conditions: Surface and subsurface soil at Site 10 consists of sand and silt with thin layers of clay. The site topography is generally flat.

Soil Conditions: The following constituents detected in surface soils at Site 10 at maximum concentrations exceeding target levels were retained as constituents of potential concern (COPCs) for surface soil at Site 10:

- Semivolatile Organic Compounds (SVOCs) - bis(2-ethylhexyl) phthalate and carcinogenic polynuclear aromatic hydrocarbons (cPAHs)
- Pesticides - dieldrin
- Polychlorinated biphenyls (PCBs) - Aroclor-1254 and Aroclor-1260
- Inorganics - barium and chromium
- TRPH

Concentration of cPAHs exceeded FDEP Soil Cleanup Target Levels (SCTLs). The maximum concentration of barium exceeded the SCTL. The TRPH and barium concentrations exceeding the relevant SCTLs were reported for samples also demonstrating cPAH concentrations exceeding the SCTL.

The following constituents were detected in subsurface soils (greater than 1 ft below the existing soil cover) at Site 10 at maximum concentrations exceeding direct contact, target levels, and were retained as COPCs for subsurface soil at Site 10:

- Pesticides - aldrin and dieldrin
- Inorganics - antimony and chromium

Maximum concentrations of aldrin, dieldrin, antimony, and chromium exceeded their respective SCTLs.

Based on the FSA, the estimated area and volume of contaminated soil requiring remedial action at Site 10 is approximately 173,991 square ft and 25,776 cubic yards, respectively.

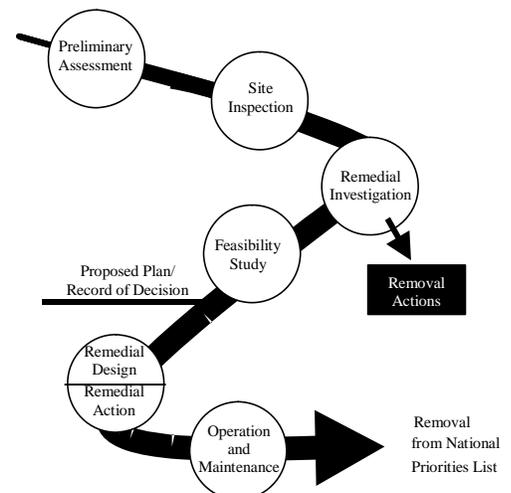
Scope and Role of OU 9–Site 10

Regulatory Framework

NAS Whiting Field was placed on the USEPA National Priorities List (NPL) for environmental study and cleanup in June 1994 based upon evidence of past historical releases into the environment of CERCLA hazardous substances.

Environmental work at OU 9 - Site 10 is part of the Navy's ongoing Installation Restoration Program that includes 27 OUs at NAS Whiting Field. This is a Department of Defense program to investigate and, if necessary, clean up conditions related to suspected past releases of hazardous substances at military facilities.

Environmental investigation and cleanup work at the facility is being conducted in accordance with the requirements of CERCLA; the Department of Defense Environmental Restoration Program (DERP); Executive Order 12580; U.S. EPA issued CERCLA guidances including, where practicable, the NCP; as well as other federal and State environmental and facility siting laws, regulations, guidance, and policies to the extent required by CERCLA. The CERCLA process is typically completed in the following stages:



Summary of Site Risks

The data collected during the RI at Site 10 were used in preparing two risk assessments, the human health risk assessment (HHRA) and the ecological risk assessment (ERA), to determine if soil contamination at the site results in risks to human health or the environment.

In surface soil, the maximum concentration of cPAHs exceeded risk-based USEPA Region IX Preliminary Remediation Goals (PRGs). The maximum concentration of barium was less than the PRG. TRPH also exceeded the PRG. In subsurface soil (greater than 1 ft below the existing soil cover), maximum concentrations of aldrin, dieldrin, antimony, and chromium exceeded the PRGs.

Following all risk assessment calculations, several COCs were identified in surface soil at concentrations greater than FDEP and USEPA target levels for protection of human health and the environment under a residential land use scenario. Constituents identified as COCs in surface soil include cPAHs, barium, and TRPH. No COCs were identified in subsurface soil at Site 10.

Current and Future Land Uses: The current and future anticipated land use at Site 10 is non-residential/recreational.

Human Health Risks: The HHRA evaluated the risk associated with cancer-causing (carcinogenic) constituents as well as those constituents associated with non-cancer adverse health effects via potential exposure pathways (ingestion, inhalation, or dermal contact) at Site 10. Based on the findings of the HHRA, unacceptable carcinogenic risk was identified for four of the five receptors evaluated (hypothetical future residents, typical industrial workers, construction workers, and recreational users) exposed to surface soil. The primary risk drivers for surface soil were cPAHs. None of the risk estimates exceeded the USEPA cancer risk range of 1×10^{-4} to 1×10^{-6} .

For non-cancer-causing constituents, the measure of the likelihood of adverse effects occurring in humans is called the Hazard Index (HI). An HI greater than 1.0 suggests adverse effects are possible. At Site 10, non-cancer risk estimates (i.e., the HIs) did not exceed 1.0 for any of the receptors evaluated. Consequently, adverse non-carcinogenic health effects are not anticipated for exposure to surface and subsurface soil at Site 10 under a residential land use scenario.

Ecological Risks: The quantity of the terrestrial habitat at Site 10 is limited. In the early 1990s, Site 10 consisted of overgrown shrubs and planted pine trees, approximately 25 to 40 ft in height. Construction debris was present on the ground surface at the site. The site is currently comprised of vacant, unused land with some shrubs and trees. No ecological risks were identified in surface or subsurface soil at Site 10.

Conclusion: Based on USEPA baseline risk assessment guidance, remedial action is not generally warranted at sites where cumulative risk does not exceed the 1×10^{-4} to 1×10^{-6} risk range. However, the guidance also stipulates that risk less than 1×10^{-4} may still be considered unacceptable for site-specific reasons. At Site 10, the suspected presence of buried wastes and debris create the significant possibility that an unacceptable risk will occur if these materials are exposed during soil excavation. These site uncertainties warrant

implementation of a remedy that precludes potential future exposure to such materials.

Considering these factors, it is in the lead agency's (Navy) current judgment that the Preferred Alternative (LUCs) identified in this Proposed Plan is warranted and necessary to protect public health, welfare, or the environment from past or potential releases of hazardous substances at this site.

Implementing LUCs prohibiting residential land use and disturbance of the soil at this site will allow the Navy to properly and effectively manage future land use at the site and minimize threats to human health or the environment.

Remedial Action Objectives

The FSA identified the following Remedial Action Objectives (RAOs) to describe what cleanup is expected to accomplish at Site 10.

RAO 1: To preclude unacceptable human health carcinogenic risks associated with incidental ingestion, inhalation, or dermal contact with surface soil contaminated with cPAHs.

RAO 2: To preclude unacceptable human health non-carcinogenic risks associated with incidental ingestion, inhalation, or dermal contact with surface soil contaminated with barium and TRPH.

Cleanup goals (CGs) are determined based on Applicable or Relevant and Appropriate Requirements (ARARs) and TBC criteria, COCs, and exposure pathways. The CGs for Site 10 soils were formulated based on the following criteria: FDEP SCTLs for residential exposure (FDEP, 2005), and USEPA Region IX PRGs (USEPA, 2002). The CGs are listed below.

- cPAHs – 0.062 mg/kg (USEPA Region IX)
- Barium – 120 mg/kg (FDEP SCTL)
- TRPH – 460 mg/kg (FDEP SCTL)

Summary of Remedial Alternatives

The remedial action alternatives evaluated for soil contamination at Site 10 include no further action (NFA), land use controls (LUCs) as a limited action alternative, and soil removal and offsite disposal as a treatment and removal alternative. The Preferred Alternative is Alternative S10-2: LUCs.

The remedial alternatives evaluated for possible selection were as follows:

Alternative S10-1: No Further Action

The NCP requires that a no-action alternative be considered as part of the evaluation of alternatives.

In an FS, the no-action or NFA alternative is typically considered to serve as a baseline consideration or to address sites not requiring any active remediation.

Under the NFA alternative, no additional remedial activities would be undertaken at the site. Because no active treatment, LUCs or site monitoring measures would be employed to preclude unacceptable human health risks from future exposure to surface soil contamination exceeding FDEP's residential and industrial SCTLs, this alternative would not meet the RAO for Site 10.

There is no capital or operational and maintenance (O&M) costs for the NFA alternative.

Alternative S10-2: Land Use Controls

Alternative S10-2 addresses threats through the implementation of LUCs for surface soil. Engineering Controls (ECs) currently in place at Site 10 include a 24-inch soil cover over the entire site which provides a barrier minimizing direct exposure to contaminated soil.

This alternative would consist of the Navy implementing LUCs in the form of both engineering controls (ECs) and institutional controls (ICs) at the site.

This component would adopt the IRA conducted in 1999 by retaining the 24-inch soil cover placed over the entire site as an EC and ensuring that it remains in place and is properly maintained. Warning signs would also be posted along the boundaries of the Site.

The location, size, and wording to be used on those signs would be agreed upon by the Navy, USEPA, and FDEP prior to their posting.

ICs in the form of a non-residential use prohibition and restrictions on activities which would disturb the site's soil cover or posted signage without prior regulatory notice and concurrence would also be implemented to ensure appropriate future land use. Prohibited uses of the site include, but are not limited to, residential housing, elementary and secondary schools, child care facilities, playgrounds, and adult convalescent or nursing home facilities.

The estimated cost of the initial implementation of the LUC alternative is \$24,608. The long-term (O&M) cost including the cost for 5-year reviews, as a 30-year total Net Present Worth (NPW) cost is \$102,893 to within +/- 30%.

Alternative S10-3: Surface Soil Removal

Alternative S10-3 minimizes the need for long-term management because all surface soils exceeding PRGs and the existing soil cover would be removed. Excavation would be used to remove all impacted soil exceeding PRGs. The excavation would consist of removing soil from the surface (below the soil cover) down to approximately 2 ft bls. After all impacted soil within the excavation area exceeding PRGs is removed, the excavated areas would be backfilled with clean, native material, compacted, and revegetated, with no long-term monitoring or maintenance required. Excavated soil would be disposed in an approved off-base Treatment, Storage, and Disposal Facility (TSDF) and/or landfill.

Following implementation of the soil removal alternative, LUCs would not be required and there would be no residential use or activity restrictions at the site.

The estimated cost for the implementation of the soil removal alternative as a 30-year total NPW cost is \$2,349,313 +/- 30%. There would be no O&M costs for this alternative.

Evaluation of Alternatives

Nine criteria were used to evaluate the remediation alternatives individually and against each other and provide rationale for the selection of the Preferred Alternative.

For Site 10, the relative performance of each alternative against the nine criteria has been evaluated and is summarized below.

The evaluation criteria fall into three groups (Threshold, Primary Balancing, and Modifying) as shown below.

Threshold Criteria:

Overall Protection of Human Health and the Environment – Determines whether an alternative eliminates, reduces, or controls threats to public health and the environment through institutional controls, engineering controls, or treatment.

Alternative S10-1 would not be protective of human health and the environment because contaminants would remain in soil at concentrations excess of its PRGs and SCTLs.

Alternative S10-2 would allow contaminant concentrations to remain in soil and to possibly continue to migrate from contaminated areas, but it would provide protection by restricting access to the site through site restrictions and warning signs. Alternative 2 would not be protective to all ecological receptors.

Alternative S10-3 would be more protective than Alternative 2 because it would eliminate the potential for exposure to contaminants. The soil removal would eliminate the possibility of direct contact with or potential migration of contaminated soil.

Compliance with ARARs – Evaluates whether the alternative meets federal and state environmental statutes, regulations, and other requirements that pertain to the site, or whether a waiver is justified.

Chemical-Specific: Alternatives S10-1 and S10-2 would not comply with chemical-specific ARARs because unacceptable levels of contaminants would remain in soil. Alternative S10-3 would comply with chemical-specific ARARs.

Action-Specific: Alternative S10-1 was not evaluated for action-specific requirements because no action is recommended for that alternative. Alternatives S10-2 and S10-3 will comply with action-specific requirements.

Location-Specific: There are no location-specific ARARs identified for Site 10.

Primary Balancing Criteria:

Long-Term Effectiveness and Permanence – Considers the ability of an alternative to maintain protection of human health and the environment over time.

Alternative S10-1 would not have long-term effectiveness or permanence.

Alternative S10-2 would provide some long-term effectiveness and permanence because LUCs would reduce exposure to contaminated soil.

Alternative S10-3 would be more effective and permanent than Alternative 2. The soil removal would be more effective and permanent than LUCs in preventing direct contact with contaminants and the migration of contaminants because the contaminants would be removed from the site.

Reduction of Toxicity, Mobility, or Volume of Contaminants through Treatment – Evaluates an alternative’s use of treatment to reduce harmful effects of principal contaminants, their ability to move in the environment, and the amount of contamination present.

Alternatives S10-1 and S10-2 would not achieve any reduction of toxicity, mobility, or volume of contaminated soil because there is no treatment.

Alternative S10-3 would achieve maximum reduction of toxicity, volume, and mobility of contaminants because the contaminated soil would be removed.

Short-Term Effectiveness – Considers the length of time needed to implement an alternative and the risks the alternative poses to workers, residents, and the environment during implementation.

Alternative S10-1 would not provide any short term effectiveness or risks because there is no action.

Alternative S10-2 would result in a slight possibility of exposing site workers to contamination during long-term monitoring activities (site inspections). However, the risk of exposure would be effectively controlled through compliance with proper site-specific health and safety procedures. Alternative 2 would not adversely impact the surrounding community or environment.

Alternative S10-3 would result in the possibility of exposing construction workers to contamination during remedial activities. However, the risk of exposure would be effectively controlled by the implementation of engineering controls (e.g., dust suppression) and compliance with applicable OSHA regulations and proper site-specific health and safety procedures.

Implementability – Considers the technical and administrative feasibility of implementing the alternative, including factors such as the relative availability of goods and services.

Alternative S10-1 was not evaluated under this criteria because there is no action to implement.

Alternative S10-2 would be very simple because it would only require implementation of LUCs.

Alternative S11-3 would be somewhat more difficult than that of Alternative 2. This alternative would require the soil excavation, removal, and off site disposal. However, these activities would be technically implementable.

Cost – Includes estimated capital and annual O&M costs, as well as NPW cost. NPW cost is the total cost of an alternative over time in terms of today’s dollar value. Cost estimates are expected to be accurate within a range of +50 percent to -30 percent.

The table below provides a breakdown of the NPW worth costs for the three alternatives at Site 10:

Alternative	Capital	Total
S10-1	\$0	\$0
S10-2	\$24,608	\$102,893
S10-3	\$2,349,313	\$2,349,313

Modifying Criteria:

State/Support Agency Acceptance – Considers whether the state agrees with the Navy’s analyses and recommendations, as described in the **RI** and **FS** and this Proposed Plan.

The FDEP concurs with the Preferred Alternative (LUCs) at Site 10.

Community Acceptance – Following the public comment period, this criterion considers whether the local community agrees with the Navy’s analyses and Preferred Alternative. Comments received on the Proposed Plan are an important indicator of community acceptance.

This criteria will be evaluated following completion of the public comment period. Modifications will be made if necessary.

Preferred Alternative

The following alternative has been selected as the “Preferred Alternative” for surface soil at Site 10.

The USEPA and FDEP concur with the recommended alternative. However, the Navy, in consultation with the USEPA and FDEP, will not select a final alternative until public comments have been considered.

Soil Alternative S10-2: LUCs - The Preferred Alternative for Site 10 is LUCs for surface soils. LUCs will be implemented at the site restricting future use of the site to non-residential activities and prohibit soil removal from the site.

This alternative consists of the Navy implementing LUCs in the form of both ECs and ICs at the site. ECs currently in place at Site 10 include a 24-inch soil cover

placed over the entire site which will remain in place and be properly maintained. Warning signs would also be posted along the boundaries of the Site. The location, size and wording to be used on those signs would be agreed upon by the Navy, USEPA, and FDEP prior to their posting.

ICs in the form of a non-residential use prohibition and restrictions on activities which would disturb the Site's soil cover or posted signage without prior regulatory notice and concurrence would also be implemented to ensure appropriate future land use. Prohibited uses of the site include, but are not limited to, residential housing, elementary and secondary schools, child care facilities, playgrounds, and adult convalescent or nursing home facilities.

Because this remedy will result in hazardous substances, pollutants, or contaminants remaining on site at levels greater than residential SCTLs, a statutory review will be conducted every 5 years after initiation of the remedy to ensure the remedy continues to be protective of human health and the environment.

Based on the information currently available, the Navy believes the Preferred Alternative will satisfy the following statutory requirements of CERCLA Section 121(b): (1) adequately protect human health and the environment; (2) comply with all federal and state requirements (including ARARs); (3) be cost effective; and (4) meet the RAOs.

Alternative by reviewing associated documents, offering suggestions, and expressing their concerns about the proposed remedial actions. The RAB meets regularly at convenient times and locations to discuss Installation Restoration Program status and provide community input into the cleanup process. RAB meetings are open to the public and are advertised in local news media.



Technical Presentation at a RAB meeting

A community mailing list is also maintained to distribute updates about the environmental program directly to interested members of the community.

If you need additional information, would like to comment on the Preferred Alternative, or would like to request a public meeting, please fill out the attached public comment form and mail to the address below or contact:



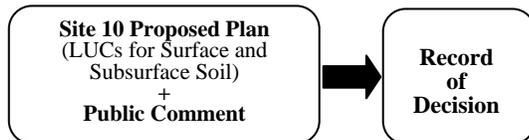
Comments

For your convenience, a public comment form is included with this Proposed Plan. Written comments and requests for more information or a public meeting must be (postmarked by 30 August 2007).

Community Participation

Community acceptance of the Preferred Alternative is the next step. After the Proposed Plan is approved, the ROD will be signed by the Navy and USEPA with concurrence by FDEP. This document will establish the LUCs for surface and subsurface soil at Site 10. No other soil cleanup measures at Site 10 will be proposed after approval of the selected remedial alternative.

The Navy has established an active outreach program to ensure community involvement in environmental activities at Site 10 and throughout NAS Whiting Field. The Navy will be accepting written comments on the proposed Site 10 remedial action from 1 August to 30 August 2007. Public participation in the selection is encouraged. Comments can be submitted using the enclosed form. Comments will be summarized and responses provided in the Responsiveness Summary section of the ROD.



The comment period includes an opportunity to request a public meeting at which the Navy would present the RI and FS Reports, the Proposed Plan, answer questions, and receive comments in writing from the public. A public meeting will be held if one is requested by members of the public before the end of the comment period.

The NAS Whiting Field RAB is another method used by the Navy to promote public involvement in the base environmental cleanup program. For example, the RAB has been invited to participate in developing the Preferred



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Glossary of Terms

Administrative Record: The complete body of documents pertaining to the investigation and restoration of an environmental site. The body of documents is kept at a location where it can be accessed by the public.

Applicable or Relevant and Appropriate Requirements (ARARs): The federal, state, and local environmental rules, regulations, and criteria that must be met by the selected cleanup action under CERCLA.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A Federal law enacted in 1980 and amended by the Superfund Amendments and Reauthorization Act (SARA) in 1986. CERCLA, administered by the USEPA and commonly known as Superfund, outlines a process to evaluate hazardous waste conditions that may pose a threat to human health or the environment.

Constituents of concern (COCs): Chemical constituents detected at levels and/or in a location where it could have an adverse effect on human health and the environment.

Constituents of potential concern (COPCs): Chemicals or constituents detected at levels and/or location that was determined during the RI to possibly have the potential for adverse effects on human health and the environment.

Feasibility Study (FS): An engineering report identifying and evaluating the most appropriate approaches for addressing contamination at a site.

Hazard Index (HI): The measure of the likelihood of adverse effects occurring to humans from non-cancer-causing chemicals.

Human health risk assessment (HHRA): An evaluation of future potential for adverse human health effects from exposure to site contaminants.

Information Repository: A public file containing technical reports, reference documents, and other materials relevant to the site cleanup.

National Priorities List (NPL): The USEPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term cleanup under Superfund.

Polychlorinated biphenyl (PCBs): PCBs are a group of organic chemicals that can cause a number of different harmful effects. There are no known natural sources of PCBs in the environment. PCBs are either oily liquids or solids and colorless to light yellow. Because they do not burn easily and are good insulating materials, PCBs are used widely as coolants and lubricants in transformers, capacitors, and other electrical equipment.

Polynuclear aromatic hydrocarbons (PAHs): High molecular weight, moderately toxic chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco. PAHs are also found in coal tar, crude oil, creosote, and roofing tar.

Proposed Plan: A public participation document detailing the proposed response action at a site.

Preliminary Remediation Goals (PRGs): PRGs establish acceptable exposure levels protective of human health and the environment, based on regulatory requirements, USEPA acceptable risk levels, and assumptions regarding ultimate land uses.

Public Comment Period: A legally required opportunity for the community to provide written and oral comments on a proposed environmental action.

Record of Decision (ROD): A public document explaining selected cleanup alternatives at a site; it is based on information and technical analysis, and on consideration of public comments and concerns. The ROD is issued and signed by the Navy and the USEPA at the completion of a Remedial Investigation and Feasibility Study and after community acceptance of the Proposed Plan.

Remedial Action Objective (RAO): A cleanup objective agreed upon by the Navy and U.S. EPA, in consultation with FDEP. One or more RAOs are typically formulated for each environmental site.

Remedial Investigation (RI): An in-depth study to determine the nature and extent of contamination.

Response action: A federally authorized action to respond to environmental contamination. There are two types: removal action taken over the short-term to respond quickly to a more immediate threat, and remedial action involving long-term activities for a more permanent cleanup solution.

Responsiveness Summary: A section of the ROD summarizing the public comments received during the Proposed Plan public comment period and the responses to those comments.

Restoration Advisory Board (RAB): An advisory group composed of regulatory agency representatives, site personnel, and community volunteers who provide input and promote public involvement in cleanup activities.

Soil Cleanup Target Levels (SCTLs): Target concentration levels established by FDEP (Chapter 62-770, F.A.C.) and determined to be protective of human health and the environment.

To Be Considered (TBC): TBC guidance criteria are federal and State non-promulgated advisories that are not legally binding and do not have the status of ARARs. However, if there are no specific ARARs for a chemical or site condition, or if ARARs are not deemed sufficiently protective, then advisory criteria should be used to ensure the protection of human health and the environment.

Total recoverable petroleum hydrocarbons (TRPH): A measurement of petroleum contamination in soil and groundwater as defined by the State of Florida environmental regulations. This method measures the amount of petroleum compounds that have 8 to 40 atoms.

Treatment Storage or Disposal Facility (TSDF): A facility permitted by the EPA to safely manage a hazardous waste.