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NAS WHITING FIELD
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FINAL PROPOSED PLAN AT SITE 2, NORTHWEST OPEN DISPOSAL AREA WITH
TRANSMITTAL LETTER NAS WHITING FIELD FL
5/18/1999
HARDING LAWSON ASSOCIATES

Harding Lawson Associates

2534-2018

May 18, 1999

Mr. Craig Benedikt, Remedial Project Manager
Federal Facilities Branch
USEPA Region IV
61 Forsyth Street
Atlanta, Georgia 30303

**Subject: Final Proposed Plan
Site 2, Northwest Open Disposal Area
Naval Air Station Whiting Field, Milton, Florida
Contract No. N62467-89D-0317/116**

Dear Craig:

On behalf of Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOCOM), Harding Lawson Associates ES, Inc. is pleased to forward three copies of the subject document. Copies of the Site 2 Proposed Plan have also been forwarded to the Naval Air Station Whiting Field partnering team.

Comments or questions you may have concerning this proposed plan should be directed to Ms. Linda Martin at (843) 820-5574 or myself at (850) 656-1293.

Sincerely,

HARDING LAWSON ASSOCIATES

Rao Angara
Rao Angara
Principal Project Manager

enclosure

cc: Ms. L. Martin, SDIV (1 copy)
Ms. A. Twitty, CH2M Hill (1 copy)
Mr. J. Cason, FDEP (1 copy)
Mr. T. Conrad, BEI (1 copy)
Mr. T. Hansen, TtNUS (1 copy)
Mr. G. Walker, TtNUS (1 copy)
Mr. P. Ottinger, TtNUS (1 copy)
Mr. J. Holland, NASWF (1 copy)
Mr. E. Blomberg, HLA (1 copy)
File



In accordance with Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this document summarizes the Navy's proposal for land-use controls at Site 2 (the Open Northwest Disposal Area) at Naval Air Station (NAS) Whiting Field.



Comments

The Navy is seeking public comments on the alternatives presented in the Proposed Plan. Comments must be received by May 10, 1999, and submitted in writing (see insert) or at a public information session on:

April 13, 1999
6:00 p.m.
Pensacola
Junior College
Bldg. No. 4900
Room 4902
Milton Campus
5988 Highway 90

All comments will be considered before a final decision is reached.

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PROPOSED PLAN

Site 2: Open Northwest Disposal Area

The Department of Defense and the Navy have completed the investigation of Site 2, Northwest Disposal Area at Naval Air Station (NAS) Whiting Field. The site history and current condition indicate a need to place certain limitations on the site affecting its future use.

April 1999

The Proposal

Based on an evaluation of findings from detailed environmental studies, land-use controls for soil are proposed for Site 2. The land-use controls would restrict use of the site to activities involving less than full-time human contact with surface and subsurface soil at the site, such as commercial/ industrial or limited agricultural or recreational use. Residential use of the site would be prohibited, and the Navy would perform quarterly and annual site inspections and ensure the land-use controls are being properly maintained and administered. Groundwater at Site 2 is being investigated as part of the basewide groundwater study at NAS Whiting Field. There is no surface water or sediment at Site 2. This proposal was developed by the Navy with concurrence from the U.S. Environmental Protection Agency (USEPA) and the Florida Department of Environmental Protection (FDEP). The NAS Whiting Field Restoration Advisory Board (RAB) has participated in preparing this proposed plan.

The Navy, USEPA, and FDEP will select a final response action for soil contamination at Site 2 after the public comment period has ended and all written comments received have been evaluated. The final response action will be selected to ensure adequate present and future protection of human health and the environment and will be detailed in the Record of Decision document for the site. That document will be published as a permanent part of the public record for NAS Whiting Field.

This Proposed Plan summarizes information that can be found in greater detail in the Site 2 Remedial Investigation and Feasibility Study reports 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, (850) 623-5565.

Site History

Location: Site 2 is a 12-acre parcel located along the northwestern boundary of NAS Whiting Field, near the North Air Field (Figure 1).

Operational and Waste Disposal History: The site was used as a borrow pit where soil was removed for use as fill elsewhere on the facility. Consequently, the site is now a surface depression, about 20 feet below the surrounding land surface at its lowest point. From 1976 to 1984 the site was used for disposal of construction and demolition debris, tires, furniture, and crushed paint cans. There are no indications of landfilling at the site, such as visible buried wastes or areas of stained soil and stressed vegetation.

Current Conditions: No longer in active use, the site is now a pit covered with dry scrub brush and weeds, and is surrounded by pine trees approximately 25 to 40 feet in height. Site access is controlled by a gate from nearby Perimeter Road.

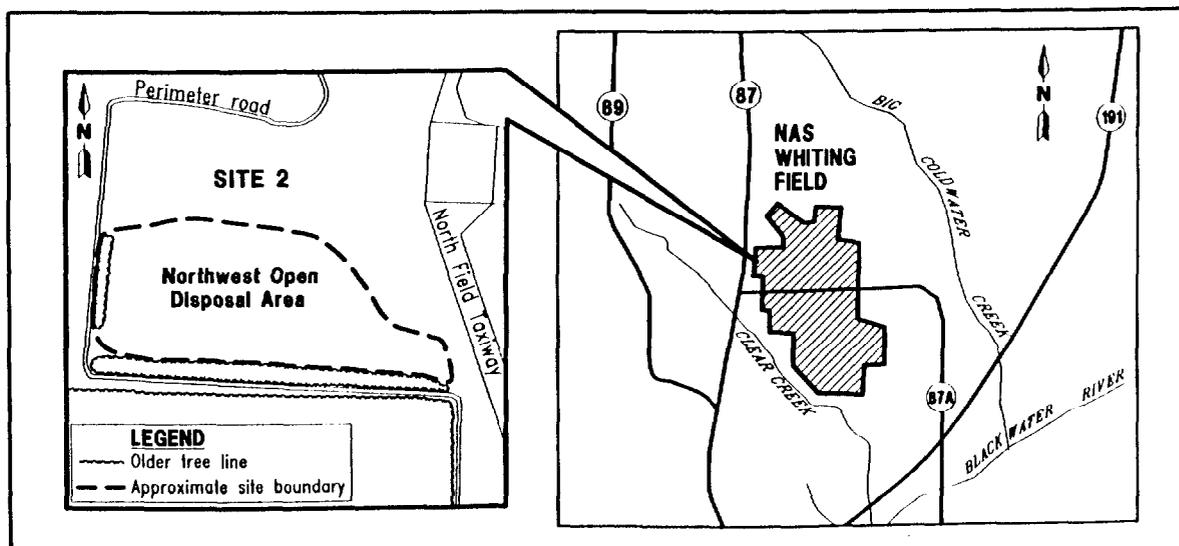


Figure 1. Site 2 Location Map

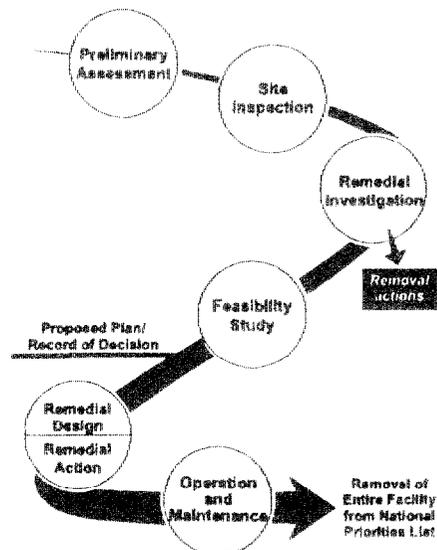


Risk Assessment Findings: Exposure to contaminants found in soil samples at Site 2 is unlikely to increase health risks for current site users or future non-residential users.

Environmental History

Regulatory Framework

Environmental work at Site 2 is part of the ongoing Installation Restoration program 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 materials at military facilities. The program complies with CERCLA and other applicable Florida and Federal environmental regulations, and is typically performed in the following stages:



NAS Whiting Field was placed on the USEPA National Priorities List (NPL) for environmental study and cleanup in June 1994. The proposal for Site 2 complies with NPL guidance. ■

Investigation Findings

The *Remedial Investigation* at Site 2 included environmental sampling and analysis of the sampling data. The investigation provided an understanding of the environmental conditions at Site 2. These findings are summarized below. Field activities are highlighted on page 4.

General Site Conditions

- Groundwater flows to the south-southwest and likely discharges into Clear Creek.
- There is no evidence of contaminants moving from the site through groundwater.
- There are no indications that vegetation at the site has been affected by past waste disposal.

Soil Conditions

- Chemicals found in surface and subsurface soil were at or below levels allowed for Florida industrial sites.
- Arsenic and beryllium in surface soil were above levels allowed for Florida residential sites; it could

not be determined whether or not these two metals are related to past waste disposal or occur naturally at the site.

Data collected during the Remedial Investigation were also used in two risk assessments: the human health risk assessment and the ecological risk assessment. The human health risk assessment estimated health risks posed to people by potential exposure to site-related chemicals in soil. The ecological risk assessment evaluated potential risk to animals and plants from exposure to site contaminants. Risk estimates were calculated using FDEP and USEPA guidelines designed to protect human health and the environment. Potential risks from groundwater at Site 2 will be investigated and evaluated in the basewide groundwater study. Risk assessment findings for soil are presented below.

Human Health Risks

- Arsenic and beryllium found in surface soil pose an increased lifetime cancer risk to current and potential future site trespassers and hypothetical residents and full-time workers.

Ecological Risks

- Chemicals found in site surface soil are at levels not likely to adversely affect plants and animals.

Next, a *Feasibility Study* was conducted to identify the best approach to deal with the arsenic and beryllium contamination noted above. Three alternatives were evaluated.

- No action (evaluated for comparison in all Feasibility Studies, estimated cost \$23,000). The no action alternative includes costs for conducting 5-year reviews over a 30 year monitoring period.
- Land-use controls (estimated cost \$193,000). Restrictions on use of the site to activities involving less than full-time human contact with surface soil, such as commercial/industrial or limited agricultural or recreational use.
- Capping and land-use controls (estimated cost \$4,341,700). Installation of a cover (typically made of soil, vegetation, or synthetic material) to prevent human contact with the landfill waste.

These three options were evaluated using nine criteria developed by the USEPA to assess cleanup alternatives. The criteria used to select a preferred alternative are as follows:

- Overall protection of human health and the environment
- Compliance with applicable environmental regulations and requirements

(continued on page 3)

Ms. Pat Durbin
Public Works Department
NAS Whiting Field
7151 USS Wasp Street
Milton, Florida 32570-6159

Place
Stamp
Here

Forwarding address correction requested

Command No. 462467 89-D-0317

Environmental History (continued from page 2)

- Long-term effectiveness and permanence
- Reduction of contaminant toxicity, mobility, or volume
- Short-term effectiveness
- Implementability
- Cost effectiveness
- State acceptance
- Community acceptance

The evaluation in the feasibility study concluded that the "no action" alternative would not address potential health risks to hypothetical future site residents. The land-use controls option was preferred over capping and land-use controls because it would protect human health, be more cost effective, and satisfy the other evaluation criteria. The community acceptance criterion will be assessed after the public comment period is complete.

The land-use controls alternative will prevent prolonged and frequent human exposure to the surface soil. The land-use controls and attendant reporting and certification requirements will be specified in the Site 2 Record of Decision and in a Memorandum of Agreement between the Navy, USEPA, and FDEP. Site 2 will be available for industrial use and limited recreational and agricultural use. With the land-use controls in place, no other cleanup actions for soil are proposed. ■

Basis for the Proposal

Based on the remedial investigation, risk assessment, and feasibility study findings, the Navy is proposing land-use controls for Site 2. These land-use controls would allow activities involving less than full-time direct contact with the site soil, and would prohibit future residential use.



The USEPA and FDEP concur with instituting land-use controls to protect human health at Site 2. Community acceptance of the proposed response action is the next step. Once the proposal is approved, the Record of Decision and a land-use controls Memorandum of Agreement will be signed by the Navy, the FDEP, and the USEPA. This Memorandum of Agreement will establish the procedure to assure that land-use controls at Site 2 remain effective over the long term. No other soil cleanup measures at Site 2 will be proposed after the approval of the proposed response action. ■

Public Involvement

The Navy has established an active outreach program to ensure community involvement in environmental activities at Site 2 and throughout NAS Whiting Field. The Navy will be soliciting public comments on the proposed response action at Site 2 from April 9, 1999 to May 10, 1999. If you have comments on this Proposed Plan, we want to hear them. Please use the comment form (see insert) or attend the public meeting on April 13, 1999 at 6:00 p.m. in Building No. 4900, Pensacola Junior College, Milton Campus, 5988 Highway 90. Comments will be summarized and responses provided in the responsiveness summary in the Record of Decision.



Reviewing site documents at a RAB meeting.

The NAS Whiting Field Restoration Advisory Board (RAB) is another method used by the Navy to promote public involvement in the base environmental cleanup program. For example, the RAB has participated in developing this proposed plan by reviewing relevant documents, offering suggestions, and expressing their concerns on the proposed response action. The RAB meets regularly at convenient times and locations to discuss IR program status and provide community input into the cleanup process. RAB meetings are open to the public and are advertised in local media. A community mailing list is also maintained to distribute updates about the environmental program directly to interested members of the community. If you want further information on the RAB or would like to be added to the mailing list, please contact either of the following:

<p>Pat Durbin Public Works Department NAS Whiting Field 7151 USS Wasp Street Milton, Florida 32570-6159 (850) 623-7181</p>	<p>W. Logan Fink Pensacola Junior College 5988 Highway 90 Milton, Florida 32583 (850) 484-4464</p>



Comments ?

For your convenience, a public comment form is included with this Proposed Plan. Comments will be received until May 10, 1999.

Field Activities



A piezocone penetrometer probe.

The remedial investigation at Site 2 was conducted in phases from 1992 through 1996. Remedial Investigation fieldwork included a range of environmental studies to collect the data needed to determine the presence, nature, and extent of contamination. The field activities and their objectives included the following:

Subsurface Soil Sampling: determine subsurface soil characteristics and contaminant

concentrations. This included piezocone penetrometer testing; a stainless-steel probe equipped with electronic sensors was hydraulically driven into the ground to gather data used to develop a description of subsurface soil characteristics.

Surface Soil Sampling: determining surface soil contaminant concentrations using laboratory chemical analysis. ■

Glossary of Terms

Aquifer: an underground layer of rock, sand, or gravel capable of storing and transmitting water within cracks and pore spaces, or between grains.

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

Feasibility Study (FS): an engineering analysis and report that identifies and evaluates the most appropriate technical approaches for addressing contamination at a site.

Groundwater: water found within an aquifer.

Information Repository: a public file that contains technical reports, reference documents, and other materials relevant to the site cleanup.

Land-Use Controls (LUCs): restrictions which limit activities at hazardous waste sites to prevent or minimize human exposure to site contaminants. LUCs also require periodic site inspections and reports.

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

Operation and Maintenance: activities that occur after a cleanup action is conducted to ensure that treatment or containment systems are functioning properly.

Polychlorinated Biphenyls (PCBs): a family of liquid industrial chemicals, formerly used as electric insulators or lubricants, now known primarily as an environmental pollutant.

Preliminary Assessment: a review of available information about a known or suspected hazardous waste site or release to determine if further study is needed.

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

Public Comment Period: a legally-required opportunity for the community to provide written and oral comments on a proposed environmental action at a hazardous waste site.

Record of Decision (ROD): a public document that explains selected cleanup alternatives at a site; it is based on information and technical analysis, and on consideration of public comments and concerns. Issued and signed by the Navy, the USEPA, and the FDEP at the completion of a remedial investigation and feasibility study and after community acceptance of the Proposed Plan.

Remedial Action: the actual construction or cleanup phase that follows the selection of cleanup alternatives.

Remedial Design: the cleanup phase where engineers design technical specifications for cleanup remedies.

Removal Action: an early action taken to address a release or threatened release of hazardous substances that do not pose immediate danger to public health or the environment.

Remedial Investigation (RI): an in-depth study to determine the nature and extent of contamination and establish cleanup criteria.

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 that summarizes the public comments received and the responses to the 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 on cleanup activities.

Risk Assessment: a study that estimates the potential risk from a site to human health and the environment.

Site Inspection: an investigation phase in which readily available information is collected and analyzed to assess the extent and severity of contamination. A USEPA scoring methodology follows the site inspection to identify any immediate threat to human health or the environment. ■