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NAS WHITING FIELD
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DRAFT PROPOSED PLAN AT SITE 12, TETRAETHYL LEAD DISPOSAL AREA WITH
TRANSMITTAL LETTER NAS WHITING FIELD FL
7/7/1999
HARDING LAWSON ASSOCIATES

Harding Lawson Associates

2534-2024

July 7, 1999

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

**Subject: Draft Proposed Plan
Site 12, Tetraethyl Lead 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 (SOUTHNAVFACENGCOM), Harding Lawson Associates is pleased to forward three copies of the draft Site 12 Proposed Plan for your review and comments. As discussed at our last partnering team meeting, review comments are due by July 20, 1999. Copies of the draft proposed plan have also been forwarded to the Naval Air Station Whiting Field Partnering team.

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

Sincerely,

HARDING LAWSON ASSOCIATES

A handwritten signature in black ink, appearing to read "Rao Angara", written in a cursive style.

Rao Angara
Task Order Manager

enclosure

cc: J. Cason, FDEP (2 copies)
L. Martin, SDIV (2 copies)
J. Holland, NASWF (2 copies)
T. Conrad, BEI (1 copy)
P. Ottinger, TtNUS (1 copy)
T. Hansen, TtNUS (1 copy)
A. Twitty, CH2M HILL (1 copy)
File



PROPOSED PLAN

Site 12: Tetraethyl Lead Disposal Area

July 1999

In accordance with Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this document summarizes the Navy's proposal for No Further Action at Site 12 (the Tetraethyl Lead Disposal Area) at Naval Air Station (NAS) Whiting Field.



Comments

The Navy is seeking public comments on the alternatives presented in this Proposed Plan. Comments must be received by August 22, 1999, and submitted by mail (see insert) or at a public information session on:

August 5, 1999 6:00 p.m.
Pensacola Junior College
Milton Campus
5988 Highway 90
Bldg. 4900, Room 4902

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

The Proposal

Based on an evaluation of findings from detailed environmental studies, land-use controls for soil are proposed for Site 12. 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 12 is being investigated as part of the basewide groundwater study at NAS Whiting Field. There is no surface water or sediment at Site 12. 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 12 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 protection of human health and the environment and will be detailed in a Record of Decision document for the site. This 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 12 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 12 is less than one-tenth of an acre and is located in the southeastern part of NAS Whiting Field (Figure 1).

Operational and Waste Disposal History: Site 12 was reportedly used for sludge disposal in May 1968. The sludge was a waste product from cleaning aviation fuel storage tanks and filters. The sludge was placed in six piles within a fenced area (Figure 1). The piles were then covered with dirt. Each pile contained approximately 200 to 400 gallons of sludge.

Current Status: The site is currently wooded with pine trees and scrub vegetation. The sludge piles are approximately 3 to 5 feet in height and 5 to 10 feet in diameter. The "Y" drainage ditch is immediately south of Site 12 and receives any surface water runoff from the site.

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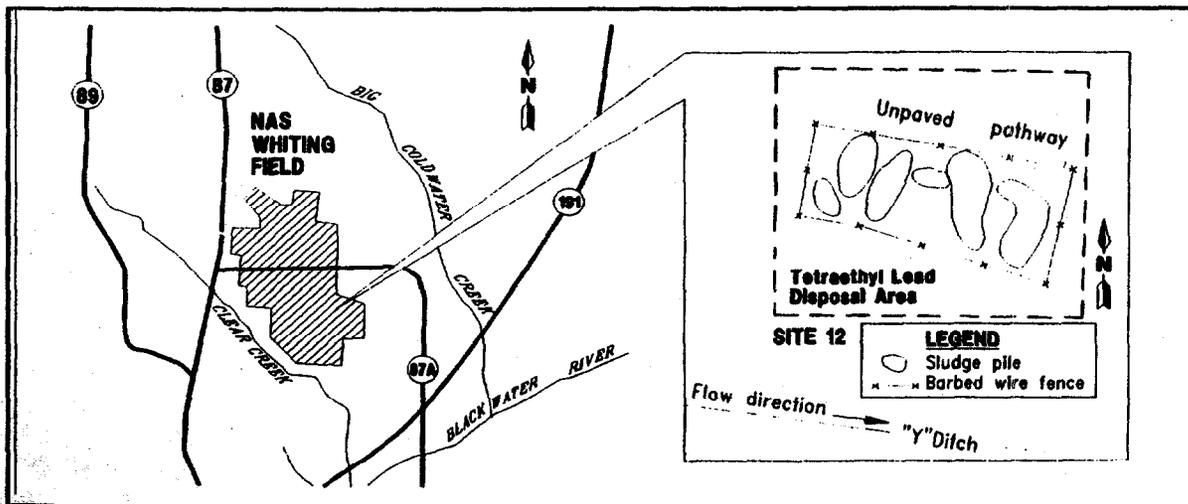


Figure 1. Site 12 Location Map

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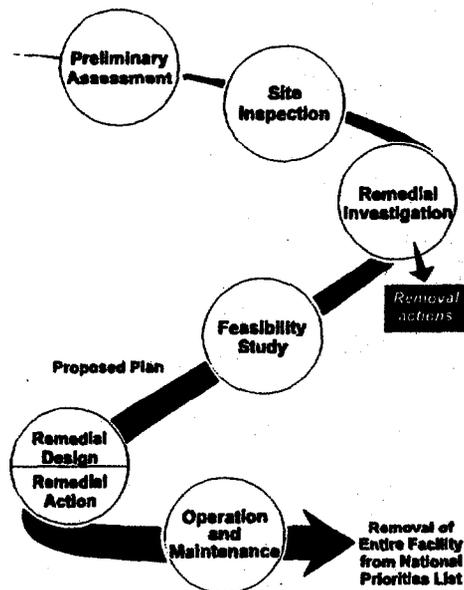


Risk Assessment Findings: Exposure to contaminants found in soil samples collected at Site 12 is unlikely to increase health risks for current site users or future non-residential users.

Environmental History

Regulatory Framework

Environmental work at Site 12 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 Federal and Florida environmental regulations, and is typically conducted 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 12 complies with NPL guidance. ■

Investigation Findings

The *Remedial Investigation* at Site 12 included environmental sampling and analysis of the sampling data. The investigation provided an understanding of the environmental conditions at the site. These findings are summarized below. Field activities are highlighted on page 4.

General Site Conditions:

- Groundwater flow is southeast across the site toward Big Coldwater Creek.
- Subsurface geology is made up of alternating layers of sand, silt, and clay.

Soil Conditions:

- Aluminum, arsenic, iron, and vanadium found in surface soil samples did not meet standards set by the USEPA and FDEP for residential areas. It is likely that arsenic occurs naturally at Site 12.

- Chemicals found in subsurface soil samples were met USEPA and FDEP standards for industrial areas.

Data collected during the Remedial Investigation were also used in two risk assessments: the human health risk assessment estimated health risks posed to people by potential exposure to site contaminants; the ecological risk assessment evaluated risks to animals and plants from potential 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 12 will be investigated and evaluated in the basewide groundwater study. Risk assessment findings for soil are presented below.

Human Health Risks

- Arsenic in surface soil poses an increased lifetime cancer risk to hypothetical future site residents.

Ecological Risks

- Chemicals in site surface soil are not expected to adversely affect plants and animals.

Alternative Evaluation

A *Feasibility Study* was conducted to identify the best approach to deal with potential health risks posed by the arsenic contamination noted above. Three alternatives were evaluated.

- No action (evaluated for comparison in all Feasibility Studies, estimated cost \$19,000): The no action alternative includes costs for conducting 5-year reviews over a 30-year monitoring period.
- Land-use controls (estimated cost \$135,000): 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.
- Removal and off-site disposal of sludge piles, LUCs, continuing inspection, and 5-year site reviews (estimated cost \$207,000). The piles are a physical site hazard, and do not contain contaminants of concern.

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)

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 the sludge pile removal alternative because it is protective of human health, more cost effective, would not disturb the existing environment at the site, and satisfies the other evaluation criteria. The community acceptance criterion will be assessed by the NAS Whiting Field partnering team 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 12 Record of Decision and in a written agreement between the Navy, USEPA, and FDEP. Site 12 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 12. 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 12. Community acceptance of the proposed corrective 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 agreement will establish the procedure to assure that land-use controls at Site 12 remain effective over the long term. No other soil cleanup measures at Site 12 will be proposed after the approval of the proposed corrective action. ■

Public Involvement

The Navy has established an active outreach program to ensure that the community is informed and involved in environmental activities at Site 12 and throughout NAS Whiting Field. For example, the Navy is soliciting public comments on the proposed actions at Site 12 from July 23 to August 22, 1999. If you have any comments on the Site 12 Proposed Plan, we want to hear them. Please use the comment form (see insert) or attend the public meeting on August 5 at 6:00 p.m. at Pensacola Junior College, Milton Campus, 5988 Highway 90, Building 4900, Room 4902. Comments will be summarized and responses provided in the responsiveness summary section of the Record of Decision for Site 12.



Groundwater sampling demonstration 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 corrective actions. 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 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:

Pat Durbin
Public Works Department
NAS Whiting Field
7151 USS Wasp Street
Milton, Florida 32570-8159
(850) 623-7181

W. Logan Fink
Pensacola Junior College
5988 Highway 90
Milton, Florida 32583
(850) 484-4464



Comments?

For your convenience, a return mail public comment form is included with this Proposed Plan. Comments can be provided until August 22, 1999.

Field Activities



Subsurface Soil Sampling

The Remedial Investigation at Site 12 was conducted in phases from 1992 through 1996. Fieldwork included a range of environmental studies to collect the data needed to determine the presence, nature, and extent of contamination. Major field activities and their objectives included the following:

Surface Soil Sampling: samples were taken from the sludge pile and

surrounding soil to determine the amount of contamination using laboratory analysis.

Subsurface Soil Sampling: samples were taken beneath the sludge piles and surrounding areas to determine subsurface soil characteristics and contaminant levels. Sampling depths ranged from 2 to 11 feet below the surface.

Glossary of Terms (commonly used acronyms are included)

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, is commonly known as Superfund and was created to respond 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 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.

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 community input 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, based on site information and technical analysis, and on

consideration of public comments and concerns. A ROD is issued and signed by the Navy, USEPA, and 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 does not pose an 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 site contaminants 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.

Sludge: a solid, semisolid, or liquid waste, usually generated by wastewater treatment processes or industrial storage tank cleaning.

Public Comments

If you have comments or questions on the Site 12 Proposed Plan, please provide them in the space below (use a separate sheet of paper, if needed). Include your name, address, and telephone number so we can contact you, if necessary. All comments will be considered in the final response action decision for Site 12. Comments must be received by August 22, 1999.



Name: _____

Address: _____

Telephone Number: _____

Mailing List Update

If you or someone you know would like to be added or removed from the NAS Whiting Field environmental mailing list, please check the appropriate box and fill in the correct address information to your left.

- Address change
- Add to mailing list
- Delete from mailing list

Comments:



Return to Ms. Pat Durbin, Public Works Department,
NAS Whiting Field, 7151 USS Wasp Street,
Milton, Florida 32570-6159, (850) 623-7181
e-mail: naswf.183ad@smtp.cnet.navy.mil

