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NAS WHITING FIELD
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PUBLIC NOTICE REGARDING PROPOSED PLAN FOR SITE 3 UNDERGROUND WASTE SOLVENT STORAGE AREA WITH TRANSMITTAL NAS WHITING FIELD FL
7/26/2000
NAVAL AIR STATION

TETRA TECH NUS, INC.
800 Oak Ridge Turnpike, A-600 ▪ Oak Ridge, Tennessee 37830
(865) 483-9900 ▪ FAX: (865) 483-2014 ▪ www.tetratech.com

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0700-E265

July 26, 2000

Commander, Southern Division, Naval Facilities Engineering Command
ATTN: Ms. Linda Martin, Code 1859
Remedial Project Manager
2155 Eagle Drive
North Charleston, SC 29419

Subject: Final Proposed Plans
Surface and Subsurface Soil at Sites 3, 4, 6, 30, 32, and 33
NAS Whiting Field, Milton, Florida

Reference: CLEAN Contract No. N62467-94-D-0888
Contract Task Order No. 0028

Dear Ms. Martin:

Tetra Tech NUS, Inc. is pleased to submit each of the Final Proposed Plans for Surface and Subsurface Soil at Sites 3, 4, 6, 30, 32, and 33, Naval Air Station Whiting Field in Milton, Florida.

The enclosed Proposed Plans have been revised to incorporate FDEP's and USEPA's comments. Formal response to USEPA's comments will be submitted by email on 27 July 2000.

Upon concurrence of these Final Proposed Plans by USEPA, FDEP, and the Navy, the public comment dates will be updated and the Proposed Plans will be issued for public review and comment.

Additional documents have been forwarded to the list below on behalf of Southern Division, Naval Facilities Engineering Command for Naval Air Station Whiting Field.

Please call me at (865) 483-9900 if you have any questions or comments regarding this submittal.

Sincerely yours,

Phillip Ottinger

Phillip E. Ottinger
Task Order Manager

PEO:tko

Enclosure

c: Mr. Craig Benedikt, USEPA (1 copy)
Mr. Jim Cason, FDEP (2 copies)
Mr. Terry Hansen, Tetra Tech NUS (1 copy)
Mr. Jim Holland, NAS Whiting Field (2 copies)
Ms. Amy Twitty, CH2M Hill (1 copy)
Mr. Mark Perry, Tetra Tech NUS (1 copy unbound)
Ms. Debbie Wroblewski, Tetra Tech NUS (w/o enclosure)
File/db

PROPOSED PLAN

Site 3, Underground Waste Solvent Storage Area

The Department of Defense and the Navy have completed the investigation of Naval Air Station (NAS) Whiting Field Site 3, Underground Wast Solvent Storage Area. The site history and current conditions indicate a need to perform a surface soil removal action and implement land-us controls for future use.

July 200

ccordance with the National Contingency Plan (NCP) §300.430(f) as well as Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this document summarizes the Navy's proposal for surface soil removal and land-use controls at Site 3 (Underground Waste Solvent Storage Area) at Naval Air Station Whiting Field.

The proposed plan is a document intended to fulfill the public participation requirements under CERCLA and the NCP with the specific purposes as follows: provide basic background information; identify the preferred alternative for remedial action at the site and explain the reasons for the preference; describe other remedial alternatives that were considered before the proposed selection was made; solicit public review and comment on all alternatives described; and provide information on how the public can be involved in the remedy selection process.

Comments

The Navy will be accepting written comments (see insert) from July __ through August ___, 2000. The comment period includes an opportunity for 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 is reached.

What's Inside

Section	Page
Environmental History	2
Basis for the Proposal	3
Public Involvement	3
Glossary	4

The Proposal

The proposed final remedy for surface and subsurface soil contamination at Site 3 is a surface soil removal action and land-use controls (LUCs). Surface soil with the potential to impact human health would be removed with proper disposal off-site. Areas where soil is removed would be backfilled with clean soil. Areas covered with concrete or asphalt would not require soil removal because the existing cover material is a barrier preventing exposure to contaminated soil as long as the concrete/asphalt remains in place. LUCs would restrict future use of the site to activities involving less than full-time human contact with surface and subsurface soil, such as commercial/industrial, limited agricultural, or recreational use. Residential use of the site would be prohibited, and the Navy would perform periodic site inspections and ensure the LUCs are being properly maintained and administered. Groundwater at Site 3 is being investigated separately as part of the NAS Whiting Field basewide groundwater study (Site 40) and is not addressed by the proposed remedy. There is no surface water or sediment at Site 3. 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 provided input into the development of the proposed remedy.

The Navy, USEPA, and FDEP will select a final response action for soil contamination at Site 3 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 (ROD) 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 ca be found in greater detail in the Remedial Investigatio Report for Surface and Subsurface Soil, Sites 3, 4, 6 30, 32, and 33; the Feasibility Study for Surface an Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33; and othe site documents. These materials are available fo review at the **NAS Whiting Field Informatio Repository, West Florida Regional Library, Milto Branch, 805 Alabama Street, Milton, Florida 32570; (850) 623-5565.**

Site History

Location: Site 3 includes areas at the north and sout ends of the Aircraft Maintenance Hanger, Buildin 2941, located in the North Field Industrial Are (Figure 1).

Operational and Waste Disposal History: Site includes the area where two 500-gallon meta underground storage tanks (USTs) were used fror 1980 to April of 1984 for the storage of waste solvent and residue generated from paint-stripping operation conducted at Building 2941. Wastes from the UST were periodically removed for off-base disposal. I April of 1984, use of the USTs was discontinued an the two tanks were removed from the site. Durin removal, one of the USTs was punctured, resulting i the release of waste solvents onto the ground. Th spilled solvent and contaminated soil were remove and sent off-base for disposal.

Examination of the tanks revealed holes up to 0.5 inc in diameter apparently caused by the waste solvent corroding through the metal tanks. The extent o leakage from the USTs before their removal is nc known. Site 3 also includes the area where a waste oi UST was located near the southwestern corner o Building 2941.

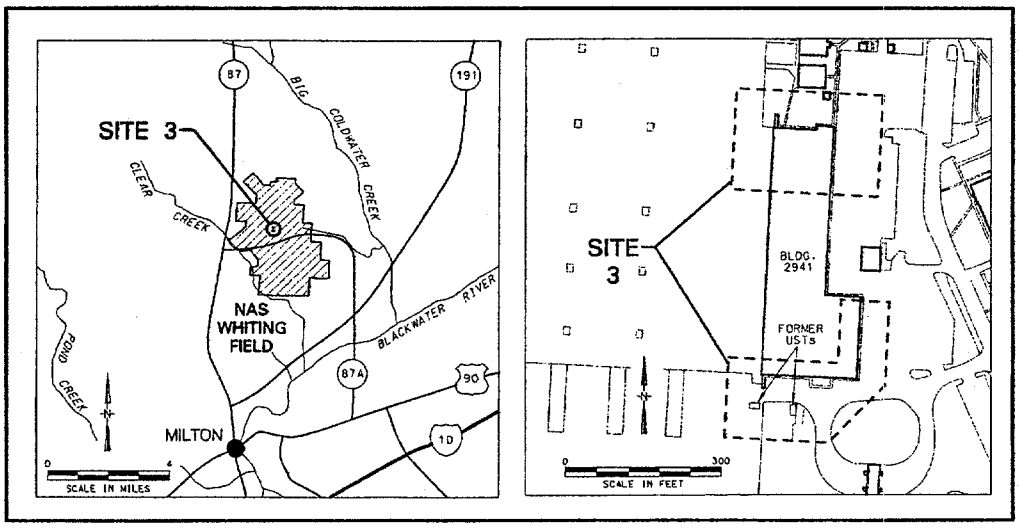


Figure 1. Site 3 Location Map

Site History
(continued from Page 1)

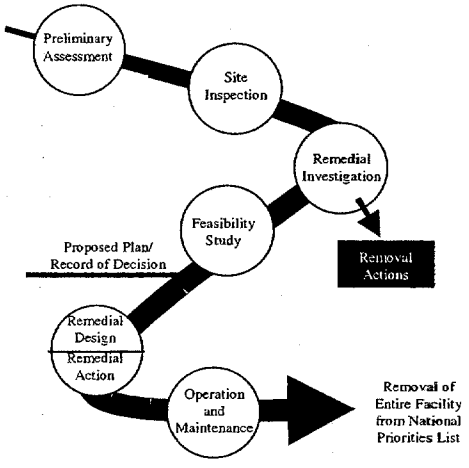
This tank was used for the storage of airframe, power plant, and ground support equipment liquid waste from 1968, and possibly earlier, until 1986. The waste consisted of waste oil, PD-680 dry cleaning solvent, and waste freon. This tank was reportedly removed before the expansion of the aircraft apron in 1987.

Current Conditions: The site is approximately 2.5 acres and is characterized by concrete, asphalt, buildings, mowed turfgrass, and heavy human activity.

Environmental History

Regulatory Framework

Environmental work at Site 3 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 the Comprehensive Environmental Response, Compensation, and Liability Act (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 for environmental study and cleanup in June 1994.

Investigation Activities

The Remedial Investigation at Site 3 was conducted in phases from 1990 through 1999. 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:

Surface Soil Sampling: conducted to determine surface soil contaminant concentrations by laboratory chemical analysis.

Subsurface Soil Sampling: provided subsurface soil characteristics and contaminant concentration data. Activities included a soil gas survey, installation of soil borings, and sampling of subsurface soil to develop a description of subsurface soil characteristics.

Investigation Findings

The Remedial Investigation Report provided an understanding of the soil environmental conditions at Site 3. Groundwater at Site 3 will be investigated and evaluated separately in the basewide groundwater study (Site 40). These findings are summarized below.

General Site Conditions:

- Groundwater flows to the south-southwest and discharges into Clear Creek. The water table at Site 3 is 80–90 feet below ground surface.
- Surface and subsurface soil is predominantly sand and silt with thin layers of clay.

Soil Conditions:

- Arsenic and dieldrin in surface soil and arsenic in subsurface soil exceed the standards set by USEPA and FDEP for residential areas.
- Arsenic in surface and subsurface soil exceeds the standards set by USEPA and FDEP for Florida industrial sites.

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 the Remedial Investigation, all hazardous substances of potential concern detected in the soil are identified. The substances listed above are those driving the risk and requiring remedy selection. The ecological risk assessment evaluated potential risks to animals and plants from exposure to site contaminants. Risk assessment findings for soil are presented below.

Risk estimates were calculated using FDEP and USEPA guidelines designed to protect human health and the environment. For cancer-causing chemicals, cancer risk numbers shown below estimate the number of additional persons at risk of developing cancer if the site is not cleaned up. For example, a cancer risk level of 1.0E-06 means one additional person out of a million persons is at risk for developing cancer. For noncancer-causing chemicals, the measure of the likelihood of adverse effects occurring in humans is called the Hazard Index (HI). An HI greater than 1.0 suggests that adverse effects are possible.

Human Health Risks:

- Arsenic present in surface soil poses an increased lifetime cancer risk greater than the FDEP's threshold level of 1.0E-06 to site trespassers (3.8E-06), maintenance workers (1.7E-06), and hypothetical future residents (2.5E-05). Dieldrin is also a risk driver for the resident receptor (1.6E-06).

Ecological Risks:

- The quantity of the terrestrial habitat at Site 3 is limited and the quality is poor. The site is comprised of asphalt and mowed turfgrass and is surrounded by intensive development, with the exception of some turfgrass to the south. In addition, aircraft and vehicle traffic on and adjacent to the site would deter terrestrial wildlife from using the turfgrass areas. Most importantly, the site comprises only a small portion of the home ranges of most of the terrestrial wildlife species found on-base. Therefore, reduction in growth, survival, and reproduction of small mammal and bird populations at and near the site is unlikely. For these reasons, potential risks appear to be acceptable and further ecological study at Site 3 is unwarranted.

Next, a **Feasibility Study** was conducted to identify the best approach to address the soil contamination at Site 3. The Feasibility Study for Surface and Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33 contains a more

Risk Assessment Findings: Exposure to contaminants found in soil samples at Site 3 pose an increased health risk to trespassers, maintenance workers, and hypothetical future residents due primarily to arsenic. However, much of the increased health risk may be due to naturally occurring levels of arsenic because there are no documented uses of arsenic at Site 3.

Public Comments

If you have comments or questions on the Site 3 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 decision for Site 3. Comments must be received by July __, 2000.

Name: _____

Address: _____

_____

_____

_____

Telephone Number: _____

Mailing List Update

If you 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:

_____

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Return to Ms. Pat Durbin, Public Works Department,
NAS Whiting Field, 7151 USS Wasp Street,
Milton, Florida 32570-6159, (850) 623-7181 (Ext. 48)
e-mail: pat.durbin@cnet.navy.mil

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

Place
Stamp
Here

Forwarding address correction requested.

Environmental History
(continued from Page 2)

detailed description of the remedial alternatives evaluated and their estimated 30-year present worth operation and maintenance (O&M) and capital costs. Three alternatives were evaluated.

- No Action (estimated present worth cost of $18,000): evaluated for comparison in all Feasibility Studies. The No Action alternative includes cost for conducting 5-year reviews over a 30-year monitoring period.
- Surface soil removal and LUCs (estimated present worth cost of $153,000 including O&M costs for 30 years): removal of surface soil not covered with concrete/asphalt and exceeding levels allowed for Florida industrial sites, off-site disposal, and restriction on the use of the site to activities involving less than full-time human contact with the soil, such as commercial/industrial, limited agricultural, or recreational.
- Surface and subsurface soil removal and LUCs (estimated present worth cost of $821,000 including O&M costs for 30 years): removal and off-site disposal of surface and subsurface soil exceeding levels allowed for Florida industrial sites and LUCs, as described above.

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

The Feasibility Study for Surface and Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33 contains a detailed evaluation of each alternative with the nine criteria. The evaluation in the Feasibility Study concluded the "No Action" alternative was not protective of human health for trespassers, occupational workers, and hypothetical future site residents. The surface soil removal and LUCs alternative was preferred over surface and subsurface soil removal and LUCs 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. Actual or threatened releases of hazardous substances from this site, if not addressed by the preferred alternative or one of the other active measures considered, may present a current or potential threat to public health, welfare, or the environment.

The surface soil removal and LUCs alternative will prevent prolonged and frequent human exposure to the subsurface soil. The reporting and certification requirements for the LUCs have been incorporated into the LUC Memorandum of Agreement between the Navy, USEPA, and FDEP dated November 4, 1999, and also will be specified in the Site 3 ROD. The LUCs will include a procedure to be followed before the surface of the LUC area can be disturbed by construction or maintenance activities. Site 3 will be available for industrial use and limited recreational ar agricultural use after removal and disposal of th surface soil exceeding allowable industrial levels. N other cleanup actions for soil are proposed at Site 3.

Basis for the Proposal

Based on the Remedial Investigation, risk assessmer and Feasibility Study findings, the Navy is proposir surface soil removal and LUCs as a final remedy wi 5-year reviews since soil contamination will rema on-site. These actions will allow activities involvir less than full-time direct contact with the soil and wou prohibit future residential use.

Site 3 Proposed Plan
(surface soil removal and land-use controls)
+
Public Comment

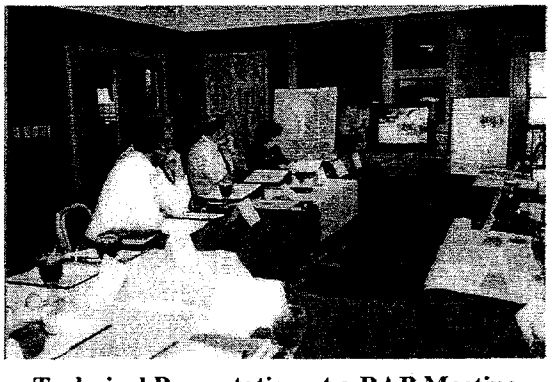
→ **Record of Decision**

The USEPA and FDEP concur with the surface so removal and institution of LUCs to protect human healt at Site 3. Community acceptance of the propose remedial action is the next step. Once the proposal approved, the ROD will be signed by the Navy wit concurrence by FDEP and USEPA. This document wi establish the procedure to assure LUCs at Site 3 remai effective over the long term. No other soil cleanu measures at Site 3 will be proposed after approval c the selected remedial action.

Public Involvement

The Navy has established an active outreach prograr to ensure community involvement in environmenta activities at Site 3 and throughout NAS Whitin Field. The Navy will be accepting written comment on the proposed Site 3 remedial action from July _t August __, 2000. Public participation in the selectio process is encouraged. Comments can be submitte using the enclosed form. Comments will b summarized and responses provided in th responsiveness summary section of the ROD.

The comment period includes an opportunity for public meeting at which the Navy would present th Remedial Investigation and Feasibility Study report and Proposed Plan, answer questions, and receiv comments in writing from the public. A publi meeting will be held if one is requested by member of the public before the end of the comment period.



Technical Presentation at a RAB Meeting

The NAS Whiting Field RAB is another method usec by the Navy to promote public involvement in the

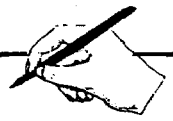
Comments

For your convenience a public comment form is included with this proposed plan. Written comments and requests for more information or a public meeting should be mailed (postmarked) by August __, 2000.

Public Involvement
(continued from Page 3)

base environmental cleanup program. For example, the RAB has been invited to participate in developing the proposed remedy by reviewing the documents, offering suggestions, and expressing their concerns on 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 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:



Pat Durbin
Public Works Department
NAS Whiting Field
7151 USS WASP Street
Milton, Florida 32570-6159
(850) 623-7181 (Ext. 48)

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

Glossary **(commonly used 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 a process to evaluate hazardous waste conditions that may pose a threat to human health or the environment.

Feasibility Study: 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.

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

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 (O&M): 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 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 tha explains selected cleanup alternatives at a site; it is based on information and technical analysis, and or consideration of public comments and concerns. The ROD is issued and signed by the Navy, the USEPA and the FDEP at the completion of a Remedia 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 potential release of hazardous subs ce that do not pose immediate danger to public health o the environment.

Remedial Investigation: 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 more permanent cleanup solution.

Responsiveness Summary: a section of the ROI that summarizes the public comments received and the responses to the comments.

Restoration Advisory Board (RAB): an advisor group composed of regulatory agenc representatives, site personnel, and communit volunteers who provide input and promote publi involvement in cleanup activities.

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

Site Inspection: an investigation phase in whic readily available information is collected an analyzed to assess the extent and severity c contamination. A USEPA scoring method ng follows the site inspection to identify any imm t threat to human health or the environment.

Naval Air Station Whiting Field, Milton, Florida

PROPOSED PLAN

Site 4, North AVGAS Tank Sludge Disposal Area

The Department of Defense and the Navy have completed the investigation of Naval Air Station (NAS) Whiting Field Site 4, North AVGAS Tan Sludge Disposal Area. The site history and current conditions indicate a need to perform a surface soil removal action, soil venting, ar implement land-use controls for future use.

July 200

In accordance with the National Contingency Plan (NCP) §300.430(f) as well as Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this document summarizes the Navy's proposal for surface soil removal, soil venting, and land-use controls at Site 4 (North AVGAS Tank Sludge Disposal Area) at Naval Air Station Whiting Field.

The proposed plan is a document intended to fulfill the public participation requirements under CERCLA and the NCP with the specific purposes as follows: provide basic background information; identify the preferred alternative for remedial action at the site and explain the reasons for the preference; describe other remedial alternatives that were considered before the proposed selection was made; solicit public review and comment on all alternatives described; and provide information on how the public can be involved in the remedy selection process.

Comments

The Navy will be accepting written comments (see insert) from July __ through August __, 2000. The comment period includes an opportunity for 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 is reached.

What's Inside

Section	Page
Environmental History	2
Basis for the Proposal	3
Public Involvement	4
Glossary	4

The Proposal

The proposed final remedy for surface and subsurface soil contamination at Site 4 is a surface soil removal action, soil venting, and land-use controls (LUCs). Surface soil with the potential to impact human health would be removed with proper disposal off-site. Areas where soil is removed would be backfilled with clean soil. A horizontal barrier (e.g., soil, concrete, asphalt cover) would be constructed in areas where surface soil is removed. In situ soil venting would be used to treat subsurface soil impacted by petroleum hydrocarbons. Areas covered with concrete or asphalt would not require soil removal because the existing cover material is a barrier preventing exposure to contaminated soil as long as the concrete/asphalt remained in place. LUCs would restrict future use of the site to activities involving less than full-time human contact with surface and subsurface soil, such as commercial/industrial, limited agricultural, or recreational use. Residential use of the site would be prohibited, and the Navy would perform periodic site inspections and ensure the LUCs are being properly maintained and administered. Groundwater at Site 4 is being investigated separately as part of the NAS Whiting Field basewide groundwater study (Site 40) and is not addressed by the proposed remedy. There is no surface water or sediment at Site 4. 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 provided input into the development of the proposed remedy.

The Navy, USEPA, and FDEP will select a final response action for soil contamination at Site 4 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 (ROD) 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 Remedial Investigation Report for Surface and Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33; the Feasibility Study for Surface and Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33; 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.**

Site History

Location: Site 4 is a former underground storage tank (UST) facility located northeast of Building 2981 and north of Tow Lane in the North Field Industrial Area (Figure 1).

Operational and Waste Disposal History: Site 4 contained nine 23,700-gallon steel tanks dating back to 1943 when NAS Whiting Field first began operations. Eight of the nine USTs at this site were used for aviation gasoline (AVGAS) storage. Past use(s) of the ninth tank for anything other than storage of contaminated jet fuel is unknown. There are no records of spills or leaks at Site 4, but petroleum contamination was observed when the USTs were removed.

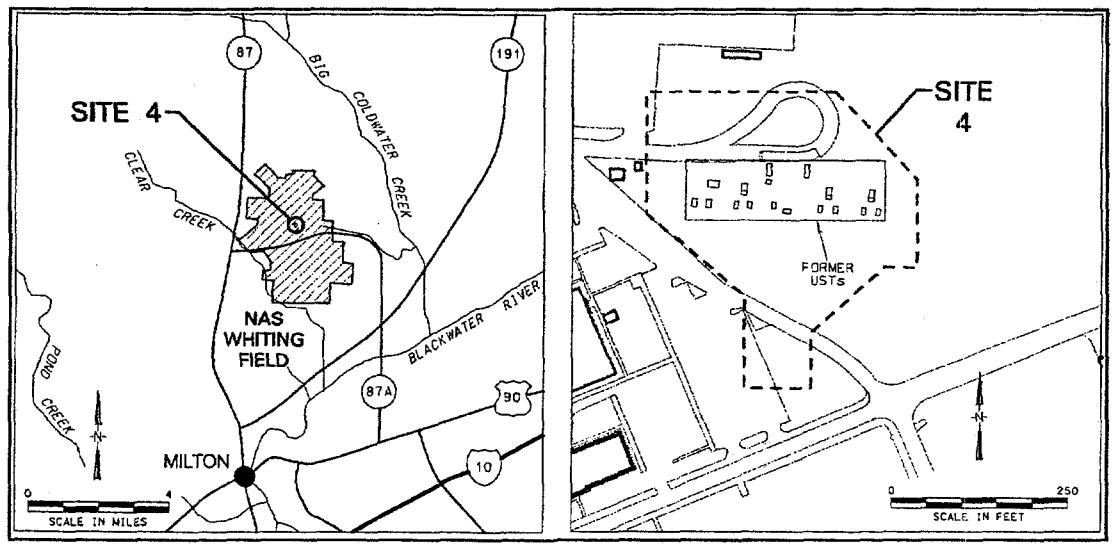


Figure 1 – Site 4 Location Map

Site History
(continued from Page 1)

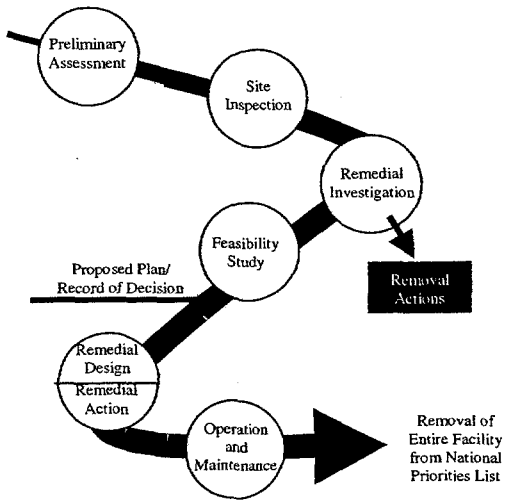
From 1943 to 1968, the nine AVGAS USTs were cleaned out approximately every 4 years. The tank bottom sludge, probably containing tetraethyl lead, was buried at shallow depths in the area immediately adjacent to the tanks. Navy personnel estimated 1,000 to 2,000 gallons of sludge were disposed of in this manner.

Current Conditions: The former tank farm in the North Field area covers approximately 2.5 acres and is currently predominantly covered with turfgrass except for concrete and asphalt roadway in the northern part of the site. Aboveground storage tanks and a fuel dispenser are located in the northern part of the site.

Environmental History

Regulatory Framework

Environmental work at Site 4 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 the Comprehensive Environmental Response, Compensation, and Liability Act (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 for environmental study and cleanup in June 1994.

Investigation Activities

The Remedial Investigation at Site 4 was conducted in phases from 1986 through 1999. Fieldwork included a range of environmental studies to collect data needed to determine the presence, nature, and extent of contamination. The field activities and their objectives included the following:

Surface Soil Sampling: conducted to determine surface soil contaminant concentrations by laboratory chemical analysis.

Subsurface Soil Sampling: provided subsurface soil characteristics and contaminant concentration data. Activities included installation of soil borings and sampling of subsurface soil to develop a description of subsurface soil characteristics.

Investigation Findings

The Remedial Investigation Report provided an understanding of the soil environmental conditions at Site 4. Groundwater at Site 4 will be investigated and evaluated separately in the basewide groundwater study (Site 40). These findings are summarized below.

General Site Conditions:

- Groundwater flows to the southwest and discharges into Clear Creek. The water table at Site 4 is 80–90 feet below ground surface.
- Surface and subsurface soil is predominantly sand and silt with thin layers of clay.

Soil Conditions:

- Arsenic, aluminum, iron, dieldrin, and vanadium in surface soil exceed the standards set by USEPA and FDEP for residential areas.
- Arsenic and benzo(a)pyrene in subsurface soil exceed the standards set by USEPA and FDEP for industrial areas.

Data collected during the Remedial Investigation wer also used in two risk assessments: the human healt risk assessment and the ecological risk assessmen The human health risk assessment estimated healt risks posed to people by potential exposure t e related chemicals. In the Remedial Investigation, a hazardous substances of potential concern detected i the soil are identified. The substances listed above ar those driving the risk and requiring remedy selectio The ecological risk assessment evaluated potenti risks to animals and plants from exposure to sil contaminants. Risk assessment findings for soil a presented below.

Risk estimates were calculated using FDEP an USEPA guidelines designed to protect human healt and the environment. For cancer-causing chemical cancer risk numbers shown below estimate th number of additional persons at risk of developir cancer if the site is not cleaned up. For example, cancer risk level of 1.0E-06 means one addition person out of a million persons is at risk f developing cancer. For noncancer-causing chemical the measure of the likelihood of adverse effec occurring in humans is called the Hazard Index (HI An HI greater than 1.0 suggests that adverse effec are possible.

Human Health Risks:

- Arsenic present in surface soil poses an increase lifetime cancer risk greater than the FDEP threshold level of 1.0E-06 to site trespasser (2.6E-06), occupational workers (4.6E maintenance worker (1.2E-06), and hypothetica future residents (2.6E-05). Dieldrin is also a ris driver for hypothetical future child resident (3.1E-06).

Risk Assessment Findings: Exposure to contaminants found in soil samples at Site 4 pose an increased health risk to trespassers, occupational workers, maintenance workers, and hypothetical future residents due primarily to arsenic and dieldrin. Because there are no documented uses of arsenic at Site 4, much of the increased health risk may be due to naturally occurring levels of arsenic in the soil.

Public Comments

If you have comments or questions on the Site 4 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 decision for Site 4. Comments must be received by July __, 2000.

Name: _____

Address: _____

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Telephone Number: _____

Mailing List Update

If you 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:

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Return to Ms. Pat Durbin, Public Works Department,
NAS Whiting Field, 7151 USS Wasp Street,
Milton, Florida 32570-6159, (850) 623-7181 (Ext. 48)
e-mail: pat.durbin@cnet.navy.mil

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

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Environmental History
(continued from Page 2)

Ecological Risks:

- The quantity of the terrestrial habitat at Site 4 is limited and the quality is poor. The site is comprised mainly of mowed turfgrass with no trees and is surrounded by intensive development, with the exception of some turfgrass to the east. In addition, aircraft and vehicle traffic on and adjacent to the site would deter terrestrial wildlife from using the turfgrass areas. Most importantly, the site comprises only a small portion of the home ranges of most of the terrestrial wildlife species found on-base. Therefore, reduction in growth, survival, and reproduction of small mammal and bird populations at and near the site is unlikely. For these reasons, potential risks appear to be acceptable and further ecological study at Site 4 is unwarranted.

Next, a **Feasibility Study** was conducted to identify the best approach to address the soil contamination at Site 4. The Feasibility Study for Surface and Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33 contains a more detailed description of the remedial alternatives evaluated and their estimated 30-year present worth operation and maintenance (O&M) and capital costs. Four alternatives were evaluated.

- No Action (estimated present worth cost of $18,000): evaluated for comparison in all Feasibility Studies. The No Action alternative includes cost for conducting 5-year reviews over a 30-year monitoring period.
- Surface soil removal and LUCs (estimated present worth cost of $160,000 including O&M costs for 30 years): removal of surface soil not covered with concrete and asphalt and exceeding levels allowed for Florida industrial sites, off-site disposal, and restrictions on the use of the site to activities involving less than full-time human contact with the soil, such as commercial/industrial, limited agricultural, or recreational.
- Surface soil removal, soil venting, and LUCs (estimated present worth cost of $382,000 including O&M costs for 30 years): removal of surface soil not covered with concrete and asphalt and exceeding levels allowed for Florida industrial sites, off-site disposal, in situ soil venting to promote volatilization and biodegradation of organic constituents in subsurface soil, and LUCs, as described above.
- Surface and subsurface soil removal and LUCs (estimated present worth cost of $3,234,000 including O&M costs for 30 years): removal and off-site disposal of surface and subsurface soil exceeding levels allowed for Florida industrial sites and LUCs, as described above.

These four alternatives 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
- Long-term effectiveness and permanence
- Reduction of contaminant toxicity, mobility, c volume through treatment
- Short-term effectiveness
- Implementability
- Cost effectiveness
- State acceptance
- Community acceptance

The Feasibility Study for Surface and Subsurfac Soils, Sites 3, 4, 6, 30, 32, and 33 contains a detaile evaluation of each alternative with the nine criteria The evaluation in the Feasibility Study concluded th "No Action" alternative was not protective of huma health for trespassers, occupational workers, an hypothetical future site residents. The surface soi removal, soil venting, and LUCs alternative wa preferred over the other three alternatives because i would protect human health, be more cost effective and satisfy the other evaluation criteria. Th community acceptance criterion will be assesse after the public comment period is complete. Actua or threatened releases of hazardous substances fron this site, if not addressed by the preferred alternativ or one of the other active measures considered, ma present a current or potential threat to public health welfare, or the environment.

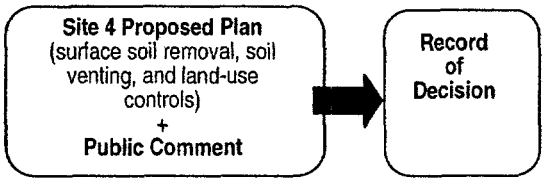
The surface soil removal, soil venting, and LUC alternative will prevent prolonged and frequen human exposure to the subsurface soil. The reporting and certification requirements for the LUCs have been incorporated into the LUC Memorandum of Agreement between the Navy USEPA, and FDEP dated November 4, 1999, and also will be specified in the Site 4 ROD. Site 4 will be available for industrial use and limited recreational and agricultural use after removal and disposal of the surface soil exceeding allowable industrial levels and completion of the soil venting. No other cleanup actions for soil are proposed at Site 4.

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 should be mailed (postmarked) by August __, 2000.

Basis for the Proposal

Based on the Remedial Investigation, risk assessment, and Feasibility Study findings, the Navy is proposing surface soil removal, soil venting, and LUCs as a final remedy with 5-year reviews since soil contamination will remain on-site. These actions will allow activities involving less than full-time direct contact with the soil and would prohibit future residential use.



The USEPA and FDEP concur with the surface soil removal, soil venting, and institution of LUCs to protect human health at Site 4. Community acceptance of the proposed remedial action is the next step. Once the proposal is approved, the ROD will be signed by the Navy with concurrence by FDEP and USEPA. This document will establish the

Basis for the Proposal
(continued from Page 3)

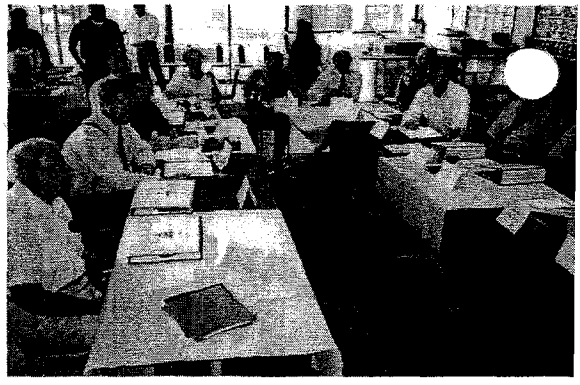
procedure to assure LUCs at Site 4 remain effective over the long term. No other soil cleanup measures at Site 4 will be proposed after approval of the selected remedial action.

Public Involvement

The Navy has established an active outreach program to ensure community involvement in environmental activities at Site 4 and throughout NAS Whiting Field. The Navy will be accepting written comments on the proposed Site 4 remedial action from July __ to August __, 2000. Public participation in the selection process is encouraged. Comments can be submitted using the enclosed form. Comments received will be summarized and responses provided in the responsiveness summary section of the ROD.

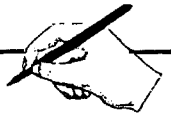
The comment period includes an opportunity for a public meeting at which the Navy would present the Remedial Investigation and Feasibility Study reports and the Proposed Plan, answer questions, and receive comments in writing from the public. A public meeting will be held if one is requested by members 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 proposed remedy by reviewing the documents, offering suggestions, and expressing their concerns on 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 a open to the public and are advertised in local media.



Technical Presentation at a RAB Meeting

A community mailing list is also maintained t distribute updates about the environmental progran to interested members of the community. If yo want further information on the RAB or would lik to be added to the mailing list, please contact eithe of the following:



Pat Durbin
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W. Logan Fink
RAB Co-Chairman
Pensacola Junior College
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Milton, Florida 32
(850) 484-4464

Glossary **(commonly used 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 a process to evaluate hazardous waste conditions that may pose a threat to human health or the environment.

Feasibility Study: 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.

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

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 (O&M): 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 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 explain selected cleanup alternatives at a site; it is based on informatio and technical analysis, and on consideration of public commen and concerns. The ROD is issued and signed by the Navy, th USEPA, and the FDEP at the completion of a Remedi Investigation and Feasibility Study and after communit acceptance of the Proposed Plan.

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

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

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

Remedial Investigation: an in-depth study to determine the natu and extent of contamination and establish cleanup criteria.

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

Responsiveness Summary: a section of the ROD that summariz the public comments received and the responses to the comments.

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

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

Site Inspection: an investigation phase in which readily availab information is collected and analyzed to assess the exter severity of contamination. A USEPA scoring metho follows the site inspection to identify any immediate thu human health or the environment

PROPOSED PLAN

Site 6, South Transformer Oil Disposal Area

The Department of Defense and the Navy have completed the investigation of Naval Air Station (NAS) Whiting Field Site 6, South Transform Oil Disposal Area. The site history and current conditions indicate a need to perform a surface soil removal action and implement land-u controls for future use.

July 20(

In accordance with the National Contingency Plan (NCP) §300.430(f) as well as Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this document summarizes the Navy's proposal for surface soil removal and land-use controls at Site 6 (South Transformer Oil Disposal Area) at Naval Air Station Whiting Field.

The proposed plan is a document intended to fulfill the public participation requirements under CERCLA and the NCP with the specific purposes as follows: provide basic background information; identify the preferred alternative for remedial action at the site and explain the reasons for the preference; describe other remedial alternatives that were considered before the proposed selection was made; solicit public review and comment on all alternatives described; and provide information on how the public can be involved in the remedy selection process.

Comments

The Navy will be accepting written comments (see insert) from July __ through August __, 2000. The comment period includes an opportunity for 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 is reached.

What's Inside

on	Page
Environmental History	2
Basis for the Proposal	3
Public Involvement	3
Glossary	4

The Proposal

The proposed final remedy for surface and subsurface soil contamination at Site 6 is a surface soil removal action and land-use controls (LUCs). Surface soil with the potential to impact human health would be removed with proper disposal off-site. Areas where soil is removed would be backfilled with clean soil. Areas covered with concrete or asphalt would not require soil removal because the existing cover material is a barrier preventing exposure to contaminated soil as long as the concrete/asphalt remain in place. LUCs would restrict future use of the site to activities involving less than full-time human contact with surface and subsurface soil, such as commercial/industrial, limited agricultural, or recreational use. Residential use of the site would be prohibited, and the Navy would perform periodic site inspections and ensure the LUCs are being properly maintained and administered. Groundwater at Site 6 is being investigated separately as part of the NAS Whiting Field basewide groundwater study (Site 40) and is not addressed by the proposed remedy. There is no surface water or sediment at Site 6. 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 provided input into the development of the proposed remedy.

The Navy, USEPA, and FDEP will select a final response action for soil contamination at Site 6 after the public comment period has ended and all written comments received have been evaluated. The final response action will be selected to ensure adequat protection of human health and the environment an will be detailed in a Record of Decision (ROI document for the site. This document will be publishe as a permanent part of the public record for NA Whiting Field.

This Proposed Plan summarizes information that can b found in greater detail in the Remedial Investigatio Report for Surface and Subsurface Soil, Sites 3, 4, 6 30, 32, and 33; the Feasibility Study for Surface an Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33; and othe site documents. These materials are available for revie at the **NAS Whiting Field Information Repository West Florida Regional Library, Milton Branch, 80 Alabama Street, Milton, Florida 32570 (850) 623-5565.**

Site History

Location: Site 6 is located southeast of the Midfiel Maintenance Hangar, Building 1454 (Figure 1).

Operational and Waste Disposal History: At Site 6 from the 1940s until 1964, transformers were reportedl drained into the grassed ditch located east o Building 1454. It is likely the dielectric fluid from th transformers was contaminated with polychlorinatec biphenyls (PCBs).

Current Conditions: The site is characterized by mowed turfgrass and drainage ditches located adjacen to the Midfield Maintenance Hangar apron. This area is also characterized by heavy human activity.

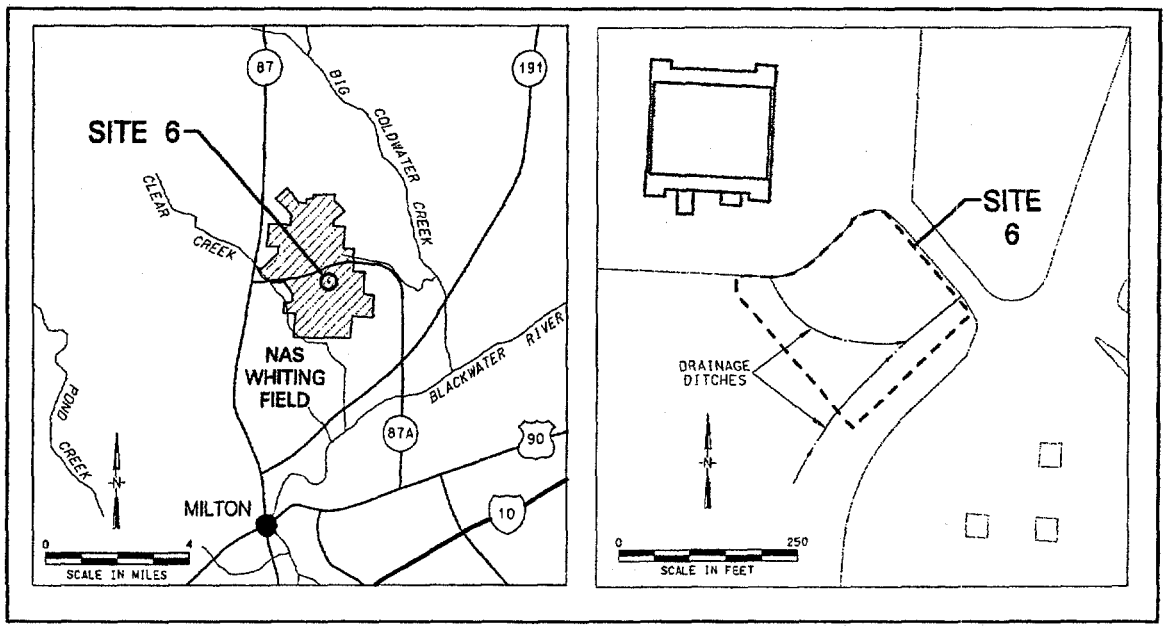
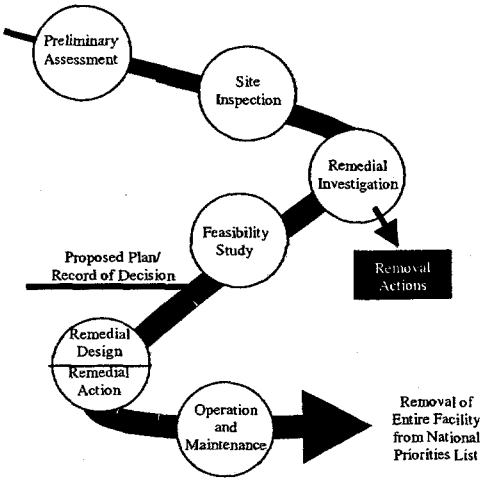


Figure 1 – Site 6 Location Map

Environmental History

Regulatory Framework

Environmental work at Site 6 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 the Comprehensive Environmental Response, Compensation, and Liability Act (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 for environmental study and cleanup in June 1994.

Investigation Activities

The Remedial Investigation at Site 6 was conducted in phases from 1986 through 1996. Fieldwork included a range of environmental studies to collect data needed to determine the presence, nature, and extent of contamination. The field activities and their objectives included the following:

Surface Soil Sampling: conducted to determine surface soil contaminant concentrations by laboratory chemical analysis.

Subsurface Soil Sampling: provided subsurface soil characteristics and contaminant concentration data. Activities included a soil gas survey, installation of soil borings, and sampling of subsurface soil to develop a description of subsurface soil characteristics.

Investigation Findings

The Remedial Investigation Report provided an understanding of the soil environmental conditions at Site 6. Groundwater at Site 6 will be investigated and evaluated separately in the basewide groundwater study (Site 40). These findings are summarized below.

General Site Conditions:

- Groundwater flows to the southwest and discharges into Clear Creek. The water table at Site 6 is 80–90 feet below ground surface.
- Surface and subsurface soil is predominantly sand and silt with thin layers of clay.

Soil Conditions:

- Arsenic, aluminum, Aroclor-1260 (PCBs), benzo(a)pyrene, chromium, iron, total petroleum hydrocarbons, and vanadium in surface soil exceed the standards set by USEPA and FDEP for residential areas.
- No chemicals in subsurface soil exceed the standards set by USEPA and FDEP for industrial areas.

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 the Remedial Investigation, all hazardous substances of potential concern detected in the soil are identified. The substances listed above are those driving the risk and requiring remedy selection. The ecological risk assessment evaluated potential risks to animals and plants from exposure to site contaminants. Risk assessment findings for soil are presented below.

Risk estimates were calculated using FDEP and USEPA guidelines designed to protect human health and the environment. For cancer-causing chemicals, cancer risk numbers shown below estimate the number of additional persons at risk of developing cancer if the site is not cleaned. For example, a cancer risk level of 1.0E-06 means one additional person out of a million persons is at risk for developing cancer. For noncancer-c g chemicals, the measure of the likelihood of adverse effects occurring in humans is called the Hazard Index (HI). An HI greater than 1.0 suggests tha adverse effects are possible.

Human Health Risks:

- Arsenic and benzo(a)pyrene in surface soil pose ar increased lifetime cancer risk greater than the FDEP's threshold level of 1.0E-06 to site trespassers (3.6E-06), occupational workers (6.6E-06), maintenance workers (1.4E-06), and hypothetical future residents (4.5E-05). Tota petroleum hydrocarbons in surface soil result in ar unacceptable noncarinogenic HI greater thar 1.0 for hypothetical future child residents (1.7).

Ecological Risks:

- The quantity of the terrestrial habitat at Site 6 i limited and the quality is poor. The site i comprised of mowed turfgrass, heavy humar activity, and high vehicle/aircraft traffic and i surrounded by intensive development. In addition aircraft and vehicle traffic adjacent to the sit would deter terrestrial wildlife from using th turfgrass areas. Most importantly, the sit comprises only a small portion of the home range of most of the terrestrial wildlife species foun on-base. Therefore, reduction in growth, su and reproduction of small mammal and populations at and near the site is unlikely. Fo these reasons, potential risks appear to b acceptable and further ecological study at Site 6 i unwarranted.

Risk Assessment Findings: Exposure to contaminants found in soil samples at Site 6 pose an increased health risk to trespassers, occupational workers, and hypothetical future residents due primarily to arsenic and benzo(a)pyrene. Because there are no documented uses of arsenic at Site 6, part of the increased health risk may be due to naturally occurring levels of arsenic in the soil.

Public Comments

If you have comments or questions on the Site 6 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 decision for Site 6. Comments must be received by July __, 2000.

Name: _____

Address: _____

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Telephone Number: _____

Mailing List Update

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Comments:

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e-mail: pat.durbin@cnet.navy.mil

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Environmental History (continued from Page 2)

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- No Action (estimated present worth cost of $18,000): evaluated for comparison in all Feasibility Studies. The No Action alternative includes cost for conducting 5-year reviews over a 30-year monitoring period.
- Surface soil removal and LUCs (estimated present worth cost of $354,000 including O&M costs for 30 years): removal and off-site disposal of surface soil exceeding levels allowed for Florida industrial sites, and restrictions on the use of the site to activities involving less than full-time human contact with the soil, such as commercial/industrial, limited agricultural, or recreational.
- Surface soil removal, soil venting, and LUCs (estimated present worth cost of $318,000 including O&M costs for 30 years): removal and off-site disposal of surface soil exceeding levels allowed for Florida industrial sites, in situ soil venting to promote volatilization and biodegradation of organic constituents in subsurface soil, and LUCs, as described above.
- Surface and subsurface soil removal and LUCs (estimated present worth cost of $628,000 including O&M costs for 30 years): removal and off-site disposal of surface and subsurface soil exceeding levels allowed for Florida industrial sites and LUCs, as described above.

These four alternatives 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
- Long-term effectiveness and permanence
- Reduction of contaminant toxicity, mobility, or volume
- Short-term effectiveness
- Implementability
- Cost effectiveness
- State acceptance
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The surface soil removal and LUCs alternative v prevent prolonged and frequent human exposure the subsurface soil. The reporting and certificati requirements for the LUCs have been incorporat into the LUC Memorandum of Agreement betwe the Navy, USEPA, and FDEP dated November 1999, and also will be specified in the Site 6 RO Site 6 will be available for industrial use and limit recreational and agricultural use after removal a disposal of the surface soil exceeding allowat industrial levels. No other cleanup actions for soil a proposed at Site 6.

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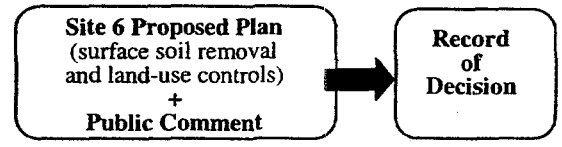

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Public Involvement (continued from Page 3)

Attendees of a recent RAB Meeting

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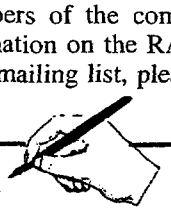

Pat Durbin	*W. Logan Fink*
Public Works Department	*RAB Co-Chairman*
NAS Whiting Field	*Pensacola Junior College*
7151 USS WASP Street	*5988 Highway 90*
Milton, Florida 32570-6159	*Milton, Florida 32583*
(850) 623-7181 (Ext. 48)	*(850) 484-4464*

Glossary (commonly used terms)

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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 a process to evaluate hazardous waste conditions that may pose a threat to human health or the environment.

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

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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 (O&M): 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 electrical 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 fo the community to provide written and oral comments on proposed environmental action at a hazardous waste site.

Record of Decision (ROD): a public document that explain selected cleanup alternatives at a site; it is based o information and technical analysis, and on consideration o public comments and concerns. The ROD is issued and signe by the Navy, the USEPA, and the FDEP at the completio f Remedial Investigation and Feasibility Study an community acceptance of the Proposed Plan.

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

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

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

Remedial Investigation: an in-depth study to determine th nature and extent of contamination and establish cleanu criteria.

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

Responsiveness Summary: a section of the ROD tha summarizes the public comments received and the responses t the comments.

Restoration Advisory Board (RAB): an advisory grou composed of regulatory agency representatives, site personne and community volunteers who provide input and promot public involvement in cleanup activities.

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

Site Inspection: an investigation phase in which readil available information is collected and analyzed to assess th extent and severity of contamination. A USEPA s methodology follows the site inspection to identif immediate threat to human health or the environment.

Naval Air Station Whiting Field, Milton, Florida

PROPOSED PLAN

Site 30, South Field Maintenance Hangar

The Department of Defense and the Navy have completed the investigation of Naval Air Station (NAS) Whiting Field Site 30, South Fi Maintenance Hangar. The site history and current conditions indicate a need to perform an underground storage tank (UST) remo surface soil removal action, and implement land-use controls for future use. July 20

ccordance with the National Contingency Plan (NCP) §300.430(f) as well as Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this document summarizes the Navy's proposal for surface soil removal and land-use controls at Site 30 (South Field Maintenance Hangar) at Naval Air Station Whiting Field.

The proposed plan is a document intended to fulfill the public participation requirements under CERCLA and the NCP with the specific purposes as follows: provide basic background information; identify the preferred alternative for remedial action at the site and explain the reasons for the preference; describe other remedial alternatives that were considered before the proposed selection was made; solicit public review comment on all natives described; and provide information on how the public can be involved in the remedy selection process.

Comments

The Navy will be accepting written comments (see insert) from July __ through August __, 2000. The comment period includes an opportunity for 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 is reached.

What's Inside

Section	Page
Environmental History	2
Basis for the Proposal	3
Public Involvement	3
Glossary	4

The Proposal

The proposed final remedy for surface and subsurface soil contamination at Site 30 is removal of four USTs, removal of surface soil, and implementation of land-use controls (LUCs). Surface soil with the potential to impact human health would be removed with proper disposal off-site. Areas where soil is removed would be backfilled with clean soil. Areas covered with concrete or asphalt would not require soil removal because the existing cover material is a barrier preventing exposure to contaminated soil as long as the concrete/asphalt remain in place. LUCs would restrict future use of the site to activities involving less than full-time human contact with surface and subsurface soil, such as commercial/industrial, limited agricultural, or recreational use. Residential use of the site would be prohibited, and the Navy would perform periodic site inspections and ensure the LUCs are being properly maintained and administered. Groundwater at Site 30 is being investigated separately as part of the NAS Whiting Field basewide groundwater study (Site 40) and is not addressed by the proposed remedy. There is no surface water or sediment at Site 30. 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 provided input into the development of the proposed remedy.

The Navy, USEPA, and FDEP will select a final response action for soil contamination at Site 30 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 (ROI document for the site. This document will b published as a permanent part of the public record fo NAS Whiting Field.

This Proposed Plan summarizes information that ca be found in greater detail in the Remedial Investigatic Report for Surface and Subsurface Soil, Sites 3, 4, 6 30, 32, and 33; the Feasibility Study for Surface an Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33; and othe site documents. These materials are available fo review at the **NAS Whiting Field Informatio Repository, West Florida Regional Library, Milto Branch, 805 Alabama Street, Milton, Florida 3257 (850) 623-5565.**

Site History

Location: Site 30 is approximately 4.3 acres an located at the South Field Maintenance Hangar Building 1406 in the South Field Industrial Are (Figure 1). Site 30 includes Building 1406, the adjacen wash rack area, and the location of the abandoned wast oil tanks (USTs) west of Building 1406.

Operational and Waste Disposal History: The Soutl Field Maintenance Hangar was constructed in the middle 1940s to support maintenance service fo training aircraft. Activities at this site included engine maintenance, corrosion control, and aircraft cleaning These activities generated waste stripping compounds cleaning solvents, paint wastes, alkaline cleaners detergents, oil, and hydraulic fluids.

Current Conditions: The site is characterized by concrete, asphalt, buildings, and heavy human activity A small area of mowed turfgrass is located along the western boundary of the site.

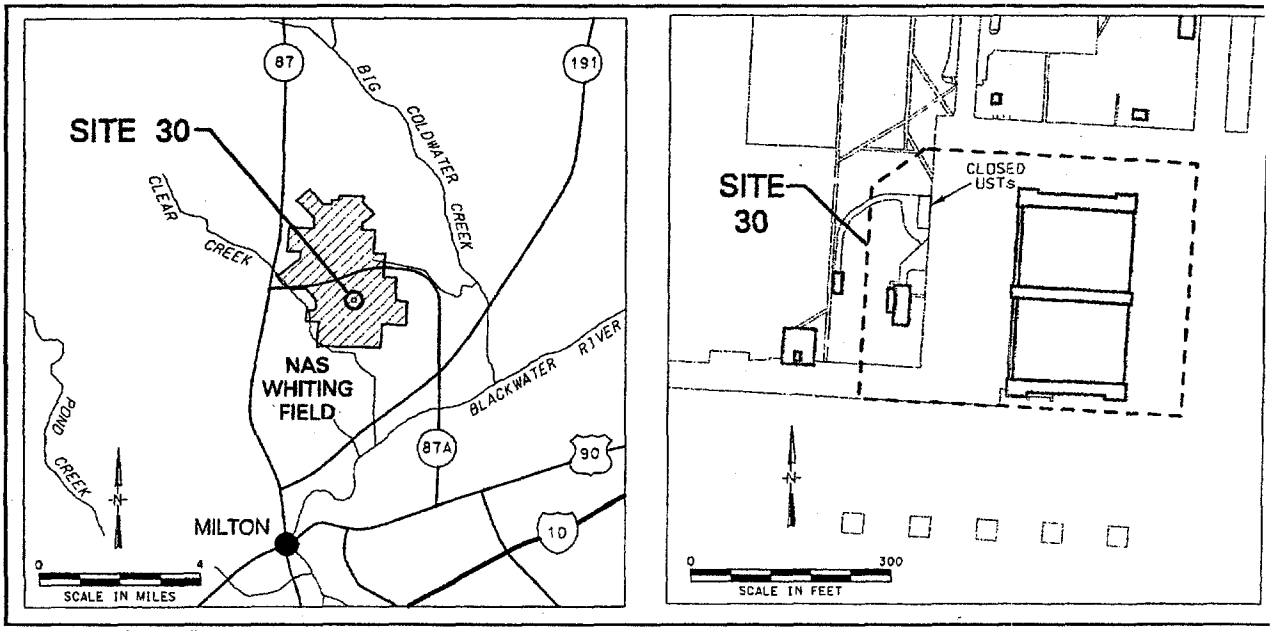
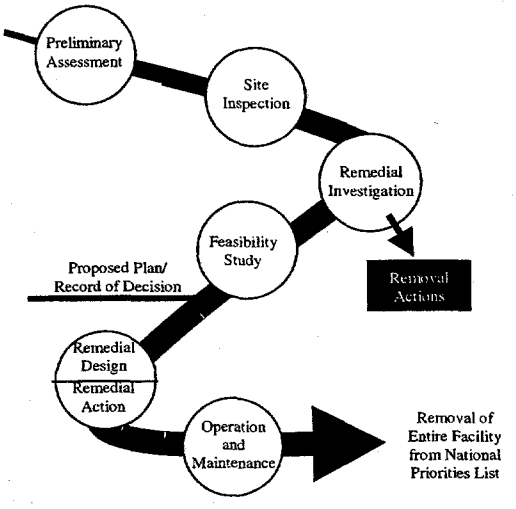


Figure 1 – Site 30 Location Map

Environmental History

Regulatory Framework

Environmental work at Site 30 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 the Comprehensive Environmental Response, Compensation, and Liability Act (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 for environmental study and cleanup in June 1994.

Investigation Activities

The Remedial Investigation at Site 30 was conducted in phases from 1986 through 1999. Fieldwork included a range of environmental studies to collect data needed to determine the presence, nature, and extent of contamination. The field activities and their objectives included the following:

Surface Soil Sampling: conducted to determine surface soil contaminant concentrations by laboratory chemical analysis.

Subsurface Soil Sampling: provided subsurface soil characteristics and contaminant concentration data. Activities included a soil gas survey, installation of soil borings, and sampling of subsurface soil to develop a description of subsurface soil characteristics.

Investigation Findings

The Remedial Investigation Report provided an understanding of the soil environmental conditions at Site 30. Groundwater at Site 30 will be investigated and evaluated separately in the basewide groundwater study (Site 40). These findings are summarized below.

General Site Conditions:

- Groundwater flows to the southwest and appears to discharge into Clear Creek. The water table at Site 30 is 80–90 feet below ground surface.
- Surface and subsurface soil is predominantly sand and silt with thin layers of clay.

Soil Conditions:

- Arsenic, aluminum, chromium, iron, manganese, total petroleum hydrocarbons, and vanadi n surface soil exceed the standards set by US PA and FDEP for residential areas.
- Arsenic and total petroleum hydrocarbons in subsurface soil exceed the standards set by USEPA and FDEP for industrial areas.

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 the Remedial Investigation, all hazardous substances of potential concern detected in the soil are identified. The substances listed above are those driving the risk and requiring remedy selection. The ecological risk assessment evaluated potential risks to animals and plants from exposure to site contaminants. Risk assessment findings for soil are presented below.

Risk estimates were calculated using FDEP and USEPA guidelines designed to protect human health and the environment. For cancer-causing chemicals, cancer risk numbers shown below estimate the number of additional persons at risk of developing cancer if the site is not cleaned up. For example, a cancer risk level of 1.0E-06 means one additional person out of a million persons is at risk for developing cancer. For noncancer-causing chemicals, the measure of the likelihood of a e effects occurring in humans is called the H rd Index (HI). An HI greater than 1.0 suggests that adverse effects are possible.

Human Health Risks:

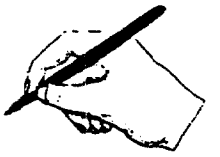
- Arsenic in surface soil poses an increased lifetime cancer risk greater than the FDEP's threshold level of 1.0E-06 to site trespassers (3.6E-06) occupational workers (6.3E-06), and hypothetical future residents (3.5E-05). Total petroleum hydrocarbons and iron in surface soil result in an unacceptable noncarinogenic HI greater than 1.0 for hypothetical future child residents (4.7 and 1.1 respectively).

Ecological Risks:

- The quantity of the terrestrial habitat at Site 30 is limited and the quality is poor. The site is comprised almost entirely of concrete and is surrounded by intensive development, with the exception of some turfgrass to the west. In addition, helicopters are parked adjacent to the turfgrass, and helicopter take offs and landings are made in this area on a regular and frequent basis. As a result, the area is characterized by loud noise, which would deter some types of terrestrial wildlife from using the turfgrass area. Most importantly, the site comprises only a small portion of the home ranges of most of the terrestrial wildlife species found on-base. There e reduction in growth, survival, and reproducti small mammal and bird populations at and near the site is unlikely. For these reasons, potential risk appear to be acceptable and further ecological study at Site 30 is unwarranted.

Risk Assessment Findings: Exposure to contaminants found in soil samples at Site 30 pose an increased health risk to trespassers, occupational workers, and hypothetical future residents due primarily to arsenic and total petroleum hydrocarbons. However, much of the increased health risk may be due to naturally occurring levels of arsenic because there are no documented uses of arsenic at Site 30.

Public Comments



If you have comments or questions on the Site 30 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 decision for Site 30. Comments must be received by July ____ , 2000.

Name: _____

Address: _____

_____

_____

_____

Telephone Number: _____

Mailing List Update

If you 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:

_____

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Return to Ms. Pat Durbin, Public Works Department,
NAS Whiting Field, 7151 USS Wasp Street,
Milton, Florida 32570-6159, (850) 623-7181 (Ext. 48)
e-mail: pat.durbin@cnet.navy.mil

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

Place
Stamp
Here

Forwarding address correction requested.

Environmental History
(continued from Page 2)

Next, a **Feasibility Study** was conducted to identify the best approach to address the soil contamination at Site 30. The Feasibility Study for Surface and Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33 contains a more detailed description of the remedial alternatives evaluated and their estimated 30-year present worth operation and maintenance (O&M) and capital costs. Four alternatives were evaluated.

- No Action (estimated present worth cost of $18,000): evaluated for comparison in all Feasibility Studies. The No Action alternative includes costs for conducting 5-year reviews over a 30-year monitoring period.
- UST removal, surface soil removal, and LUCs (estimated present worth cost of $176,000 including O&M costs for 30 years): removal of USTs; removal of surface soil not covered with concrete and asphalt and exceeding levels allowed for Florida industrial sites, and off-site disposal; and LUCs. LUCs are restrictions on the use of the site to activities involving less than full-time human contact with the soil, such as commercial/industrial, limited agricultural, or recreational.
- UST removal, surface soil removal, soil venting, and LUCs (estimated present worth cost of $352,000 including O&M costs for 30 years): removal of USTs; removal of surface soil not covered with concrete and asphalt and exceeding levels allowed for Florida industrial sites, and off-site disposal; in situ soil venting to promote volatilization and biodegradation of organic constituents in subsurface soil; and LUCs, as described above.
- UST removal, surface and subsurface soil removal, and LUCs (estimated present worth cost of $884,000 including O&M costs for 30 years): removal of USTs; removal and off-site disposal of surface and subsurface soil exceeding levels allowed for Florida industrial sites; and LUCs, as described above.

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

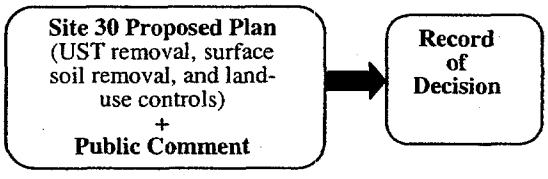
- Overall protection of human health and the environment
- Compliance with applicable environmental regulations and requirements
- Long-term effectiveness and permanence
- Reduction of contaminant toxicity, mobility, or volume
- Short-term effectiveness
- Implementability
- Cost effectiveness
- State acceptance
- Community acceptance

The Feasibility Study for Surface and Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33 contains a detailed evaluation of each alternative with the nine criteria. The evaluation in the Feasibility Study concluded the "No Action" alternative was not protective of human health for trespassers, occupational workers, and hypothetical future site residents. The UST removal, surface sc removal, and LUCs alternative was preferred over th other two alternatives because it would protect huma health, be more cost effective, and satisfy the oth evaluation criteria. The community acceptanc criterion will be assessed after the public commer period is complete. Actual or threatened releases c hazardous substances from this site, if not addresse by the preferred alternative or one of the other activ measures considered, may present a current c potential threat to public health, welfare, or th environment.

The UST removal, surface soil removal, and LUC alternative will prevent prolonged and frequer human exposure to the subsurface soil. The reportin and certification requirements for the LUCs hav been incorporated into the LUC Memorandum c Agreement between the Navy, USEPA, and FDE dated November 4, 1999, and also will be specified i the Site 30 ROD. Site 30 will be available fo industrial use and limited recreational an agricultural use after removal and disposal of th surface soil exceeding allowable industrial levels No other cleanup actions for soil are proposed a Site 30.

Basis for the Proposal

Based on the Remedial Investigation, risk assessment, and Feasibility Study findings, the Navy is proposing UST removal, surface soil removal, and LUCs as a final remedy with 5-year reviews since soil contamination will remain on-site. These actions will allow activities involving less than full-time direct contact with the soil and would prohibit future residential use.



The USEPA and FDEP concur with UST removal, surface soil removal, and institution of LUCs to protect human health at Site 30. Community acceptance of the proposed remedial action is the next step. Once the proposal is approved, the ROD will be signed by the Navy, with concurrence by FDEP and USEPA. This document will establish the procedure to assure LUCs at Site 30 remain effective over the long term. No other soil cleanup measures at Site 30 will be proposed after approval of the selected remedial action.

Public Involvement

The Navy has established an active outreach program to ensure community involvement in environmental activities at Site 30 and throughout NAS Whiting Field. The Navy will be accepting written comments on the proposed Site 30 remedial action from July__ to August __, 2000. Public participation in the selection process is encouraged. Comments can be submitted using the enclosed form. Comments received will be summarized and responses provided in the responsiveness summary section of the ROD.

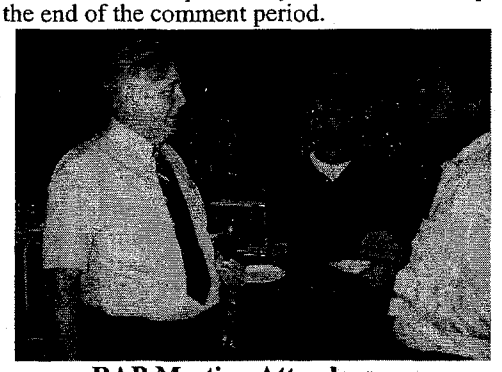
The comment period includes an opportunity for a public meeting at which the Navy would present the Remedial Investigation and Feasibility Study reports

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 should be mailed (postmarked) by August ___, 2000.

Public Involvement
(continued from Page 3)

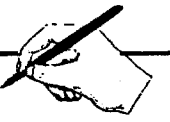
and the Proposed Plan; answer questions, and receive comments in writing from the public. A public meeting will be held if one is requested by members of the public before the end of the comment period.



RAB Meeting Attendees

The NAS Whiting Field RAB is another method used by the Navy to promote public involvement in the base and the environmental cleanup program. For example, the RAB has been invited to participate in developing the proposed remedy by reviewing the documents, offering suggestions, and expressing their concerns on th proposed remedial actions. The RAB meets regularly convenient times and locations to discuss Installatic Restoration program status and provide communi input into the cleanup process. RAB meetings are ope to the public and are advertised in local media.

A community mailing list is also maintained distribute updates about the environmental program interested members of the community. If you wa further information on the RAB or would like to b added to the mailing list, please contact either of th following:



Pat Durbin
Public Works Department
NAS Whiting Field
7151 USS WASP Street
Milton, Florida 32570-6159
(850) 623-7181 (Ext. 48)

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

Glossary (commonly used 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 a process to evaluate hazardous waste conditions that may pose a threat to human health or the environment.

Feasibility Study: 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.

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

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 (O&M): 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 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 tha explains selected cleanup alternatives at a site; it is base on information and technical analysis, and on considerati of public comments and concerns. The ROD is issued an signed by the Navy, the USEPA, and the FDEP at th completion of a Remedial Investigation and Feasibilit Study and after community acceptance of the Pr Plan.

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

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

Removal Action: an early action taken to address a releas or potential release of hazardous substances that do n pose immediate danger to public health or the environmen

Remedial Investigation: an in-depth study to determin the nature and extent of contamination and establis cleanup criteria.

Response Action: a federally authorized action to respon to environmental contamination. There are two type removal action taken over the short-term to respond quickl to a more immediate threat, and remedial action involvin long-term activities for a more permanent cleanup solution

Responsiveness Summary: a section of the ROD th summarizes the public comments received and th responses to the comments.

Restoration Advisory Board (RAB): an advisory grou composed of regulatory agency representatives, si personnel, and community volunteers who provide inp and promote public involvement in cleanup activities.

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

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

PROPOSED PLAN

Site 32, North Field Maintenance Hangar

The Department of Defense and the Navy have completed the investigation of Naval Air Station (NAS) Whiting Field Site 32, North Fi Maintenance Hangar. The site history and current conditions indicate a need to perform an underground storage tank (UST) removal, perfo a surface soil removal, and implement land-use controls for future use. **July 20(**

ccordance with the ational Contingency Plan (NCP) §300.430(f) as well as Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), this document summarizes the Navy's proposal for surface soil removal and land-use controls at Site 32 (North Field Maintenance Hangar) at Naval Air Station Whiting Field.

The proposed plan is a document intended to fulfill the public participation requirements under CERCLA and the NCP with the specific purposes as follows: provide basic background information; identify the preferred alternative for remedial action at the site and explain the reasons for the preference; describe other remedial alternatives that were considered before the proposed selection was made; solicit public review and comment on all atives described; and p. vide information on how the public can be involved in the remedy selection process.

Comments

The Navy will be accepting written comments (see insert) from July __ through August __, 2000. The comment period includes an opportunity for 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 is reached.

hat's Inside

Section	Page
Environmental History	2
Basis for the Proposal	3
Public Involvement	3
Glossary	4

The Proposal

The proposed final remedy for surface and subsurface soil contamination at Site 32 is removal of four USTs, removal of surface soil, and implementation of land-use controls (LUCs). Surface soil with the potential to impact human health would be removed with proper disposal off-site. Areas where soil is removed would be backfilled with clean soil. Areas covered with concrete or asphalt would not require soil removal because the existing cover material is a barrier preventing exposure to contaminated soil as long as the concrete/asphalt remains in place. LUCs would restrict future use of the site to activities involving less than full-time human contact with surface and subsurface soil, such as commercial/industrial, limited agricultural, or recreational use. Residential use of the site would be prohibited, and the Navy would perform periodic site inspections and ensure the LUCs are being properly maintained and administered. Groundwater at Site 32 is being investigated separately as part of the NAS Whiting Field basewide groundwater study (Site 40) and is not addressed by the proposed remedy. There is no surface water or sediment at Site 32. 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 provided input into the development of the proposed remedy.

The Navy, USEPA, and FDEP will select a final response action for soil contamination at Site 32 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 (ROD document for the site. This document will b published as a permanent part of the public record fo NAS Whiting Field.

This Proposed Plan summarizes information that ca be found in greater detail in the Remedial Investigatio Report for Surface and Subsurface Soil, Sites 3, 4, 6 30, 32, and 33; the Feasibility Study for Surface an Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33; and othe site documents. These materials are available fo review at the **NAS Whiting Field Information Repository, West Florida Regional Library, Milton Branch, 805 Alabama Street, Milton, Florida 32570; (850) 623-5565.**

Site History

Location: Site 32 is approximately 3.5 acres and located at the North Field Maintenance Hangar, Building 1424 in the North Field Industrial Area (Figure 1). Site 32 includes Building 1424, the adjacent wash rack area, and the location of the abandoned waste oil USTs west of Building 1424.

Operational and Waste Disposal History: The North Field Maintenance Hangar was constructed in the mid-1940s to support maintenance service for training aircraft. Activities at this site included engine maintenance, corrosion control, and aircraft cleaning. These activities generated waste stripping compounds, cleaning solvents, paint wastes, detergents, oil, and hydraulic fluids.

Current Conditions: The site is characterized by concrete, asphalt, buildings, and heavy human activity. A small area of mowed turfgrass is located near the southern boundary of the site.

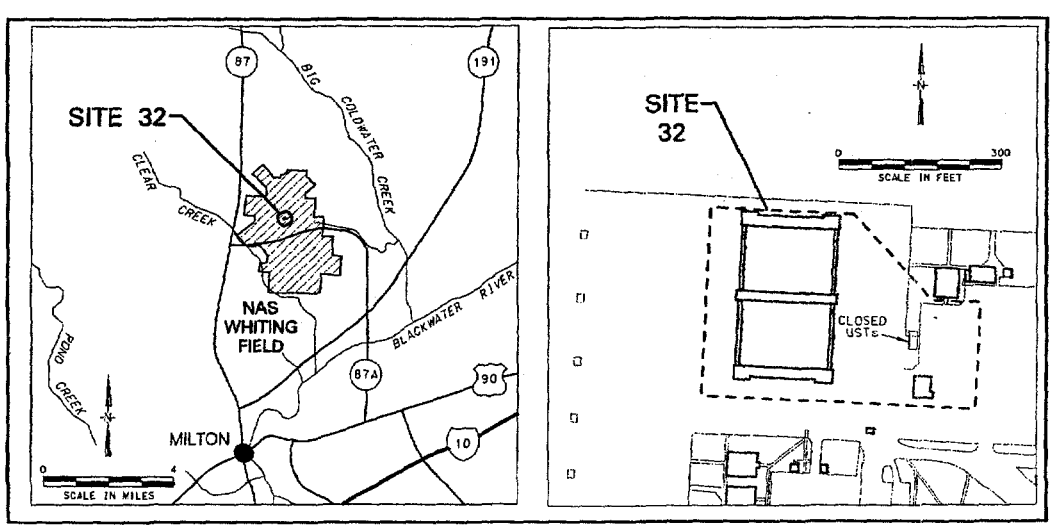
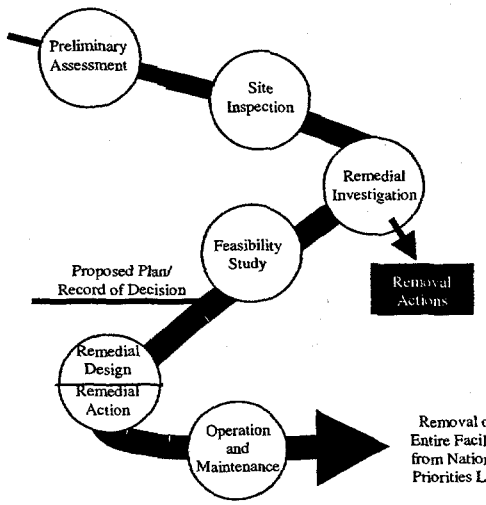


Figure 1 – Site 32 Location Map

Environmental History

Regulatory Framework

Environmental work at Site 32 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 the Comprehensive Environmental Response, Compensation, and Liability Act (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 for environmental study and cleanup in June 1994.

Investigation Activities

The Remedial Investigation at Site 32 was conducted in phases from 1992 through 1999. Fieldwork included a range of environmental studies to collect data needed to determine the presence, nature, and extent of contamination. The field activities and their objectives included the following:

Surface Soil Sampling: conducted to determine surface soil contaminant concentrations by laboratory chemical analysis.

Subsurface Soil Sampling: provided subsurface soil characteristics and contaminant concentration data. Activities included a soil gas survey, installation of soil borings, and sampling of subsurface soil to develop a description of subsurface soil characteristics.

Investigation Findings

The Remedial Investigation Report provided an understanding of the soil environmental conditions at Site 32. Groundwater at Site 32 will be investigated and evaluated separately in the basewide groundwater study (Site 40) . These findings are summarized below.

General Site Conditions:

- Groundwater flows to the southwest and discharges into Clear Creek. The water table at Site 32 is 80–90 feet below ground surface.
- Surface and subsurface soil is predominantly sand and silt with thin layers of clay.

Soil Conditions:

- Arsenic, aluminum, iron, total petroleum hydrocarbons, and vanadium in surface soil exceed the standards set by USEPA and FDEP for residential areas.
- Arsenic and total petroleum hydrocarbon in subsurface soil exceed the standards set by USEPA and FDEP for industrial areas.

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 the Remedial Investigation, all hazardous substances of potential concern detected in the soil are identified. The substances listed above are those driving the risk and requiring remedy selection. The ecological risk assessment evaluated potential risks to animals and plants from exposure to site contaminants. Risk assessment findings for soil are presented below.

Risk estimates were calculated using FDEP and USEPA guidelines designed to protect human health and the environment. For cancer-causing chemicals, the cancer risk numbers shown below estimate the number of additional persons at risk of developing cancer if the site is not cleaned up. For example, a cancer risk level of 1.0E-06 means one additional person out of a million persons is at risk for developing cancer. For noncancer-causing chemicals, 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.

Human Health Risks:

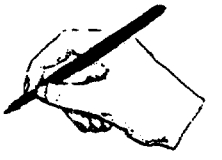
- Arsenic in surface soil poses an increased lifetime cancer risk greater than the FDEP's threshold level of 1.0E-06 to site trespassers (2.0E-06), occupational workers (3.4E-06), and hypothetical future residents (1.9E-05). Total petroleum hydrocarbons in surface soil result in an unacceptable noncarcinogenic HI greater than 1.0 for hypothetical future child residents (6.0).

Ecological Risks:

- The quantity of the terrestrial habitat at Site 32 is limited and the quality is poor. The site is comprised almost entirely of concrete and buildings and surrounded by intensive development, with the exception of some turfgrass to the north. In addition, aircraft and vehicle traffic on and adjacent to the site would deter terrestrial wildlife from using the small turfgrass areas. Although some types of wildlife can become accustomed to heavy human activity, little habitat is present on or near Site 32 to attract anything but an occasional transient songbird or small mammal. Most importantly, the site comprises only a small portion of the home ranges of most of the terrestrial wildlife species found on-base. Therefore, reduction in growth, survival, or reproduction of small mammal and bird populations at and near the site is unlikely. For these reasons, potential risks appear to be acceptable and further ecological study at Site 32 is unwarranted.

Risk Assessment Findings: Exposure to contaminants found in soil samples at Site 32 pose an increased health risk to trespassers, occupational workers, and hypothetical future residents due primarily to arsenic and total petroleum hydrocarbons. Because there are no documented uses of arsenic at Site 32, a large part of the health risk may be due to naturally occurring levels of arsenic.

Public Comments



If you have comments or questions on the Site 32 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 decision for Site 32. Comments must be received by July __, 2000.

Name: _____

Address: _____

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Telephone Number: _____

Mailing List Update

If you 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:

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NAS WHITING FIELD

Return to Ms. Pat Durbin, Public Works Department,
NAS Whiting Field, 7151 USS Wasp Street,
Milton, Florida 32570-6159, (850) 623-7181 (Ext. 48)
e-mail: pat.durbin@cnet.navy.mil

NAS WHITING FIELD

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

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Environmental History
(continued from Page 2)

Next, a **Feasibility Study** was conducted to identify the best approach to address the soil contamination at Site 32. The Feasibility Study for Surface and Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33 contains a more detailed description of the remedial alternatives evaluated and their estimated 30-year present worth operation and maintenance (O&M) and capital costs. Four alternatives were evaluated.

- No Action (estimated present worth cost of $18,000): evaluated for comparison in all Feasibility Studies. The No Action alternative includes costs for conducting 5-year reviews over a 30-year monitoring period.
- UST removal, surface soil removal, and LUCs (estimated present worth cost of $73,000 including O&M costs for 30 years): removal of USTs; removal of surface soil not covered by concrete or asphalt and exceeding levels allowed for Florida industrial sites, and off-site disposal; and LUCs. LUCs are restrictions on the use of the site to contact with the soil, such as commercial/industrial, limited agricultural, or recreational.
- UST removal, soil venting, LUCs (estimated present worth cost of $190,000 including O&M costs for 30 years): removal of USTs, in situ soil venting to promote volatilization and biodegradation of organic constituents in surface and subsurface soil, and LUCs, as described above.
- UST removal, surface and subsurface soil removal, and LUCs (estimated present worth cost of $411,000 including O&M costs for 30 years): removal of USTs, removal and off-site disposal of surface and subsurface soil exceeding levels allowed for Florida industrial sites, and LUCs, as described above.

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

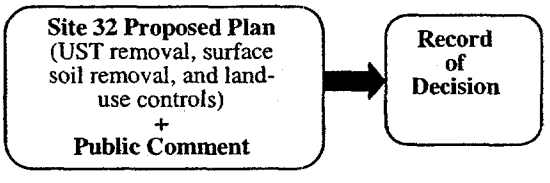
- Overall protection of human health and the environment
- Compliance with applicable environmental regulations and requirements
- Long-term effectiveness and permanence
- Reduction of contaminant toxicity, mobility, or volume through treatment
- Short-term effectiveness
- Implementability
- Cost effectiveness
- State acceptance
- Community acceptance

The Feasibility Study for Surface and Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33 contains a detailed evaluation of each alternative with the nine criteria. The evaluation in the Feasibility Study concluded the "No Action" alternative was not protective of human health for trespassers, occupational workers, and hypothetical future site residents. The UST removal, surface soil removal, and LUCs alternative was preferred over the other two alternatives 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. Actual or threatened releases of hazardous substances from this site, if not addressed by the preferred alternative or one of the other active measures considered, may present a current or potential threat to public health, welfare, o the environment.

The UST removal, surface soil removal, and LUC alternative will prevent prolonged and frequent humai exposure to the subsurface soil. The reporting an certification requirements for the LUCs have bee incorporated into the LUC Memorandum of Agreemen between the Navy, USEPA, and FDEP date November 4, 1999 and also will be specified in the Sit 32 ROD. Site 32 will be available for industrial use an limited recreational and agricultural use after remova and disposal of the surface soil exceeding allowabl industrial levels. No other cleanup actions for soil ar proposed at Site 32.

Basis for the Proposal

Based on the Remedial Investigation, risk assessmen and Feasibility Study findings, the Navy is proposin UST removal, surface soil removal, and LUCs as a fina remedy with 5-year reviews since soil contaminatio will remain on-site. These actions will allow activitie involving less than full-time direct contact with the so and would prohibit future residential use.



The USEPA and FDEP concur with UST remova surface soil removal, and institution of LUCs to prote human health at Site 32. Community acceptance of th proposed remedial action is the next step. Once th proposal is approved, the ROD will be signed by th Navy with concurrence by FDEP and USEPA. Th document will establish the procedure to assure LUC at Site 32 remain effective over the long term. No oth soil cleanup measures at Site 32 will be proposed aft approval of the selected remedial action.

Public Involvement

The Navy has established an active outreach program ensure community involvement in environment activities at Site 32 and throughout NAS Whiting Fiel The Navy will be accepting written comments on th Site 32 proposed remedial action from July __ August __, 2000. Public participation in the selecti process is encouraged. Comments can be submitte using the enclosed form. Comments received will l summarized and responses provided in th responsiveness summary section of the ROD.

The comment period includes an opportunity for public meeting at which the Navy would present th Remedial Investigation and Feasibility Study repor and the Proposed Plan, answer questions, and recei comments in writing from the public. A public meeti will be held if one is requested by members of th public before the end of the comment period.

The NAS Whiting Field RAB is another meth used by the Navy to promote public involvement the base environmental cleanup program. F example, the RAB has been invited to participate

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 should be mailed (postmarked) by August __, 2000.

Public Involvement

(continued from Page 3)

developing the proposed remedy by reviewing the documents, offering suggestions, and expressing their concerns on 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 media.

Participants at a RAB Meeting

A community mailing list is also maintained to distribute updates about the environmental program 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 32570-6159
(850) 623-7181 (Ext. 48)

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

Glossary (commonly used 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 a process to evaluate hazardous waste conditions that may pose a threat to human health or the environment.

Feasibility Study: 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.

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

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 (O&M): 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 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. The ROD is 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 cl[illegible]p phase that follows the selection of cleanup alternat[illegible].

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

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

Remedial Investigation: 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 in 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 [illegible] USEPA scoring methodology follows the site inspection to identify any immediate threat to human health or the environment.

PROPOSED PLAN

Site 33, Midfield Maintenance Hangar

The Department of Defense and the Navy have completed the investigation of Naval Air Station (NAS) Whiting Field Site 33, Midfiel Maintenance Hangar. The site history and current conditions indicate a need to perform an underground storage tank (UST) removal an implement land-use controls to restrict future use.

July 200

In accordance with the National Contingency Plan (NCP) §300.430(f) as well as 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 33 (Midfield Maintenance Hangar) at Naval Air Station Whiting Field.

The proposed plan is a document intended to fulfill the public participation requirements under CERCLA and the NCP with the specific purposes as follows: provide basic background information; identify the preferred alternative for remedial action at the site and explain the reasons for the preference; describe other remedial alternatives that were considered before the proposed selection was made; solicit public review and comment on all natives described; and de information on how the public can be involved in the remedy selection process.

Comments

The Navy will be accepting written comments (see insert) from July __ through August __, 2000. The comment period includes an opportunity for 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 is reached.

hat's Inside

Section	Page
Environmental History	2
Basis for the Proposal	3
Public Involvement	3
Glossary	4

The Proposal

The proposed final remedy for surface and subsurface soil contamination at Site 33 is removal of one UST and implementation of land-use controls (LUCs). Areas covered with concrete or asphalt would not require soil removal because the existing cover material is a barrier preventing exposure to contaminated soil as long as the concrete/asphalt remains in place. LUCs would restrict future use of the site to activities involving less than full-time human contact with surface and subsurface soil, such as commercial/industrial, limited agricultural, or recreational use. Residential use of the site would be prohibited, and the Navy would perform periodic site inspections and ensure the LUCs are being properly maintained and administered. Groundwater at Site 33 is being investigated separately as part of the NAS Whiting Field basewide groundwater study (Site 40) and is not addressed by the proposed remedy. There is no surface water or sediment at Site 33. 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 provided input into the development of the proposed remedy.

The Navy, USEPA, and FDEP will select a final response action for soil contamination at Site 33 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 (ROD) document for the site. This document will be published as a permanent part of th public record for NAS Whiting Field.

This Proposed Plan summarizes information that can b found in greater detail in the Remedial Investigatio Report for Surface and Subsurface Soil Sites 3, 4, 6, 30 32, and 33, and the Feasibility Study for Surface an Subsurface Soil at Sites 3, 4, 6, 30, 32, and 33 and othe site documents and other site documents. These material are available for review at the **NAS Whiting Fiel Information Repository, West Florida Regiona Library, Milton Branch, 805 Alabama Street, Milton Florida 32570 (850) 623-5565.**

Site History

Location: Site 33 is approximately 2.5 acres and located a the Midfield Maintenance Hangar, Building 145 (Figure 1). The site includes Building 1454 and th location of the abandoned waste oil UST north of Buildin 1454.

Operational and Waste Disposal History: The Midfiel Maintenance Hangar was constructed in the mid-1940s t support maintenance service of assigned aircraft and lin maintenance on transient aircraft. Activities at this sit included engine maintenance, corrosion control, an aircraft cleaning. These activities generated wast stripping compounds, cleaning solvents, paint wastes alkaline cleaners, detergents, oil, and hydraulic fluids.

Current Conditions: The site is characterize predominantly by concrete, asphalt, buildings, and heav human activity. Areas of mowed turfgrass are locate along the northern and southern boundaries of the site.

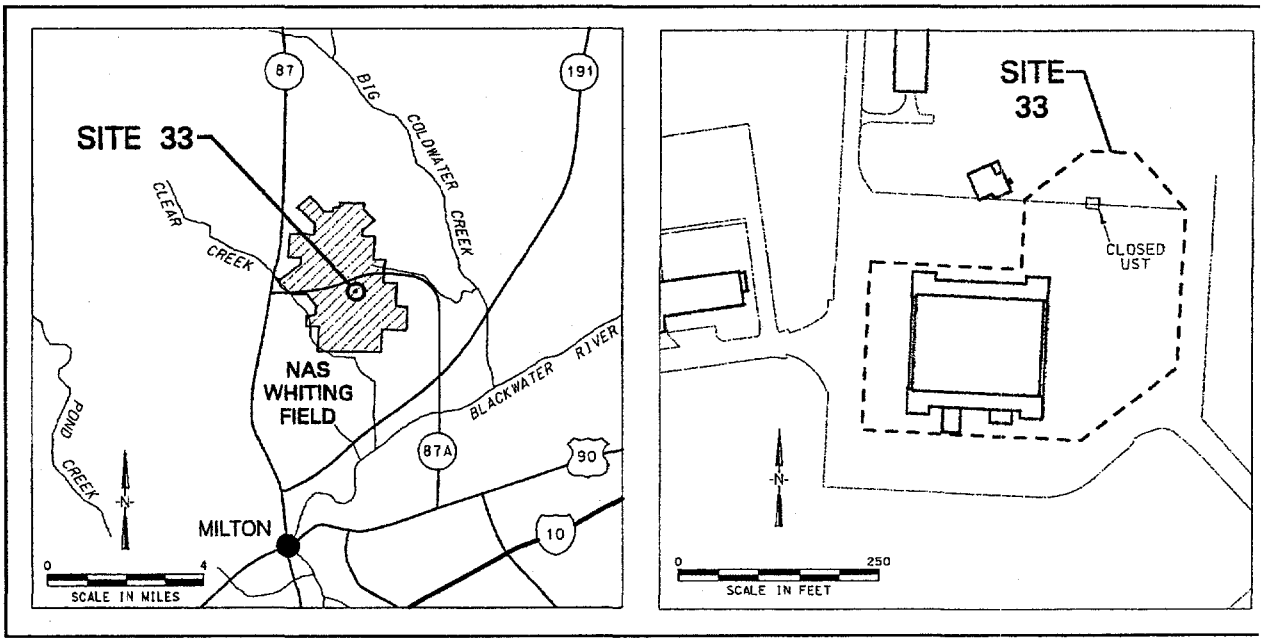
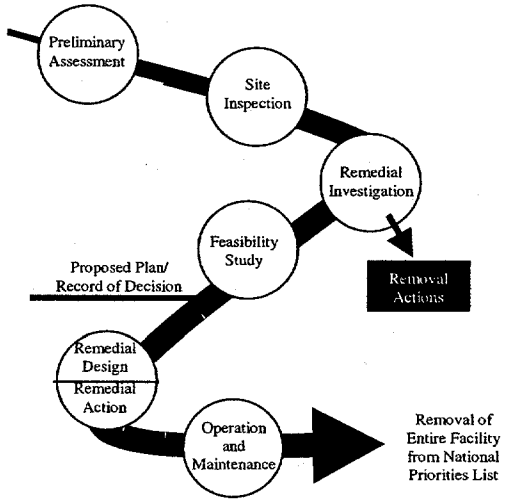


Figure 1 – Site 33 Location Map

Environmental History

Regulatory Framework

Environmental work at Site 33 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 the Comprehensive Environmental Response, Compensation, and Liability Act (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 for environmental study and cleanup in June 1994.

Investigation Activities

The Remedial Investigation at Site 33 was conducted in phases from 1992 through 1999. Fieldwork included a range of environmental studies to collect data needed to determine the presence, nature, and extent of contamination. The field activities and their objectives included the following:

Surface Soil Sampling: conducted to determine surface soil contaminant concentrations by laboratory chemical analysis.

Subsurface Soil Sampling: provided subsurface soil characteristics and contaminant concentration data. Activities included a soil gas survey, installation of soil borings, and sampling of subsurface soil to develop a description of subsurface soil characteristics.

Investigation Findings

The Remedial Investigation Report provided an understanding of the soil environmental conditions at Site 33. Groundwater at Site 33 will be investigated and evaluated separately in the basewide groundwater study (Site 40). These findings are summarized as follows.

General Site Conditions:

- Groundwater flows to the southwest and discharges into Clear Creek. The water table at Site 33 is 80–90 feet below ground surface. Areas covered with concrete or asphalt would not require soil removal because the existing cover material is a barrier preventing exposure to contaminated soil.
- Surface and subsurface soil is predominantly sand and silt with thin layers of clay.

Soil Conditions:

- Arsenic, aluminum, iron, and vanadium in surface soil exceed the standards set by USEPA and FDEP for residential areas.
- Arsenic and total petroleum hydrocarbons in subsurface soil exceed the standards set by USEPA and FDEP for industrial areas.

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 the Remedial Investigation, all hazardous substances of potential concern detected in the soil are identified. The substances listed above are those driving the risk and requiring remedy selection. The ecological risk assessment evaluated potential risks to animals and plants from exposure to site contaminants. Risk assessment findings for soil are presented below.

Risk estimates were calculated using FDEP and USEPA guidelines designed to protect human health and the environment. For cancer-causing chemicals, the cancer risk numbers shown below estimate the number of additional persons at risk for developing cancer if the site is not cleaned up. For example, a cancer risk level of 1.0E-06 means one additional person out of a million persons is at risk of developing cancer. For noncancer-causing chemicals, the measure of the likelihood of adverse effects occurring in humans is called the Hazard Index (HI). An HI greater than 1.0 suggests that adverse effects are possible.

Human Health Risks:

- Arsenic in surface soil poses an increased lifetime cancer risk greater than the FDEP's threshold level of 1.0E-06 to site trespassers (6.3E-06), maintenance workers (2.1E-06), occupational workers (1.4E-05), and hypothetical future residents (7.8E-05). Total petroleum hydrocarbons in surface soil result in an unacceptable noncarcinogenic HI greater than 1.0 for hypothetical future child residents (1.1).

Ecological Risks:

- The quantity of the terrestrial habitat at Site 33 is limited and the quality is poor. The site is comprised almost entirely of concrete and Building 1454 and is surrounded by intensive development, with the exception of some turfgrass and scattered pines to the north. In addition, aircraft and vehicle traffic on and adjacent to the site would deter terrestrial wildlife from using the turfgrass areas. Most importantly, the site comprises only a small portion of the home ranges of most of the terrestrial wildlife species found on-base. Therefore, reduction in growth, survival, and reproduction of small mammal and bird populations at and near the site is unlikely. For these reasons, potential risks appear to be acceptable and further ecological study at Site 33 is unwarranted.

Next, a **Feasibility Study** was conducted to identify the best approach to address the soil contamination at Site 33. The Feasibility Study for Surface and Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33 contains a more detailed description of the remedial alternatives evaluated and their estimated 30-year present worth operation and

Risk Assessment Findings: Exposure to contaminants found in soil samples at Site 33 pose an increased health risk to trespassers, occupational workers, maintenance workers, and hypothetical future residents due primarily to arsenic and total petroleum hydrocarbons. However, much of the increased health risk may be due to naturally occurring levels of arsenic because there are no documented uses of arsenic at Site 33.

Public Comments

If you have comments or questions on the Site 33 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 decision for Site 33. Comments must be received by July __, 2000.

Name: _____

Address: _____

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Telephone Number: _____

Mailing List Update

If you 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
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Comments:

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Environmental History
(continued from Page 2)

maintenance (O&M) and capital costs. Four alternatives were evaluated.

- No Action (estimated present worth cost of $18,000); evaluated for comparison in all Feasibility Studies. The No Action alternative includes costs for conducting 5-year reviews over a 30-year monitoring period.
- UST removal and LUCs (estimated present worth cost of $73,000): removal of UST and restrictions on the use of the site to activities involving less than full-time human contact with the soil, such as commercial/industrial, limited agricultural, or recreational.
- UST removal, soil venting, and LUCs (estimated present worth cost of $189,000 including O&M costs for 30 years): removal of UST, in situ venting to promote volatilization and biodegradation of organic constituents in surface and subsurface soil, and LUCs, as described above.
- UST removal, surface and subsurface soil removal, and LUCs (estimated present worth cost of $391,000 including O&M costs for 30 years): removal of UST, removal and off-site disposal of subsurface soil exceeding levels allowed for Florida industrial sites, and LUCs, as described above.

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

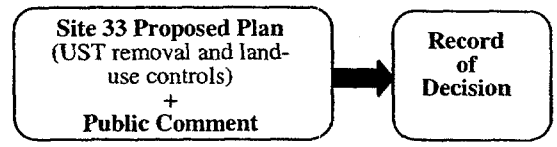
- Overall protection of human health and the environment
- Compliance with applicable environmental regulations and requirements
- Long-term effectiveness and permanence
- Reduction of contaminant toxicity, mobility, or volume through treatment
- Short-term effectiveness
- Implementability
- Cost effectiveness
- State acceptance
- Community acceptance

The Feasibility Study for Surface and Subsurface Soil, Sites 3, 4, 6, 30, 32, and 33 contains a detailed evaluation of each alternative with the nine criteria. The evaluation in the Feasibility Study concluded the "No Action" alternative was not protective of human health for trespassers, occupational workers, and hypothetical future site residents. The UST removal and LUCs alternative was preferred over the other alternatives 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. Actual or threatened releases of hazardous substances from this site, if not addressed by the preferred alternative or one of the other active measures considered, may present a current or potential threat to public health, welfare, or the environment.

The UST removal and LUCs alternative will prevent prolonged and frequent human exposure to the subsurface soil. The reporting and certification requirements for the LUCs have been incorporated into the LUC Memorandum of Agreement between the Navy, USEPA, and FDEP dated November 4, 1999, and also will be specified in the Sit 33 ROD. LUCs will include a provision for surface an subsurface soil remediation if soil is later exposed b concrete or asphalt disturbance and exceeds acceptabl levels. Site 33 will be available for industrial use an limited recreational and agricultural use after remova and disposal of the surface soil exceeding allowabl industrial levels. No other cleanup actions for soil ar proposed at Site 33.

Basis for the Proposal

Based on the Remedial Investigation, risk assessment and Feasibility Study findings, the Navy is proposing UST removal and LUCs as a final remedy with 5-yea reviews since soil contamination will remain on-site These actions will allow activities involving less thar full-time direct contact with the soil and would prohibi future residential use.



The USEPA and FDEP concur with the UST removal and institution of LUCs to protect human health at Site 33. Community acceptance of the proposed corrective action is the next step. Once the proposal is approved, the ROD will be signed by the Navy, with concurrence by the FDEP and USEPA. This document will establish the procedure to assure LUCs at Site 33 remain effective over the long term. No other soil cleanup measures at Site 33 will be proposed after approval of the selected remedial action.

Public Involvement

The Navy has established an active outreach program to ensure community involvement in environmental activities at Site 33 and throughout NAS Whiting Field. The Navy will be accepting written comments on the Site 33 proposed remedial action July __ to August __, 2000. Public participation in the selection process is encouraged. Comments can be submitted using the enclosed form. Comments received will be summarized and responses provided in the responsiveness summary section of the ROD.

The comment period includes an opportunity for a public meeting at which the Navy would present the Remedial Investigation and Feasibility Study reports, and 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.

RAB Meeting Attendees

Comments

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Public Involvement
(continued from Page 3)

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 proposed remedy by reviewing the documents, offering suggestions, and expressing their concerns on 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 media.

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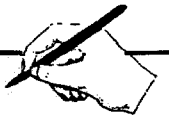

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Removal Action: an early action taken to address release or potential release of hazardous substances tha do not pose immediate danger to public health or th environment.

Remedial Investigation: an in-depth study t determine the nature and extent of contamination an establish cleanup criteria.

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

Responsiveness Summary: a section of the ROD th summarizes the public comments received and th responses to the comments.

Restoration Advisory Board (RAB): an adviso group composed of regulatory agency representative site personnel, and community volunteers who provid input and promote public involvement in cleanu activities.

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

Site Inspection: an investigation phase in which readi available information is collected and analyze assess the extent and severity of contamination. USEPA scoring methodology follows the si inspection to identify any immediate threat to huma health or the environment.