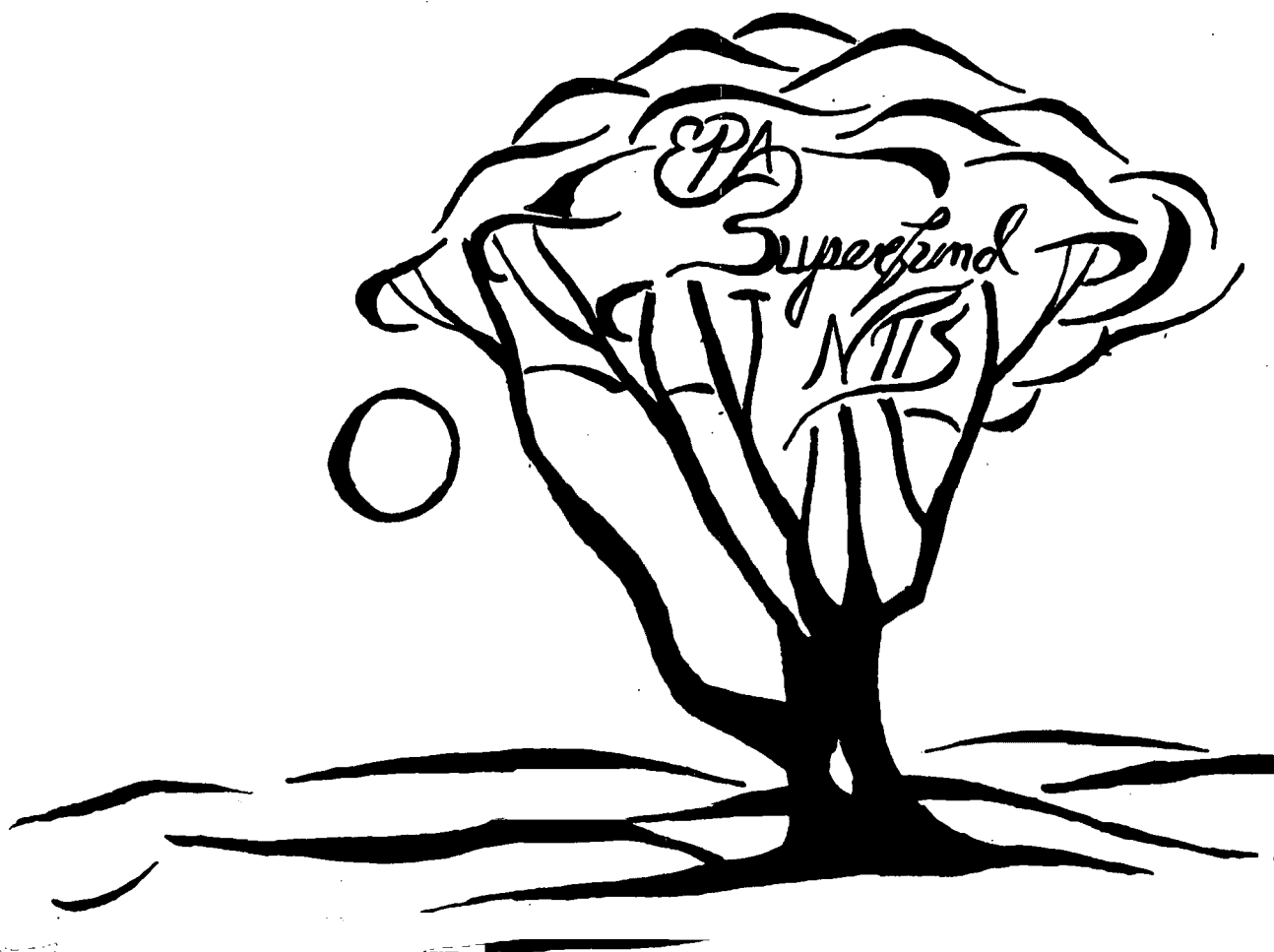


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April 1995

EPA Superfund Record of Decision:

**Naval Air Station Cecil Field
(Operable Unit 7), Jacksonville, FL
3/31/1994**



INTERIM RECORD OF DECISION

**AIRCRAFT INTERMEDIATE MAINTENANCE DEPARTMENT (AIMD)
SEEPAGE PIT AREA, SITE 16, OPERABLE UNIT 7**

**NAVAL AIR STATION, CECIL FIELD
JACKSONVILLE, FLORIDA**

Unit Identification Code (UIC): N60200

Contract No. N62467-89-D-0317

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March 1994

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NAS Cecil Field, Jacksonville, Florida

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GLOSSARY

AIMD	Aircraft Intermediate Maintenance Department
ARARs	applicable or relevant and appropriate requirements
bls	below land surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
FDEP	Florida Department of Environmental Protection
FFS	Focused Feasibility Study
IAS	Initial Assessment Study
IROD	Interim Record of Decision
LDR	Land Disposal Restriction
µg/kg	micrograms per kilogram
NAS	Naval Air Station
NDI	Non-Destructive Inspection
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
OU	Operable Unit
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RI	Remedial Investigation
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act
SVOCs	semivolatile organic compounds
TCE	trichloroethene
USEPA	U.S. Environmental Protection Agency --
VOCs	volatile organic compounds

1.0 DECLARATION FOR THE INTERIM RECORD OF DECISION

1.1 SITE NAME AND LOCATION. The site name is Aircraft Intermediate Maintenance Department (AIMD) Seepage Pit Area, Site 16, Operable Unit (OU) 7, and is located at Naval Air Station Cecil Field, Jacksonville, Florida.

1.2 STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected interim remedial action for OU 7 or Site 16, the AIMD Seepage Pit Area. The selected interim remedial action was chosen in accordance with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP, 40 Code of Federal Regulations [CFR] 300). This decision document explains the factual basis for selecting the interim remedy for Site 16 and the rationale for the final decision. The information supporting this interim remedial action decision is contained in the Administrative Record for this site.

The U.S. Environmental Protection Agency and the State of Florida concur with the selected interim remedy.

1.3 ASSESSMENT OF THE SITE. Actual or threatened releases of hazardous substances from the site, if not addressed by implementing the response actions selected in this Interim Record of Decision (IROD), may present an imminent and substantial endangerment to public health, public welfare, or the environment as a result of concentrations of contaminants in soil and groundwater in excess of health-based levels.

1.4 DESCRIPTION OF THE SELECTED REMEDY. The preferred alternative for source control at Site 16 is a combination of two alternatives (Alternatives 1 and 2) that were developed and evaluated in the Focused Feasibility Study (FFS). The combined preferred alternative would meet the Resource Conservation and Recovery Act (RCRA) Land Disposal Restriction (LDR) requirements as well as the facility's RCRA permit requirement to remove an underground storage tank. A combination of Alternatives 1 and 2 would involve:

- excavation of debris and soils from the source area;
- treatment of contaminated debris using abrasive blasting for porous debris and high pressure water washing for non-porous debris or an equivalent method;
- testing of excavated soils to determine if treatment is required prior to disposal (i.e., if the soils are subject to LDRs);
- transportation and disposal of soils with concentrations below the LDR treatment standards to a hazardous waste landfill;

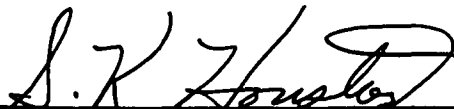
- transportation, treatment, and disposal in a hazardous waste landfill of all soils with concentrations of hazardous constituents that are higher than the LDR treatment standards;
- transportation and disposal of decontaminated debris to a solid waste landfill or other environmentally appropriate location;
- transportation, treatment (if necessary), and disposal of water used in high pressure water washing of hazardous debris; and
- transportation, treatment (if necessary), and disposal of blasting residuals from abrasive blasting of hazardous debris.

The Navy estimates that the preferred alternative would cost between \$772,000 and \$3,133,000 and would take 5 weeks to implement.

1.5 STATUTORY DETERMINATIONS. This interim action is protective of human health and the environment, complies with Federal and State applicable or relevant and appropriate requirements for this limited scope action, and is cost effective. Although this interim action is not intended to fully address the statutory mandate for permanence and treatment to the maximum extent practicable, this interim action uses treatment and, thus, is in furtherance of that statutory mandate. Because this action does not constitute the final remedy for soil and groundwater contamination at Site 16, the statutory preference for remedies that employ treatment that reduces toxicity, mobility, or volume as a principal element, although partially addressed in this remedy, will be addressed by the final response action for soil and groundwater contamination. Subsequent actions are planned to fully address the threats posed by the conditions in the soil and groundwater at this site.

Because this remedy will result in hazardous substances remaining onsite above health-based levels, a review will be conducted to ensure that the remedy continues to provide adequate protection of human health and the environment within 5 years after commencement of the remedial action. Because this is an IROD, review of this site and of this remedy will be ongoing as the Navy continues to develop final remedial alternatives for this site and this OU.

1.6 SIGNATURE AND SUPPORT AGENCY ACCEPTANCE OF THE REMEDY



 Captain Sam Houston
 Commanding Officer, NAS Cecil Field



 Date

2.0 DECISION SUMMARY

2.1 SITE NAME, LOCATION, AND DESCRIPTION. Naval Air Station (NAS) Cecil Field is located 14 miles southwest of Jacksonville in the northeastern part of Florida. The majority of the Naval Air Station is located within Duval County; however, a portion is located in the northern part of Clay County.

NAS Cecil Field was established in 1941 and provides facilities, services, and material support for the operation and maintenance of naval weapons, aircraft, and other units of the operating forces as designated by the Chief of Naval Operations. Some of the tasks required to accomplish this mission include operation of fuel storage facilities, performance of aircraft maintenance, maintenance and operation of engine repair facilities and test cells for turbo-jet engines, and support of special weapons systems.

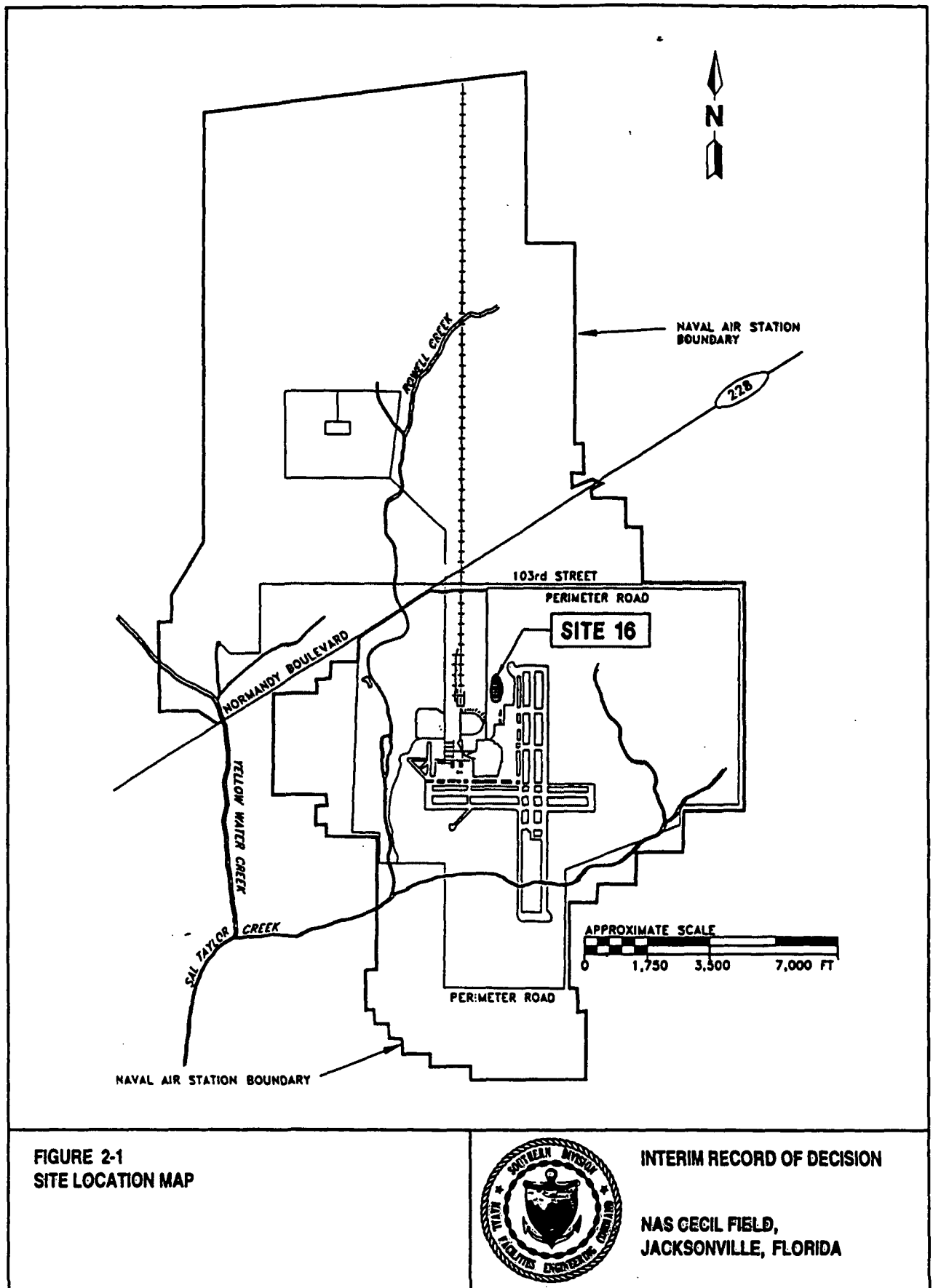
The AIMD Seepage Pit Area, known as OU 7 or Site 16, is one of several sites currently designated at NAS Cecil Field for remedial action. Site 16 is located adjacent to the north-south jet runways on NAS Cecil Field in an industrial area, as shown on Figure 2-1. The AIMD seepage pit and adjacent area are located 60 feet north of Building 313. Currently, the Jet Engine Maintenance Shop and Non-Destructive Inspection (NDI) laboratory are located in Building 313. A sketch of Site 16 is provided on Figure 2-2.

Site 16 is a vegetated area with grass that is mowed regularly. The general area adjacent to site 16 is relatively flat and is covered with asphalt and concrete. The immediate vicinity is crisscrossed by several utilities, including a water line, overhead steam line, fire water main, a sanitary sewer main, and storm drain lines (both active and abandoned). There are no inlets to the storm sewer system in the immediate vicinity of Site 16.

Surface water flow is toward paved roads in the vicinity of Site 16. However, a drainage swale that may carry some runoff to the south of the site is located east of the fence between Buildings 313 and Hangar 815. The swale is covered with grass and drains to the stormwater system. It is believed that runoff from the paved roads in the vicinity of Site 16 ultimately flows to the NAS Cecil Field stormwater sewer system.

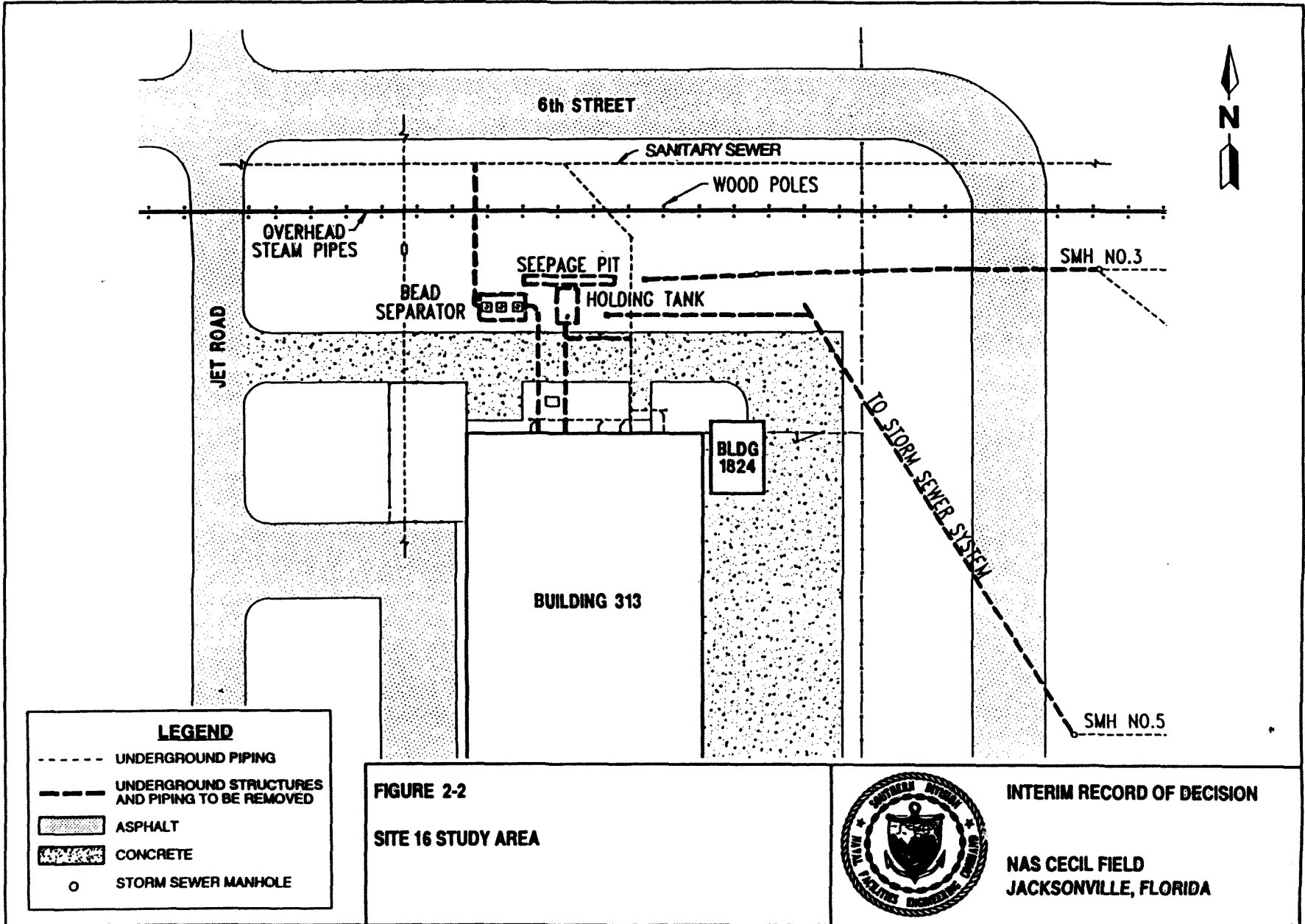
2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES. Site 16 consists of a 4,100-gallon concrete underground storage tank, a concrete underground vitrified glass bead (used for cleaning painted surfaces) separator, a seepage pit (for subsurface release of liquid wastes) constructed of cinder blocks on a concrete pad, and associated clay and iron piping, which may have leaked in the past and allowed solvents to migrate to the surrounding soil and groundwater (Figure 2-2).

2.2.1 Site History Wastes associated with cleaning and daily operations from activities within an aircraft maintenance building (Building 313) at Site 16 have contributed to soil and groundwater contamination in the area. From 1959 until 1980, greases, rusts, scale (i.e., flaky films that form on metals), and paint wastes generated during a machine and engine parts cleaning process, along with glass beads and blasting grit from the airframes blasting shop, were deposited at the site. Based on operations occurring within the building at this time, wastes disposed here may have included sodium cyanide (used to clean metals),



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trichloroethene (TCE) (used mainly for metal degreasing), phenol (found in epoxy resins), methylene chloride (used in solvent degreasing and as a cleaning fluid and oil.

Liquid wastes generated during these processes were allowed to drain toward a sump located at the north end of the building. This sump was connected through iron piping to the 4,100-gallon concrete holding tank. The holding tank contained a sump equipped with a sump pump. The tank was constructed so that wastes could be pumped from the sump into either a seepage pit located north of the holding tank or the storm sewer system (through 6-inch diameter clay piping). The seepage pit was constructed with concrete blocks on top of a concrete slab and measured approximately 40 feet long by 3 feet wide by 10 feet deep. One-half-inch gaps were left between the vertical intersections of the concrete blocks. The gaps were filled with sand, rather than mortar. The construction of the seepage pit allowed for seepage of wastes directly into surrounding soils and groundwater.

Glass beads and blasting grit from sandblasting operations within the building were also allowed to enter the system through the sump in the building. Subsequently, glass beads accumulating within the tank and seepage pit caused the system to malfunction. In the late 1960's, a 4-inch diameter clay discharge pipe was installed in the seepage pit to allow gravity drainage to the storm sewer system. The discharge pipe was installed approximately 3 feet above the base of the seepage pit. This pipe was installed so that when the level of wastewaters within the seepage pit reached the level of the discharge pipe, the wastewaters would overflow to the storm sewer system.

Use of the seepage pit was discontinued in 1980. At that time, piping leading from the tank to the seepage pit was removed and the tank's outlet to the seepage pit was plugged. Piping from the tank to the storm sewer system was partially removed and plugged, and piping leading from the seepage pit to the storm sewer system was plugged. Concurrently with these alterations, a bead separator, for gravity settling of glass beads from the wastewaters, was installed to the west of this system. Discharge from the bead separator was connected to the sanitary sewer system through 4-inch diameter iron piping.

From 1980 until 1989, the holding tank was used for 90-day storage of hazardous waste. This activity was allowed under a RCRA permit for temporary storage of hazardous waste. The use of the bead separator continued from 1982 until 1989. Renovation of the north end of the building in 1989 included the abandonment of the entire system. At this time, all piping leading from the building to the bead separator and from the building to the 4,100-gallon holding tank was disconnected and plugged from within the building. In addition, all liquids in the holding tank were pumped out and transported to an offsite treatment, storage, and disposal facility for treatment.

Figure 2-2 shows the current location of the underground tank and piping network at the site. It includes a holding tank (with free liquid removed), a portion of the seepage pit that was not excavated in 1980, a glass bead separator, and ductile iron and clay piping of various diameters.

2.2.2 Previous Investigations Previous environmental investigations at Site 16 include an Initial Assessment Study (IAS), an RCRA Facility Investigation (RFI), and a Phase I Remedial Investigation (RI). The results of these investigations are summarized below.

Initial Assessment Study. The IAS was performed in 1985 by Envirodyne Engineers to identify waste sites at NAS Cecil Field that warranted further investigation. The study included an investigation of historical data and aerial photographs as well as field inspections and personnel interviews. A total of 18 sites were identified as a result of the IAS, including Site 16.

RCRA Facility Investigation. The RFI was performed in 1988 by Harding Lawson Associates. Field investigations completed for Site 16 included a geophysical survey using a magnetometer to locate subsurface features, the installation of three monitoring wells, collection and analysis of three groundwater samples and one sediment sample, and measurement of water levels in the three monitoring wells. Groundwater samples contained some solvents, including TCE, and heavy inorganics (metals; e.g., chromium and lead). The sediment sample, collected from the discharge pipe connecting the seepage pit to the storm sewer system, contained solvents and metals (lead).

Remedial Investigation. A Phase I RI was initiated during the fall of 1991 and the spring of 1992. The investigation included:

- a geophysical survey to verify the location of the seepage pit and other subsurface anomalies,
- a detailed profile of subsurface conditions,
- monitoring well installation and sampling and analysis of groundwater,
- sampling and analysis of surface and subsurface soil,
- estimation of the rate of groundwater flow through the soils, and
- collection of groundwater level measurements.

Subsurface soil samples contained volatile organic compounds (VOCs), some semivolatile organic compounds (SVOCs) characteristic of solvents and petroleum products, and metals typical of natural soils, with the exceptions of chromium and lead, which were detected at concentrations approximately twice as high as those found in the natural soil. Surface soils contained VOCs and several SVOCs characteristic of solvents, plasticizers, and petroleum. Groundwater samples contained VOCs characteristic of solvents (including TCE).

In summary, past waste management practices performed within the aircraft maintenance building have contributed to soil and groundwater contamination at the site. As a result of these waste management practices, the holding tank, seepage pit, the bead separator, associated piping, and associated soils are currently acting as possible sources of groundwater contamination. In addition, the 4,100-gallon holding tank must be closed to comply with the requirements of NAS Cecil Field's RCRA permit. To meet regulatory and administrative requirements for closure of this tank, the tank must be removed by June 4, 1994.

2.3 HIGHLIGHTS OF COMMUNITY PARTICIPATION. The FFS report and Proposed Plan were completed and released to the public in December 1993. A public meeting was held on January 6, 1994, to present information on the proposed interim remedial action at Site 16 and to solicit comments on the proposed cleanup. These documents and other Installation Restoration program information are available for public review in the Information Repository and Administrative Record. The repository is maintained at the Charles D. Webb Wesconnett Branch of the Jacksonville Public Library in Jacksonville, Florida. The notice of availability of these documents was published in *The Florida Times Union* on December 19, 1993, and January 1, 1994.

A 30-day public comment period was held from December 21, 1993, to January 24, 1994. At the public meeting on January 6, 1994, representatives from NAS Cecil Field, U.S. Environmental Protection Agency (USEPA), Florida Department Environmental Protection (FDEP), and the Navy's environmental consultants presented information on the remedial alternatives and answered questions regarding the proposed interim remedial action at Site 16. Written comments received during the comment period and questions asked during the public meeting are summarized and addressed in Attachment A, Responsiveness Summary.

2.4 SCOPE AND ROLE OF OPERABLE UNIT. Investigations at Site 16 indicate the presence of solvents (TCE) in the surrounding soil and groundwater. The purpose of this interim remedial action is to remove the source of contamination to soil and groundwater at Site 16; namely, the debris and the most contaminated soil at the site. Based on previous investigations and the evaluation of applicable or relevant and appropriate requirements (ARARs) for this site, two remedial action objectives were identified:

- remove the 4,100-gallon holding tank, seepage pit, bead separator, piping, and associated soils to mitigate the release of contaminants to groundwater; and
- remove the 4,100-gallon holding tank to comply with the facility's RCRA permit issued by the State of Florida.

Further remedial action for the remaining contamination at the site (i.e., the groundwater and the remaining soil) will be performed upon completion of the RI and the baseline risk assessment. The RI report and baseline risk assessment are scheduled for completion in the late spring of 1995. It is believed that this interim action is consistent with any future remedial activities that may take place at the site.

2.5 SITE CHARACTERISTICS. As discussed in subsection 2.2.2, compounds characteristic of solvents and petroleum products, were detected in the soils and absorbed into the concrete at AIMD. Metals were also detected in the samples. TCE is the primary contaminant of concern because it was frequently identified in the environmental samples. Examples of other solvents found at Site 16 include 1,1,1-trichloroethene and 1,2-dichloroethene.

The holding tank, seepage pit, glass bead separator, and associated piping received wastewaters containing spent solvents and other contaminants from the AIMD located within Building 313 over a timespan of several decades. The

construction of the seepage pit allowed wastewater to seep into the subsurface soils, which can be described as fine-grained sands to silty sands. Seepage may have also occurred as a result of leaks from the holding tank, glass bead separator, and/or associated piping. The bottoms of some of these underground vessels intercept the shallow surficial aquifer, which ranges from approximately 6 to 10 feet below land surface (bls) depending on the season. Thus, wastes (either absorbed or present) in the holding tank, seepage pit, bead separator, associated piping, and contaminated soil next to these structures are possibly acting as sources of groundwater contamination at the site and control of these sources are addressed in this IROD.

2.6 SUMMARY OF SITE RISKS. The purpose of this interim remedial action is to address soil and debris that are currently acting as sources of groundwater contamination at Site 16. A baseline risk assessment has not been completed at this time. Once the RI has been completed, the baseline risk assessment will be completed using RI data and any risks associated with exposure to contaminated soils and groundwater at Site 16 will be addressed in a subsequent Feasibility Study.

Action levels were calculated based on concentrations of TCE in soil because the Navy, USEPA, and FDEP agreed that this compound is the primary contaminant of concern for source control at Site 16. Other chemicals detected at the site will be evaluated further during the RI and the baseline risk assessment.

To approximate the volume of soil to be removed for this interim remedial action, the following three scenarios were evaluated:

- direct contact with soil containing TCE by humans,
- leaching of TCE from soil to groundwater, and
- feasibility analysis based on residual soil concentration versus soil volume requiring removal.

2.6.1 Direct Contact Exposure Scenario Direct contact exposure was evaluated by assuming that soils containing TCE would be absorbed through the skin. Based on this analysis, an action level for TCE of 660,000 micrograms per kilogram ($\mu\text{g}/\text{kg}$) would be considered a safe level to remain in the soil.

2.6.2 Leaching to Groundwater Scenario The leaching scenario used a computer model to calculate the amount of TCE that would move through the soil and into the groundwater. According to this model, the recommended action level for TCE is 5 $\mu\text{g}/\text{kg}$.

2.6.3 Feasibility Analysis The feasibility analysis was performed by evaluating the cost of excavation, backfill, treatment, and disposal of soils for concentrations of TCE remaining in the soils between 5 and 660,000 $\mu\text{g}/\text{kg}$. Based on this analysis, removing TCE below 1,000 $\mu\text{g}/\text{kg}$ in soils was not considered cost effective for this interim remedial action.

The Navy, USEPA, and FDEP agreed to the 1,000 $\mu\text{g}/\text{kg}$ action level but also agreed to place a limit (maximum amount) on the volume of soil to be removed during the interim remedial action. An evaluation of existing data indicated that in order to remove the underground structures and all soils containing TCE above 1,000 $\mu\text{g}/\text{kg}$, 1,100 cubic yards of soil would require removal. Therefore, a volume

limit of 1,100 cubic yards was established to meet the intent of source control (i.e., manage or remove a source of contamination) with the intention that any contaminated soils remaining onsite will be evaluated as part of the RI and baseline risk assessment. If the baseline risk assessment indicates that contaminants remaining in the soil must be treated to a lower concentration, this remedial effort may be accomplished more effectively by using other treatment technologies.

2.7 DESCRIPTION OF ALTERNATIVES. Table 2-1 presents a description of the source control alternatives evaluated for Site 16. The alternatives are numbered to correspond with the alternatives provided in the FFS report (available at the Information Repository).

All alternatives involve excavation of approximately 100 cubic yards of debris. Of this debris, approximately 95 cubic yards are expected to be porous material (e.g., concrete), and the remainder to be non-porous debris (e.g., ductile iron piping). Additionally, all alternatives include excavation of up to 1,100 cubic yards of soil. All alternatives involve disposal of both soils and debris in either hazardous waste or solid waste landfills.

Evaluation of the no action alternative, typically required in a Feasibility Study, is not necessary in an FFS because designation of a cleanup action as an interim remedial action implies that some action be taken.

2.8 SUMMARY OF COMPARATIVE ANALYSIS OF ALTERNATIVES.

This section evaluates and compares each of the alternatives with respect to the nine criteria used to assess remedial alternatives as outlined in Section 300.430(e) of the NCP.

2.8.1 Overall Protection All alternatives would provide an increased level of protection of human health and the environment. Risks are reduced by removing contaminated soil and debris from the site, thereby preventing exposure and reducing a source of soil and groundwater contamination.

2.8.2 Compliance with ARARs Alternatives 1, 2, and 3 meet ARARs for this interim remedial action. Alternative 4 does not comply with applicable laws concerning offsite disposal of RCRA hazardous waste because the contaminated soils have been identified to be hazardous according to the RCRA definition and must, therefore, be managed as a hazardous waste (i.e., the soils may not be disposed in a solid waste landfill). A complete listing of all ARARs is provided in Tables 2-2 and 2-3. No location specific ARARs were identified for this interim remedial action.

2.8.3 Long-term Effectiveness and Permanence The reduction of risk at Site 16 is permanent for all alternatives because contaminated soil would be removed from the site. Constituents remaining after soil and debris excavation would not pose a direct-contact hazard and would be addressed during future soil and groundwater remediation if they are determined to pose a risk.

Table 2-1
Alternatives Considered for the Interim Remedial Action at Site 16

Interim Record of Decision
AIMD, Seepage Pit Area, Site 16, OU 7
NAS Cecil Field, Jacksonville, Florida

Alternative	Alternative 1: Offsite Disposal of Soil to Hazardous Waste Landfill/Onsite Treatment of Debris and Disposal to a Solid Waste Landfill	Alternative 2: Offsite Treatment of Soil and Disposal to Hazardous Waste Landfill/Onsite Treatment of Debris and Disposal to a Solid Waste Landfill	Alternative 3: Onsite treatment of soil and disposal to hazardous waste landfill/onsite treatment of debris and disposal to a solid waste landfill	Alternative 4: Offsite Disposal of Soil and Debris to Solid Waste Landfill without Prior Treatment
Total Cost	\$772,000	\$3,133,000	\$1,466,000	\$201,000
Weeks to Implement	5	5	8	5
Activities Involved	<ul style="list-style-type: none"> • Clear and prepare the site. • Excavate debris (holding tank, seepage pit, bead separator, and associated piping). • Decontaminate porous debris using abrasive blasting and non-porous debris using high pressure water washing. • Excavate soils with trichloroethene concentrations greater than 1,000 $\mu\text{g}/\text{kg}$. • Backfill excavated areas with clean fill. • Transport contaminated soils to a hazardous waste landfill for disposal. • Transport decontaminated debris to a solid waste landfill for disposal. • Dispose of treatment residuals (blasting residuals from abrasive blasting and water from high pressure washing) as a hazardous waste. • Cleanup, grade, and revegetate site. 	<ul style="list-style-type: none"> • Clear and prepare the site. • Excavate debris (holding tank, seepage pit, bead separator, and associated piping). • Decontaminate porous debris using abrasive blasting and nonporous debris by using high pressure water washing. • Excavate soils with trichloroethene concentrations greater than 1,000 $\mu\text{g}/\text{kg}$. • Backfill excavated areas with clean fill. • Transport contaminated soils to a hazardous waste management facility for treatment and disposal. • Transport decontaminated debris to a solid waste landfill for disposal. • Dispose of treatment residuals (blasting residuals from abrasive blasting and water from high pressure washing) as a hazardous waste. • Cleanup, grade, and revegetate site. 	<ul style="list-style-type: none"> • Clear and prepare the site. • Mobilize thermal treatment unit. • Excavate debris (holding tank, seepage pit, bead separator, and associated piping). • Decontaminate porous debris using abrasive blasting and non-porous debris by using high pressure water washing. • Excavate soils with trichloroethene concentrations greater than 1,000 $\mu\text{g}/\text{kg}$. • Treat soils to the land disposal restriction treatment standards using an onsite thermal treatment unit. • Backfill excavated areas with clean fill. • Transport treated soils to a hazardous waste landfill for disposal. • Transport decontaminated debris to a solid waste landfill for disposal. • Dispose of treatment residuals (blasting residuals from abrasive blasting and water from high pressure washing) as a hazardous waste. • Cleanup, grade, and revegetate site. 	<ul style="list-style-type: none"> • Clear and prepare the site. • Excavate debris (holding tank, seepage pit, bead separator, and associated piping) and contaminated soil (up to 1,100 cubic yards). • Transport soil and debris to a solid waste landfill. • Cleanup, grade, and revegetate site.

See notes at end of table.

Table 2-1 (Continued)
Alternatives Considered for the Interim Remedial Action at Site 16

Interim Record of Decision
AIMD, Seepage Pit Area, Site 16, OU 7
NAS Cecil Field, Jacksonville, Florida

Alternative	Alternative 1: Offsite Disposal of Soil to Hazardous Waste Landfill/Onsite Treatment of Debris and Disposal to a Solid Waste Landfill	Alternative 2: Offsite Treatment of Soil and Disposal to Hazardous Waste Landfill/Onsite Treatment of Debris and Disposal to a Solid Waste Landfill	Alternative 3: Onsite treatment of soil and disposal to hazardous waste landfill/onsite treatment of debris and disposal to a solid waste landfill	Alternative 4: Offsite Disposal of Soil and Debris to Solid Waste Landfill without Prior Treatment
Treatment/- Removal of Debris	Assumes that all debris removed would contain RCRA hazardous waste and, therefore, must be managed under the RCRA hazardous waste requirements. The debris will be excavated and decontaminated using the treatment technologies determined to be the most suitable for the debris at Site 16. Abrasive blasting (i.e., "sand blasting") is proposed for the porous debris and high pressure water washing for the non-porous debris. Decontaminated debris to be disposed in a solid waste landfill.	Contaminated debris would be excavated, treated, and disposed in the manner described for Alternative 1.	Contaminated debris would be excavated, treated, and disposed in the manner described for Alternative 1.	Assumes untreated debris would be placed in a solid waste landfill.
Treatment/- Removal of Soils	Assumes that all excavated soils contain concentrations of trichloroethene that are lower than the land disposal restriction treatment standard for trichloroethene, and treatment of the soils is not required prior to disposal in a hazardous waste landfill.	Assumes that all excavated soils contain concentrations of trichloroethene that are higher than the land disposal restriction treatment standard for trichloroethene, thus requiring treatment of soils prior to land disposal. Soil would be transported and incinerated at an approved facility prior to ultimate disposal in a hazardous waste landfill.	Include additional activities to prepare for use of the onsite thermal treatment unit, such as: abandoning two monitoring wells that would interfere with construction and removal activities; securing a permit for onsite thermal treatment and other necessary permits prior to intrusive work; and constructing a concrete pad for staging of the thermal treatment unit.	As with the debris, Alternative 4 assumes that untreated soils would be placed in a solid waste landfill.

Notes: $\mu\text{g}/\text{kg}$ = micrograms per kilogram.
RCRA = Resource Conservation and Recovery Act.

Table 2-2
Synopsis of Potential Federal and State Chemical-Specific ARARs

Interim Record of Decision
AIMD, Seepage Pit Area, Site 16, OU 7
NAS Cecil Field, Jacksonville, Florida

Federal Standards and Requirements	Requirements Synopsis	Consideration in the Remedial Response Process
Safe Drinking Water Act (SDWA), National Primary and Secondary Drinking Water Standards Maximum Contaminant Levels (MCLs and SMCLs) and MCL Goals (MCLGs); [40 FR Part 141]	MCLs and MCLGs promulgated under the Safe Drinking Water Act (SDWA) National Primary Drinking Water Standards, are federally enforceable standards for specific contaminants in public water distribution systems. These standards are protective of human health for individual chemicals. MCLGs that are not zero are usually ARARs for groundwater that is a potential or current source of drinking water; where MCLGs are not available or are equal to zero, MCLs are often the required standard.	Relevant and Appropriate. Although this FFS is restricted to the soil medium, chemical-specific ARARs for groundwater are provided because action levels for soil are based on a leaching model that considers leaching from soil to groundwater. MCLs and MCLGs for groundwater will become guidance for calculating soil action levels.
Chapter 17-520, FAC, Florida Water Quality Standards, May 1990	This chapter establishes the groundwater classification system for the State and provides qualitative minimum criteria for groundwater based on the classification. This rule adopts the Federal primary and secondary drinking water standards and establishes some State standards that are more stringent than Federal standards. Like Federal MCLs, these standards are considered ARARs for cleanups of groundwater that is a current or potential source of drinking water.	Applicable. Although this FFS is restricted to the soil medium, chemical-specific ARARs for groundwater are provided because action levels for soil are based on a leaching model that considers leaching from soil to groundwater. MCLs and MCLGs for groundwater will become guidance for calculating soil action levels.
Chapter 17-775, FAC, Florida Soil Thermal Facilities Regulations, December 1990	Chapter 17-775.400, FAC, provides chemical standards for soil treated in a thermal treatment unit. This rule was promulgated to regulate the thermal treatment of petroleum contaminated soil.	Relevant and Appropriate. Currently, no chemical-specific ARARs have been promulgated for soils. However, the State of Florida has developed clean soil levels for soils treated in a thermal unit. Although soils at Site 16 are not petroleum contaminated, these standards may be relevant and appropriate requirements for remediation of contaminated soils with the constituents regulated in this rule.
Notes: ARARs = applicable or relevant and appropriate requirements. CFR = Code of Federal Regulations. FAC = Florida Administrative Code. FFS = focused feasibility study. SMCL = secondary maximum contaminant level.		MCL = maximum contaminant level. MCLG = maximum contaminant level goal. NAS = Naval Air Station. SDWA = Safe Drinking Water Act.

Table 2-3
Synopsis of Potential Federal and State Action-Specific ARARs

Interim Record of Decision
AIMD, Seepage Pit Area, Site 16, OU 7
NAS Cecil Field, Jacksonville, Florida

Federal Standards and Requirements	Requirements Synopsis	Consideration in the Remedial Response Process
CAA, National Ambient Air Quality Standards (NAAQS), [40 CFR Part 50]	Establishes primary (health based) and secondary (welfare based) standards for air quality for carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, and sulfur oxides.	Applicable. Site remediation activities must comply with NAAQS. The most relevant pollutant standard is for particulate matter less than 10 microns in size (PM ₁₀) as defined in 40 CFR Section 50.6. The PM ₁₀ standard is based on the detrimental effects of particulate matter to the lungs of humans. The PM ₁₀ standard for a 24-hour period is 150 micrograms per cubic meter (µg/m ³) of air, not to be exceeded more than once a year. Remedial construction activities such as excavation will need to include controls to ensure compliance with the PM ₁₀ standard. The attainment and maintenance of primary and secondary NAAQS are required to protect human health and welfare (wildlife, climate, recreation, transportation, and economic values). These standards are applicable during remedial activities, such as soil excavation and incineration, that may result in exposure to hazardous chemicals through dust and vapors.
CAA, New Source Performance Standards (NSPS) [40 CFR Part 60]	This regulation establishes new source performance standards (NSPS) for specified sources, including incinerators. This rule establishes a particulate emission standard of 0.08 grains per dry standard cubic foot corrected to 12 percent carbon dioxide for sources.	Applicable. Because NSPS are source-specific requirements, they are not generally considered applicable to CERCLA cleanup actions. However, an NSPS may be applicable for an incinerator; or a relevant and appropriate requirement if the pollutant emitted and the technology employed during the cleanup action are sufficiently similar to the pollutant and source category regulated.
Chapter 17-2, FAC, Florida Air Pollution Rules, September 1990	This rule establishes permitting requirements for owners or operators of any source emitting any air pollutant. This rule also establishes ambient air quality standards for sulfur dioxide, PM ₁₀ , carbon monoxide, and ozone.	Applicable. This rule establishes permitting requirements for owners and operators of any source emitting air pollutants. If onsite thermal treatment is the preferred remedial alternative, the substantive requirements of this rule are applicable for the thermal treatment unit. Part II of this rule establishes ambient air quality standards for sulfur dioxide, PM ₁₀ , carbon monoxide, and ozone.
RCRA, Closure and Post-Closure [40 CFR Subpart G, 264.110-264.120]	This regulation details general requirements for closure and post-closure of hazardous waste facilities, including installation of a groundwater monitoring program.	Applicable. This is a requirement for remedial alternatives involving the closure of a hazardous waste site. However, the 4,100-gallon holding tank is being removed in accordance with the facility's RCRA Part B permit. Because of this, the closure and post-closure process described in this rule is an applicable requirement for tank closure.
See notes at end of table.		

Table 2-3 (Continued)
Synopsis of Potential Federal and State Action-Specific ARARs

Interim Record of Decision
AIMD, Seepage Pit Area, Site 16, OU 7
NAS Cecil Field, Jacksonville, Florida

Federal Standards and Requirements	Requirements Synopsis	Consideration in the Remedial Response Process
RCRA, Treatment Standards for Hazardous Debris [40 CFR Part 268.45]	This rule defines and established treatment standards for hazardous debris. The debris (tanks, bead separator, and lines) may be classified as hazardous debris if it is contaminated with RCRA listed waste that has LDR standards or with waste that exhibits a toxic characteristic. Five options for management of hazardous debris are currently available: (1) treat the debris to performance standards established in this rule through one of 17 approved technologies, (2) obtain a ruling from USEPA that the debris no longer contains hazardous debris, (3) treat the debris using a technology approved through an "equivalent technology demonstration," (4) treat the contaminated debris to existing LDR standards for wastes contaminating the debris and continue to manage under RCRA Subtitle C, or (5) dispose of debris in a Subtitle C landfill under the generic extension of the capacity variance for hazardous debris, which currently expires on May 8, 1994.	Applicable. Under CERCLA, removal of contaminants from debris by decontamination and replacing the debris within an Area of Concern (AOC) is permitted. As long as movement of waste is conducted within the AOC and outside of a separate RCRA unit, placement of wastes have not occurred and, therefore, LDRs are not triggered. However, if the debris is determined to be hazardous, and placement is determined to occur, one of the five listed options must be selected for management of the hazardous debris.
RCRA, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities [40 CFR Part 264]	This rule establishes minimum national standards which defining the acceptable management of hazardous wastes for owners and operators of facilities that treat, store, or dispose of hazardous wastes.	Applicable. If remedial actions involve management of RCRA wastes at an offsite treatment, storage, or disposal unit, or management of RCRA wastes at an onsite incinerator, the substantive requirements of this rule would be an ARAR.
RCRA, Incinerators [40 CFR Subpart O, 264.340-264.599]	This regulation specifies the performance standards, operating requirements and monitoring, inspection, and closure guidelines for any incinerator that manages hazardous waste.	Applicable. These requirements are applicable for remedial actions involving the offsite incineration of RCRA-regulated wastes. These requirements are relevant and appropriate for remedial actions involving the performance, operating, and monitoring requirements for onsite thermal destruction of CERCLA wastes.
Chapter 17-775, FAC, Florida Soil Thermal Facilities Regulations	This rule establishes criteria for the thermal treatment of petroleum- or petroleum product-contaminated soils. Guidelines for management and treatment of soils to levels that prevent future contamination of either soils, groundwater, and surface water are provided. Chapter 17-775.300, FAC, provides permitting requirements for soil thermal treatment facilities. This section states that soil must be screened or otherwise processed in order to prevent soil particles greater than 2 inches in diameter from entering the thermal treatment unit. This rule further outlines procedures for excavating, receiving, handling, and stockpiling contaminated soils prior to thermal treatment in both stationary and mobile facilities.	Relevant and Appropriate. This requirement is not applicable to soils classified as hazardous which are not petroleum contaminated. However, it may be a relevant and appropriate requirement for soils contaminated with constituents that are significantly similar to the organic and inorganic constituents regulated under this rule.
See notes at end of table.		

Table 2-3 (Continued)
Synopsis of Potential Federal and State Action-Specific ARARs

Interim Record of Decision
AIMD, Seepage Pit Area, Site 16, OU 7
NAS Cecil Field, Jacksonville, Florida

Federal Standards and Requirements	Requirements Synopsis	Consideration in the Remedial Response Process
RCRA, Manifest System, Recordkeeping, and Reporting [40 CFR Part 264, Subpart E]	This rule outlines procedures for manifesting hazardous waste for owners and operators of onsite and offsite facilities that treat, store, or dispose of hazardous waste.	Applicable. These regulations apply if a remedial alternative involves the offsite treatment, storage, or disposal of hazardous waste. For remedial actions involving onsite treatment or disposal of hazardous waste, these regulations are applicable.
Hazardous Materials Transportation Act (49 CFR Parts 171, 173, 178, and 179) and Hazardous Materials Transportation Regulations	These regulations outline procedures for the packaging, labeling, manifesting, and transporting of hazardous materials.	Applicable. For remedial actions involving offsite disposal, contaminated materials would need to be packaged, manifested, and transported to a licensed offsite disposal facility in compliance with these regulations.
RCRA, Standards Applicable to Transporters of Hazardous Waste [40 CFR Part 263 Subparts A - C, 263.10-263.31]	This rule establishes procedures for transporters of hazardous waste within the United States if the transportation requires a manifest under 40 CFR Part 262.	Applicable. If a remedial alternative involves offsite transportation of hazardous waste for treatment and/or disposal, these requirements must be attained.
RCRA, Standards Applicable to Generators of Hazardous Waste [40 CFR Part 262, Subparts A - D, 262.10-262.44]	These rules establish standards for generators of hazardous wastes that address: accumulating waste, preparing hazardous waste for shipment, and preparing the uniform hazardous waste manifest. These requirements are integrated with Department of Transportation (DOT) regulations.	Applicable. If an alternative involves the offsite transportation of hazardous wastes, the material must be shipped in proper containers that are accurately marked and labeled, and the transporter must display proper placards. These rules specify that all hazardous waste shipments must be accompanied by an appropriate manifest.
RCRA, Identification and Listing of Hazardous Waste [40 CFR Part 261, 261.1-261.33]	This rule defines those solid wastes that are subject to regulation as hazardous wastes under 40 CFR Parts 262-265. The applicability of RCRA regulations to wastes found at a site is dependent on the solid waste meeting one of the following criteria: (1) the wastes are generated through a RCRA listed source process, (2) the wastes are RCRA-listed waste from a non-specific source, or (3) the waste is characteristically hazardous due to ignitability, corrosivity, reactivity, or toxicity.	Applicable. Contaminated soils at OU 7 have been classified as F-listed wastes and are, therefore, subject to regulation under this rule.
RCRA, Land Disposal Regulations (LDRs); [40 CFR Part 268]	This rule establishes restrictions for the land disposal of untreated hazardous wastes and provides treatment standards for these land-banned wastes. Under this rule, treatment standards have been established for most listed hazardous wastes	Applicable. Contaminated soils at OU 7 have been classified as F-listed wastes (specifically F001 wastes) and are, therefore, subject to regulation under this rule. However, because no treatment standards are available for F001 wastes, the concentrations of these listed wastes in the extract (using the standard leaching procedure method) must be compared to Table CCCE of this rule to determine if the soils are restricted to land disposal. If it is determined that the soils at OU 7 are subject to these regulations, then the soils must be treated prior to disposal in an RCRA Subtitle C landfill.

See notes at end of table.

Table 2-3 (Continued)
Synopsis of Potential Federal and State Action-Specific ARARs

Interim Record of Decision
AIMD, Seepage Pit Area, Site 16, OU 7
NAS Cecil Field, Jacksonville, Florida

Federal Standards and Requirements	Requirements Synopsis	Consideration in the Remedial Response Process
RCRA, Contingency Plan and Emergency Procedures [40 CFR Subpart D, 264.30-264.37]	This regulation outlines the requirements for procedures to be followed in the event of an emergency such as an explosion, fire, or other emergency event.	Relevant and Appropriate. These requirements are relevant and appropriate for remedial actions involving the management of hazardous waste.
Occupational Safety and Health Act (OSHA), General Industry Standards [29 CFR Part 1910]	This act requires establishment of programs to assure worker health and safety at hazardous waste sites, including employee training requirements.	Applicable. Under 40 CFR 300.38, requirements apply to all response activities under the NCP. During remedial action at the site, these regulations must be maintained.
OSHA, Recordkeeping, Reporting, and Related Regulations [29 CFR Part 1904]	Provides recordkeeping and reporting requirements applicable to remediation activities.	Applicable. These requirements apply to all site contractors and subcontractors and must be followed during all site work. During remedial action at the site, these regulations must be maintained.
OSHA, Health and Safety Standards [29 CFR Part 1926]	Specifies the type of safety training, equipment, and procedures to be used during site investigation and remediation.	Applicable. All phases of the remedial response project should be executed in compliance with this regulation. During remedial action at the site, these regulations must be maintained.
RCRA, Preparedness and Prevention [40 CFR Part 264, Subpart C]	This regulation outlines requirements for safety equipment and spill-control for hazardous waste facilities. Facilities must be designed, maintained, constructed, and operated to minimize the possibility of an unplanned release that could threaten human health or the environment.	Applicable. Safety and communication equipment should be incorporated into all aspects of the remedial process and local authorities should be familiarized with site operations.
Chapter 17-736, FAC, Florida Rules on Hazardous Waste Warning Signs, July 1991	Requires warning signs at NPL and FDEP (formerly FDER) identified hazardous waste sites to inform the public of the presence of potentially harmful conditions.	Applicable. This requirement is applicable for sites that are on the NPL or that have been identified by the FDEP as potentially harmful.
Notes: NAS = Naval Air Station. NCP = National Contingency Plan. CAA = Clean Air Act. CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act. CFR = Code of Federal Regulations. OU = Operable Unit. USEPA = U.S. Environmental Protection Agency.		FAC = Florida Administrative Code. FDEP = Florida Department of Environmental Protection. NPL = National Priorities List. RCRA = Resource Conservation and Recovery Act. FDER = Florida Department of Environmental Regulation. LDRs = Land Disposal Restrictions.

2.8.4 Reduction of Toxicity, Mobility, or Volume of the Contaminants Alternative 1 would achieve significant and permanent reduction in toxicity, mobility, and volume of contaminants on debris only. Toxicity, mobility, and volume of contaminants in soils would be reduced onsite but would be transferred to an offsite landfill. Alternatives 2 and 3 would result in a significant and permanent reduction of mobility, toxicity, and volume for both soil and debris. Alternative 4 would reduce toxicity, mobility, and volume of contaminants of soils and debris onsite, but would be transferred to an offsite land disposal facility.

2.8.5 Short-Term Effectiveness Dust control would be required during excavation of soil. Volatilization of the contaminants would be monitored and controlled during excavation and transport. Alternative 3 would require that air emissions be monitored during onsite thermal treatment.

2.8.6 Implementability Alternatives 1, 2, and 4 use technologies that are relatively easy to implement and are readily available. Alternative 3 would require a demonstration of effectiveness prior to full-scale operation. Approval by the FDEP and USEPA would also be required prior to onsite thermal treatment. Accomplishing both the test and gaining regulatory approval could jeopardize meeting the June 4, 1994, tank removal deadline and, therefore, Alternative 3 is not as implementable as Alternatives 1, 2, or 4.

2.8.7 Cost The range of cost for the two preferred alternatives (Alternatives 1 and 2) is \$772,000 to \$3,133,000. A range is provided because the volume of soils requiring treatment is not known at this time. The lowest cost alternative is Alternative 4, which does not comply with applicable laws concerning offsite disposal of RCRA hazardous waste. The most expensive alternative is Alternative 2 because all soil is treated under this alternative and incineration (thermal treatment) is costly.

2.8.8 State and Federal Acceptance The FDEP and USEPA have concurred with the selected remedy.

2.8.9 Community Acceptance The community has accepted the selected remedy. Comments received during the public comment period did not alter the selected remedy. A summary of comments received is in Attachment A, Responsiveness Summary. In general, the comments supported the selected alternatives and the expedient implementation of the interim remedial action. Other comments suggested that the Navy consider alternative methods, other than sand blasting, to decontaminate the non-porous debris and alternative disposal locations for decontaminated debris (i.e., dispose of decontaminated tanks in the ocean to create an artificial reef).

2.9 SELECTED REMEDY. The preferred alternative for source control at Site 16 is a combination of Alternatives 1 and 2. The combination of these alternatives would meet the LDR requirements as well as the RCRA permit requirement to remove the tank by June 4, 1994. Selection of Alternative 3 would jeopardize meeting the regulatory deadline for removal of the tank. Alternative 4 would not meet the requirements for disposal of a hazardous waste.

The Navy estimates that the preferred alternative would cost between \$772,000 and \$3,133,000 and would take 5 weeks to implement.

2.10 STATUTORY DEFERRED ACTIONS. The interim remedial action selected for implementation at Site 16 is consistent with CERCLA and the NCP. The selected remedy is protective of human health and the environment, attains ARARs, and is cost effective. The selected remedy also satisfies the statutory preference for treatment that permanently and significantly reduces the mobility, toxicity or volume of hazardous substances as a principal element. Additionally, the selected remedy uses alternate treatment technologies or resource recovery technologies to the maximum extent practicable. Any soil contamination remaining after this interim remedial action will be addressed during the RI and FS for this OU and the resulting Record of Decision.

2.11 DOCUMENTATION OF SIGNIFICANT CHANGES. There are no significant changes in the interim remedial action from that described in the Proposed Plan.

ATTACHMENT A
RESPONSIVENESS SUMMARY

Responsiveness Summary **Site 16 Source Control Remedial Alternatives**

NAS Cecil Field, Florida

Comment	Response
<p>Letter from Nestor H. Bertotto to Commanding Officer, NAS Cecil Field</p> <p>12/27/93</p> <p>Gentlemen,</p> <p>In regards to the removal of the underground storage tank, after this tank has been cleaned it could be dropped in the ocean for a fish reef, instead of using space in a landfill.</p> <p>Thank you, Nestor H. Bertotto 5825 CP352 Keystone Hts., Fl. 32656</p> <p>904-473-9130</p>	<p>The Navy recognizes the validity in your suggestion as there are cases in which discarded tanks are being used as reefs in the ocean. The tanks being removed from Site 16 are concrete and will be broken up during the excavation process and subsequent treatment to remove the outer surface. For bidding purposes, the Navy will instruct contractors to dispose of treated debris into a Subtitle D landfill; however, contractors may propose, and the Navy will consider, alternative means of disposal as long as they meet current regulations.</p>

Site 16 Source Control Remedial Alternatives

NAS Cecil Field, Florida

Comment	Response
<p>Letter from Steven W. Haerter to Commanding Officer, NAS Cecil Field</p> <p>ATT: Public Affairs Officer DEC 19, 1993 1836 S. 3rd St. Unit 113 Jax Bch FL 32250</p> <p>Commanding Officer NAS Cecil Field P.O. Box 111 Jax, FL 32215</p> <p>Dear Military Professional,</p> <p>I read with great dismay your advertisement soliciting public comment about landfilling solvent contaminated materials. Instead of wasting taxpayer money getting opinions and holding hearings, why not just get on with it? There is no question that the best place for unwanted materials is in a properly constructed landfill (with liner and leachate treatment). There is no question that removal from its current site should mitigate groundwater contamination.</p> <p>What is seriously questionable about your plan is your intent to further process removed materials prior to disposal. Abrasive blasting is not only expensive, but extremely messy. I have never seen a blasting operation that didn't spread unwanted materials to places that were unintended. What will you do with blasting residue anyway? Certainly it belongs in the landfill, too. It simply makes no sense to pay to separate materials that you intend to put in the same place, eventually.</p> <p>Instead of expending your management skills on public comment, why not use them to obtain an exception to "land disposal restriction treatment standards?" It is simply ludicrous to attempt to clean concrete with abrasive blasting, only to spread the contaminant around in the landfill to reduce its concentrations. You will be unnecessarily exposing workers to the contaminants; you will be wasting fuel and materials; and you will inevitably lose some of the contaminants which you presently have in a "captured" state.</p> <p>Please help to reduce the military budget by using some "common sense."</p> <p>Very truly yours, Steven W. Haerter</p>	<p>The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) established statutory requirements for a process for documenting Superfund remedial action decisions. Public participation has not always been a requirement; however, CERCLA Section 117 requires that the Proposed Plan, Remedial Investigation/Feasibility Study (RI/FS) report, and administrative record file be made available to the public. CERCLA requires that the public be provided with a reasonable opportunity to submit written and oral comments on the Proposed Plan. By scheduling public meetings and allowing the public to provide comments, the Navy is in compliance with CERCLA.</p> <p>In August 1992, the rule entitled Land Disposal Restriction for Newly Listed Waste and Hazardous Debris was promulgated. This rule, referred to as the Debris Rule, established treatment standards under the land disposal restrictions (LDR) program for certain hazardous wastes and also established treatment standards for hazardous debris. There is a capacity variance in place until May 8, 1994, that allows for the disposal of untreated debris in a hazardous waste landfill (RCRA Subtitle C). However, the variance is not applicable to debris contaminated with F001 through F005 listed wastes. The concrete tanks at Site 16 are contaminated with solvents characterized as F001 wastes. As such, the debris must be treated to performance standards established in the Debris Rule using 1 of 17 approved technologies. One of the approved technologies for concrete, a porous debris, is abrasive blasting.</p> <p>The treated concrete can be disposed in a solid waste landfill (RCRA Subtitle D). A Subtitle D landfill accepts non-hazardous waste such as household garbage. Disposal into a Subtitle D landfill is significantly less expensive than disposal into a Subtitle C landfill.</p> <p>Abrasive blasting is an effective means to remove the surface of concrete and in this case it is more economical than some other technologies that are available. It is less expensive to abrasively blast the concrete and send the residuals to a Subtitle C landfill and the treated concrete to a Subtitle D landfill than to send all of the untreated concrete to a Subtitle C landfill.</p> <p>Blasting activities will take place in a temporary enclosed area to prevent the spread of residuals into the environment. Workers will be required to meet all applicable Occupational Safety and Health Administration (OSHA) regulations.</p>

Responsiveness Summary
Site 16 Source Control Remedial Alternatives

NAS Cecil Field, Florida

Comment	Response
<p>Letter from Jim Salem to the Commanding Officer, NAS Cecil Field</p> <p>Dear Commanding Officer,</p> <p>My name is Jim Salem. I live at 3934 Main St. in Middleburg, FL. I was born and raised in Jacksonville, FL.</p> <p>It seems to me every time I read something in the newspaper about the Naval Bases it has to do with contamination of our soil and groundwater.</p> <p>I often wonder just <u>how much</u> contamination the Navy has done to our soil and groundwater that's gone unnoticed in the past fifty years.</p> <p>I know many retired and current Navy personnel in this area. They all tell me the same thing. Quote, "There's no telling how much or what the Navy has dumped over the years illegally."</p> <p>I don't know if it was pure <u>stupidity</u> or a lack of caring by the people giving the orders. I suspect it was <u>stupidity</u>!</p> <p>In Middleburg not only do we have to put up with your contamination, we have to put up with your noise pollution.</p> <p>You don't know how much the Navy is cussed when we can't hear each other talk because of the very low flying jets.</p> <p>I am <u>so glad</u> Cecil Field is closing and pray it closes earlier than projected.</p> <p>No offense, I just want to drink clean water from my well and save my hearing for the future.</p> <p style="text-align: right;">Sincerely, Jim Salem</p>	<p>The Navy recognizes your concern about contamination in the soil and groundwater and respects your right to question past and current practices at NAS Cecil Field. Much of what is considered unsafe today was not only accepted practice at the time, but was the recommended practice.</p> <p>The Navy acknowledges the problems at Cecil Field and is prepared to identify and address all sites that pose a potential risk to human health and the environment. Because Cecil Field is scheduled to be closed under the Base Realignment and Closure, the remedial activities are on an accelerated schedule.</p> <p>Noise pollution is a concern near any airport and is an unfortunate byproduct of aviation. If you have serious concerns about the noise and its effect on your hearing, you may contact Mr. Burt Byers, NAS Cecil Field Public Affairs Officer, to discuss the issue.</p>

Responsiveness Summary

Site 16 Source Control Remedial Alternatives

NAS Cecil Field, Florida

Comment	Response
<p>Letter from Timothy Rudolph, P.E., to Commanding Officer, NAS Cecil Field</p> <p>24 January, 1994</p> <p>Commanding Officer NAS Cecil Field P.O. Box 111 Jacksonville, FL 32215 Attn: Public Affairs Officer</p> <p>Dear Officer,</p> <p>I am writing to provide comments on the Installation Restoration Program (IRP) Site 16 Interim Remedial Action at NAS Cecil Field. I have attended the last two public hearings on this remedial action. The proposed action appears good and I am glad to see some work about to be done. The sooner the Navy gets the clean up work done the better.</p> <p>The concrete tank is proposed to be sand blasted and the blast debris disposed of as a hazardous waste. Large quantity hazardous waste generators are required to minimize hazardous waste generation. The 6 mm concrete removal could be done by mechanical methods that would reduce the amount of hazardous waste generation.</p> <p>I look forward to seeing more Navy IRP sites cleaned up in the near future.</p> <p>Please call me at 247-0335 if you have any questions. I look forward to seeing the work completed.</p> <p>Sincerely,</p> <p>Timothy Rudolph, P.E. <CECIL2.TWR></p>	<p>The Navy appreciates that you have taken the time to attend the last two public meetings and are aware of the proposed action and the reasons for it.</p> <p>Sand blasting of the concrete tanks is an effective method to remove the outer surface. Hazardous residuals will be generated during the process. Although mechanical methods would reduce the quantity of waste generated, implementing a mechanical removal would be difficult because the tanks will be broken up as they are excavated. However, the Navy will evaluate all proposed treatment methods during the bid review process.</p>

Responsiveness Summary

Site 16 Source Control Remedial Alternatives

NAS Cecil Field, Florida

Comment	Response
QUESTIONS FROM THE PUBLIC MEETING	
How do you propose to do the sandblasting?	Sandblasting will be done onsite. The Contractor will submit a plan for Navy approval detailing the proposed method for sandblasting. The Contractor will have to install a temporary enclosed area in which to sandblast to prevent the spread of blasting residuals into the environment.
How much soil is there that you plan to remove?	The Navy, USEPA, and the State have agreed on a soil volume cap of 1,100 cubic yards. Excavation of up to 1,100 cubic yards will remove the majority of the contaminated soil. Any remaining contaminated soil will be addressed in the overall feasibility study.
Why does it cost more to treat the contaminated soil offsite than it does onsite?	The precautions needed to safely transport contaminated media on public roads increases transportation costs greatly.
Are you planning to test as you go? In other words, let's say you take out several cubic yards of soil and you fill one of these large trucks. Are you going to take a sample from each truck or are you going to take a sample on a daily basis or -- to determine that you're under the 5.6 parts per million?	An onsite gas chromatograph will be used to analyze soil samples as excavation proceeds. Other sampling requirements will be set by the disposal facility.
The soil, is it going to a regular, permitted facility for burning, I suppose?	Soils above the treatment standards set by Federal law will require treatment before disposal. The treatment standard for trichloroethene (TCE) is 56 parts per million. If soils contain TCE concentrations above that, they will be treated first and then transported to a RCRA permitted facility for disposal.
It wouldn't necessarily be incinerated, though. It would just have to be treated.	Correct. Other treatment technologies can be used to reach regulatory levels.
Did you do any checks for dioxin?	Not at this site. Dioxin is not an anticipated contaminant at this site; however, dioxin testing would be done as part of an offsite disposal operation.
Has this reached the groundwater?	Contamination has been found in the surficial aquifer below this site.
Well, how are you going to clean the water up?	The site is still in the investigative stage. Once the investigation is complete, a risk assessment will be performed to determine if risks are associated with the site. Next, a feasibility study will be performed to evaluate different cleanup alternatives.
How long is that process going to take, approximately?	The feasibility study for this site is due in the spring of '95.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

4WD-FFB

MAR 31 1994

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Captain Sam Houston
Commanding Officer, NAS Cecil Field
P.O. Box 108 (Code 00)
Cecil Field, Florida 32215-0108

SUBJ: Cecil Field Site 16

Dear Captain Houston:

The Environmental Protection Agency (EPA) has received and reviewed the final Interim Record of Decision (IROD) for the seepage pit area, also known as site 16. EPA concurs with the Navy's decision as set forth in the IROD dated March 1994. This concurrence is with the understanding that the proposed action is an interim action and the need for any future or final remedial action will be addressed following the completion of the Baseline Risk Assessment (BRA).

By providing concurrence on this plan, EPA does not warrant technical adequacy as set forth or implied in the IROD. Additionally, EPA concurrence does not implicitly or expressly waive any of EPA's rights or authority.

EPA appreciates the opportunity work with the Navy on this site and other sites at Cecil Field. Should you have any questions, or if EPA can be of any assistance, please contact Mr. Bart Reedy of my staff at the letterhead address or at (404) 347-3016.

Sincerely,

A handwritten signature in cursive script that reads "Patrick M. Tobin".

Patrick M. Tobin
Deputy Regional Administrator

cc: Mr. James Crane, FDEP
Mr. Eric Nuzie, FDEP
Mr. Michael Deliz, FDEP
Mr. Alan Shoultz, SouthDiv