

Rev. 1 09/16/05

Record of Decision for Surface and Subsurface Soils at Site 29, Auto Hobby Shop

Naval Air Station Whiting Field Milton, Florida USEPA ID No. FL2170023244

Contract Task Order 0079

September 2005



Naval Facilities Engineering Comman Southern Division Naval Facilities Engineering Command 2155 Eagle Drive North Charleston, South Carolina 29406

TETRA TECH NUS, Inc.

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RECORD OF DECISION FOR SURFACE AND SUBSURFACE SOILS AT SITE 29, AUTO HOBBY SHOP

NAVAL AIR STATION WHITING FIELD MILTON, FLORIDA USEPA ID No. FL2170023244

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

Submitted to:

Southern Division Naval Facilities Engineering Command 2155 Eagle Drive North Charleston, South Carolina 29406

Submitted by:

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CONTRACT NO. N62467-94-D-0888 CONTRACT TASK ORDER 0079

SEPTEMBER 2005

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TtNUS/TAL-05-037/0052-5.1

CTO 0079



CERTIFICATION OF TECHNICAL DATA CONFORMITY

The Contractor, Tetra Tech NUS, Inc., hereby certifies, to the best of its knowledge and belief, the technical data delivered herewith under Contract No. N62467-94-D-0888 are complete, accurate, and comply with all requirements of this contract. The work and professional opinions rendered in this report were conducted or developed in accordance with commonly accepted procedures consistent with applicable standards of practice.

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TABLE OF CONTENTS

PROF ACRO	ESSION	IAL CERTIFICATION	iii vi
1.0	DECL	ARATION OF THE RECORD OF DECISION	1-1
	1.1	SITE NAME AND LOCATION	1-1
	1.2	STATEMENT OF BASIS AND PURPOSE	1-1
	1.3	ASSESSMENT OF THE SITE	1-1
	1.4	DESCRIPTION OF THE SELECTED REMEDY	1-3
	1.5	STATUTORY DETERMINATIONS	1-3
	1.6	AUTHORIZING SIGNATURES	1-4
2.0	DECISION SUMMARY		
	2.1	SITE NAME, LOCATION, AND DESCRIPTION	2-1
	2.2	SITE HISTORY AND ENFORCEMENT ACTIVITIES	2-1
	2.2.1	NAS Whiting Field History	2-1
	2.2.2	Site 29 History	2-1
	2.3	HIGHLIGHTS OF COMMUNITY PARTICIPATION	2-3
	2.4	SCOPE AND ROLE OF REMEDIAL ACTION SELECTED FOR SITE 29	2-5
	2.5	SITE CHARACTERISTICS	2-5
	2.5.1	Nature and Extent of Contamination	2-5
	2.5.2	Ecological Habitat	2-6
	2.5.3	Migration Pathways	2-6
	2.5.4	Current and Potential Future Site Land Use	2-6
	2.6	SUMMARY OF SITE RISKS	2-7
	2.6.1	HHRA	2-7
	2.6.2	ERA	2-7
	2.6.3	Site Risk Summary	2-8
	2.7	DOCUMENTATION OF SIGNIFICANT CHANGES	2-8

R-1

TABLE OF CONTENTS (Continued)

SECTION

APPENDICES

A COMMUNITY RELATIONS RESPONSIVENESS SUMMARY

FIGURES

NUMBER

1-1	Site 29 Location and Area Map	1-2
2-1	Soil Boring Location Map	2-2

<u>PAGE</u>

PAGE

ACRONYMS

bls	below land surface
CERCLA COC COPC	Comprehensive Environmental Response, Compensation, and Liability Act constituent of concern constituents of potential concern
ERA	ecological risk assessment
EE	Envirodyne Engineers, Inc.
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDER	Florida Department of Environmental Regulation
FID	Flame Ionization Detector
ft	Feet/foot
FS	Feasibility Study
G&M	Geraghty & Miller, Inc.
HHRA	human health risk assessment
HI	Hazard Index
IAS	Initial Assessment Study
IR	installation restoration
NFA	No Further Action
NAS	Naval Air Station
Navy	United States Navy
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
PCB	polychlorinated biphenyl
PRGs	Preliminary Remediation Goals
RA	remedial action
RI	Remedial Investigation
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act
SCTLs	Soil Cleanup Target Levels
SERA	screening ecological risk assessment
SVOCs	Semivolatile Organic Compounds
TRPH	Total Recoverable Petroleum Hydrocarbons
TtNUS	Tetra Tech, NUS, Inc.
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

1.0 DECLARATION OF THE RECORD OF DECISION

1.1 SITE NAME AND LOCATION

Naval Air Station (NAS) Whiting Field is located approximately 5.5 miles north of the town of Milton, Florida in Santa Rosa County, about 25 miles northeast of Pensacola (Figure 1-1). Site 29, Auto Hobby Shop, consists of Buildings 1404 and 2975 and the surrounding area located in the southern part of NAS Whiting Field, Milton, Florida.

1.2 STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedy for Site 29 as No Further Action (NFA) for surface and subsurface soils. As a result of the selected remedy, no action is required under a residential land use scenario; and unrestricted use and unlimited exposure of surface and subsurface soils will be allowed at Site 29. Groundwater at NAS Whiting Field has been identified as a separate site (Site 40, Basewide Groundwater) and will be addressed in a future decision document. The selected action was chosen by the United States Navy (Navy) and the United States Environmental Protection Agency (USEPA) in accordance with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Information supporting the selection of this action is contained in the Administrative Record, is located at the West Florida Regional Library, Milton Branch, 805 Alabama Street, Milton, Florida 32570, (850) 623-5565.

The Florida Department of Environmental Protection (FDEP) concurs with the selected remedy.

1.3 ASSESSMENT OF THE SITE

The Remedial Investigation (RI) for Sites 05, 07, 29, 35, and 38 [Tetra Tech NUS, Inc. (TtNUS), 2005a] identified one volatile organic compound (VOC), three semivolatile organic compounds (SVOCs), total recoverable petroleum hydrocarbons (TRPH), and 16 inorganics in the surface soil at Site 29. One constituent of potential concern (COPC), chromium, was identified in the RI and the associated risk assessments; however, no human health risks were identified for exposure to surface and subsurface soils under a residential land use scenario at Site 29. A summary of site risks is provided in Section 2.6 of this Record of Decision (ROD).

1-1

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FORM CADD NO. SDIV-BH.DWG - REV 1 - 9/10/98

The results of the ecological risk assessment (ERA) presented in the RI indicate ecological risks are acceptable, and further ecological study is unwarranted because the site is heavily industrialized and severely limited in the quantity and quality of habitat. Site 29 is characterized by buildings, grassy (turfgrass) areas, and the building parking lots.

As a result of the moderate human activity and vehicle noise, terrestrial wildlife is deterred from using the site. Most importantly, the limited size and habitat of the site serves to restrict the amount of food available to upper trophic level organisms. A discussion of the potential ecological risk is presented in Section 2.6.2.

1.4 DESCRIPTION OF THE SELECTED REMEDY

This ROD presents the final action for surface and subsurface soils at Site 29 and is based on results of the RI (TtNUS, 2005a), and the Feasibility Study (FS) (TtNUS, 2005b). The selected remedy for Site 29 is NFA for surface and subsurface soils and ensures protection of human health and the environment. No action is required under a residential land use scenario and unrestricted use and unlimited exposure of surface and subsurface soils will be allowed at Site 29.

This ROD only addresses surface and subsurface soil at Site 29. Consequently, this ROD does not address actual or potential groundwater contamination at the site. Groundwater at NAS Whiting Field has been identified as a separate site (Site 40, Basewide Groundwater) and will be addressed in a future decision document. Sediment and surface water are not present at Site 29. Current soil conditions at Site 29 are protective of human health and the environment under an unrestricted use, unlimited exposure scenario; therefore, no further CERCLA action for surface and subsurface soils is necessary.

1.5 STATUTORY DETERMINATIONS

The NFA remedy selected for surface and subsurface soils at Site 29 is protective of human health and the environment under a residential land use scenario, complies with federal and state requirements legally applicable or relevant and appropriate, and is cost effective. Consequently, no remedial action (RA) is necessary to ensure protection of human health and the environment based on an unlimited exposure, unrestricted use scenario at Site 29.

Rev. 1 09/16/05

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AUTHORIZING SIGNATURES

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22 Sep 2005 Date

Date

2.0 DECISION SUMMARY

2.1 SITE NAME, LOCATION, AND DESCRIPTION

Site 29, the Auto Hobby Shop, consists of Buildings 1404 and 2975 (Figure 1-2) and the surrounding area located in the southern part of NAS Whiting Field, Milton, Florida (Figure 2-1). NAS Whiting Field presently consists of two airfields (North and South Fields) and serves as a naval aviation training facility providing support facilities for flight and academic training.

2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES

2.2.1 NAS Whiting Field History

NAS Whiting Field was placed on the National Priorities List (NPL) by the USEPA in June 1994. Following the listing of NAS Whiting Field on the NPL, remedial response activities have been conducted pursuant to CERCLA authority.

The first environmental studies for the investigations of waste handling and/or disposal sites at NAS Whiting Field were conducted during the Initial Assessment Study (IAS) (Envirodyne Engineers, Inc. (EE), 1985). The record search indicated throughout its years of operation, NAS Whiting Field generated a variety of wastes related to pilot training, operation and maintenance of aircraft and ground support equipment, and facility maintenance programs.

2.2.2 Site 29 History

Site 29, the Auto Hobby Shop, is located in the area surrounding Buildings 1404 and 2975 (Figure 2-1). One metal underground storage tank (UST) was installed in the 1940's for storage of waste motor oil generated from vehicle maintenance operations conducted at the Auto Hobby Shop. The tank was located southeast of Building 1404 and west of Building 2975. The tank was initially abandoned in place in 1986 and later removed from the site in 1998 (Bechtel, 2000). Another UST, used for storage of heating oil specifically for Building 1404 and presumably installed in the mid 1940's, was located in the parking area between Buildings 1404 and 2975. This tank was also removed in 1998.

Building 1404 has been used since the 1940's for base personnel vehicle repairs, woodworking, and hobby activities. Building 2975 is used for vehicle and supply storage. The waste oil tank was used for disposal of waste motor oil and potentially solvents and paints from the 1940's until 1986. In 1986, the



FORM CADD NO. SDIV-AH.DWG - REV 1 - 9/10/98

tank was abandoned in place by filling it with sand. This apparently occurred before the tank was included in the formal tank management program at the Facility. It is unknown if the tank was pumped of materials as part of the abandonment. Following abandonment, an above ground waste oil tank was placed at the location for continued disposal activities. The heating oil tank is believed to have been used for heating oil only and no records of other materials being placed in the tank exist.

Site 29, the Auto Hobby Shop, was not included in the IAS (EE, 1985). Site 29 was included in the RI/FS investigations at Whiting Field starting in 1992.

Six surface soil borings and five subsurface soil borings were advanced at Site 29 near the former waste oil UST location and five additional subsurface soil borings were advanced at the former heating oil UST location for the purpose of investigating possible contamination. Six surface soil samples were collected from the borings and analyzed for VOCs, SVOCs, inorganics, and TRPH.

One VOC, three SVOCs, TRPH, and 16 inorganics were detected in the surface soil. Bis(2-ethylhexyl)phthalate, butyl benzyl phthalate, aluminum, cadmium, chromium, iron, vanadium, and zinc were detected above screening levels used to determine the need for further investigation assuming future residential land use. Bis(2-ethylhexyl)phthalate, butyl benzyl phthalate, aluminum, cadmium, chromium, iron, vanadium, and zinc were detected above the USEPA Region IX Preliminary Remediation Goals (PRGs) (USEPA, 2002). Vanadium was also detected above the FDEP residential Soil Cleanup Target Level (SCTL) (FDEP, 2005).

The individual inorganic constituents, aluminum, cadmium, iron, and vanadium, detected at the site have no direct evidence of site-related use at Site 29 and the process and procedures at this site did not likely contribute to the presence of these inorganics in surface soil. Additionally, the site-specific values for these inorganics are within the range of levels found at NAS Whiting Field and of naturally occurring levels throughout the southeastern United States. Considering the information presented above, aluminum, cadmium, iron, and vanadium were dropped from consideration as COPCs for Site 29 surface soils. Table 2-1 summarizes the Site 29 investigative history.

The current land use at Site 29 is industrial and no change is anticipated in the future land use.

2.3 HIGHLIGHTS OF COMMUNITY PARTICIPATION

The RI Report (TtNUS, 2005a), FS (TtNUS, 2005b), and Proposed Plan (TtNUS, 2005c) for Site 29 were made available to the public for review in August 2005. These documents, and other Installation

TABLE 2-1

INVESTIGATIVE HISTORY RECORD OF DECISION SITE 29, AUTO HOBBY SHOP NAVAL AIR STATION WHITING FIELD MILTON, FLORIDA

Date	Investigation Title	Activities	Findings
1992 - 2000	Remedial Investigation Report for Surface and Subsurface Soil, Sites 5, 7, 29, 35, and 38, NAS Whiting Field, Milton, Florida (TtNUS, 2005a)	 Passive soil gas investigation Installation of six soil borings Collection and analysis of six surface 	• Two USTs, used for storing waste oil and heating oil were installed in the 1940s. The waste oil tank was also used for solvents and paints until 1986.
		 Groundwater sampling HHRA FRA 	 The USTs were abandoned in place in 1986 and later removed in 1998. Following abandonment, one AST was placed at the location for waste oil.
			 The HHRA determined the carcinogenic risk from exposure to surface soil was below USEPA's target risk range FDEP's benchmark for current and future receptors at Site 29.
			• The non-cancer HI associated with ingestion and direct contact of soil under current and hypothetical future land-uses are below USEPA's and FDEP's target of 1.0.
			• The ERA does not predict unacceptable risks to plants or animals from chemicals present in surface soil at Site 29.
2005	Feasibility Study for Surface and Subsurface Soil at Site 29 NAS Whiting Field, Milton, Florida (TtNUS, 2005b).	Evaluated remedial alternatives for site cleanup of COCs.	No surface soil or subsurface COCs identified.
2005	Proposed Plan, Site 29, Auto Hobby Shop, NAS Whiting Field, Milton, Florida, (TtNUS, 2005c)	 Established public comment period from 15 August through 14 September 2005. 	Proposed remedy: No Further Action for Site 29 surface and subsurface soils.
			No comments received.

Notes:

UST = underground storage tank

AST = aboveground storage tank

bls = below land surface

HHRA = human health risk assessment

ERA = ecological risk Assessment

HI = hazard index

COC = constituent of concern

FDEP = Florida Department of Environmental Protection

TtNUS = Tetra Tech, NUS, Inc.

USEPA = United States Environmental Protection Agency

Restoration (IR) program information, are contained within the Administrative Record in the Information Repository at the West Florida Regional Library, Milton, Florida, 805 Alabama Street, Milton, Florida, 32570. The notice of availability of all site-related documents was published in the Santa Rosa Press Gazette and Pensacola News Journal on 13 August and 14 August 2005, respectively, and targeted the communities closest to NAS Whiting Field. The availability notice presented information on the RI and FS at Site 29 and invited community members to submit written comments on the Proposed Plan.

A public comment period was held from 15 August through 14 September 2005, to solicit comments on the Proposed Plan. The comment period included an opportunity for the public to request a public meeting; however, a public meeting was not held because one was not requested. The site-related documents were placed in the Information Repository and made available for the public to review. Comments received during the public comment period are presented in the Responsiveness Summary in Appendix A.

2.4 SCOPE AND ROLE OF REMEDIAL ACTION SELECTED FOR SITE 29

This ROD addresses surface and subsurface soil contamination and presents the final response action as NFA for Site 29. The groundwater at NAS Whiting Field has been designated as a separate site (Site 40, Basewide Groundwater) and is not addressed in this ROD. No surface water or sediment exists at Site 29.

2.5 SITE CHARACTERISTICS

Site 29, the Auto Hobby Shop, consists of Buildings 1404 and 2975 (Figure 2-1) and the surrounding area at NAS Whiting Field, Milton, Florida.

2.5.1 Nature and Extent of Contamination

Historical aerial photographs and engineering drawings, provided by the Navy, were evaluated during the planning phases of the RI. The objective of the evaluation was to determine the operational history of Site 29 and to verify earlier historical accounts.

As part of the RI conducted for Site 29, data were collected to determine the nature and extent of releases of site-derived contaminants in surface and subsurface soil, to identify potential pathways of migration in surface and subsurface soil, and to evaluate risks to human and ecological receptors.

2.5.1.1 Surface Soil

Surface soil sampling was conducted at Site 29 to determine the nature and extent of contamination at the site and to assess whether or not surface soil could potentially serve as an exposure pathway to human or ecological receptors. Constituents detected in surface soil at Site 29 included one VOC, three SVOCs, TRPH, and 16 inorganics. One COPC, chromium, was identified in the RI; however, no COCs were identified in the associated risk assessments. Therefore; no human health risks were identified for exposure to surface and subsurface soils at Site 29.

A complete list of all constituents sampled and their detected concentrations in surface soil is available in the RI report (TtNUS, 2005a).

2.5.1.2 Subsurface Soil

The subsurface soil below the 0 to 1 foot (ft) below land surface (bls) interval was not sampled at Site 29. The subsurface soil borings were advanced at the former heating oil UST location for the purpose of investigating possible contamination. The soil was screened for organic vapors using a flame ionization detector (FID) and visually inspected for discoloration. No organic vapors were detected and no discoloration observed; therefore, no subsurface soil samples were collected for laboratory analysis.

2.5.2 <u>Ecological Habitat</u>

Site 29 is severely limited in the quantity and quality of habitat for ecological receptors because it is heavily industrialized, characterized by concrete surfaces, mowed turfgrass, and moderate human activity. Most importantly, the limited size and habitat of the site serves to restrict the amount of food available to upper trophic level organisms.

2.5.3 <u>Migration Pathways</u>

No constituents of concern (COC) were identified for exposure to surface and subsurface soils at Site 29; therefore, the leaching of constituents from the soil to groundwater, is not a concern.

2.5.4 Current and Potential Future Site Land Use

The current land use at Site 29 is industrial and this is not expected to change in the near future. Potential future residential land use will be allowed under the selected remedy.

2.6 SUMMARY OF SITE RISKS

A risk assessment was completed for Site 29 to predict whether the site would pose current or future threats to human health or the environment. Both a human health risk assessment (HHRA) and an ERA were performed for Site 29. These risk assessments evaluated the constituents detected in site soil during the RI and evaluated the COPCs.

The HHRA and the ERA provided the basis for selecting the remedial alternative for Site 29. This section of the ROD summarizes the results of the HHRA and the ERA.

2.6.1 <u>HHRA</u>

An HHRA was conducted at Site 29 to characterize the risks associated with potential exposures to siterelated contaminants for human receptors. The HHRA is provided in Chapter 4.0 of the RI Report (TtNUS, 2005a). One COPC, chromium, was evaluated and based on the HHRA, no COCs were identified for surface or subsurface soils and; therefore, no human health risks were identified for surface or subsurface soils at Site 29 under a residential land use scenario.

2.6.1.1 Uncertainty Analysis

General uncertainties associated with the risk estimation process and site-specific uncertainties are discussed or referenced in the RI.

2.6.2 <u>ERA</u>

A screening ecological risk assessment (SERA) was performed for Site 29. Several organic and inorganic compounds were detected in surface soil at concentrations exceeding conservative screening levels and, therefore, were selected as COPCs. These COPCs were assessed in a less conservative Step 3A evaluation.

The results of the Step 3A analysis indicate the constituents detected in the surface soil at Site 29 do not pose unacceptable risks to ecological receptors and were not evaluated further. Therefore, no COCs were identified and no ecological risks were identified for surface or subsurface soils based on the ERA under a residential land use scenario at Site 29.

2.6.3 Site Risk Summary

No unacceptable human health risks have been identified for Site 29 surface and subsurface soils based on a residential land use scenario. Risks to ecological receptors are acceptable.

2.7 DOCUMENTATION OF SIGNIFICANT CHANGES

No significant changes have occurred at Site 29 since the public comment period for the Proposed Plan.

REFERENCES

Envirodyne Engineers, Inc. (EE), 1985. *Initial Assessment Study, NAS Whiting Field, Milton, Florida.* Final Report. Prepared for Naval Energy and Environmental Support Activity, Port Hueneme, California.

FDEP (Florida Department of Environmental Protection), 2005. Soil Cleanup Target Levels (SCTLs). Chapter 62-777, Florida Administrative Code (F.A.C.). April.

TtNUS (Tetra Tech NUS, Inc.), 2005a. *Remedial Investigation Report for Surface and Subsurface Soil, Sites 05, 07, 29, 35, and 38, Naval Air Station Whiting Field, Milton, Florida.* Prepared for NAVFAC EFD SOUTH, North Charleston, South Carolina. March.

TtNUS, 2005b. *Feasibility Study for Surface and Subsurface Soil, Site 29, Naval Air Station Whiting Field, Milton, Florida.* Prepared for NAVFAC EFD SOUTH, North Charleston, South Carolina. March.

TtNUS, 2005c. *Proposed Plan for Site 29, Auto Hobby Shop, Naval Air Station Whiting Field, Milton, Florida.* Prepared for NAVFAC EFD SOUTH, North Charleston, South Carolina. July.

USEPA, 2002. Region IX PRGs Table 2002 Update. USEPA Region IX, San Francisco, CA. October 1.

APPENDIX A

COMMUNITY RELATIONS RESPONSIVENESS SUMMARY

Responsiveness Summary Site 29, Auto Hobby Shop Naval Air Station Whiting Field Milton, Florida

A public comment period on the Site 29 Proposed Plan was held from 15 August through 14 September 2005. No public comments were received, and because a public meeting was not requested one was not held.