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NAS CECIL FIELD, FL
5090.3a

LIMITED CLOSURE ASSESSMENT REPORT FOR OIL-WATER SEPARATOR REMOVAL AT
BUILDING 271 OIL-WATER SEPARATOR 271S-OW WITH TRANSMITTAL LETTER NAS
CECIL FIELD FL
4/26/2001
CH2MHILL CONSTRUCTORS INC



CH2MHILL
Constructors, Inc.

CH2M HILL

115 Perimeter Center Place NE

Suite 700

Atlanta, GA

30346-1278

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April 26, 2001

Mr. Nick Ugolini
Southern Division, Naval Facilities Engineering Command
P.O. Box 190010
North Charleston, SC 29419-9010

RE: Contract No. N62467-98-D-0995
Contract Task Order 0002 – Naval Air Station (NAS) Cecil Field – Jacksonville, Florida
Limited Closure Assessment Report for the Oil/Water Separator Removal at Building
271 Oil/Water Separator 271S-OW

Dear Mr. Ugolini:

CH2M HILL Constructors, Inc. (CCI) is pleased to provide one copy of the enclosed Limited Closure Assessment Report for the Oil/Water Separator Removal at Building 271 Oil/Water Separator 271S-OW at NAS Cecil Field in Jacksonville, Florida.

If you have any questions or comments regarding the enclosed, please do not hesitate to contact me at (904) 777-4812.

Sincerely,

CH2M HILL Constructors, Inc.


Samuel M. Ross
Project Manager

cc: Jimmy Jones, SOUTHDIV (w/o)
Larry Blackburn, ROICC
Mike Deliz, FDEP
Mark Speranza, TetraTech NUS (2 copies)
Paul Calligan, TetraTech NUS
CCI Project File No. 149152

Limited Closure Assessment Report
Oil/Water Separator Removal at Building 271
Oil/Water Separator 271S-OW

Naval Air Station Cecil Field
Jacksonville, Florida

Contract No. N62467-98-D-0995
Contract Task Order No. 0002

Submitted to:

U.S. Naval Facilities
Engineering Command
Southern Division

Prepared by:



115 Perimeter Center Place, N.E.
Suite 700
Atlanta, GA 30346

April 2001

Limited Closure Assessment Report

**Oil/Water Separator Removal at Building 271
Oil/Water Separator 271S-OW
Naval Air Station Cecil Field
Jacksonville, Florida**

**Contract No. N62467-98-D-0995
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Submitted to:

**U.S. Naval Facilities
Engineering Command
Southern Division**

Prepared by:



April 2001

Prepared/Approved By:

Samuel M. Ross, Project Manager

Date

Approved By:

R. Scott Newman, Program Manager

Date

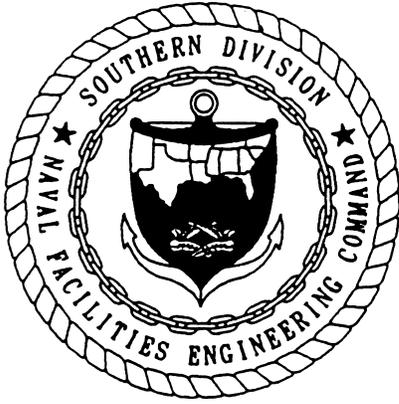
Client Acceptance:

U.S. Navy Responsible Authority

Date

Distribution List

	<u>Copies</u>
Southern Division, Naval Facilities Engineering Command	1
NAS Cecil Field	1
City of Jacksonville, Regulatory and Environmental Services Department, Air and Water Quality Division	1
CH2M HILL, Inc.	1
Tetra Tech NUS, Inc.	2



**CERTIFICATION OF TECHNICAL
DATA CONFORMITY (April 2001)**

The contractor, CH2M HILL Constructors, Inc., hereby certifies that, to the best of its knowledge and belief, the technical data, delivered herewith under Contract No. N62467-98-D-0995, Contract Task Order (CTO) No. 0002 is complete and accurate and complies with all requirements of this contract.

DATE: _____

NAME AND TITLE OF CERTIFYING OFFICIAL:

Samuel M. Ross
Project Manager



Certificate of Completion

CH2M HILL Constructors, Inc., attests that, to the best of its knowledge and belief, the removal of oil/water separator 271S-OW at Building 271, delivered under Contract No. N62467-98-D-0995, Naval Air Station Cecil Field, Jacksonville, Florida, Contract Task Order (CTO) No. 0002, has been completed, inspected, and tested, and is in compliance with the contract.

Project QC Manager

Date

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Acronyms

bls	below land surface
CCI	CH2M HILL Constructors Inc.
CTO	Contract Task Order
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FID	flame ionization detector
FL-PRO	Florida Petroleum Residual Organic
GCTLs	groundwater cleanup target levels
HLA	Harding Lawson Associates
KAG	Kerosene Analytical Group
mg/kg	milligrams per kilogram
µg/L	micrograms per liter
mil	millimeter
NAS	Naval Air Station
NAVFAC	Naval Facilities Engineering Command
NFFF	North Tank Fuel Farm
OVA	organic vapor analyzer
OWS	oil/water separator
PAHs	polynuclear aromatic hydrocarbons
PID	Photoionization detector
ppm	parts per million
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
SCTLs	selected soil cleanup target levels
SVOAs	semivolatile organic aromatics
TOC	top of casing
TRPH	total recoverable petroleum hydrocarbons
VOCs	volatile organic compounds

SOURCE REMOVAL REPORT REQUIREMENTS – CHECKLIST

Per Chapter 62-770.300(3) FAC the Source Removal Report shall contain the following information in detail, as applicable:

Site Name: Building 271, oil/water separator 271S OW Date(s) of OWS Removal: 08/14/00

Required Information	Response
1. Volume of product that was discharged, if known	<i>None Detected</i>
2. Volume of free product and the volume of groundwater recovered	<i>Not Applicable. No free product detected, no groundwater recovered.</i>
3. Volume of contaminated soil excavated and treated or properly disposed	<i>None</i>
4. Disposal or recycling methods for free product and contaminated soil	<i>None</i>
5. Disposal methods for other contaminated media	<i>OWS Rinseate disposed of at Industrial Water Services, Inc., Jacksonville, Florida. Copy of Disposal Manifest provided in Appendix B.</i>
6. Scaled site map (including a graphical representation of the scale used) showing location(s) of free product recovered and the area of soil removed or treated and the approximate locations of all samples taken	<i>See Figure 2-1.</i>
7. Table summarizing free product thickness in each monitoring well or piezometer and the dates the measurements were made	<i>Not Applicable. No free product observed onsite.</i>
8. Type of field screening instrument or method used	<i>Foxboro Model 128 OVA/FID and visual methodology in accordance with Chapter 62-770 FAC.</i>
9. Dimensions of the excavation(s) and location(s), integrity, capacities and last known contents of storage tanks, integral piping, dispensers, or appurtenances removed	<i>Excavation area: 11 feet long by 8 feet wide by 10 feet maximum depth (see Figure 2-1). One 500-gallon OWS tank containing used oil and water (see Figure 1-1). No signs of leakage. OWS and tank removed. Piping either removed or flushed and capped.</i>
10. Dimensions of the excavation(s) and location(s) and capacities of replacement underground storage tanks	<i>Not Applicable. No replacement OWS installed. .</i>
11. Table indicating the identification, depth and field soil screening results of each sample collected	<i>See Table 2-2.</i>
12. Depth to groundwater at the time of each excavation, measurement locations and method used to obtain that information	<i>Depth to groundwater was measured at start of field activities in adjacent flush-mounted monitoring well (CEF-271-1S) using electronic water level indicator. Depth to water = 6.73 feet (TOC).</i>
13. Type of petroleum or petroleum products discharged	<i>None observed</i>
14. Documentation confirming the proper treatment or proper disposal of the free product or contaminated soil, including disposal manifests for free product, a copy of the treatment or acceptance of the contaminated soil and results of analyses, if performed	<i>Not Applicable. No contaminated soil or free product generated.</i>
15. For land farmed soil, a copy of the pre-treatment and post-treatment analytical results	<i>Not Applicable.</i>

1.0 Introduction

CH2M HILL Constructors, Inc. was contracted by the Southern Division Naval Facilities Engineering Command (NAVFAC) to perform the removal of an oil/water separator (OWS) system located at Building 271 (Base Exchange Gas Station) at the former Naval Air Station (NAS) Cecil Field in Jacksonville, Duval County, Florida. A site location map is provided in Figure 1-1. A limited closure assessment, including organic vapor analysis (OVA) soil screening was performed during the OWS removal. The limited closure assessment activities were conducted in accordance with the requirements of Chapter 62-761, Florida Administrative Code (FAC), and with Florida Department of Environmental Protection (FDEP) guidance documents "Storage Tank System Closure Assessment Requirements" (April, 1998), and "Quality Assurance Standard Operating Procedures for Petroleum Storage System Closure Requirements."

The scope of services for the removal of OWS 271S-OW from Building 271 is described in detail in the NAS Cecil Field Base wide Work Plan, Revision 01 (CCI, 1998a) and the Work Plan Addendum No. 5, Removal of the North Tank Fuel Farm and Removals at Various Tank Sites, (CCI, 2000). This work was authorized under the Response Action Contract No. N62467-98-D-0995, Contract Task Order (CTO) No. 0002.

1.1 Site Background

The OWS system was located on the south side of the automotive repair shop at the Base Exchange Gas Station (Building 271). The Base Exchange Gas Station was no longer in operation, and the OWS system had been out of service for an unknown period of time. The content of the OWS system had been evacuated at some time in the past, and at the time of the removal, contained only residual liquids, which appeared to be primarily water. The OWS system consisted of two structures, including a metal OWS pit, measuring approximately 3 feet in length, 4 feet in width, and approximately 7 feet in depth, and a storage tank, with a capacity of approximately 500 gallons, measuring approximately 5.5 feet in length and 4 feet in diameter. A site plan showing the site conditions prior to the OWS removal is provided in Figure 1-2.

1.2 Project Objectives And Summary Of Work Performed

The primary objective of this project was to remove the OWS system, thereby removing a potential source of subsurface contamination. A limited closure assessment was conducted at the time of the OWS system removal to assess the presence or absence of contamination associated with the subsurface structure through the use of organic vapor analysis as well as visual methodology. Soils exhibiting staining or discoloration and/or exhibiting OVA concentrations of greater than 10 parts per million (ppm) were considered to be contaminated and may signify a need for further assessment.

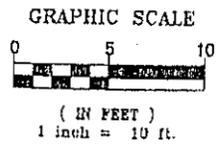
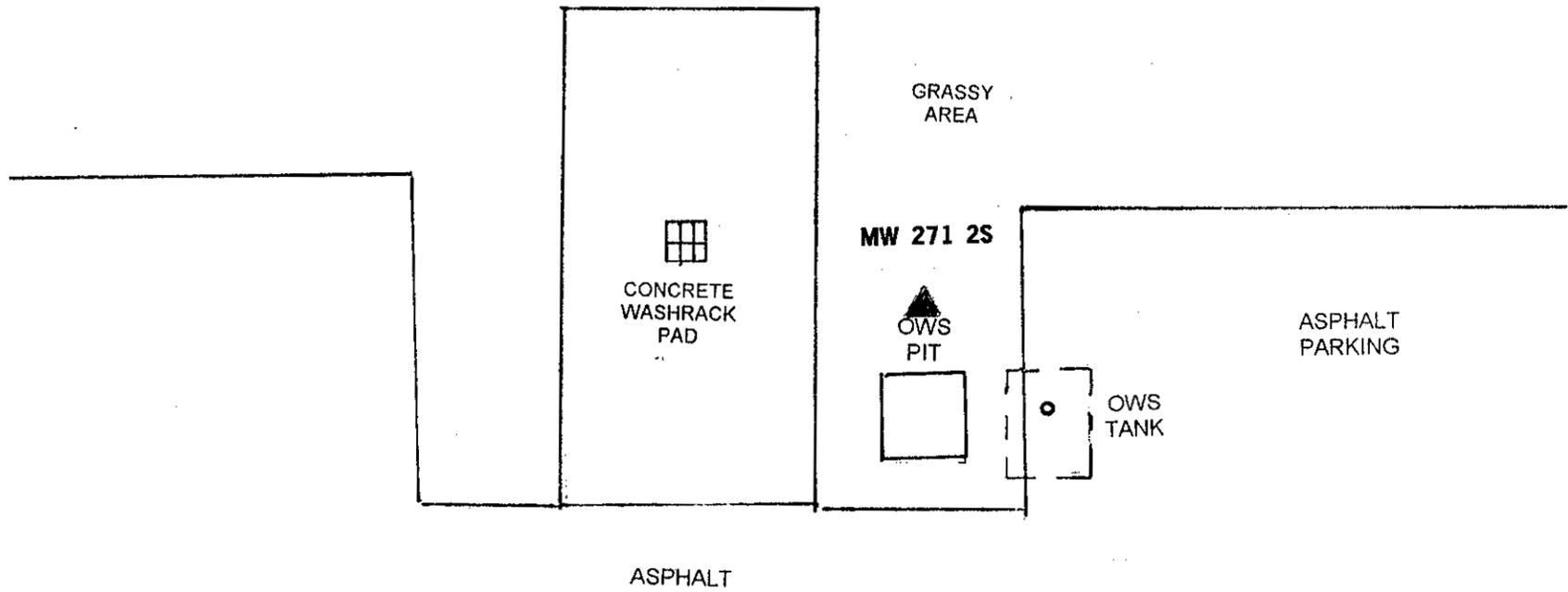
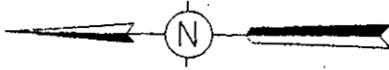


Figure 1-2
Pre-Excavation Conditions
Building 271
NAS Cecil Field
Jacksonville, Florida

2.0 OWS Removal Activities

The removal of OWS system 271S at Building 271 was conducted on August 14, 2000. The contents (residual oily wastewater) were recovered from the OWS and associated storage tank prior to the system removal. The results of the OVA soil screening and visual inspection of the soils in contact with the system revealed no indications of contamination. Following removal of the OWS, storage tank, and associated piping, the void was backfilled using clean fill. Photographs documenting the field activities are provided in Appendix A.

2.1 Site Preparation

In preparation for excavation, all utilities were marked out by the Sunshine State One Call of Florida utility locate service. No active utilities were encountered during the OWS removal or associated soil excavation.

2.2 OWS Removal

The removal of OWS system 271S at Building 271 (Base Exchange Gas Station) was conducted on August 14, 2000. Prior to initiating the tank removal activities, a visual inspection of the OWS system fill ports, vent pipes, and surrounding areas was conducted, and no visible evidence of contamination was observed. Residual liquid remaining in the OWS and storage tank was recovered by vacuum tanker. The piping entering and exiting the OWS was cut and capped at the boundary of the excavation. Additional piping, including the vent pipe and piping extending from the OWS to the storage tank were removed from the ground. The OWS system consisted of two structures, including a steel OWS pit, measuring approximately 3 feet in length, 4 feet in width, and approximately 7 feet in depth, and a 500-gallon steel storage tank, which measured 5.5 feet in length and 4 feet in diameter. The structures were connected by 1.5-inch diameter steel piping. The excavated OWS and tank appeared to be in generally good condition, with no holes or leaks observed. The empty OWS and tank were then rinsed, and the residual liquid (rinseate) were recovered for disposal by vacuum tanker. The liquid (oily wastewater) generated by the field activities was staged in a holding tank along with recovered liquid from other OWS removals conducted as part of the project, and were transported for disposal to Industrial Water Services Inc., Jacksonville, Florida. Copies of the manifest and certificate of disposal are provided in Appendix B. The results of the OVA soil screening and visual inspection of the soils in contact with the system revealed no indications of the presence of contamination. Following removal of the OWS, storage tank, and associated piping, the void was backfilled using clean fill. The OWS, associated storage tank, and piping was decontaminated and disposed offsite by recycling as scrap metal.

2.3 Soil Excavation and Disposal

A limited closure assessment, which included visual inspection for the presence of stained or discolored soils during the tank removal activities, as well as OVA soil screening, and documentation of the field activities, was conducted concurrently with the OWS system removal.

The extent of soil contamination was delineated during the OWS system removal activities using soil headspace analysis screening procedures as outlined in Chapter 62-770 FAC and FDEP "Guidelines for the Assessment and Remediation of Petroleum Contaminated Soils." Organic vapor analysis of the soil was performed in the field using a Foxboro Model 128 OVA/flame ionization detector (FID). The instrument was calibrated in the field prior to sample collection using a standard of 100 ppm methane.

Excavation was initiated by removing the soil overlying the top of the OWS and associated storage tank. Soil samples were collected continuously during excavation and screened for the presence of volatile petroleum hydrocarbon vapors using soil vapor headspace analysis techniques. In this procedure, two clean 16-ounce, wide-mouth glass jars were half-filled with the soil sample to be tested, each jar was then sealed with aluminum foil, and allowed to equilibrate at ambient temperatures for a period of 5 to 10 minutes. The organic vapor concentration in the headspace of each jar was then analyzed using the OVA/FID. One jar was analyzed without a carbon filter and the other jar with a carbon filter in order to detect and correct for the presence of naturally occurring organic vapors (i.e., methane). The corrected reading is reported in parts per million (ppm), and represents the concentration of organic vapor from the soil sample resulting from the presence of volatile petroleum hydrocarbon compounds in the sample.

Soil samples were collected from the walls and floor of the excavation and screened in the field using OVA headspace analysis as well as visual methodology to determine the presence or absence of indications of contamination. The results of the OVA soil screening were all below the target level of 10 ppm, and no visual indications of contamination were noted. The results of the OVA soil screening are summarized in Table 2-1, and soil-sampling locations are shown on Figure 2-1.

Soils excavated to facilitate the removal of the OWS system were returned to the excavation, and additional clean fill was used to restore the excavation to original grade.

2.3.1 Soil Excavation

Soil excavated to facilitate the removal of the OWS and associated storage tank was screened for indications of contamination using OVA soil screening procedures and visual screening methodology. No evidence of contamination was detected, and the soil was returned to the void following the removal of the OWS system. The limits of the excavation area were approximately 11 feet in length, 8 feet in width (at the widest point), and were approximately 10 feet in depth, at the deepest point. The limits of the excavation are shown in Figure 2-1. Depth to water at the site was measured in adjacent flush-mounted monitoring well (CEF-271-1S) using an electronic water level indicator. The depth to water was determined to be 6.73 feet relative to the top of the well casing (TOC).

TABLE 2-2
Summary of Headspace Screening Results

Sample Location (see Figure 2-1)	Depth (feet bls)	FID Unfiltered (ppm)	FID with Filter (ppm)	FID Corrected (ppm)	Remarks
1	2	0	0	0	North wall
2	4	0	0	0	
3	2	0	0	0	South wall
4	4	0	0	0	
5	2	0	0	0	East wall
6	4	0	0	0	
7	2	0	0	0	West wall
8	4	0	0	0	
9	7	0	0	0	Bottom, center of OWS pit
10	6	0	0	0	North wall, bottom
11	6	0	0	0	East wall, bottom
12	6	0	0	0	West wall, bottom
13	6	0	0	0	South wall, Bottom
14	4	0	0	0	East end of tank
15	4	0	0	0	West end of tank
16	6	2.4	0	2.4	South wall, center
17	2	0	0	0	
18	4	8.8	7.0	1.8	
19	4	6.0	6.0	0	West wall
20	6	16	16	0	South side, center
21	8	0	0	0	2 feet below # 20
22	4	0	0	0	West wall
23	6	0	0	0	
24	4	0	0	0	North wall
25	6	0	0	0	
26	2	0	0	0	East wall
27	4	0	0	0	
28	8	2.0	2.0	0	
29	10	8.2	7.8	0.4	Bottom, center of excavation
30	1	0	0	0	At vent pipe, against wall of bldg.
31	2	0	0	0	1 foot below vent pipe

Note: Samples # 1 – 13 @ OWS pit; Samples # 14 – 29 @ tank excavation

2.3.2 Soil Transportation and Disposal

No contaminated soil was found during removal of the OWS system.

2.3.3 Backfilling and Site Restoration

The material used to backfill the excavation was certified clean fill brought in from the North Tank Fuel Farm (NTFF) removal project at NAS Cecil Field. The certified clean soil used to backfill the Building 271S-OWS excavation was taken from NTFF Clean Pile 1. The laboratory analytical report for Clean Pile 1, showing that the material is clean fill, is presented in Appendix D. The backfill was compacted using the excavation equipment. No compaction tests were required.

Following completion of the source removal activities, the area of excavation was returned to original grade using the clean fill and seeded with a mixture of brown millet, rye, and bahia grass, fertilizer and mulch.

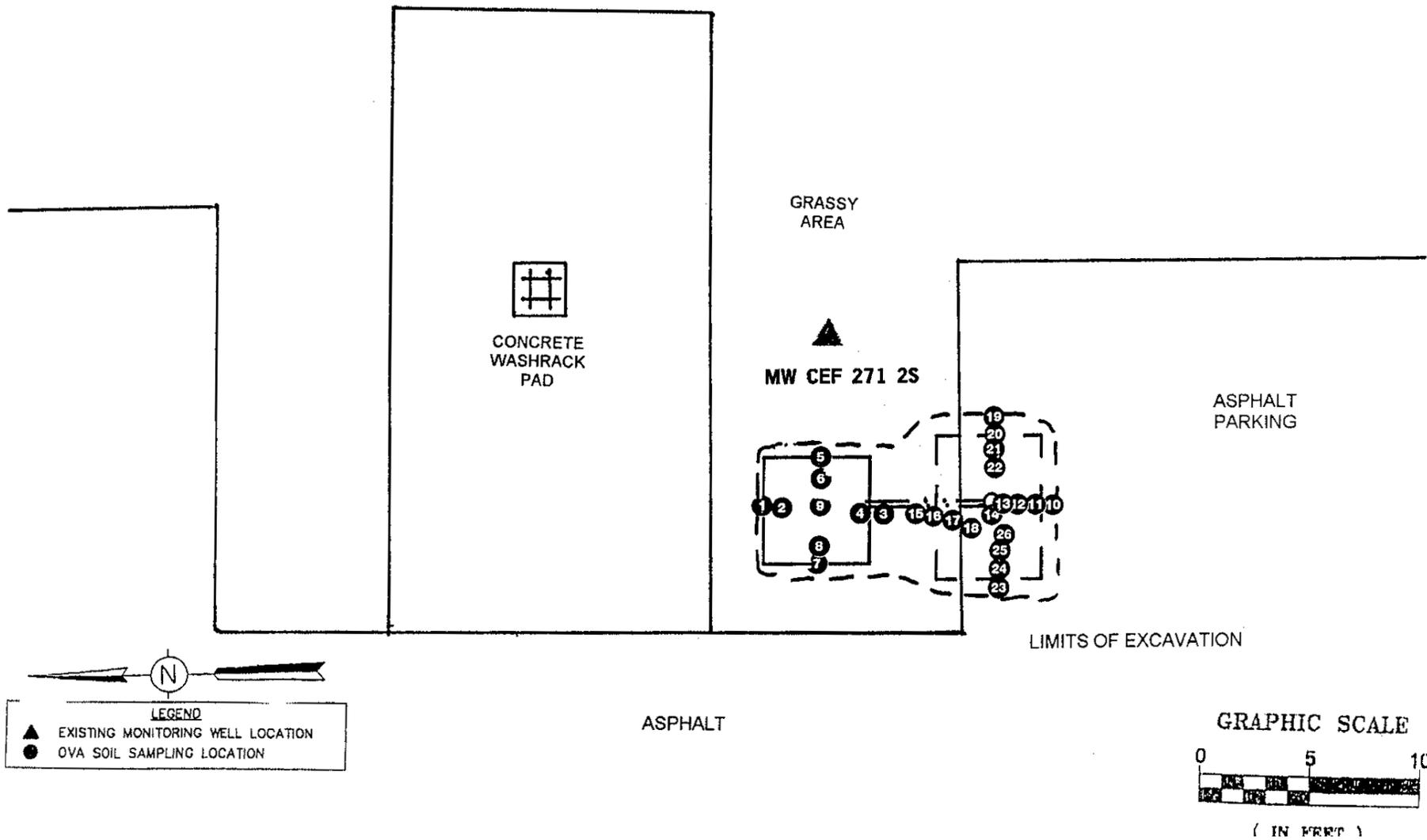


Figure 2-1
OVA Soil Sampling Locations
Building 271
NAS Cecil Field
Jacksonville, Florida

2.4 Sampling and Analysis

Soil samples were collected from the walls and floor of the excavation during the OWS and storage tank removal for field screening using organic vapor headspace analysis procedures as well as visual inspection. The OVA soil sampling locations are shown in Figure 2-1. Based on the lack of indications of the presence of contamination and Chapter 62-761 FAC, no soil or groundwater samples were collected for laboratory analysis.

2.4.1 Headspace Analysis

Soil samples collected from the excavation were screened using an OVA equipped with an FID utilizing the field screening methodology as described in Section 2.1. A methane filter was used to detect and correct for the presence of naturally occurring organic vapors (i.e., methane). The results of the organic vapor headspace analysis were below the 10 ppm target level in all samples collected as part of the OWS system closure. The results of the headspace analyses are summarized in Table 2-1.

3.0 Conclusions

The removal of OWS system 271S at Building 271 was conducted on August 14, 2000. Prior to initiating the tank removal activities, a visual inspection of the OWS system fill ports, vent pipes, and surrounding areas was conducted, and no visible evidence of contamination was observed. Residual liquid remaining in the OWS and storage tank was recovered by vacuum tanker. The piping entering and exiting the OWS was cut and capped at the boundary of the excavation. The excavated OWS and storage tank appeared to be in generally good condition, with no holes or leaks observed. The empty tanks were then rinsed, and the residual liquid (rinseate) was recovered for disposal by vacuum tanker. The liquids (oily wastewater) generated by the field activities were staged in a holding tank along with recovered liquids from other OWS removals conducted as part of the project, and were transported for disposal to Industrial Water Services, Inc., Jacksonville, Florida. The results of the OVA soil screening and visual inspection of the soils in contact with the system revealed no indications of the presence of contamination. Following removal of the OWS, storage tank, and associated piping, the void was backfilled using clean fill. The OWS, associated storage tank, and piping were decontaminated and disposed offsite by recycling as scrap metal.

Soil samples were collected from the walls and floor of the excavation during the OWS and storage tank removal for field screening using organic vapor headspace analysis procedures as well as visual inspection. The field screening procedures revealed no evidence of the presence of contamination. Based on the field screening and Chapter 62-761 FAC, no soil or groundwater samples were collected for laboratory analysis.

Based on the lack of apparent indications of the presence of contamination, as indicated by the results of the OVA soil screening and by the lack of visual indications of the presence of contamination, no further action appears warranted for this site.

4.0 References

CH2MHILL Constructors, Inc. Basewide Work Plan Revision 1, NAS Cecil Field, Jacksonville, Florida. November 1998.

CH2MHILL Constructors, Inc. Work Plan Addendum Number 5, Removal of the North Tank Fuel Farm and Removals at Various Tank Sites, NAS Cecil Field, Jacksonville, Florida. May 2000.

Appendix A

Photo Documentation



1. Photograph of area of excavation following removal of oil/water separator # 271S-OW and storage tank.



2. Photograph of Oil/Water Separator Pit and storage tank following removal.

PHOTODOCUMENTATION: Oil/Water Separator Removal, Building 271, #271S-OW
Cecil Field Naval Air Station; Facility ID # 16/8507293
Jacksonville, Duval County, Florida

Appendix B

Copies of Disposal Manifests and Certificate of Disposal

(Oily wastewater generated by the OWS removal activities)

EX 1121

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N / A

Manifest Document No. 151400

2. Page 1 of

9/22/00

3. Generator's Name and Mailing Address
United States Navy - N.A.S Cecil Field
6219 Authority AVE.
Jacksonville, FL 32221

4. Generator's Phone (904) 777-8850

5. Transporter 1 Company Name
ENVIRONMENTAL RECOVERY INC

6. US EPA ID Number
FLD092718576

A. Transporter's Phone
(800) 359-3740

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
INDUSTRIAL WATER SERVICES, INC
1640 TALLEYRAND AVENUE
JACKSONVILLE, FL 32206

10. US EPA ID Number
FLD981928484

C. Facility's Phone
(904) 354-0372

11. Waste Shipping Name and Description

12. Containers
No. Type

13. Total Quantity

14. Unit Wt/Vol

a. OILY WASTE WATER

001 T T 280.0 G

GENERATOR

D. Additional Descriptions for Materials Listed Above
IWS MPA # J020473
CONTENTS OF OWS (4) AT ~~BEES~~ 80-OW2, 271SE-OW,
271S-OW, 274-OW

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
CONTACT: Services, Inc. -- 24 Hour Emergency Service -- (800)-999-1234
JOB # 2316

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name
DAVID J. KRUZICKI, ENV. MGR

Signature
David J. Kruzicki
Month Day Year
09/22/00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name
ERIC TIDWELL

Signature
Eric Tidwell
Month Day Year
09/29/00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature
Month Day Year

19. Discrepancy Indication Space

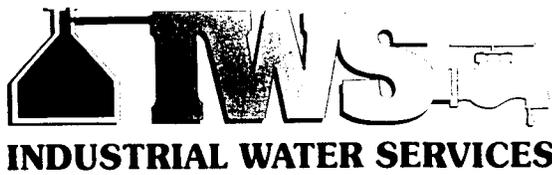
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name
Jon L Ross

Signature
Jon L Ross
Month Day Year
09/29/00

TRANSPORTER
FACILITY

ORIGINAL - RETURN TO GENERATOR



Industrial Water Services
1980 Avenue "A"
Mobile, Alabama 36615

Facility:
1980 Avenue "A"
Mobile, Alabama 36615
(334) 694-7500
FAX: (334) 694-7508

Corporate Office:
1-800-447-3592
FAX (904) 350-1313

Customer Service:
1-800-4-IWS-HAUL
800-449-7428

Industrial Water Services, Inc.
P.O. Box 43369
Jacksonville, Florida 32203

Facility:
1705 Danese Street
Jacksonville, Florida 32206
(904) 354-0372
FAX: (904) 354-7612

CERTIFICATE OF COMPLIANCE AND DISPOSAL

Generator: UNITED STATES NAVY – N.A.S. CECIL FIELD
Site Location: 6219 AUTHORITY AVENUE – JACKSONVILLE, FL

This certifies that on the 29th of September, 2000; 2,800 gallons of non-hazardous oily waste water as described on manifest number 151400, was disposed of and/or recycled in compliance with all applicable state, federal and local regulations under Industrial User Permit Number ISN 019.

Facility Name: Industrial Water Services, Inc.

Facility Address: 1640 Talleyrand Avenue
Jacksonville, FL

Facility EPA ID#: FLD 981 928 484

Certified By: Leslie Detlefsen

Signature: 

Date: March 7, 2001

Appendix C

Laboratory Reports

(Wastewater Characterization Analysis – Oily Wastewater and Rinseate)

00010

TestAmerica

INCORPORATED

Sample Identification

002-OWS1-L-0725-00

Matrix: Water
pH:
Units: ug/l
Dilution Factor: 1.
Analysis Method: SW8260B
Delivery Group: 201800
Instrument: HP-25

Lab Sample ID: 00-A105982
Date Sampled:: 7/25/00
Date Received: 7/26/00
Analysis Date: 8/ 7/00
Analysis Time: 22:41
Sample QC Group: 3402

FORM I

CAS NUMBER	ANALYTE	CONCENTRATION	FLAG
67-64-1	Acetone	5.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-25-2	Bromoform	1.00	U
74-83-9	Bromomethane	1.00	U
78-93-3	2-Butanone	5.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.50	U
98-06-6	t-Butylbenzene	1.00	U
75-15-0	Carbon disulfide	1.00	U
56-23-5	Carbon tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-8	2-Chloroethylvinylether	2.50	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	5.00	U
124-48-1	Dibromochloromethane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
75-71-8	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U

2960 FOSTER CREIGHTON DRIVE / NASHVILLE, TN 37204 / 615-726-0177 / FAX: 615-726-0954 / 800-765-0980

00011

TestAmerica

INCORPORATED

Sample Identification

002-OWS1-L-0725-00

Matrix: Water
pH:
Units: ug/l

Lab Sample ID: 00-A105982
Date Sampled:: 7/25/00
Date Received: 7/26/00

FORM I

CAS NUMBER	ANALYTE	CONCENTRATION	FLAG
156-59-2	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
594-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
100-41-4	Ethylbenzene	1.00	U
87-68-3	Hexachlorobutadiene	1.00	U
591-78-6	2-Hexanone	5.00	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	5.50	U
108-10-1	4-Methyl-2-pentanone	5.00	U
75-09-2	Methylene chloride	2.50	U
91-20-3	Naphthalene	15.7	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
108-88-3	Toluene	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
79-01-6	Trichloroethene	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
95-63-6	1,2,4-Trimethylbenzene	23.0	U
108-67-8	1,3,5-Trimethylbenzene	19.9	U
75-01-4	Vinyl chloride	1.00	U
1330-20-7	Xylenes, Total	4.60	U
75-27-4	Bromodichloromethane	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U

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00158

TestAmerica

INCORPORATED

Sample Identification

002-OWS1-L-0725-00

Matrix: Water
 pH:
 Units: ug/l
 Dilution Factor: 1.
 Analysis Method: SW6010B
 Delivery Group: 201800
 Instrument:
 Mercury DilFact: 2.
 Mercury Method: SW7470

Lab Sample ID: 00-A105982
 Date Sampled:: 7/25/00
 Date Received: 7/26/00
 Analysis Date: 8/9/00
 Analysis Time: 6:59
 Sample QC Group: 5809
 Mercury Date: 8/9/00
 Mercury Time: 7:02
 Mercury QC Group: 5811

FORM I

CAS NUMBER	ANALYTE	CONCENTRATION	FLAG
7429-90-5	Aluminum, Total	13400	.....
7440-36-0	Antimony, Total	20	.....
7440-38-2	Arsenic, Total	19	.....
7440-39-3	Barium, Total	880	.....
7440-41-7	Beryllium, Total	4	..... U
7440-43-9	Cadmium, total	124	.....
7440-70-2	Calcium	81200	.....
7440-47-3	Chromium, total	303	.....
7440-48-4	Cobalt, Total	20	..... U
7440-50-8	Copper, Total	766	.....
7439-89-6	Iron	93000	.....
7439-92-1	Lead	1130	.....
7439-95-4	Magnesium	3360	.....
7439-96-5	Manganese	396	.....
7439-97-6	Mercury, Total	17.4	.....
7440-02-0	Nickel, Total	94	.....
7440-09-7	Potassium, Total	1500	.....
7782-49-2	Selenium, Total	5	..... U
7440-22-4	Silver, Total	5	..... U
7440-23-5	Sodium	2260	.....
7440-28-0	Thallium, Total	2	..... U
7440-62-2	Vanadium, Total	50	.....
7440-66-6	Zinc, Total	8620
57-12-5	Cyanide	6

Arsenic
cadmium
chromium
lead
mercury
zinc
cy

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00144

TestAmerica

INCORPORATED

Sample Identification

002-OWS1-L-0725-00

Matrix: Water
PH:
Units: ug/l

Lab Sample ID: 00-A105982
Date Sampled: 7/25/00
Date Received: 7/26/00

FORM I

CAS NUMBER	ANALYTE	CONCENTRATION	FLAG
Dilution Factor: 1000 Analysis Method: FPRO Delivery Group: 201800 Instrument: PE-3 Vol Extracted: 975. ml Extract Vol: 2.0 ml		Analysis Date: 8/ 2/00 Analysis Time: 11:22 Sample QC Group: 8167 Extraction Date: 8/ 1/00	

FORM I

CAS NUMBER	ANALYTE	CONCENTRATION	FLAG
.....	TRPH	667000

FL

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Appendix D

Certification of Clean Fill



LOG NO: C0-07521
 Received: 25 JUL 00
 Reported: 26 JUL 00

Mr. Bill Canelos
 CCI/JA Jones Env. Svcs.
 8936 Western Way, Suite 10
 Jacksonville, FL 32256

CC: Lisa Schwan (CCI, Atlanta, GA)

Contract No.: CTO 002
 Project: NTFP CLEAN SOIL PILE #1
 Sampled By: Client
 Code: 172500726

REPORT OF RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
07521-1	002-CPI-S-0724-00	07-24-00/15:15	002-CPI
PARAMETER		07521-1	

Petroleum Hydrocarbons (FL-PRO)			
Petroleum Range Organics (FL-PRO), ug/kg dw		23000	
Surrogate - o-Terphenyl		104 %	
Surrogate - Nonatriacontane (C39)		105 %	
Dilution Factor		1	
Prep Date		07.25.00	
Analysis Date		07.25.00	
Batch ID		FLS080	
Prep Method		3550	
Analyst		HAH	



Mr. Bill Canelos
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 8936 Western Way, Suite 10
 Jacksonville, FL 32256

LOG NO: C0-07521
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CC: Lisa Schwan (CCI, Atlanta, GA)

Contract No.: CTO 002
 Project: NTFP CLEAN SOIL PILE #1
 Sampled By: Client
 Code: 172500726

REPORT OF RESULTS

Page 2

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
07521-1	002-CPI-S-0724-00	07-24-00/15:15	002-CPI
PARAMETER		07521-1	
Polynuclear Aromatic Hydrocarbons (8310)			
Acenaphthene, ug/kg dw		<11	
Acenaphthylene, ug/kg dw		<11	
Anthracene, ug/kg dw		<11	
Benzo(a)anthracene, ug/kg dw		<11	
Benzo(a)pyrene, ug/kg dw		22	
Benzo(b)fluoranthene, ug/kg dw		86 T	
Benzo(g,h,i)perylene, ug/kg dw		38 T	
Benzo(k)fluoranthene, ug/kg dw		64 T	
Chrysene, ug/kg dw		21	
Dibenzo(a,h)anthracene, ug/kg dw		82	
Fluoranthene, ug/kg dw		62 T	
Fluorene, ug/kg dw		<11	
Indeno(1,2,3-cd)pyrene, ug/kg dw		<11	
Naphthalene, ug/kg dw		<11	
Phenanthrene, ug/kg dw		<11	
Pyrene, ug/kg dw		31	
1-Methylnaphthalene, ug/kg dw		<11	
2-Methylnaphthalene, ug/kg dw		<11	
Surrogate - 2-Chloroanthracene		115 %	
Dilution Factor		1	
Prep Date		07.25.00	
Analysis Date		07.25.00	
Batch ID		PAS252	
Prep Method		3550	
Analyst		SB	



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REPORT OF RESULTS

Page 3

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
07521-1	002-CPI-S-0724-00	07-24-00/15:15	002-CPI
PARAMETER	07521-1		
Volatile Organic Compounds (8260)			
Benzene, ug/kg dw		<5.6	
Bromobenzene, ug/kg dw		<5.6	
Bromochloromethane, ug/kg dw		<5.6	
Bromodichloromethane, ug/kg dw		<5.6	
Bromoform, ug/kg dw		<5.6	
Bromomethane (Methyl bromide), ug/kg dw		<5.6	
Carbon tetrachloride, ug/kg dw		<5.6	
Chlorobenzene, ug/kg dw		<5.6	
Chloroethane, ug/kg dw		<5.6	
Chloroform, ug/kg dw		<5.6	
Chloromethane, ug/kg dw		<5.6	
2-Chlorotoluene, ug/kg dw		<5.6	
4-Chlorotoluene, ug/kg dw		<5.6	
Dibromochloromethane, ug/kg dw		<5.6	
Dibromomethane (Methylene bromide), ug/kg dw		<5.6	
1,2-Dibromoethane (EDB), ug/kg dw		<5.6	
1,2-Dichlorobenzene, ug/kg dw		<5.6	
1,3-Dichlorobenzene, ug/kg dw		<5.6	
1,4-Dichlorobenzene, ug/kg dw		<5.6	
Dichlorodifluoromethane, ug/kg dw		<5.6	
1,1-Dichloroethane, ug/kg dw		<5.6	
1,2-Dichloroethane, ug/kg dw		<5.6	
1,1-Dichloroethene, ug/kg dw		<5.6	
cis-1,2-Dichloroethene, ug/kg dw		<5.6	
trans-1,2-Dichloroethene, ug/kg dw		<5.6	



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REPORT OF RESULTS

Page 4

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
07521-1	002-CPI-S-0724-00	07-24-00/15:15	002-CPI
PARAMETER	07521-1		
1,2-Dichloropropane, ug/kg dw		<5.6	
1,3-Dichloropropane, ug/kg dw		<5.6	
2,2 Dichloropropane, ug/kg dw		<5.6	
cis-1,3-Dichloropropene, ug/kg dw		<5.6	
trans-1,3-Dichloropropene, ug/kg dw		<5.6	
Ethylbenzene, ug/kg dw		<5.6	
Hexachlorobutadiene, ug/kg dw		<5.6	
Isopropylbenzene (Cumene), ug/kg dw		<5.6	
p-Isopropyltoluene, ug/kg dw		<5.6	
Methylene chloride (Dichloromethane), ug/kg dw		<5.6	
Methyl t-butyl ether (MTBE), ug/kg dw		<5.6	
Naphthalene, ug/kg dw		<5.6	
n-Butylbenzene, ug/kg dw		<5.6	
n-Propylbenzene , ug/kg dw		<5.6	
sec-Butylbenzene, ug/kg dw		<5.6	
Styrene, ug/kg dw		<5.6	
t-Butylbenzene, ug/kg dw		<5.6	
1,1,1,2-Tetrachloroethane, ug/kg dw		<5.6	
1,1,2,2-Tetrachloroethane, ug/kg dw		<5.6	
Tetrachloroethene, ug/kg dw		<5.6	
Toluene, ug/kg dw		<5.6	
1,1,1-Trichloroethane, ug/kg dw		<5.6	
1,1,2-Trichloroethane, ug/kg dw		<5.6	
1,2,3-Trichlorobenzene, ug/kg dw		<5.6	
1,2,4-Trichlorobenzene, ug/kg dw		<5.6	
Trichloroethene, ug/kg dw		<5.6	



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Contract No.: CTO 002
 Project: NTFP CLEAN SOIL PILE #1
 Sampled By: Client
 Code: 172500726
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , SOLID OR SEMISOLID SAMPLES	DATE/ TIME SAMPLED	SDG#
07521-1	002-CPI-S-0724-00	07-24-00/15:15	002-CPI
PARAMETER		07521-1	
Trichlorofluoromethane, ug/kg dw		<5.6	
1,2,3-Trichloropropane, ug/kg dw		<5.6	
1,2,4-Trimethylbenzene, ug/kg dw		<5.6	
1,3,5-Trimethylbenzene, ug/kg dw		<5.6	
Vinyl chloride, ug/kg dw		<5.6	
o-Xylene, ug/kg dw		<5.6	
m&p-Xylene, ug/kg dw		<11	
Surrogate - Dibromofluoromethane		91 %	
Surrogate - Toluene-d8		103 %	
Surrogate - 4-Bromofluorobenzene		96 %	
Dilution Factor		1	
Prep Date		07.25.00	
Analysis Date		07.25.00	
Batch ID		KAS097	
Prep Method		5035	
Analyst		DWB	
Percent Solids		88	

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.



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 8936 Western Way, Suite 10
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CC: Lisa Schwan (CCI, Atlanta, GA)

Contract No.: CTO 002
 Project: NTPF CLEAN SOIL FILE #1
 Sampled By: Client
 Code: 172500726

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED			
07521-2	Method Blank				
07521-3	Lab Control Standard Result				
07521-5	Lab Control Standard & Recovery				
07521-22	LCS Accuracy Control Limit (%R)				
07521-9	Matrix Spike Result				
PARAMETER	07521-2	07521-3	07521-5	07521-22	07521-9
Petroleum Hydrocarbons (FL-PRO)					
Petroleum Range Organics (FL-PRO), ug/kg dw	<2500	118075	104 % 63 - 153 %		153348
Surrogate - o-Terphenyl	111 %	133	106 %	---	133
Surrogate - Nonatriacontane (C39)	80 %	36.5	73 %	---	---
Prep Date	56.0				
Dilution Factor	1	1	1	07.25.00	07.25.0
Analysis Date	07.25.00	07.25.00	07.25.00	---	07.25.00
Batch ID	FLS080	FLS080	FLS080	---	FLS080
Prep Method	3550	3550	3550	---	3550
Analyst	HAH	HAH	HAH	---	HAH



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CC: Lisa Schwan (CCI, Atlanta, GA)

Contract No.: CTO 002
 Project: NTFP CLEAN SOIL PILE #1
 Sampled By: Client
 Code: 172500726
 Page 7

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED				
07521-2	Method Blank					
07521-3	Lab Control Standard Result					
07521-5	Lab Control Standard % Recovery					
07521-22	LCS Accuracy Control Limit. (%R)					
07521-9	Matrix Spike Result					
PARAMETER		07521-2	07521-3	07521-5	07521-22	07521-9
Polynuclear Aromatic Hydrocarbons (8310)						
Acenaphthene, ug/kg dw	<10	<10	---	---	---	---
Acenaphthylene, ug/kg dw	<10	6.7	67 %	39 - 137 %		229
Anthracene, ug/kg dw	<10	---	---	---	---	---
Benzo(a)anthracene, ug/kg dw	<10	---	---	---	---	---
Benzo(a)pyrene, ug/kg dw	<10	---	---	---	---	---
Benzo(b)fluoranthene, ug/kg dw	<10	---	---	---	---	---
Benzo(g,h,i)perylene, ug/kg dw	<10	---	---	---	---	---
Benzo(k)fluoranthene, ug/kg dw	<10	10.6	106 %	68 - 124 %		382
Chrysene, ug/kg dw	<10	9.6	96 %	65 - 132 %		367
Dibenzo(a,h)anthracene, ug/kg dw	<10	---	---	---	---	---
Fluoranthene, ug/kg dw	<10	---	---	---	---	---
Fluorene, ug/kg dw	<10	---	---	---	---	---
Indeno(1,2,3-cd)pyrene, ug/kg dw	<10	---	---	---	---	---
Naphthalene, ug/kg dw	<10	---	---	---	---	---
Phenanthrene, ug/kg dw	<10	8.3	83 %	---	---	348
Pyrene, ug/kg dw	<10	9.7	97 %	59 - 127 %		351
1-Methylnaphthalene, ug/kg dw	<10	---	---	61 - 120 %		---
2-Methylnaphthalene, ug/kg dw	<10	---	---	---	---	---
Surrogate - 2-Chloroanthracene	75 %	95 %	95 %	---	---	103 %
Dilution Factor	1	1	1	---	---	1
Prep Date	07.25.00	07.25.00	07.25.00	---	---	07.25.00
Analysis Date	07.25.00	07.25.00	07.25.00	---	---	07.25.00
Batch ID	PAS252	PAS252	PAS252	---	---	PAS252
Prep Method	3550	3550	3550	---	---	3550
Analyst	SB	SB	SB	---	---	SB



LOG NO: C0-07521
 Received: 25 JUL 00
 Reported: 26 JUL 00

Mr. Bill Canelos
 CCI/JA Jones Env. Svcs.
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 Jacksonville, FL 32256

CC: Lisa Schwan (CCI, Atlanta, GA)

Contract No.: CTO 002
 Project: NTFF CLEAN SOIL PILE #1
 Sampled By: Client
 Code: 172500726

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED
07521-2	Method Blank	
07521-3	Lab Control Standard Result	
07521-5	Lab Control Standard % Recovery	
07521-22	LCS Accuracy Control Limit (%R)	
07521-9	Matrix Spike Result	

PARAMETER	07521-2	07521-3	07521-5	07521-22	07521-9
Volatile Organic Compounds (8260)					
Benzene, ug/kg dw	<5.0	48	96 % 50 - 150 %		55.7
Bromobenzene, ug/kg dw	<5.0	---	---	---	---
Bromochloromethane, ug/kg dw	<5.0	---	---	---	---
Bromodichloromethane, ug/kg dw	<5.0	---	---	---	---
Bromoform, ug/kg dw	<5.0	---	---	---	---
Bromomethane (Methyl bromide), ug/kg dw	<5.0	---	---	---	---
Carbon tetrachloride, ug/kg dw	<5.0	---	---	---	---
Chlorobenzene, ug/kg dw	<5.0	55	110 % 50 - 150 %		61.6
Chloroethane, ug/kg dw	<5.0	---	---	---	---
Chloroform, ug/kg dw	<5.0	---	---	---	---
Chloromethane, ug/kg dw	<5.0	---	---	---	---
2-Chlorotoluene, ug/kg dw	<5.0	---	---	---	---
4-Chlorotoluene, ug/kg dw	<5.0	---	---	---	---
Dibromochloromethane, ug/kg dw	<5.0	---	---	---	---
Dibromomethane (Methylene bromide), ug/kg dw	<5.0	---	---	---	---
1,2-Dibromoethane (EDB), ug/kg dw	<5.0	---	---	---	---
1,2-Dichlorobenzene, ug/kg dw	<5.0	---	---	---	---
1,3-Dichlorobenzene, ug/kg dw	<5.0	---	---	---	---
1,4-Dichlorobenzene, ug/kg dw	<5.0	---	---	---	---



LOG NO: C0-07521
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Contract No.: CTO 002
 Project: NTEF CLEAN SOIL PILE #1
 Sampled By: Client
 Code: 172500726
 Page 9

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED
07521-2	Method Blank	
07521-3	Lab Control Standard Result	
07521-5	Lab Control Standard % Recovery	
07521-22	LCS Accuracy Control Limit (%R)	
07521-9	Matrix Spike Result	

PARAMETER	07521-2	07521-3	07521-5	07521-22	07521-9
Dichlorodifluoromethane, ug/kg dw	<5.0	---	---	---	---
1,1-Dichloroethane, ug/kg dw	<5.0	---	---	---	---
1,2-Dichloroethane, ug/kg dw	<5.0	---	---	---	---
1,1-Dichloroethene, ug/kg dw	<5.0	45	90 % 50 - 150 %		52.8
cis-1,2-Dichloroethene, ug/kg dw	<5.0	---	---	---	---
trans-1,2-Dichloroethene, ug/kg dw	<5.0	---	---	---	---
1,2-Dichloropropane, ug/kg dw	<5.0	---	---	---	---
1,3-Dichloropropane, ug/kg dw	<5.0	---	---	---	---
2,2 Dichloropropane, ug/kg dw	<5.0	---	---	---	---
cis-1,3-Dichloropropene, ug/kg dw	<5.0	---	---	---	---
trans-1,3-Dichloropropene, ug/kg dw	<5.0	---	---	---	---
Ethylbenzene, ug/kg dw	<5.0	---	---	---	---
Hexachlorobutadiene, ug/kg dw	<5.0	---	---	---	---
Isopropylbenzene (Cumene), ug/kg dw	<5.0	---	---	---	---
p-Isopropyltoluene, ug/kg dw	<5.0	---	---	---	---
Methylene chloride (Dichloromethane), ug/kg dw	<5.0	---	---	---	---
Methyl t-butyl ether (MTBE), ug/kg dw	<5.0	---	---	---	---
Naphthalene, ug/kg dw	<5.0	---	---	---	---



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REPORT OF RESULTS

Page 10

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED
07521-2	Method Blank	
07521-3	Lab Control Standard Result	
07521-5	Lab Control Standard % Recovery	
07521-22	LCS Accuracy Control Limit (%R)	
07521-9	Matrix Spike Result	

PARAMETER	07521-2	07521-3	07521-5	07521-22	07521-9
n-Butylbenzene, ug/kg dw	<5.0	---	---	---	---
n-Propylbenzene , ug/kg dw	<5.0	---	---	---	---
sec-Butylbenzene, ug/kg dw	<5.0	---	---	---	---
Styrene, ug/kg dw	<5.0	---	---	---	---
t-Butylbenzene, ug/kg dw	<5.0	---	---	---	---
1,1,1,2-Tetrachloroethane, ug/kg dw	<5.0	---	---	---	---
1,1,2,2-Tetrachloroethane, ug/kg dw	<5.0	---	---	---	---
Tetrachloroethene, ug/kg dw	<5.0	---	---	---	---
Toluene, ug/kg dw	<5.0	58	116 % 50 - 150 %		60.7
1,1,1-Trichloroethane, ug/kg dw	<5.0	---	---	---	---
1,1,2-Trichloroethane, ug/kg dw	<5.0	---	---	---	---
1,2,3-Trichlorobenzene, ug/kg dw	<5.0	---	---	---	---
1,2,4-Trichlorobenzene, ug/kg dw	<5.0	---	---	---	---
Trichloroethene, ug/kg dw	<5.0	52	104 % 50 - 150 %		58.6
Trichlorofluoromethane, ug/kg dw	<5.0	---	---	---	---
1,2,3-Trichloropropane, ug/kg dw	<5.0	---	---	---	---
1,2,4-Trimethylbenzene, ug/kg dw	<5.0	---	---	---	---
1,3,5-Trimethylbenzene, ug/kg dw	<5.0	---	---	---	---
Vinyl chloride, ug/kg dw	<5.0	---	---	---	---
o-Xylene, ug/kg dw	<5.0	---	---	---	---



LOG NO: C0-07521
 Received: 25 JUL 00
 Reported: 26 JUL 00

Mr. Bill Canelos
 CCI/JA Jones Env. Svcs.
 8936 Western Way, Suite 10
 Jacksonville, FL 32256

CC: Lisa Schwan (CCI, Atlanta, GA)

Contract No.: CTO 002
 Project: NTFP CLEAN SOIL PILE #1
 Sampled By: Client
 Code: 172500726
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED
07521-2	Method Blank	
07521-3	Lab Control Standard Result	
07521-5	Lab Control Standard % Recovery	
07521-22	LCS Accuracy Control Limit (%R)	
07521-9	Matrix Spike Result	

PARAMETER	07521-2	07521-3	07521-5	07521-22	07521-9
m&p-Xylene, ug/kg dw	<10	---	---	---	---
Surrogate - Dibromofluoromethane	88 %	89 %	89 %	---	93 %
Surrogate - Toluene-d8	100 %	103 %	103 %	---	100 %
Surrogate - 4-Bromofluorobenzene	104 %	103 %	103 %	---	100 %
Dilution Factor	1	1	1	---	1
Prep Date	---	---	---	---	07.25.00
Analysis Date	07.25.00	07.25.00	07.25.00	---	07.25.00
Batch ID	KAS097	KAS097	KAS097	---	KAS097
Prep Method	5030	5030	5030	---	5035
Analyst	DWB	DWB	DWB	---	DWB



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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED			
07521-10	Matrix Spike Duplicate Result				
07521-11	Matrix Spike % Recovery				
07521-12	Matrix Spike Duplicate % Recovery				
07521-13	Precision (%RPD) MS/MSD				
07521-14	MS Precision Advisory Limit (%RPD)				
PARAMETER	07521-10	07521-11	07521-12	07521-13	07521-14
Petroleum Hydrocarbons (FL-PRO)					
Petroleum Range Organics (FL-PRO), ug/kg dw	170034	115 %	130 %	12	30
Surrogate - o-Terphenyl	134	107 %	107 %	---	---
Surrogate - Nonatriacontane (C39)	56.0	112 %	112 %	---	---
Dilution Factor	1	1	1	---	---
Prep Date	07.25.00	07.25.00	07.25.00	---	---
Analysis Date	07.25.00	07.25.00	07.25.00	---	---
Batch ID	FLS080	FLS080	FLS080	---	---
Prep Method	3550	3550	3550	---	---
Analyst	HAH	HAH	HAH	---	---
Polynuclear Aromatic Hydrocarbons (8310)					
Acenaphthylene, ug/kg dw	241	69 %	72 %	5	67
Benzo(k)fluoranthene, ug/kg dw	570	95 %	152 %	39	53
Chrysene, ug/kg dw	362	104 %	102 %	1	45
Phenanthrene, ug/kg dw	334	105 %	100 %	4	48
Pyrene, ug/kg dw	380	96 %	105 %	8	49
Surrogate - 2-Chloroanthracene	115 %	103 %	115 %	---	---
Dilution Factor	1	1	1	---	---
Prep Date	07.25.00	07.25.00	07.25.00	---	---
Analysis Date	07.25.00	07.25.00	07.25.00	---	---
Batch ID	PAS252	PAS252	PAS252	---	---
Prep Method	3550	3550	3550	---	---
Analyst	SB	SB	SB	---	---



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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED			
07521-10	Matrix Spike Duplicate Result				
07521-11	Matrix Spike % Recovery				
07521-12	Matrix Spike Duplicate % Recovery				
07521-13	Precision (%RPD) MS/MSD				
07521-14	MS Precision Advisory Limit (%RPD)				
PARAMETER	07521-10	07521-11	07521-12	07521-13	07521-14
Volatile Organic Compounds (8260)					
Benzene, ug/kg dw	57.8	97 %	101 %	5	30
Chlorobenzene, ug/kg dw	63.6	107 %	112 %	5	30
1,1-Dichloroethene, ug/kg dw	55.1	92 %	97 %	5	30
Toluene, ug/kg dw	66.4	106 %	116 %	9	30
Trichloroethene, ug/kg dw	59.1	102 %	104 %	2	30
Surrogate - Dibromofluoromethane	91 %	93 %	91 %	---	---
Surrogate - Toluene-d8	100 %	100 %	100 %	---	---
Surrogate - 4-Bromofluorobenzene	96 %	100 %	96 %	---	---
Dilution Factor	1	1	1	---	---
Prep Date	07.25.00	07.25.00	07.25.00	---	---
Analysis Date	07.25.00	07.25.00	07.25.00	---	---
Batch ID	KAS097	KAS097	KAS097	---	---
Prep Method	5035	5035	5035	---	---
Analyst	DWB	DWB	DWB	---	---



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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR SOLID/SEMISOLID	DATE/ TIME SAMPLED	
		07521-23	07521-24
07521-23	MS Accuracy Advisory Limit (%R)		
07521-24	Surrogate Recovery Limits		
PARAMETER			
Petroleum Hydrocarbons (FL-PRO)			
	Petroleum Range Organics (FL-PRO), ug/kg dw	62 - 204 %	---
	Surrogate - o-Terphenyl	---	62 - 109 %
	Surrogate - Nonatriacontane (C39)	---	60 - 118 %
Polynuclear Aromatic Hydrocarbons (8310)			
	Acenaphthylene, ug/kg dw	12 - 145 %	---
	Benzo(k)fluoranthene, ug/kg dw	22 - 130 %	---
	Chrysene, ug/kg dw	27 - 140 %	---
	Phenanthrene, ug/kg dw	40 - 121 %	---
	Pyrene, ug/kg dw	29 - 133 %	---
	Surrogate - 2-Chloroanthracene	---	17 - 160 %
Volatile Organic Compounds (8260)			
	Bromobenzene, ug/kg dw	50-150 %	---
	Chlorobenzene, ug/kg dw	50 - 150 %	---
	1,1-Dichloroethene, ug/kg dw	50 - 150 %	---
	Toluene, ug/kg dw	50 - 150 %	---
	Trichloroethene, ug/kg dw	50 - 150 %	---
	Surrogate - Dibromofluoromethane	---	70 - 130 %
	Surrogate - Toluene-d8	---	70 - 130 %
	Surrogate - 4-Bromofluorobenzene	---	70 - 130 %


 Rick Hayes, Project Manager

Final Page Of Report

Appendix E

FDEP Forms



Florida Department of Environmental Protection
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Storage Tank Facility Registration Form

DEP Form # 62-761.900(2)
Form Title Storage Tank Registration Form
Effective Date: July 13, 1998
DEP Application No. _____
(Filled in by DEP)

Submit a completed form for the facility when registration of storage tanks or compression vessels is required by Chapter 376.303, Florida Statutes

Please review *Registration Instructions* before completing the form.

Please check all that apply	<input type="checkbox"/> New Registration	<input type="checkbox"/> New Owner	<input type="checkbox"/> New Tanks
	<input type="checkbox"/> Facility Info Update/Correction	<input type="checkbox"/> Owner Info Update/Correction	<input checked="" type="checkbox"/> Tank Info Update/Correction

A. FACILITY INFORMATION

County: DUVAL DEP Facility ID: 168507293

Facility Name: NAS CECIL FIELD
Facility Address: 13200 NORMANDY BLVD. BLDG #271 City: JACKSONVILLE, FL Zip: 32215
Facility Contact: DAVE KRUZICKI Business Phone: (904) 778-5440
Facility Type(s): ELECTRICAL GENERATOR NAICS Code: _____ Financial Responsibility: U S GOVT.

24 Hour Emergency Contact: _____ Emergency Phone: (____) _____

B. RESPONSIBLE PERSON INFORMATION - Identify individual(s) or business(es) responsible for storage tank management, fueling operations, and/or cleanup activities at the facility location named above. Provide additional information in an attachment if necessary.

Name: <u>US GOVT./US NAVY</u>	Facility - Responsible Person Relation Type: <input checked="" type="checkbox"/> Facility Account Owner (pays fees)	Effective Date
Mail address: <u>CARETAKER SITE OFFICE SO DIV NAVFACENCOM</u>	Facility Account Owner information must be provided when the facility contains active (in-use) storage tanks on site.	
City, ST, Zip: <u>P. O. BOX 150853, JACKSONVILLE, FL 32221-0853</u>	STCM Account Number (if known)	
Contact: _____	Identify other appropriate facility relationships for this party: <input checked="" type="checkbox"/> Facility Owner/Operator <input checked="" type="checkbox"/> Property Owner <input checked="" type="checkbox"/> Storage Tank Owner	
Telephone: _____		

Name:	Other owner, relationship type(s)	Effective Date
Mail address:	<input type="checkbox"/> Facility Owner/Operator	
City, ST, Zip:	<input type="checkbox"/> Property Owner	
Contact:	<input type="checkbox"/> Storage Tank Owner	
Telephone:	<input type="checkbox"/> Other:	

C. TANK/VESSEL INFORMATION - Complete one row for each storage tank or compression vessel system located at this facility.

Tank ID	TV	A/U	Capacity	Installed	Content	Status/Effective Date	Construction	Piping	Monitoring
<u>271 R</u>	<u>T</u>	<u>U</u>	<u>10,000</u>		<u>A, B</u>	<u>B 11/00</u>	<u>C, I, M, P</u>	<u>B, F</u>	<u>N, F, L, R, K</u>
<u>271 UL</u>	<u>T</u>	<u>U</u>	<u>10,000</u>		<u>B</u>	<u>B 11/00</u>	<u>C, I, M, P</u>	<u>B, F</u>	<u>N, F, L, R, K</u>
<u>271 SUL</u>	<u>T</u>	<u>U</u>	<u>10,000</u>		<u>B</u>	<u>B 11/00</u>	<u>C, I, M, P</u>	<u>B, F</u>	<u>N, F, L, R, K</u>
<u>271 SE-0W</u>	<u>T</u>	<u>U</u>	<u>500</u>		<u>Y</u>	<u>B 11/00</u>	<u>C</u>	<u>B</u>	<u>N</u>
<u>271-S-0W</u>	<u>T</u>	<u>U</u>	<u>500</u>		<u>Y</u>	<u>B 11/00</u>	<u>C</u>	<u>B</u>	<u>N</u>

Certified Contractor (performing tank installation or removal): ENVIRONMENTAL RECOVERY, INC. DBPR License No.: PC-C050751

Registration Certification: To the best of my knowledge and belief, all information submitted on this form is true, accurate, and complete.

J. D. DANIEL, VICE PRES, ERI Signature: [Signature] Date: 12/31/00

DEP 62-761.900(2)

Northwest District
160 Governmental Center Blvd.
Pensacola, FL 32501
850-595-8360

Northeast District
7825 Baymeadows Way,
Suite B200
Jacksonville, FL 32256
904-448-4300

Central District
3319 Maguire Blvd.,
Suite 232
Orlando, FL 32803
407-894-7555

Southwest District
3804 Coconut Palm Drive
Tampa, FL 33619
813-744-6100

Southeast District
400 North Congress Ave.,
W Palm Beach, FL 33416
561-681-6600

South District
2295 Victoria Ave.,
Suite 364
Fort Myers, FL 33901
941-332-6975

Marathon Branch Office
2796 Overseas Hwy.,
Suite 221
Marathon, FL 33050
305-289-2310



Underground Storage System Installation and Removal Form for Certified Contractors

Pollutant Storage Systems Contractor as defined in Section 489.113, Florida Statutes (certified contractors as defined in Section 62-761.200, Florida Administrative Code) shall use this form to certify that the installation, replacement or removal of the underground storage tank system(s) located at the address listed below was performed in accordance with Department Reference Standards. This includes system components such as dispenser liners, piping sumps, and overfill protection devices.

General Facility Information

Facility Name: <u>NAS CECIL FIELD</u>	DEP Facility Identification No.: <u>168507293</u>
Street Address (physical location): <u>13200 NORMANDY BLVD BLDG # 271, JACKSONVILLE, FL 32215</u>	
County: <u>DUVAL</u>	Telephone #: ()
Owner Name: <u>US GOVT / US NAVY</u>	Telephone #: <u>(904) 778-5440</u>
Owner Address: <u>CARETAKER SITE OFFICE SO DIV NAVFACENGCOM, PO Box 150853, JACKSONVILLE, FL 32221-0808</u>	

Storage Tank System Information

Number of Tanks Installed: _____	Number of Tanks Removed: <u>FIVE (5) UST's</u> 271 R 271 U 271 S 271 SE-a 271 S-b
Date Work Initiated: <u>SEPTEMBER 2000</u>	Date Work Completed: <u>DECEMBER 2000</u>
Tank(s) Manufactured by: _____	
Description of work Completed: <u>REMOVE TANK, TRIPLE RINSE, DISPOSE VIA LOCAL SCRAP RECYCLER IN ACCORDANCE WITH F.A.C 62-761</u>	

Certification

I hereby certify and attest that I am familiar with the facility that is registered with the Florida Department of Environmental Protection; that to the best of my knowledge and belief, the storage tank system installation, replacement or removal at this facility was conducted in accordance with Chapter 489, Florida Statutes, Section 376.303, Florida Statutes, and Chapter 62-761, Florida Administrative Code, and its adopted reference standards and documents for underground storage tank systems.

ENVIRONMENTAL RECOVERY, INC.
(Type or Print)
Certified Pollutant Tank Contractor Name

PC C050751
PSSC Number
Pollutant Storage Systems
Contractor License Number

Russell B. Dork
Certified Tank Contractor Signature

DEC 31, 2000
Date

JAY NEVIN
Field Supervisor Name

DEC 31, 2000
Date

The owner or operator of the facility must register the tanks with the Department upon completion of the installation. The installer must submit this form to the County no more than 30 days after the completion of installation, replacement, or removal of a storage tank system.