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NAS CECIL FIELD, FL  
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CONSTRUCTION COMPLETION REPORT FOR REMOVAL OF DRUM OF UNKNOWN  
CONTENTS AT SITE 15 BLUE 10 ORDNANCE DISPOSAL AREA NAS CECIL FIELD FL  
12/1/2006  
CH2MHILL CONSTRUCTORS INC

# Construction Completion Report Removal of Drum of Unknown Contents at Site 15, Blue 10 Ordnance Disposal Area

Former Naval Air Station Cecil Field  
Jacksonville, Florida

Revision No. 00

Contract No. N62467-98-D-0995  
Contract Task Order No. 0057

Submitted to:



U.S. Naval Facilities  
Engineering Command  
Southeast

Prepared by:



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

December 2006

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Prepared/Approved By:

*Michael D. Halil*

Michael Halil, Project Manager

December 14, 2006

Date

Approved By:

*Scott M. Smith*

Scott Smith, Program Manager

December 14, 2006

Date

Client Acceptance:

U.S. Navy Responsible Authority

Date



## CERTIFICATE OF COMPLETION

CH2M HILL Constructors, Inc., attests that, to the best of its knowledge and belief, the Removal of Drum of Unknown Contents from Site 15, Blue 10 Ordnance Disposal Area at former Naval Air Station Cecil Field, Jacksonville, Florida, delivered under Contract No. N62467-98-D-0995, Contract Task Order No. 0057, has been completed, inspected, and tested, and is in compliance with the contract.

Eric Burrell/Greg Ramey  
Project Quality Control Managers

December 14, 2006  
Date

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# Acronyms

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Action Resources	Action Resources, Inc.
CH2M HILL	CH2M HILL Constructors, Inc.
CTO	Contract Task Order
DNT	DNT Environmental Services, Inc.
DOT	U.S. Department of Transportation
ENCO	Environmental Conservation Laboratories, Inc.
ES	Environmental Services
FDEP	Florida Department of Environmental Protection
FID	flame ionization detector
HazCAT	hazardous characterization evaluation
IC	ion chromatography
MEC	munitions and explosives of concern
NAS	Naval Air Station
NAVFAC SE	Naval Facilities Engineering Command Southeast
NGVD	National Geodetic Vertical Datum
Onyx	Onyx Environmental Services, L.L.C
Perma Fix	Perma Fix Environmental Services, Inc.
%	percent
PID	photoionization detector
PPE	personal protective equipment
PWC	Public Works Center
QC	Quality Control
Site 15	Site 15, Blue 10 Ordnance Disposal Area
SO <sub>3</sub>	sulfur trioxide
T&D	transportation and disposal
TtNUS	Tetra Tech NUS, Inc.
UXO	Unexploded Ordnance

# 1.0 Introduction

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CH2M HILL Constructors, Inc. (CH2M HILL) was contracted by the Department of the Navy, Naval Facilities Engineering Command Southeast (NAVFAC SE), to prepare this Construction Completion Report to document the work performed to remove the drum of unknown contents from Site 15, Blue 10 Ordnance Disposal Area (Site 15) located at former Naval Air Station (NAS) Cecil Field, Jacksonville, Florida. This work was performed under Contract No. N62467-98-D-0995, Contract Task Order (CTO) No. 0057 and in accordance with the management approach outlined in the CH2M HILL Contract Management Plan (CH2M HILL, 1998a), the NAS Cecil Field Basewide Work Plan, Revision No. 1 (CH2M HILL, 1998b), and the CTO No. 0057 Work Plan Addendum No. 24, Revision No. 00 (CH2M HILL, 2006).

## 1.1 Site Description

Site 15 is located in the southwest section of Yellow Water Weapons Area and is shown on Figure 1-1. The area is approximately 85 acres with elevations ranging from approximately 79 feet National Geodetic Vertical Datum (NGVD) to 72 feet NGVD. The site is heavily forested, primarily with slash pine and understory vegetation, as shown on Figure 1-2. Several forest fires have occurred in the area designated as “Forest Burn Area” located in the southwestern portion of the site, as shown on Figure 1-3 (Tetra Tech NUS, Inc. [TtNUS], 2005).

From the early 1940s through the mid 1950s, the site was used as a skeet range. The former skeet range was approximately 1,000 feet by 2,400 feet in size. From the mid 1960s through 1977, Site 15 was used for ordnance disposal. This operation consisted of burning ordnance materials in a large metal chamber and static firing of rockets. The ordnance disposal structures were located west of the skeet range. The majority of ordnance disposed of at the site was burned and included small arms munitions up to 20 millimeters in size, parachute and distress flares, Mark IV signal cartridges, rocket igniters, cartridge activated devices, 2.75-inch rockets, and 5-inch rockets. Rocket propellant was reportedly placed on the ground and ignited in the area of the burn chamber. An estimated 350 tons of ordnance was disposed of at the site while in operation (TtNUS, 2005).

The ordnance burn chamber and static rocket firing pad are the only structures currently at the site. The burn chamber is a rounded, steel, tank-like container, approximately 10 feet in length and 4 feet in height. The chamber has a burn stack that rises approximately 3 feet above the body of the chamber. Access to the chamber is gained through a 2-foot by 2-foot hinged door. When full, the burn chamber can accommodate 1.5 cubic yards of material. The static rocket firing pad is an L-shaped concrete structure approximately 10 feet long by 4 feet wide by 6 feet high. Steel firing rods are seated into the concrete at 45-degree angles. Several concrete building foundations, remnants of buildings that supported skeet range activities, are located in the area surrounding the burn chamber and firing pad (TtNUS, 2005).

Review of aerial photographs from 1952, prior to the initiation of ordnance disposal on Site 15, show an active trap and skeet range facility located at the site. The area covered by the skeet range appears to be approximately 50 acres in size and is centered over the area in which the burn chamber and firing pad were constructed (TtNUS, 2005).

An area of stressed vegetation, referred to as the forest burn area, is located in the southwestern portion of the site, approximately 900 feet southwest of the burn chamber and firing pad. Several slash pines are partially burned in this area. Controlled burns were commonly undertaken in this area to control understory growth in the planted pine forests (TtNUS, 2005).

During a site visit conducted on April 17, 2006, to assess the potential of encountering munitions and explosives of concern (MEC) during a planned excavation of contaminated soil from the site, CH2M HILL discovered an unlabeled drum that appeared to be full. The drum had a side primary bung and small top secondary bung, and its contents were unknown. The chimes appeared to be reinforced and solid, not typical of the basic 55-gallon drum. Photographs of the drum are included in Appendix A, and the approximate location of the drum is shown on Figure 3-1.

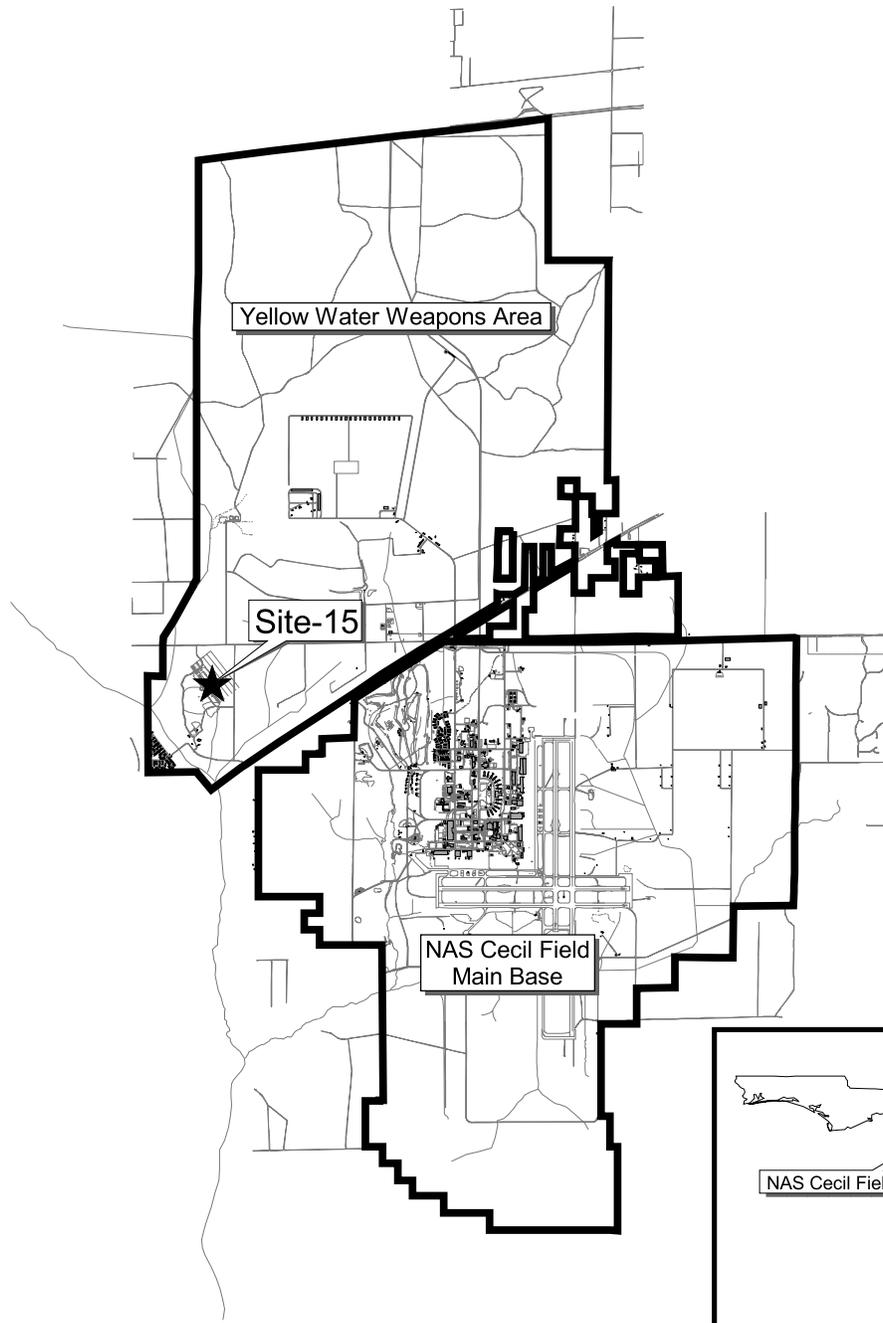
NAVFAC SE was notified of the drum discovery on April 17, 2006, and the NAS Cecil Field Base Realignment and Closure Team was notified on April 18, 2006. NAVFAC SE notified the Florida Department of Environmental Protection (FDEP), Northeast District on April 21, 2006. FDEP, Northeast District requested an additional notification once the drum had been removed. NAVFAC SE visited the site on April 24, 2006, to view the discovered drum. Technical Direction to remove the discovered drum was received from NAVFAC SE on May 5, 2006.

## 1.2 Project Scope and Objectives

CH2M HILL was authorized by NAVFAC SE in the Technical Direction on May 5, 2006 to complete the scope of work associated with the removal of the drum of unknown contents from Site 15 located at former NAS Cecil Field. The scope of work outlined in the CTO No. 0057 Work Plan Addendum No. 24, Revision No. 00 (CH2M HILL, 2006) included the following:

- Mobilization and site preparation
- Secondary containerization and remote opening of the drum
- Sampling and analysis of drum contents
- Transportation and disposal (T&D) of the drum and contents
- Preparation and submittal of a Construction Completion Report

The project objective specified in the CTO No. 0057 Work Plan Addendum No. 24, Revision No. 00 (CH2M HILL, 2006) was to contain and remotely open the drum; and properly characterize, transport, and dispose of the drum and its contents.



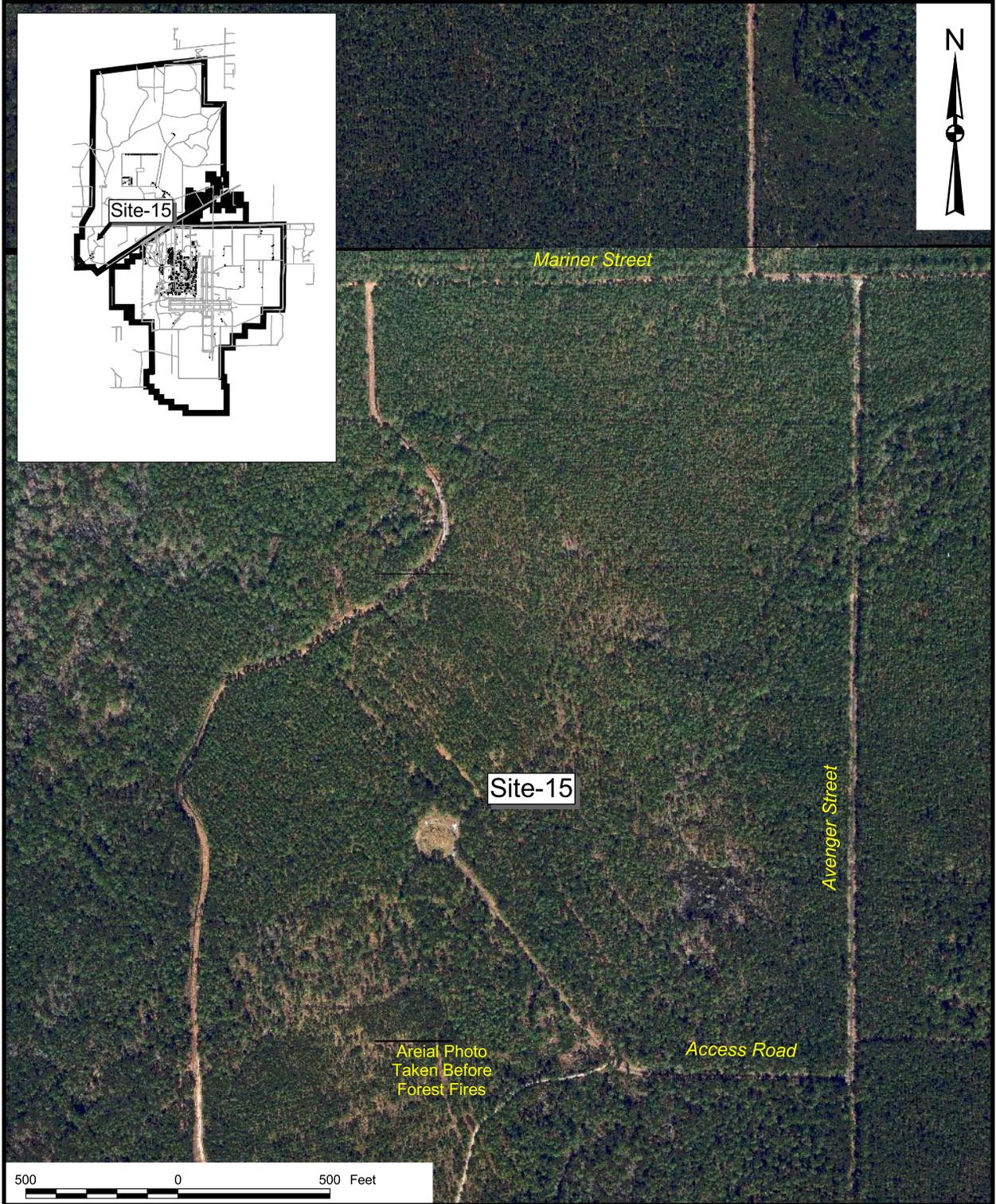
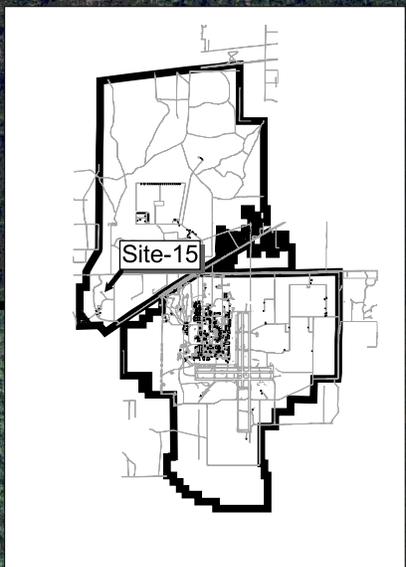
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COST/SCHEDULE-AREA	
SCALE AS NOTED	



GENERAL LOCATION MAP  
OU 5, SITE 15  
FEASIBILITY STUDY REPORT  
NAS CECIL FIELD  
JACKSONVILLE, FLORIDA

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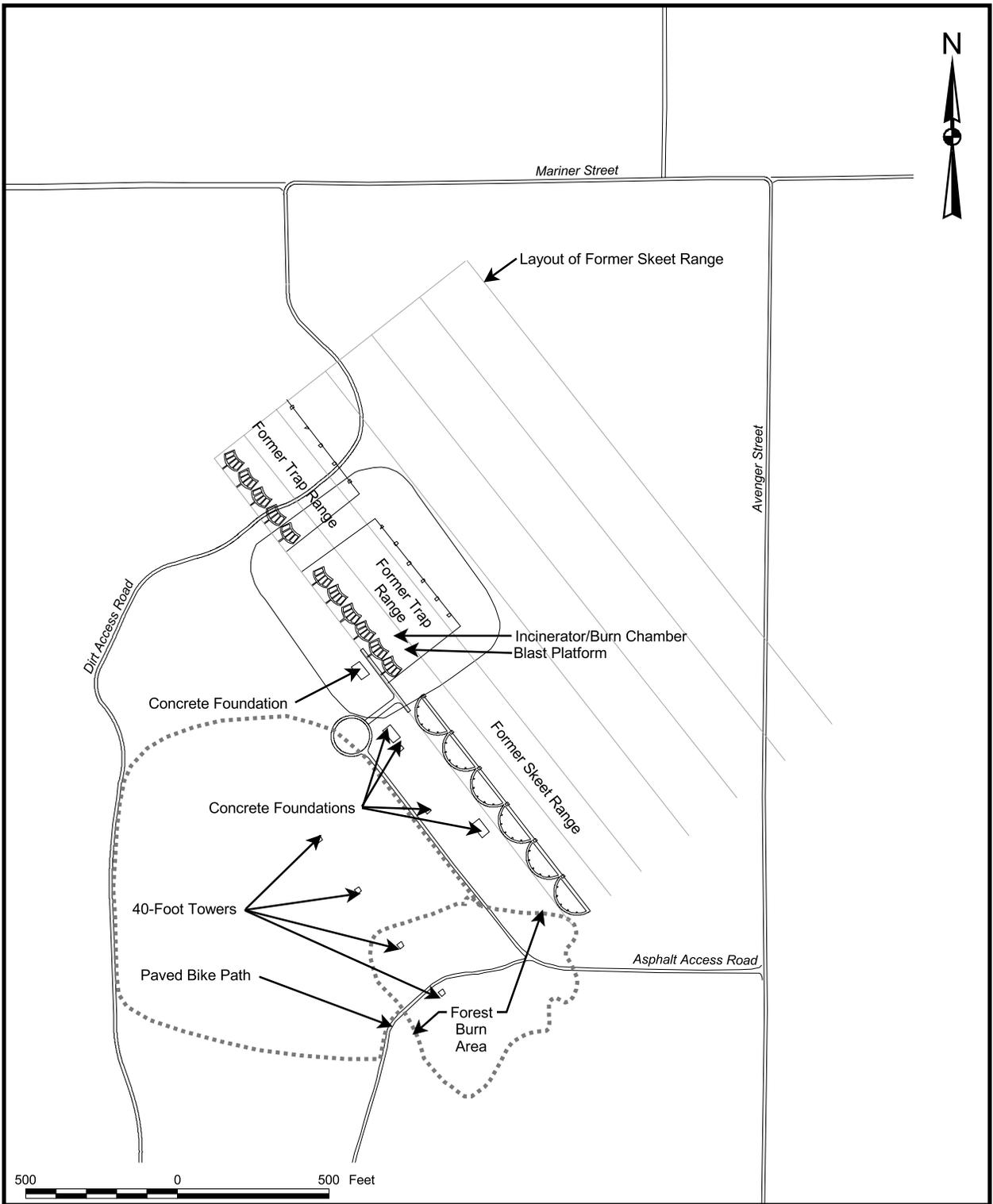


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SCALE AS NOTED	



SITE VICINITY MAP  
 OU 5, SITE 15  
 FEASIBILITY STUDY REPORT  
 NAS CECIL FIELD  
 JACKSONVILLE, FLORIDA

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GENERAL ARRANGEMENT  
 OU 5, SITE 15  
 FEASIBILITY STUDY REPORT  
 NAS CECIL FIELD  
 JACKSONVILLE, FLORIDA

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## 2.0 Chronology of Events and Problems Encountered

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### 2.1 Chronology of Events

The chronology of events is listed below in Table 2-1. Specific details describing the construction activities are found in Section 3.0 of this report.

TABLE 2-1  
Construction Sequence Summary

<b>Event</b>	<b>Date</b>
Drum Discovery/NAVFAC SE Notification	April 17, 2006
NAS Cecil Field Base Realignment and Closure Team Notification	April 18, 2006
FDEP, Northeast District Notification	April 21, 2006
NAVFAC SE Technical Direction Received	May 5, 2006
Work Plan Addendum No. 24, Revision No. 00 Submitted	June 6, 2006
Work Plan Addendum No. 24, Revision No. 00 Approved	June 12, 2006
Endangered Species Survey	June 14, 2006
MEC Surface Sweep	June 16, 2006
Project Mobilization	June 20, 2006
Drum Containment, Remote Opening, and Initial Contents Identification	June 20-22, 2006
Follow-up Contents Identification, Plugging of the Drum Opening, and Relocation and Staging of the Drum for Loading and Transportation	June 28-29, 2006
Sample Collection of Drum Contents for Offsite Laboratory Analysis	July 26, 2006
Loading and Transportation of the Drums for Disposal	September 18, 2006
Project Demobilization	September 27, 2006
Drum Disposal	October 19, 2006

### 2.2 Problems Encountered

No significant problems were encountered while executing the scope of work; however second and third project mobilizations were required to conduct additional property identification and sample collection of the drum contents. During the second mobilization, the drum contents were identified as a strong fuming inorganic acid. The third mobilization was necessary because the field analyses had yielded limited information/characterization of the drum's liquid contents. Additional sample collection and laboratory analyses determined sufficient property identification for waste profiling and acceptance of the waste by the disposal facility. A sample of the drum contents was collected and ultimately analyzed by the disposal facility's in-house laboratory.

# 3.0 Construction Activities and Quality Control

## 3.1 Project Participants

The primary project participants are shown below in Table 3-1.

TABLE 3-1  
Organization of Project Participants

Company	Role	Name
NAVFAC SE	Remedial Project Manager	Mr. Mark Davidson
CH2M HILL	Project Manager	Mr. Michael Halil
	Project Superintendent/Site Health and Safety Specialists	Mr. Craig Haas Mr. Greg Ramey
	Project Quality Control Managers	Mr. Eric Burrell Mr. Greg Ramey
	Project Support	Mr. Greg Ramey Mr. Jeff Marks
DNT Environmental Services, Inc.	Drum Investigation and Identification Subcontractor	
Environmental Conservation Laboratories, Inc.	Drum Content Identification Analytical Laboratory (Lower-tier Subcontractor)	
Veolia Environmental Services-Port Arthur Thermal Facility (formerly known as Onyx Environmental Services, L.L.C.)	Hazardous Waste Disposal Facility/Drum Content Identification Analytical Laboratory (Lower-tier Subcontractor)	
Perma Fix Environmental Services, Inc./Action Resources, Inc.	Hazardous Waste Transporters (Lower-tier Subcontractors)	

## 3.2 Summary of Construction Activities

The following sections describe the construction activities, schedule, and quality control (QC) related to the removal of the drum of unknown contents from Site 15 located at former NAS Cecil Field. Construction activities for the project included:

- Mobilization and site preparation
- Drum containment and remote opening
- Sampling and analysis of the drum contents
- T&D of the drum and contents
- Decontamination and demobilization

CH2M HILL provided oversight of all field operations throughout the course of the project. CH2M HILL field oversight staff included Project Superintendents/Site Health and Safety Specialists, Project QC Managers, and additional project support personnel. Details of daily construction activities were maintained in the daily Contractor Production/QC Reports, field logbooks, and site field records. Photographs of construction activities were taken throughout the project and representative photographs are provided in Appendix A.

### **3.3 Mobilization and Site Preparation**

#### **3.3.1 Endangered Species Survey**

An endangered species survey was conducted by CH2M HILL on June 14, 2006, prior to any drum removal activities to determine if any endangered species were within the area disturbed or traversed during the remediation activities. The survey was performed in accordance with guidelines established by the Florida Fish and Wildlife Conservation Commission for the protection of the endangered species under Florida Administrative Code Rules 68A-25.002 and 68A-27.002. No endangered species were observed.

#### **3.3.2 MEC Avoidance**

CH2M HILL utilized Unexploded Ordnance (UXO)-qualified personnel on June 16, 2006, to perform MEC avoidance procedures to mark an access path and area around the drum to allow personnel and equipment sufficient space to retrieve the drum. Two UXO technicians completed clearance of the ground surface by visual inspection to identify any potential MEC hazards. No MEC hazards were identified within the access path and area around the drum, and the boundaries of these cleared areas were marked with white pin flags.

The UXO technicians remained in the support zone during drum containment and initial drum content identification activities to provide MEC avoidance and health and safety support. No MEC hazards were identified prior to or during drum removal activities.

#### **3.3.3 Site Utility Survey**

No intrusive work was necessary during drum removal activities, therefore no site utility survey or excavation permit were completed.

#### **3.3.4 Project Mobilization**

Initial project mobilization activities were completed by CH2M HILL and DNT Environmental Services, Inc. (DNT) on June 20, 2006. Additional mobilization activities were completed for each respective phase of field work throughout project completion. The task generally consisted of mobilizing the appropriate personnel, equipment, and materials to the work area; establishing the decontamination and equipment laydown areas; demarcating the downwind exclusion zone/public withdrawal distance, exclusion zone entry point, support zone, and emergency rally points (shown on Figure 3-1); installing the appropriate site controls (caution tape and security fencing); and completing emergency response notifications to the local Forestry Department and Fire Department. Courtesy notifications of estimated start, actual start, and completion times were made for each phase of field work.

From the location of the drum, wind streamers were established to the north, south, east, and west to determine the downwind direction. A wind streamer was also established at the exclusion zone entry point shown on Figure 3-1. The exclusion zone/public withdrawal distance was established in the downwind direction for each phase of field work at 450 meters (1,476 feet). The downwind direction was variable during field work completion with the potential exclusion zone radius in each direction shown on Figure 3-1.

Additional details for this task are provided with the respective project activity in the following sections.

### 3.4 Drum Containment and Remote Opening

CH2M HILL with DNT completed secondary containment and remote opening of the drum of unknown contents from June 20-21, 2006. All tasks associated with containerizing and opening the drum were performed by personnel outfitted in Level B personal protective equipment (PPE), in accordance with the site-specific Health and Safety Plan. The following tasks were completed:

1. Established a bermed and lined containment/staging area constructed with plywood and doubled 6-mil polyethylene sheeting.
2. Placed the drum into a 95-gallon overpack drum within the containment/staging area in order to contain any material that might spill during remote opening. The drum was placed in the overpack using a rubber tire backhoe equipped with a Lexan® blast shield and drum sling.
3. Opened the drum using a remote method by punching the drum with a brass non-sparking punch attached to the backhoe.
4. Sealed the drum within the overpack with a screw-type lid, and duct tape was placed around the lid's bottom to help maintain lid tightness.
5. Placed a 10-foot by 10-foot by 6-foot high chain-link fence around the overpack and containment/staging area to secure the drum. Appropriate caution signs were then placed on the fence.

Observations noted during the field work completed June 20-21, 2006 include:

- No markings that might have indicated its contents were present on the drum.
- A vapor cloud was emitted immediately following punching the drum. The vapor cloud was grayish in color.
- Liquid material in the drum was noted as blackish to brown in color (as observed from the brass punch).
- The drum appeared to be of stainless steel construction, standard 55-gallon size with added support rings around each band of the drum. The drum had a 2-inch diameter bung on the side in the middle of the drum, and the top of the drum had a 1-inch diameter bung. The drum appeared to have a polyethylene bladder inside.

- None of the direct reading instruments (Foxboro TVA1000 flame ionization detector [FID]/photoionization detector [PID] to monitor organics and a ToxiRAE Plus to monitor oxygen, lower explosive limit, hydrogen cyanide, and hydrogen sulfide) indicated any change in the atmosphere within the vapor cloud.
- pH of the liquid obtained from the brass punch was measured at approximately 0, and the pH of the vapors was measured at less than 2.
- The drum appeared to be  $\frac{3}{4}$ -full with an approximate weight of greater than 750 pounds.
- The area where the drum was removed to showed no visual indication of contamination in the soil.

Based on the field observations, the drum was determined with some confidence to contain a fuming acid, and the project was demobilized on June 21, 2006, to prepare for a second mobilization to complete additional property identification of the drum contents. Prior to demobilization, the overpack and drum were labeled with a "Hazardous Waste" label with a D002 waste code and an accumulation start date of June 21, 2006. The drum was inspected daily from June 22-27, 2006 to ensure the integrity and stability of the drum, drum contents, and overpack.

### 3.5 Sampling and Analysis of Drum Contents

CH2M HILL with DNT completed additional property identification of the drum contents from June 28-29, 2006. All tasks associated with this phase of field work were performed by personnel outfitted in Level B PPE, in accordance with the site-specific Health and Safety Plan. The following tasks were completed:

1. Opened the overpack, and performed several field hazardous characterization evaluation (HazCAT) fingerprint analyses.
2. Used a butyl rubber plug and stainless steel bolt and butterfly to plug the punch hole in the top of the drum following HazCAT fingerprint analyses. Once the plug was in place, a two-part epoxy was placed over the top of the plug, securing it to the drum surface.
3. Sealed the drum within the overpack with the screw-type lid, and duct tape was placed around the lid's bottom to help maintain lid tightness.
4. Relocated the overpack and drum and the containment/staging area to a more convenient location onsite for loading for transportation to the disposal facility. The overpack and drum were relocated using the rubber tire backhoe with ratchet straps. The 10-foot by 10-foot by 6-foot high chain-link fence was also relocated to secure the drum. All appropriate caution signs were left in-place on the fence. The location of the drum staging area is shown on Figure 3-1.

Observations noted during the field work completed June 28-29, 2006 include:

- Upon opening the overpack, a vapor cloud was released from the punch hole in the top of the drum.

- Using a disposable coliwassa (dip tube), small amounts of a brownish-colored liquid (coffee brown) were obtained from the drum.
- During the HazCAT fingerprint analyses, the liquid from the drum reacted with the air forming a fuming cloud. The liquid was tested against pH paper, and the pH paper immediately turned red and dissolved. The liquid was also tested as an oxidizer using an oxidizer test strip, but the liquid was too corrosive and dissolved the test strip. Water was added to the sample, and a reaction producing heat was observed.
- The liquid from the drum is slightly more viscous than water, and the drum appears to contain only liquid.
- None of the direct reading instruments (Foxboro TVA1000 FID/PID to monitor organics; QRAE Multi-Gas detector to monitor oxygen, lower explosive limit, carbon monoxide, hydrogen cyanide, and hydrogen sulfide; and Geiger Counter to measure radiation) indicated any change in the atmosphere during sample collection.

The liquid contained in the drum appeared to be a strong inorganic acid. The liquid was of the fuming type and reacted when exposed to the atmosphere. The pH was measured as less than 1 according to pH paper, and when exposed to other HazCAT test strips, the corrosive nature of the material made it impossible to determine the results. The material had a viscosity slightly greater than water but less than oil. Since the material was of the fuming type, the liquid that was obtained turned to a cloud within a few minutes of exposure to air. The material also reacted vigorously when the liquid phase was moved through the atmosphere quickly. For example, when the liquid was collected in the sample rod, and the sample rod and liquid were moved up and down, the fumes rose 15 to 20 feet in the air.

Limited information obtained through field analyses for the characterization of the liquid contents of the drum resulted in the need for additional sample collection and laboratory analyses to determine sufficient property identification for waste profiling and acceptance of the waste by the disposal facility.

CH2M HILL with DNT completed sample collection of the drum contents on July 26, 2006. All tasks associated with drum content sample collection were performed by personnel outfitted in Level B PPE, in accordance with the site-specific Health and Safety Plan. The following tasks were completed for sample collection:

1. Opened the overpack, removed the butyl rubber plug and stainless steel bolt and butterfly, collected approximately 750 milliliters of a sample of the drum contents using a glass drum thief, and placed the collected sample into a glass sample container with a Teflon lid. A glass drum thief was used to determine whether the drum contents were hydrofluoric acid. No etching of the glass drum thief was observed, an indication that the contents were not hydrofluoric acid.
2. Used a new butyl rubber plug and stainless steel bolt and butterfly to plug the punch hole in the top of the drum following sample collection. Once the plug was in place, a two-part epoxy was placed over the top of the plug, securing it to the drum surface.

3. Sealed the drum within the overpack with the screw-type lid, and duct tape was placed around the lid's bottom to help maintain lid tightness.
4. Transported the sample of the drum contents to Environmental Conservation Laboratories, Inc. (ENCO) in Jacksonville, Florida, for analysis. The laboratory was asked to analyze the drum content sample for pH; ion chromatography (IC) for the presence of ions (sulfate, nitrate, phosphate, fluoride, chloride, etc.) to determine the type of acid; and the target analyte list of inorganics. If the drum contents were determined to not be an acid, then analysis for volatile organic compounds and semi-volatile organic compounds would be performed.

During preparation of the sample for analysis, ENCO noted that the sample exhibited extreme reactivity with water and the atmosphere. The open container of sample began fuming within laboratory controlled conditions. A litmus test of the fuming vapors was used to identify the unknown as an acid. The sample was found to be soluble in water by adding a sample to approximately one liter of water. The pH of that liter of water was tested with litmus paper and determined to be less than 2. The generated heat when the sample was mixed with water confirmed that the drum contents were water reactive. Due to the violent reaction of the sample to water, ENCO was unable to perform any additional analyses on the drum content sample. The laboratory report is provided in Appendix B as part of the waste profile package. The sample was then retrieved from the laboratory.

The preferred disposal facility for the drum, Veolia Environmental Services (ES) (formerly known as Onyx Environmental Services, L.L.C. [Onyx]), Port Arthur Thermal Facility in Port Arthur, Texas, was contacted and agreed to accept and attempt to analyze the drum sample. The drum sample was packaged into a U.S. Department of Transportation (DOT) E-9168 sample package and delivered to the Onyx facility in Morrow, Georgia. The DOT E-9168 sample package meets the requirements for shipping a fuming corrosive material. The sample was then shipped by Onyx via hazardous waste transporter to the Port Arthur Thermal Facility.

The sample was received by the Veolia ES, Port Arthur Thermal Facility on August 28, 2006. The sample was highly reactive and generated acidic white fumes when exposed to moist air under a laboratory hood. Due to the reactivity, it was impossible for the laboratory to extract an aliquot of exact weight. Approximately 1.0 milliliter of the sample was diluted in 3 ounces of low sulfur diesel. No reaction with the diluent was observed, and the resulting mixture was stable in air. The resulting diesel/acid mixture was analyzed by IC and determined to have an estimated sulfur content of 26 percent (%).

Fuming sulfuric acid is formed by adding sulfur trioxide (SO<sub>3</sub>) to sulfuric acid. Sulfuric acid having 20% SO<sub>3</sub> is typical. The sulfur content of 90% sulfuric acid is 29%. Results of the analyses at Veolia ES follow:

- The reactivity and sulfur content were consistent with a sulfuric acid mixture with a fuming sulfuric acid component.
- It is probable there are other minor components associated with the waste; however due to reactivity, these were difficult to quantify.

- Based on the observed properties of the sample, the waste would be managed in the thermal facility's enclosed specialty feeder under a nitrogen blanket and fed directly into the incinerator.

The laboratory report is provided in Appendix B as part of the waste profile package.

### 3.6 Transportation and Disposal

Prior to offsite disposal, a waste profile package was prepared and provided to Mr. John Brummett of the NAS Jacksonville Public Works Center (PWC) for approval and signature. Based on the completed field work and laboratory analyses, the drum and contents were characterized as hazardous waste, with waste codes D002 and D003. The spent PPE was characterized as non-hazardous waste based on generator knowledge. Profile approval and signature were received from PWC on September 14, 2006, and forwarded to Veolia ES. Once profile approval was received from Veolia ES, a manifest and Land Disposal Notification and Certification form were generated and provided to PWC for signature.

The drum, overpack, and spent PPE drum were loaded into a Perma Fix Environmental Services, Inc. (Perma Fix) semi-trailer on September 18, 2006. Perma Fix served as the initial hazardous waste transporter, with Action Resources, Inc. (Action Resources) providing final transportation of the waste to the Veolia ES, Port Arthur Thermal Facility. Custody of the waste was transferred from Perma Fix to Action Resources on September 29, 2006. The waste was delivered to the Port Arthur Thermal Facility on October 4, 2006.

The drum and spent PPE drum were treated on October 19, 2006, in the thermal facility's enclosed specialty feeder under a nitrogen blanket and fed directly into the incinerator. The T&D Log and copies of the hazardous waste manifest, Land Disposal Notification and Certification form, and Certificate of Destruction are provided in Appendix C.

### 3.7 Decontamination and Demobilization

Decontamination activities were performed by CH2M HILL and DNT throughout project completion and included the decontamination to remove all contamination that may have adhered to personnel or equipment as a result of drum removal activities. Spent PPE was containerized in a 55-gallon drum and staged, transported, and disposed with the drum.

CH2M HILL and DNT completed demobilization activities following each phase of field work. Demobilization included removing all equipment and materials from the work area; temporary facilities established at the decontamination, equipment laydown, drum staging areas, and exclusion zone entry point; and site controls (wind streamers, signage, caution tape, and security fencing). Any debris or solid waste material remaining from drum removal activities was removed and properly disposed.

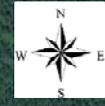
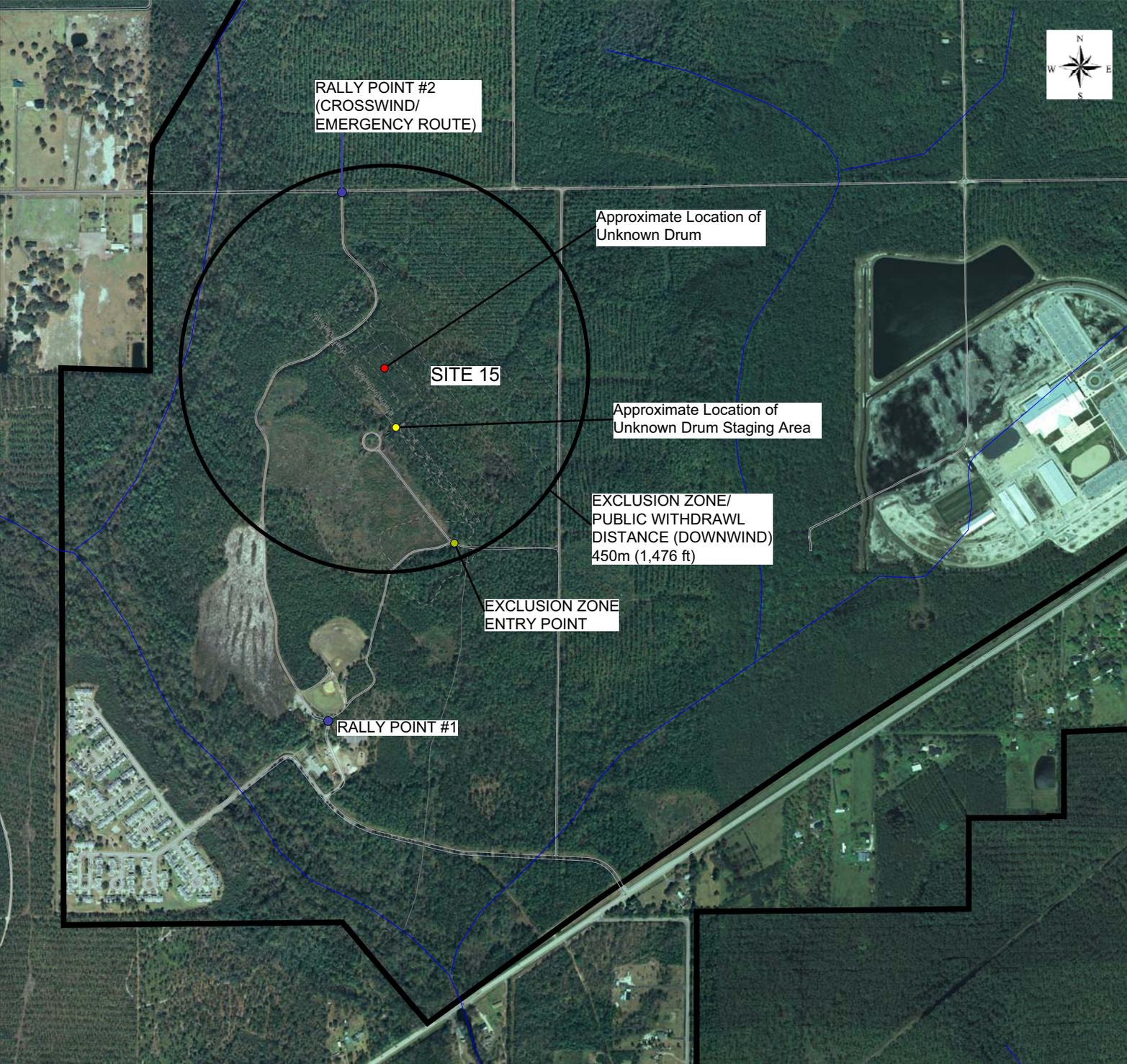
Project demobilization was completed on September 27, 2006 with the removal of the 10-foot by 10-foot by 6-foot high chain-link fence used to secure the drum staging area. Drum removal activities were non-intrusive, and no site improvements or restoration were required.

# FIGURE 3-1 NAS CECIL FIELD SITE 15

Site Plan

## LEGEND

- Roads
- Installation Area



0 500 1000 1500 Feet

1"= 1000 feet



# 4.0 Final Inspection and Site Summary

---

## 4.1 Final Inspections

Due to the nature of the project, no final inspection was conducted by the Navy. Project demobilization was completed September 27, 2006, and no deficiencies or outstanding punch list items remain on the project.

## 4.2 Site Summary

As outlined in the CTO No. 0057 Work Plan Addendum No. 24, Revision No. 00 (CH2M HILL, 2006), the scope of work included the following:

- Mobilization and site preparation
- Secondary containerization and remote opening of the drum
- Sampling and analysis of drum contents
- T&D of the drum and contents
- Preparation and submittal of a Construction Completion Report

As specified in the CTO No. 0057 Work Plan Addendum No. 24, Revision No. 00 (CH2M HILL, 2006), the project objective was to contain and remotely open the drum; and properly characterize, transport, and dispose of the drum and its contents.

As documented in this Construction Completion Report, CH2M HILL with DNT completed the following scope of work:

- Completed mobilization and site preparation activities, to include an endangered species survey; MEC avoidance procedures; mobilizing the appropriate personnel, equipment, and materials to the work area; establishing the decontamination and equipment laydown areas; demarcating the downwind exclusion zone/public withdrawal distance, exclusion zone entry point, support zone, and emergency rally points; installing the appropriate site controls; and completing emergency response notifications to the local Forestry Department and Fire Department.
- Completed secondary containerization and remote opening of the drum, to include establishing a bermed and lined containment/staging area; placing the drum into a 95-gallon overpack drum using a rubber tire backhoe equipped with a Lexan® blast shield and drum sling; opening the drum using a remote method by punching the drum with a brass non-sparking punch attached to the backhoe; sealing the drum within the overpack with a screw-type lid; and placing a 10-foot by 10-foot by 6-foot high chain-link fence around the overpack and containment/staging area to secure the drum. All tasks associated with containerizing and opening the drum were performed by personnel outfitted in Level B PPE, in accordance with the site-specific Health and Safety



## 5.0 References

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CH2M HILL Constructors, Inc. 1998. *Contract Management Plan for Response Action Contract No. N62467-98-D-0995*. July.

CH2M HILL Constructors, Inc. 1998. *Basewide Work Plan, Naval Air Station Cecil Field, Jacksonville, Florida. Revision No. 01*. November.

CH2M HILL Constructors, Inc. 2006. *Contract Task Order No. 0057 Work Plan Addendum No. 24, Revision No. 00, Removal of Drum of Unknown Contents at Site 15, Blue 10 Ordnance Disposal Area, Former Naval Air Station Cecil Field, Jacksonville, Florida*. June.

Tetra Tech NUS, Inc. 2005. *Draft Feasibility Study Report for Site 15 Blue 10 Ordnance Disposal Area, Naval Air Station Cecil Field, Jacksonville, Florida*. May.

## Appendix A

### Site Photographs



Photo 1 - View of drum of unknown contents - primary side bung view



Photo 2 - View of drum of unknown contents - opposite view



Photo 3 - View of drum of unknown contents - opposite view



Photo 4 - View of drum of unknown contents - end view



Photo 5 - View of drum of unknown contents - small top secondary bung end view



Photo 6 - View of the small top secondary bung - close-up view



Photo 7 - View of primary side bung - close-up view



Photo 8 - View of mobilizing equipment and materials from the lay down area to the work site



Photo 9 - View of initial drum containment activities - initial air monitoring, containment area, and overpack



Photo 10 - View of preparing to lift drum into overpack using backhoe



Photo 11 - View of lifting drum into overpack using backhoe



Photo 12 - View of punching the drum and vapor cloud



Photo 13 - View of the area under the drum following drum containment



Photo 14 - View of the sealed drum in the overpack



Photo 15 - View of the drum content identification equipment and work table



Photo 16 - View of the drum content identification equipment and work table



Photo 17 - View of the drum content identification equipment and work table



Photo 18 - View of the drum content identification equipment and work table



Photo 19 - View of the sealed drum in the overpack



Photo 20 - View of the vapor cloud from the second phase of drum content identification

## Appendix B

### Waste Profile Package with Supporting Documentation



Onyx Environmental Services, L.L.C.
7 Mobile Avenue
Sauget, IL 62201
Telephone: (618) 271-2804
Fax: (618) 271-9704

Profile# 374633

Approval Code

1. GENERATOR NAME: Naval Air Station Jacksonville Generator USEPA ID: FL3170022474
2. Generator Address: Public Works Center POB 30 Building 147 Billing Address: DNT Environmental Services, Inc
Jacksonville, Florida 32212 Evergreen Waste, LLC
1492 N. Blair Bridge Rd
Austell, GA 30168
3. Technical Contact Phone: Billing Contact Phone: 770 739 5600
4. Technical Contact Fax: Billing Contact Fax: 770 739-8002

Check here if this is a re-certification

PROPERTIES AND COMPOSITION

5. A. Process Generating Waste: Abandoned Drum
B. Is the waste from a CERCLA or state mandated cleanup? Yes No X Location Name:
6. Waste Name: Waste Acid
7. A. Is this a USEPA hazardous waste (40 CFR Part 261)? Yes X No
B. If D001, D002, D004-D043 do any underlying hazardous constituents (UHC's) apply? Yes No X (If yes attach UHC form)
C. Does this waste contain debris (List size and type in chemical composition)? Yes No X
D. Identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U): D002,D003
State Waste Codes:

8. Physical State @ 70°F: A. Solid Liquid X Both Gas B. Single Layer X Multi-layer C. Free Liquid Range 100%
9. A. pH Range: 0 to 1 or Not Applicable B. Strong Odor Describe: C. Color: Brown
10. Liquid Flash Point: <73°F 73-99°F 100-139°F 140-199°F ≥200°F X N/A

11. Chemical Composition: List ALL constituents (including halogenated organics and UHC's) present in any concentration and forward available analysis
Constituents Range Units Constituents Range Units
Fuming Sulfuric Acid 100%

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

12. Other: PCB's if yes, Concentration PPM, PCB's regulated by 40 CFR 761 Pyrophoric Explosive Radioactive
Water Reactive Shock Sensitive Oxidizer Carcinogen Infectious Other:
13. If Benzene, Concentration PPM, Is the waste subject to the Benzene Waste Operations NESHAP? Yes No X Unknown
14. Is the waste subject to RCRA subpart CC control? Yes No X Volatile Organic Concentration, if known PPMW.
15. If waste is subject to the land ban and meets the treatment standards, check here: and supply analytical results where applicable.
16. Is the wastestream being imported into the USA? Yes No X
17. Is the wastestream subject to the Marine Pollutant Regulations? Yes No X
18. Is the wastestream subject to any NESHAP/MACT notification requirements? Yes No X
19. If the answer to question 18 is yes, to which NESHAP/MACT is the waste subject?
20. If a NESHAP/MACT was identified in 19 will each shipment be monitored and/or inspected prior to transport, as required? Yes No X

SHIPPING INFORMATION

21. Packaging: Bulk Solid Type/Size: Bulk Liquid Type/Size: Drum X Type/Size 95 gallon OP Other:
22. Shipping Frequency: Units 1 Per: Month Quarter Year One Time X Other:
23. Shipping Name: RQ, Waste Sulfuric Acid, fuming with greater than 30 percent free sulfur trioxide
24. Hazardous Class: 8, 6.1 UN/NA #: UN1831 PG: I RQ Amount 100 lb/k

SAMPLING INFORMATION

25. A. Sample Source (drum, lagoon, pond, tank, vat, etc.): Drum
Date Sampled: July 26 2006 Sampler's Name/Company: John Teague/DNT
25. B. Generator's Agent Supervising Sampling: Mike Halil

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261-Appendix 1 or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize Onyx Environmental Services to obtain a sample from any waste shipment for purposes of re-certification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Waste Profile from information provided by the generator and additional information as it has determined to be reasonably necessary.

Signature Printed (or typed) Name and Title Date



Onyx Environmental Services, L.L.C.
7 Mobile Avenue
Sauget, IL 62201
Telephone: (618) 271-2804
Fax: (618) 271-9704

Profile# 374633

Approval Code

1. GENERATOR NAME: Naval Air Station Jacksonville Generator USEPA ID: FL3170022474
2. Generator Address: Public Works Center POB 30 Building 147 Billing Address: DNT Environmental Services, Inc
Jacksonville, Florida 32212 Evergreen Waste, LLC
1492 N. Blair Bridge Rd
Austell, GA 30168
3. Technical Contact Phone: Billing Contact Phone: 770 739 5600
4. Technical Contact Fax: Billing Contact Fax: 770 739-8002

Check here if this is a re-certification

PROPERTIES AND COMPOSITION

5. A. Process Generating Waste: Abandoned Drum
B. Is the waste from a CERCLA or state mandated cleanup? Yes No X Location Name:
6. Waste Name: Waste Acid
7. A. Is this a USEPA hazardous waste (40 CFR Part 261)? Yes X No
B. If D001, D002, D004-D043 do any underlying hazardous constituents (UHC's) apply? Yes No X (If yes attach UHC form)
C. Does this waste contain debris (List size and type in chemical composition)? Yes No X
D. Identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U): D002,D003

8. Physical State @ 70°F: A. Solid Liquid X Both Gas B. Single Layer X Multi-layer C. Free Liquid Range 100%
9. A. pH Range: 0 to 1 or Not Applicable B. Strong Odor Describe: C. Color: Brown
10. Liquid Flash Point: <73°F 73-99°F 100-139°F 140-199°F ≥200°F X N/A

11. Chemical Composition: List ALL constituents (including halogenated organics and UHC's) present in any concentration and forward available analysis
Constituents Range Units Constituents Range Units
Fuming Sulfuric Acid 100%

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

12. Other: PCB's if yes, Concentration PPM, PCB's regulated by 40 CFR 761 Pyrophoric Explosive Radioactive
Water Reactive Shock Sensitive Oxidizer Carcinogen Infectious Other:
13. If Benzene, Concentration PPM, Is the waste subject to the Benzene Waste Operations NESHAP? Yes No X Unknown
14. Is the waste subject to RCRA subpart CC control? Yes No X Volatile Organic Concentration, if known PPMW.
15. If waste is subject to the land ban and meets the treatment standards, check here: and supply analytical results where applicable.
16. Is the wastestream being imported into the USA? Yes No X
17. Is the wastestream subject to the Marine Pollutant Regulations? Yes No X
18. Is the wastestream subject to any NESHAP/MACT notification requirements? Yes No X
19. If the answer to question 18 is yes, to which NESHAP/MACT is the waste subject?
20. If a NESHAP/MACT was identified in 19 will each shipment be monitored and/or inspected prior to transport, as required? Yes No X

SHIPPING INFORMATION

21. Packaging: Bulk Solid Type/Size: Bulk Liquid Type/Size Drum X Type/Size 95 gallon OP Other:
22. Shipping Frequency: Units 1 Per: Month Quarter Year One Time X Other:
23. Shipping Name: RQ Waste Sulfuric Acid, fuming with greater than 30 percent free sulfur trioxide
24. Hazardous Class: 8, 6.1 UN/NA #: UN1831 PG: I RQ Amount 100 lb/k

SAMPLING INFORMATION

25. A. Sample Source (drum, lagoon, pond, tank, vat, etc.): Drum
Date Sampled: July 26 2006 Sampler's Name/Company: John Teague/DNT
25. B. Generator's Agent Supervising Sampling: Mike Halil

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261-Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize Onyx Environmental Services to obtain a sample from any waste shipment for purposes of re-certification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Waste Profile from information provided by the generator and additional information as it has determined to be reasonably necessary.

Signature: John Brummett Printed (or typed) Name and Title: John Brummett EPS Date: 9-14-06



Onyx Environmental Services, L.L.C.
7 Mobile Avenue
Sauget, IL 62201
Telephone: (618) 271-2804
Fax: (618) 271-9704

Profile# 374633

Approval Code

1. GENERATOR NAME: Naval Air Station Jacksonville Generator USEPA ID: FL3170022474
2. Generator Address: Public Works Center POB 30 Building 147 Billing Address: DNT Environmental Services, Inc
Jacksonville, Florida 32212 Evergreen Waste, LLC
1492 N. Blair Bridge Rd
Austell, GA 30168
3. Technical Contact Phone: Billing Contact Phone: 770 739 5600
4. Technical Contact Fax: Billing Contact Fax: 770 739-8002

Check here if this is a re-certification

PROPERTIES AND COMPOSITION

5. A. Process Generating Waste: Disposable PPE and Sampling Equipment
B. Is the waste from a CERCLA or state mandated cleanup? Yes No X Location Name:
6. Waste Name: Miscellaneous PPE and Sampling Equipment
7. A. Is this a USEPA hazardous waste (40 CFR Part 261)? Yes No X
B. If D001, D002, D004-D043 do any underlying hazardous constituents (UHC's) apply? Yes No X (If yes attach UHC form)
C. Does this waste contain debris (List size and type in chemical composition)? Yes No X
D. Identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U): None

8. Physical State @ 70°F: A. Solid X Liquid Both Gas B. Single Layer X Multi-layer C. Free Liquid Range 0%
9. A. pH Range: to or Not Applicable X B. Strong Odor Describe: C. Color: Various
10. Liquid Flash Point: <73°F 73-99°F 100-139°F 140-199°F ≥200°F X N/A

Table with 6 columns: Constituents, Range, Units, Constituents, Range, Units. Row 1: PPE, Plastic, Floor Dry, Sample, 100, %, Tubes.

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

12. Other: PCB's if yes, Concentration PPM, PCB's regulated by 40 CFR 761 Pyrophoric Explosive Radioactive
Water Reactive Shock Sensitive Oxidizer Carcinogen Infectious Other:
13. If Benzene, Concentration PPM, Is the waste subject to the Benzene Waste Operations NESHAP? Yes No X Unknown
14. Is the waste subject to RCRA subpart CC control? Yes No X Volatile Organic Concentration, if known PPMW.
15. If waste is subject to the land ban and meets the treatment standards, check here: and supply analytical results where applicable.
16. Is the wastestream being imported into the USA? Yes No X
17. Is the wastestream subject to the Marine Pollutant Regulations? Yes No X
18. Is the wastestream subject to any NESHAP/MACT notification requirements? Yes No X
19. If the answer to question 18 is yes, to which NESHAP/MACT is the waste subject?
20. If a NESHAP/MACT was identified in 19 will each shipment be monitored and/or inspected prior to transport, as required? Yes No X

SHIPPING INFORMATION

21. Packaging: Bulk Solid Type/Size: Bulk Liquid Type/Size Drum X Type/Size 55 gallon Other:
22. Shipping Frequency: Units 1 Per: Month Quarter Year One Time X Other:
23. Shipping Name: Non-Hazardous Waste
24. Hazardous Class: UN/NA #: PG: RQ Amount lb/k

SAMPLING INFORMATION

25. A. Sample Source (drum, lagoon, pond, tank, vat, etc.):
Date Sampled: Sampler's Name/Company:
25. B. Generator's Agent Supervising Sampling:

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261-Appendix 1 or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize Onyx Environmental Services to obtain a sample from any waste shipment for purposes of re-certification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Waste Profile from information provided by the generator and additional information as it has determined to be reasonably necessary.

# SONYX WASTE PROFILE

Onyx Environmental Services, L.L.C.  
7 Mobile Avenue  
Sauget, IL 62201  
Telephone: (618) 271-2804  
Fax: (618) 271-9704

Profile# 374633

Approval Code

1. GENERATOR NAME: Naval Air Station Jacksonville Generator USEPA ID: FL3170022474  
 2. Generator Address: Public Works Center POB 30 Building 147 Billing Address:  DNT Environmental Services, Inc  
Jacksonville, Florida 32212  Evergreen Waste, LLC  
1492 N. Blair Bridge Rd  
Austell, GA 30168  
 3. Technical Contact Phone: \_\_\_\_\_ Billing Contact Phone: 770 739 5600  
 4. Technical Contact Fax: \_\_\_\_\_ Billing Contact Fax: 770 739-8002

Check here if this is a re-certification

### PROPERTIES AND COMPOSITION

5. A. Process Generating Waste: Disposable PPE and Sampling Equipment  
 B. Is the waste from a CERCLA or state mandated cleanup? Yes  No  Location Name: \_\_\_\_\_  
 6. Waste Name: Miscellaneous PPE and Sampling Equipment  
 7. A. Is this a USEPA hazardous waste (40 CFR Part 261)? Yes  No   
 B. If D001, D002, D004-D043 do any underlying hazardous constituents (UHC's) apply? Yes  No  (If yes attach UHC form)  
 C. Does this waste contain debris (List size and type in chemical composition)? Yes  No   
 D. Identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U): None

8. Physical State @ 70°F: A. Solid  Liquid Both  Gas  B. Single Layer  Multi-layer  C. Free Liquid Range 0%  
 9. A. pH Range: to or Not Applicable  B. Strong Odor  Describe: \_\_\_\_\_ C. Color: Various  
 10. Liquid Flash Point: <73°F  73-99°F  100-139°F  140-199°F  ≥200°F  N/A

11. Chemical Composition: List ALL constituents (including halogenated organics and UHC's) present in any concentration and forward available analysis

Constituents	Range	Units	Constituents	Range	Units
<u>PPE, Plastic, Floor Dry, Sample</u>	<u>100</u>	<u>%</u>			
<u>Tubes</u>					

### TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

12. Other: PCB's if yes, Concentration \_\_\_\_\_ ppm, PCB's regulated by 40 CFR 761  Pyrophoric  Explosive  Radioactive   
 Water Reactive  Shock Sensitive  Oxidizer  Carcinogen  Infectious  Other: \_\_\_\_\_  
 13. If Benzene, Concentration \_\_\_\_\_ ppm, Is the waste subject to the Benzene Waste Operations NESHAP? Yes  No  Unknown   
 14. Is the waste subject to RCRA subpart CC control? Yes  No  Volatile Organic Concentration, if known \_\_\_\_\_ ppm/V.  
 15. If waste is subject to the land ban and meets the treatment standards, check here: \_\_\_\_\_ and supply analytical results where applicable.  
 16. Is the wastestream being imported into the USA? Yes  No   
 17. Is the wastestream subject to the Marine Pollutant Regulations? Yes  No   
 18. Is the wastestream subject to any NESHAP/MACT notification requirements? Yes  No   
 19. If the answer to question 18 is yes, to which NESHAP/MACT is the waste subject? \_\_\_\_\_  
 20. If a NESHAP/MACT was identified in 19 will each shipment be monitored and/or inspected prior to transport, as required? Yes  No

### SHIPPING INFORMATION

21. Packaging: Bulk Solid  Type/Size: \_\_\_\_\_ Bulk Liquid  Type/Size \_\_\_\_\_ Drum  Type/Size 55 gallon Other: \_\_\_\_\_  
 22. Shipping Frequency: Units 1 Per: Month  Quarter  Year  One Time  Other: \_\_\_\_\_  
 23. Shipping Name: Non-Hazardous Waste  
 24. Hazardous Class: \_\_\_\_\_ UN/NA #: \_\_\_\_\_ PG: \_\_\_\_\_ RQ Amount \_\_\_\_\_ lb/k \_\_\_\_\_

### SAMPLING INFORMATION

25. A. Sample Source (drum, lagoon, pond, tank, vat, etc.): \_\_\_\_\_  
 Date Sampled: \_\_\_\_\_ Sampler's Name/Company: \_\_\_\_\_  
 25. B. Generator's Agent Supervising Sampling: \_\_\_\_\_

### GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261-Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize Onyx Environmental Services to obtain a sample from any waste shipment for purposes of re-certification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Waste Profile from information provided by the generator and additional information as it has determined to be reasonably necessary.

*John Brunner*

*John Brunner EPS*

*9-14-06*

Environmental Conservation Laboratories, Inc.  
4810 Executive Park Court, Suite 211  
Jacksonville, Florida 32216-6069  
904 / 296-3007  
Fax 904 / 296-6210  
www.encolabs.com



DHRS Certification No. E82277

## CASE NARRATIVE

**Date:** July 28, 2006  
**Client:** DNT Environmental  
**Project:** Site #15 Unknown Drum  
**Lab ID:** B606369

### Overview

All samples submitted were analyzed by Environmental Conservation Laboratories, Inc. in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling by Environmental Conservation Laboratories, Inc. will be discussed in the QC Remarks section below.

### Quality Control Remarks

There were no quality control anomalies present.

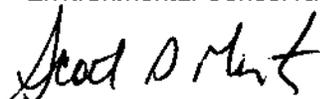
### Other Comments

The sample identified as Site #15 unknown drum was received and processed to be analyzed for the target analyte list of inorganics as well as an ion chromatography scan. Upon preparing the sample for analysis it was noted that the sample exhibited extreme reactivity. The open container of sample began fuming within controlled conditions. A litmus test of the fuming vapors was used to identify the unknown as an acid. A miscibility test was employed by adding the unknown sample to a volume of water. Miscibility was confirmed when the pH was tested after the violent reaction occurred when a drop of unknown sample was added to an approximate liter of water. The pH was tested with litmus paper and determined to be less than 2 pH units. The generated heat of the water confirmed the unknown is water reactive.

Due to the violent reaction of the unknown sample to water it is in ENCO Laboratories, Inc. best interest to terminate the investigation and analysis of the sample submitted. The unknown sample identified as Site #15 unknown drum was returned to client DNT Environmental for final disposal.

Should there be any questions regarding this narrative, please feel free to contact the undersigned for additional information.

Released By:  
Environmental Conservation Laboratories, Inc.

  
Scott D. Martin  
Laboratory Manager

Veolia ES Technical Solutions - Port Arthur Facility

August 31, 2006

To: John Teague

A waste sample identified as sulfuric acid, fuming ( for DOT shipping purposes) was received by this facility. The sample consisted of a dark liquid in a quart glass bottle. The sample was highly reactive and generated acidic white fumes when exposed to moist air under a laboratory hood.

Due to the reactivity (fuming), it was impossible to extract an aliquot of exact weight. Approximately 1.0 milliliters\* of the sample was diluted in three oz. of low sulfur diesel.

\* Note: Sample loss during transfer of aliquot due to reactivity could be as much as 25%

No reaction with the diluent was observed and the resulting mixture was stable in air. The resulting diesel/acid mixture was analyzed by ion chromatography to confirm if sulfur was present in a concentration consistent with the identified waste. Sulfur content was estimated to be 26%. As noted above actual sulfur content could be greater i.e. >32%, but this can not be quantified.

Fuming sulfuric acid is formed by adding sulfur trioxide (SO<sub>3</sub>) to sulfuric acid. Typically 20% SO<sub>3</sub> is the norm. The sulfur content of 90% sulfuric acid is 29%. Additional of SO<sub>3</sub> would increase the sulfur concentration.

Findings: The reactivity and the sulfur content are consistent with a sulfuric acid mixture with a fuming sulfuric acid component. It is probable there are other minor components associated with this waste, however due to reactivity these would be difficult to quantify.

Based on the observed properties of the sample received the waste will be managed in our enclosed specialty feeder under a nitrogen blanket and fed directly into the incinerator.

Rean Swanson  
Technical Manager  
Veolia Environmental Services  
Port Arthur Thermal Facility





CH2M HILL  
115 Perimeter Center Place, N.E.  
Suite 700  
Atlanta, GA  
30346-1278  
Tel 770.604.9095  
Fax 770.604.9282

July 14, 2006

Mr. Mark Davidson  
NAVFAC EFD SOUTH  
BRAC PMO SE  
P.O. Box 190010  
North Charleston, SC 29419-9010

Subject: Contract No. N62467-98-D-0995  
Contract Task Order No. 0057  
Former Naval Air Station Cecil Field - Jacksonville, Florida  
Project Summary Letter Report  
Removal of Drum of Unknown Contents  
Site 15, Blue 10 Ordnance Disposal Area

Dear Mr. Davidson:

At your request, CH2M HILL Constructors, Inc. (CH2M HILL) is providing this Project Summary Letter Report to document the activities completed to date to remove the drum of unknown contents from Site 15, Blue 10 Ordnance Disposal Area (Site 15) located at the former Naval Air Station (NAS) Cecil Field, Jacksonville, Florida. This letter report is being prepared under Contract Task Order No. 0057 for the Response Action Contract No. N62467-98-D-0995.

During a site visit conducted on April 17, 2006 to assess the potential to encounter munitions and explosives of concern (MEC) while conducting a planned excavation of contaminated soil from Site 15, CH2M HILL discovered an unlabeled drum that appeared to be full. The drum had a side primary bung and small top secondary bung and its contents determined an unknown. The chimes appeared to be reinforced and solid, not typical of the basic 55-gallon drum.

Mr. Mark Davidson of the Base Realignment and Closure Program Management Office Southeast (BRAC PMO SE) was notified by CH2M HILL of the drum discovery on April 17, 2006, and the NAS Cecil Field BRAC Cleanup Team was notified on April 18, 2006. BRAC PMO SE notified the Florida Department of Environmental Protection (FDEP), Northeast District of the drum discovery on April 21, 2006. FDEP, Northeast District requested an additional notification once the drum had been removed. Mr. Davidson visited the site on April 24, 2006 to view the discovered drum.

BRAC PMO SE issued a Technical Direction to CH2M HILL on May 5, 2006 to remove the discovered drum. CH2M HILL submitted Work Plan Addendum No. 24 on June 6, 2006 outlining the procedures to contain and remotely open the drum; and properly characterize, transport, and dispose of the drum and its contents. Work Plan Addendum No. 24 was approved by BRAC PMO SE on June 12, 2006.

CH2M HILL, with DNT Environmental Services Inc., mobilized to the site on June 20-21, 2006 and completed the following scope of work associated with the removal of the drum of unknown contents:

1. Established a bermed and lined containment/staging area constructed with plywood and doubled 6-mil polyethylene sheeting.
2. Placed the drum into a 95-gallon overpack drum within the containment/staging area in order to contain any material that may spill during remote opening. The drum was placed in the overpack using a rubber tire backhoe equipped with a Lexan® blast shield and drum sling.
3. Opened the drum using a remote method by punching the drum with a brass non-sparking punch attached to the backhoe.
4. Sealed the drum within the overpack with the screw-type lid, and duct tape was placed around the lid's bottom to help maintain lid tightness.
5. Placed a 10-foot by 10-foot by 6-foot high chain-link fence around the overpack and containment/staging area to secure the drum. Appropriate caution signs were then placed on the fence.

Observations noted during the field work completed June 20-21, 2006 included:

- No markings were present on the drum that may indicate its contents.
- A vapor cloud was emitted immediately following punching the drum. The vapor cloud was grayish in color.
- Liquid material in the drum was noted as blackish to brown in color (as observed from the brass punch).
- The drum appeared to be of stainless steel construction, standard size as a 55-gallon drum with added support rings around each band of the drum. The drum had a 2-inch diameter bung on the side in the middle of the drum and the top of the drum had a 1-inch diameter bung. The drum appeared to have a polyethylene bladder inside.
- All direct reading instruments (Foxboro TVA1000 flame ionization detector (FID)/photoionization detector (PID) to monitor organics and a ToxiRAE Plus to monitor oxygen, %LEL, hydrogen cyanide, and hydrogen sulfide) did not indicate any change in the atmosphere within the vapor cloud.
- pH of the liquid obtained from the brass punch was measured at approximately 0 and the pH of the vapors was measured at less than 2.
- The drum appeared to be  $\frac{3}{4}$ -full with an approximate weight of greater than 750 pounds.
- The area where the drum was removed showed no indications of visual contamination in the soil.

Because the drum was identified with some confidence to contain a fuming acid, the project was demobilized on June 21, 2006 to prepare for a second mobilization to complete additional property identification of the drum contents. Prior to demobilization, the overpack and drum were labeled with a "Hazardous Waste" label with a D002 waste code and an accumulation start date of June 21, 2006. The drum was inspected daily from June 22-27, 2006 to ensure the integrity and stability of the drum, drum contents, and overpack.

CH2M HILL, with DNT Environmental Services Inc., remobilized to the site on June 28-29, 2006 to complete additional property identification of the drum contents. The following tasks were completed:

1. Opened the overpack and performed several field hazardous characterization evaluation (HazCAT) fingerprint analyses.
2. Following HazCAT fingerprint analyses, a butyl rubber plug and stainless steel bolt and butterfly were used to plug the punch hole in the top of the drum. Once the plug was in place, a two-part epoxy was placed over the top of the plug, securing it to the drum surface.
3. Sealed the drum within the overpack with the screw-type lid, and duct tape was placed around the lid's bottom to help maintain lid tightness.
4. Relocated the overpack and drum and the containment/staging area to a more convenient location on-site for loading for transportation to the disposal facility. The overpack and drum were relocated using the rubber tire backhoe with ratchet straps. The 10-foot by 10-foot by 6-foot high chain-link fence was also relocated to secure the drum. All appropriate caution signs were left in-place on the fence.

Observations noted during the field work completed June 28-29, 2006 included:

- On opening the overpack, a vapor cloud released from the punch hole in the top of the drum.
- Using a disposable coliwassa (dip tube), small amounts of a brownish-colored liquid (coffee brown) were obtained from the drum.
- During the HazCAT fingerprint analyses, the liquid from the drum reacted with the air forming a fuming cloud. The liquid was tested against pH paper in which the pH paper immediately turned red and dissolved. The liquid was also tested as an oxidizer using an oxidizer test strip, but the liquid was too corrosive and dissolved the test strip. Water was added to the sample and a reaction producing heat was observed.
- The liquid from the drum is slightly more viscous than water, and the drum appears to contain all liquid.
- All direct reading instruments (Foxboro TVA1000 FID/PID to monitor organics; QRAE Multi-Gas detector to monitor oxygen, %LEL, carbon monoxide, hydrogen cyanide, and hydrogen sulfide; and Geiger Counter to measure radiation) did not indicate any change in the atmosphere during sample collection.

The liquid contained in the drum appears to be a strong inorganic acid. The liquid is of the fuming type and reacts when exposed to the atmosphere. The pH was measured as less than 1 according to pH paper, and when exposed to other HazCAT test strips, the corrosive nature of the material made it impossible to determine the results. The material does have a viscosity slightly thicker than water but less than oil. Since the material was of the fuming type, the liquid that was obtained would turn to a cloud within a few minutes of exposure to air. The material would also react vigorously when the liquid phase was moved through the atmosphere quickly. For example, when the liquid was obtained in the sample rod, if the sample rod and liquid were moved up and down, the fumes would elevate 15 to 20 feet in the air.

The drum has been inspected daily since the June 28, 2006 demobilization to ensure the integrity and stability of the drum, drum contents, and overpack.

Uncertainty in the characterization of the liquid contents of the drum based on the completed field analyses has resulted in the requirement to complete additional sample collection and analyses to determine sufficient property identification for waste profiling and acceptance of the waste by the disposal facility. Determination of the required additional analyses will be completed by July 14, 2006 with the additional sample collection completed by July 28, 2006.

Based on discussions with Mr. Mike Redig and Mr. David Grabka of FDEP on July 12, 2006, and the November 21, 1995 FDEP Memorandum from Mr. Satish Kastury to Mr. Jeff Tobergte provided to CH2M HILL from FDEP on July 12, 2006 (see enclosed), "the accumulation start date for unknown waste which are being analyzed begins on the date of receipt of the analysis." As June 21, 2006 was the date field pH testing showed the drum contents to be a D002 hazardous waste, June 21, 2006 is the proper accumulation start date for the drum. This establishes September 19, 2006 as the expiration of the 90-day accumulation period allowed for large quantity generators of hazardous waste, F.A.C. 62 730.16 and 40 CFR 262.34.

Please call me at (904) 777-4812 ext. 233 or e-mail me at [michael.halil@ch2m.com](mailto:michael.halil@ch2m.com) if you have any questions or comments regarding this submittal.

Respectfully,

CH2M HILL CONSTRUCTORS, INC.

A handwritten signature in cursive script, appearing to read "Michael D. Halil".

Michael D. Halil, P.E.  
Project Manager

Enclosure

cc: Project File No. 263231

Susan

Florida Department of  
Environmental Protection

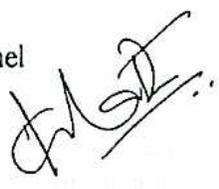
Memorandum

G 527

TO: Jeff Tobergte, Bureau of Emergency Response

THROUGH: Hazardous Waste Compliance District Personnel

FROM: Satish Kastury, Environmental Administrator  
Bureau of Solid and Hazardous Waste



DATE: November 21, 1995

SUBJECT: Transfer Facilities and Hazardous Waste Determinations Response to  
Memorandum dated July 14, 1995

You requested a RCRA Subtitle C regulatory interpretation regarding accumulation times and when the clock starts on the accumulation of abandoned drums of unknown materials collected by emergency response contractors. You gave the example scenario of an emergency response contractor going to a contaminated site, sampling, overpacking and transporting abandoned drums of unknown or tentatively-identified materials to its RCRA transfer facility where samples would be collected for a hazardous waste determination. You commented that the hazardous waste determinations could take weeks.

The response to your question cannot be generically answered and depends on the facts of the individual case. The following discussion will highlight the regulatory interpretation questions raised. Immediate response actions are exempt from RCRA Subtitle C regulation. 48 FR 2508, 2509 (January 19, 1983), See also, 40 CFR 264.1(g)(8), 265.1(c)(11), and 270.1(c)(3). There is no blanket definition as to when an immediate response terminates. This determination is made on a case by case basis. The 90-day clock for generator storage begins when the immediate response terminates.

“The extent of immediate response [] must be judged by persons responding to discharges on an individual basis. Problems with persons who abuse the intent of this provision can be better controlled through enforcement provisions of RCRA than through more restrictive definitions.” 48 FR 2508, 2510 (January 19, 1983).

The Department’s guidance memo dated August 12, 1992, to Greg Lee from Satish Kastury, number 376 in the RCRA guidance series (attached), states that the accumulation date for unknown waste which are being analyzed begins on the date of the receipt of the analysis. This is only true if the Department also determines that the “immediate response” terminates on the date of the receipt of the analysis.

Jeff Tobergte  
November 1, 1995  
Page Two

For the purpose of existing emergency response contracts the Department interprets "immediate response" to end on the date the analysis is received. Correspondingly, the accumulation timeframe will start from the date of receipt of analysis. The Department may revisit this issue at the expiration of existing emergency response contracts, if needed.

SK/dco

enclosure

cc: Waste Program Administrators  
Mike Redig, FDEP/Compliance & Enforcement  
Diana Coleman, FDEP/ Office of General Counsel  
Bill Hinkley, FDEP/Bureau of Solid & Hazardous Waste

## Appendix C

Transportation and Disposal Log, Certificate of Destruction,  
and Hazardous Waste Manifest

Transportation and Disposal Log

Removal of Drum of Unknown Contents from Site 15

Former Naval Air Station Cecil Field, Jacksonville, Florida

CTO No	Project No	Project Name	Site Description	Container Type	Container Design	Waste Profile Sample No	Contractor	Transporter	Date Transported	Transporter EPA ID	Load ID	Disposal Facility	Disp Fac EPA ID	Media	Waste Type (Haz, Nonhaz, TSCA)	Waste Code/ Haz Waste No	Disposal Date	Manifest Number	Disposal Treatment Method ( Enter disposal quantity under appropriate method)					Certif of Disp/ Destruc Date	Comments/ Notes	File Status (see note)
																			Incineration	Recycle	Landfill	Other	Unit			
0057	263231	NAS Cecil Field	Site 15	55-gal Drum	Not Applicable	57-UNKDRM15-001	DNT	Perma Fix/Action Resources	18-Sept-06/29-Sept-06	FLD980559728/ALR000007237	1	Veolia ES Technical Solutions	TXD000838896	Waste Acid (Fuming Sulfuric Acid)	HAZ	D002, D003	19-Oct-06	000008463	800				LBS	20-Oct-06		Complete
0057	263231	NAS Cecil Field	Site 15	55-gal Drum	Not Applicable	57-UNKDRM15-001	DNT	Perma Fix/Action Resources	18-Sept-06/29-Sept-06	FLD980559728/ALR000007237	1	Veolia ES Technical Solutions	TXD000838896	PPE/Sampling Equipment	Non-Haz	Not Applicable	19-Oct-06	000008463	100				LBS	20-Oct-06		Complete

595 366

IRFOG2344

Form Approved, OMB No. 2050-0039

Please print or type. (Form designed for use on a (12-pin) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: **BL5170 022 474**

2. Page 1 of 1

3. Emergency Response Phone: **1-851-269-9207**

4. Manifest Tracking Number: **000008463 GBF**

5. Generator's Name and Mailing Address: **Public Works Center 708 30 Building 14 Jacksonville FL 32212**

6. Generator's Site Address (if different than mailing address): **NAVAL AIR Station Jacksonville**

Generator's Phone: **904-542-5579**

7. Transporter 1 Company Name: **Devon Fix 10100 Rocket Blvd Orlando FL**

U.S. EPA ID Number: **FLD 980 559728**

Transporter 2 Company Name: **ACTIV Resources**

U.S. EPA ID Number: **ALR000007237**

8. Designated Facility Name and Site Address: **VEOLIA ES Technical Solution Highway 73 35 miles west of Taylors BA104 Road Andover SC 29004**

Facility's Phone: **409-735-2001**

U.S. EPA ID Number: **TND 000 538596**

Generator's Name and Mailing Address	U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
30 percent Sulfuric Acid Solution with Corrosive then position inhalation hazard zone D							
NON REGULATORY material, Non flammable							

14. Special Handling Instructions and Additional Information: **96-ADR 100 Drum (EQ 1004) EGR 137**

**982 Disposable HPE Approval # 37463**

15. GENERAL DECLARATION OF ACCEPTANCE: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Spawner, I certify that the waste minimization statement identified in 40 CFR 262.27(b) (1) am a large quantity generator or (b)(4) am a small quantity generator is true.

Generator's/Owner's Printed Name: **John B. Burnett**

Signature: *[Signature]*

Month Day Year: **09/15/06**

16. Information on Export:  Report to U.S.  Export from U.S.

Port of entry/exit: \_\_\_\_\_ Date leaving U.S.: \_\_\_\_\_

17. Transporter Information: **ACTIV Resources**

Signature: *[Signature]*

Month Day Year: **09/15/06**

Signature: *[Signature]*

Month Day Year: **09/15/06**

18a. Discrepancy Indication System:  Quantity  Type  Residue  Partial Rejection  Full Rejection

18b. Alternate Facility (or Generator): \_\_\_\_\_ U.S. EPA ID Number: \_\_\_\_\_

Facility's Phone: \_\_\_\_\_

18c. Signature of Alternate Facility (or Generator): \_\_\_\_\_ Month Day Year: \_\_\_\_\_

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems): **H0410**

20. Designated Facility Owner or Operator: **Janet Sheppard**

Signature: *[Signature]*

Month Day Year: **09/04/06**



LAND DISPOSAL NOTIFICATION AND CERTIFICATION FORM PHASE IV

Page 1 of 1

Generator Name: MAVALAR STATION WDR/ID # FL5-170 022 47 State Manifest No. 00000 0469 68F

1. If waste is a wastewater (see 40 CFR 268.2) place "w" next to the applicable code(s) Profile # 374633

- 2. CODES WITH SUBCATEGORIES (place appropriate letter from section B before each code that applies) (See 40 CFR 268 for details)
D001 Hi-TOC
D001 Except Hi-TOC
D003 Reactive Cyanide
D003 Reactive Sulfide
D003 Explosive
D003 Water Reactives
D003 Unexp Ord, Emg
D003 Other Reactives
D006 Batteries
D006 Lead acid batteries
D009 Organic Hg > 200ppm
D009 Inorg. Hg > 200
D009 Hg < 200
F025 Light ends
F025 Spent filter
K006 Hydrated
K006 Anhydrous
K069 Calcium Sulfate
K069 Not Calcium Sulfate
K071 Amerc Res.
K071 Not Amerc Res.
K106 Lo Amerc Res.
K106 Not Amerc Res.
K106 > 200 ppm Hg
P047 Salts
P047 Nonsalts
P065 Lo Inc. Res.
P065 Lo RMERC Res.
P065 Not Inc./RMERC Res.
P065 Hi Inc./RMERC Res.
P092 Lo Inc. Res.
P092 Lo RMERC Res.
P092 Not Inc./RMERC Res.
P092 Hi Inc./RMERC Res.
U151 Lo RMERC Res.
U151 Lo Not RMERC Res.
U151 Hi Hg
U240 2, 4 D
U240 2, 4 esters & Salts

The subcategory for D018-D043 waste is "treated in nonCWA/nonSDWA facility" unless the following box is checked: [ ] "treated in CWA/SDWA facility"

- 3. COMMON CODES (Place appropriate letter from section B before each code that applies)
D002 P012 P030 P051 P098 P105 P205 F006 F007 F008 F009 F010 F011 F012 F019 F039
D004 D005 D006 D007 D008 D010 D011 D012 D013 D014 D015 D016 D017 D018 D019
D020 D021 D022 D023 D024 D025 D026 D027 D028 D029 D030 D031 D032 D033 D034 D035
D036 D037 D038 D039 D040 D041 D042 D043 F001 F002 F003 F004 F005 U002 U003 U006
U007 U044 U061 U072 U080 U108 U117 U122 U123 U136 U154 U188 U213 U220 U226 U279
K061

ADDITIONAL CODES (Enter all codes not identified above which are associated with waste)

Table with 3 columns: 4. USEPA HAZARDOUS WASTE CODE(S), 5. TREATMENT STANDARDS FOR NON-PHASE II STATES (INDICATE THE APPLICABLE TREATMENT STANDARD 268.41, 268.43 OR SPECIFIED TECHNOLOGY BELOW), 6. HOW MUST THE WASTE BE MANAGED? ENTER THE LETTER FROM BELOW

To identify F039, or UHCs managed in non-CWA, use the "F039/Underlying Hazardous Constituents Form" provided and check here: [ ]
If no UHCs are present upon generation check here: [ ] Check here if disposal facility will check for all UHCs [ ] (i.e. no UHC form required)
To list additional EPA waste code(s), use the supplemental sheet and check here: [ ] In lieu of supplemental sheet you may use multiple copies of this form.

- 7. SOLVENT CONSTITUENTS (F001 - F006) Check here if disposal facility will check for all spent solvents
Acetone Benzene n-Butyl alcohol Carbon disulfide
Carbon Tetrachloride Chlorobenzene O-Cresol Cresols (m&p)
Cyclohexanone o-Dichlorobenzene 2-Ethoxyethanol Ethyl acetate
Ethyl benzene Ethyl ether Isobutanol Methanol
Methylene chloride Methyl ethyl ketone Methyl isobutyl ketone Nitrobenzene
2-Nitropropane Pyridine Tetrachloroethylene Toluene
1,1,1 Trichloroethane 1, 1, 2-Trichloroethane 1, 1, 2-Trichloro, 1, 2, 2-Trifluoroethane Trichloroethylene
Trichloromonofluoroethane Xylenes

8. (States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed below. Where these regulatory citations differ, your certification will be deemed to refer to those state citations instead of the 40 CFR citations.)

- A. or [ ] RESTRICTED WASTE REQUIRES TREATMENT
This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268.40.
[ ] For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR 268.45."
B.1 RESTRICTED WASTE TREATMENT TO PERFORMANCE STANDARDS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40 without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment."
B.2 (CERTIFICATION REQUIRED BY PHASE IV)
B.3 GOOD FAITH AND ANALYTICAL CERTIFICATION - FOR INGENERATED ORGANICS
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion units as specified in 268.42, Table 1. I have been unable to detect the nonwastewater organic constituents, despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."
B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS
"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet universal treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."
RESTRICTED WASTE SUBJECT TO A VARIANCE
This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 5 above.
[ ] For hazardous debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR 268.45."
RESTRICTED WASTE CAN BE LAND IMPOSED WITHOUT FURTHER TREATMENT
"I certify under penalty of law that I have personally examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment."
WASTE NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS
This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature: [Handwritten Signature] Title: [Handwritten Title]

Date: 9/18/06



Veolia ES Technical Solutions, L.L.C.  
Federal EPA ID: TXD000838896  
State EPA ID: 50212-001  
Highway 73, 3.5 miles W. of Taylor's Bayou Bridge  
Port Arthur, TX 77643  
(409) 736-2821

NAVAL FAC SO DIV CECIL FIELD  
ATTN: MANIFEST SECTION  
FL5170022474  
103RD ST & NORMANDY BLVD  
JACKSONVILLE, FL 32215

CERTIFICATE OF DESTRUCTION

Veolia ES Technical Solutions, L.L.C. has received waste material from NAVAL FAC SO DIV CECIL FIELD on 10/4/2006 as described on [State Manifest or Uniform] Hazardous Waste Manifest number 0000008463.

Sequence 2

Profile Number: DSSX01  
Veolia Tracking ID: 595386-02

Veolia Unit ID

1

Treatment Date

10/19/2006

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits, and licenses on the date listed above.

Paul V. Conrad

20-Oct-06