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FINAL ENGINEERING EVALUATION/COST ANALYSIS FOR POTENTIAL SOURCE OF CONTAMINATION 38 (PSC 38) NAS JACKSONVILLE FL

10/24/2014

SOLUTIONS-IES

ENGINEERING EVALUATION / COST ANALYSIS

POTENTIAL SOURCE OF CONTAMINATION 38
NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA

Contract No. N69450-11-D-0100
Order No. 0032

Prepared for:

NAVFAC SE
NAS Jacksonville
Jacksonville, FL 32212

Prepared by:

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Solutions-IES Project No. 2014.0034.NAVY

October 24, 2014

Solutions-IES
Industrial & Environmental Services

U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION 4
61 Forsyth Street, SW
Atlanta, Georgia 30303

<u>Official Correspondence</u> - This electronic message is being sent in lieu of regular mail

October 30, 2014

4WD-FFB

Ms. Adrienne Wilson
Code OPDE3/AW
DEPARTMENT OF THE NAVY
NAVAL FACILITIES SOUTHEAST
ATTN: AJAX STREET, BLDG 135N
P.O. BOX 30A
JACKSONVILLE, FL 32212-0030

Dear Ms. Wilson:

The U.S. Environmental Protection Agency has reviewed the Final EE/CA, for Operable Unit 12 Potential Source of Contamination 38. EPA has no further comment and is approving the document as final.

If you have any questions regarding this letter, I can be reached at (404) 562-8508 or at dao.peter@epa.gov.

Sincerely,

Peter Dao
Remedial Project Manager

cc: Mr. Tim Curtin, NAS Jacksonville
Ms. Jennifer Conklin, FDEP
Mr. Mark Peterson, TtNUS
Mr. Eric Davis, CH2MHill
Mr. Todd Haverkorst, Resolution

Response to EPA Comments on the
Draft Revision 2 – Engineering Evaluation/Cost Analysis
Potential Source of Contamination 38
NAS Jacksonville, Jacksonville, Florida
dated September 9, 2014

(1) The lower EPA industrial number for aroclor-1260 of 740 µg/kg should be used as the PRG.

SIES Questions:

1. **It appears that the EPA industrial RSL for aroclor-1260 increased to 1,000 µg/kg in the May 2014 RSL table. Is it ok to use this updated value as the PRG?**
2. **The comment to use the lower EPA industrial RSL was for aroclor-1260. However, the EPA industrial RSL for arsenic (3.0 mg/kg) is also lower than the FDEP SCTL (12 mg/kg). Should we use the EPA industrial RSL for arsenic also?**

EPA Clarification:

Yes, use the newer numbers. For the arsenic, I believe the current background number is higher so use it or the EPA industrial RSL (3.0 mg/kg) whichever is the higher number.

Response: The text has been revised to use the lower of the FDEP industrial SCTL and EPA industrial RSL for arsenic and aroclor-1260. Therefore, the PRG for arsenic is 3.0 mg/kg and the remediation goal for aroclor-1260 is 1,000 µg/kg, both are the EPA industrial RSL. The current background concentration for arsenic at PSC 38 is 0.8 mg/kg (surface soil) and 1.48 mg/kg (subsurface soil) in accordance with the RI Report, so the background concentration was not used as the PRG.

Jody Overmyer

From: Dao, Peter <Dao.Peter@epa.gov>
Sent: Wednesday, October 22, 2014 3:24 PM
To: Wilson, Adrienne T CIV NAVFAC SE, JAXS
Cc: Jody Overmyer
Subject: RE: PSC 38 EECA

Yes, use the newer numbers. I mistakenly used an older table. For the Arsenic, I believe the current background number is higher so use it or the EPA industrial RSL (3.0 mg/Kg) whichever is the higher number. Thanks.
Pete

-----Original Message-----
From: Wilson, Adrienne T CIV NAVFAC SE, JAXS [mailto:adrienne.wilson@navy.mil]
Sent: Wednesday, October 22, 2014 3:11 PM
To: Dao, Peter
Cc: Jody Overmyer
Subject: PSC 38 EECA

Hi Pete,

Jody has some questions regarding your comment

-----Original Message-----
From: Jody Overmyer [mailto:jovermyer@solutions-ies.com]
Sent: Wednesday, October 22, 2014 12:36 PM
To: Wilson, Adrienne T CIV NAVFAC SE, JAXS
Subject: RE: Correction to Vee Tech email address for PSC 38 EECA

Good afternoon Adrienne,

I had two questions/clarifications for Pete. If you want, I can send this to him directly. Just let me k now.

1) It appears that the EPA industrial RSL for aroclor-1260 changed to 1,000 ug/kg in the May 2014 RSL table. Is it ok to use this updated value as the PRG?
2) The comment to use the lower EPA industrial RSL was for aroclor-1260. However, the EPA industrial RSL for arsenic (3.0 mg/kg) is also lower than the FDEP SCTL (12 mg/kg). Should we use the EPA industrial RSL for arsenic also?

Best regards,
Jody

-----Original Message-----
From: Wilson, Adrienne T CIV NAVFAC SE, JAXS [mailto:adrienne.wilson@navy.mil]
Sent: Wednesday, October 22, 2014 9:29 AM
To: Dao, Peter
Cc: Jody Overmyer
Subject: RE: Correction to Vee Tech email address for PSC 38 EECA

Thanks Pete.

-----Original Message-----
From: Dao, Peter [mailto:Dao.Peter@epa.gov]
Sent: Wednesday, October 22, 2014 9:18 AM
To: Wilson, Adrienne T CIV NAVFAC SE, JAXS; Jennifer.Conklin@dep.state.fl.us
Cc: 'mark.peterson@tetratech.com'
Subject: RE: Correction to Vee Tech email address for PSC 38 EECA

My one comment is that the lower EPA industrial number for Aroclor-1260 of 740 ug/kg should be used as the PRG.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BOB MARTINEZ CENTER
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RICK SCOTT
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SECRETARY

October 23, 2014

Ms. Adrienne Wilson
Code OPDE3/AW
Department of the Navy
Naval Facilities Southeast
Attn: AJAX Street, Building 135N
P.O. Box 30A
Jacksonville, FL 32212-0030

RE: Draft Rev 2 – Engineering Evaluation/Cost Analysis, Potential Source of Contamination (PSC) 38, Naval Air Station Jacksonville, Jacksonville, Florida

Dear Ms. Wilson:

The Department has reviewed the Draft Rev 2 – Engineering Evaluation/Cost Analysis, Potential Source of Contamination (PSC) 38, dated September 9, 2014, (received September 10, 2014), Naval Air Station Jacksonville, prepared and submitted by Solutions-IES. The document is adequate for its intent and is approved.

If you have any questions regarding this letter, please contact me at (850) 245-8935.

Sincerely,

Jennifer R. Conklin
Remedial Project Manager
Department of Defense and Brownfields Partnerships
Bureau of Waste Cleanup

KAW

EC: Pete Dao, EPA Region IV, Atlanta
Tim Curtin, NAS Jacksonville
Mike Singletary, NAFACSE
Mark Peterson, TtNUS, Jacksonville
Eric Davis, CH2M Hill, Atlanta
Todd Haverkost, Resolutions Consultants

SIGNATURE PAGE

We, the undersigned, do hereby affirm that the information contained in this report is accurate and correct to the best of our knowledge and belief.

James P. Tiger

James Tiger Project Manager	October 24, 2014 Date
Jody Overmyer, P.E., PMP Senior Project Manager	October 24, 2014 Date

JODY L. OVERMYER
LICENSE
No. 70887
STATE OF FLORIDA
10/24/14
PROFESSIONAL ENGINEER

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LIST OF ACRONYMS

ABB-ES	ABB Environmental Services, Inc.
ARAR	Applicable or Relevant and Appropriate Requirement
ATSDR	Agency for Toxic Substances and Disease Registry
bgs	below ground surface
bls	below land surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	chemical of concern
CTL	cleanup target level
CV	comparison value
cy	cubic yard
EE/CA	Engineering Evaluation and Cost Analysis
ERA	Ecological Risk Assessment
FDEP	Florida Department of Environmental Protection
ft	feet
FRE	Focused Risk Evaluation
G&M	Geraghty and Miller, Inc.
GCTL	Groundwater Cleanup Target Level
GRA	General Response Action
HHRA	Human Health Risk Evaluation
HI	hazard index
HLA	Harding Lawson Associates
HQ	hazard quotient
IAS	Initial Assessment Study
IRA	Interim Removal Action
IRP	Installation Restoration Program
LUC	Land Use Control
LUCIP	Land Use Control Implementation Plan
MCL	maximum contaminant level
mg/kg	milligrams per kilogram
NAS	Naval Air Station
NAT	Navy Aviation Trade
NAVFAC SE	Naval Facilities Engineering Command Southeast
NCP	National Contingency Plan
NFA	No Further Action
NPW	Net Present Worth
O&M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
PAH	polycyclic aromatic hydrocarbon
PAL	project action limit
Partnering Team	NAS Jacksonville Installation Restoration Partnering Team
PCB	polychlorinated biphenyl
PGDN	1,2-propylene glycol dinitrate
PHA	Public Health Assessment
PPE	personal protective equipment
PRG	Preliminary Remediation Goal
PSC	Potential Source of Contamination
RAO	remedial action objective
RCRA	Resource Conservation and Recovery Act
RI	remedial investigation

RSL	regional screening level
SCTL	Soil Cleanup Target Level
sf	square foot
SIES	Solutions-IES, Inc.
SRE	screening risk evaluation
SVOC	semivolatile organic compound
TAL	target analyte list
TBC	To Be Considered
TCL	target compound list
µg/kg	micrograms per kilogram
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound

EXECUTIVE SUMMARY

This Engineering Evaluation/Cost Analysis (EE/CA) for Potential Source of Contamination (PSC) 38 at Naval Air Station (NAS) Jacksonville located in Jacksonville, Duval County, Florida, has been prepared to comply with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requirements for a non-time-critical removal action, as identified in Section 300.415(b)(4)(I) of the National Oil and Hazardous Substance Pollution Contingency Plan. The goal of this EE/CA is to identify remedial action objectives (RAOs); develop remedial alternatives to achieve these RAOs; and then evaluate the alternatives with regards to cost, effectiveness, and implementability in order to select the most appropriate alternative.

ES.1 SITE DESCRIPTION AND HISTORY

According to the *Draft Remedial Investigation Report for Potential Source of Contamination 38 Torpedo Rework Facility* (RI) (Tetra Tech, 2014), the Torpedo Rework Facility (PSC 38) encompasses approximately 2.5 acres within the restricted Magazine Area in the central-western portion of NAS Jacksonville. The site is surrounded by an 8-foot high fence and is accessible from Allegheny Road via a paved driveway, but access is limited to Navy personnel with weapons clearance. There are three buildings within PSC 38: Building 327, the Torpedo Rework Facility; Building 367, the Bulk Waste Storage Area; and Building 330, a storage building for paint and hazardous materials.

In general the topography at PSC 38 is flat and gently slopes to the south and east. An unlined ditch parallels the eastern and southern boundaries of PSC 38 and then flows westward under Allegheny Road. Surface drainage eventually discharges into the tributaries of the Ortega River, which is located about 1 mile west of PSC 38.

Work in support of the NAS Jacksonville installation mission that is carried out at PSC 38 includes the repair and cleaning of propulsion systems, the addition of Otto fuel to torpedoes, and inspection of torpedoes. A variety of materials are used as part of the maintenance and support activities at PSC 38, which resulted in chemical releases to the environment.

Specifically, processes for reworking torpedoes generated approximately one 55-gallon drum of solid waste material per day (gloves and rags containing Otto fuel). Additionally, unmonitored underground storage tanks (USTs), lead acid battery disposal areas and gravel sumps may have contributed contaminants to the site.

ES.2 SUMMARY OF PREVIOUS INVESTIGATIONS

The following is a summary of previous investigations conducted at PSC 38 as provided in the RI (Tetra Tech, 2014).

1983 - The Torpedo Rework Facility was identified as a PSC during the Initial Assessment Study (IAS).

1991 - It was discovered that unmonitored USTs might be present at PSC 38. In addition to these USTs, two gravel sumps on the east side of Building 327 were identified that may have received waste.

1994 - Fill ports for two USTs were observed confirming the presence of the two USTs noted previously in 1991. A below-grade acid pit on the east side of Building 327 and septic tank were also identified on a facility utility map.

1996 - Surface soil samples were collected and several metals were detected above the Florida Department of Environmental Protection (FDEP) Soil Cleanup Target Levels (SCTLs).

1997 to 1999 - Support facilities such as USTs, a below-grade acid pit, a hazardous materials and paint storage area, gravel sumps, and a concrete-bermed gravel drain were determined to be areas of interest and were the focus of a 1997 site investigation.

1999 - The Navy Installation Restoration Program Plan presented No Further Response Action Planned PSC 38.

2005 - The Agency for Toxic Substances and Disease Registry (ATSDR) completed a Public Health Assessment (PHA) for NAS Jacksonville, including all PSCs and Operable Units. The PHA identified a number of contaminants at PSC 38 with maximum concentrations exceeding their comparison value (CV), a risk-based screening value that ATSDR utilizes to support the PHA.

2012 to 2014 - A multi-phase RI was performed to further characterize PSC 38. The RI included additional groundwater and soil sampling and analysis to delineate the areal extent of contamination at PSC 38.

ES.3 SUMMARY OF RISK EVALUATION

The Human Health Risk Evaluation (HHRA) at PSC 38 was conducted as a screening risk evaluation (SRE). The Human Health SRE is an evaluation of potential risks from site constituents to human receptors at the site by comparing exposure concentrations of chemicals to appropriate risk-based screening levels. At PSC 38, the focus of the RI was on soil and groundwater; however, soil is the media discussed in this EE/CA. Hypothetical future residents, industrial receptors, maintenance workers, and potential future construction workers were evaluated for potential risks associated with direct contact exposures to soil.

The Human Health SRE for direct contact exposures was conducted by generating a cancer risk or hazard quotient (HQ) by creating ratios between the analyte exposure concentration and the appropriate screening value. The United States Environmental Protection Agency (USEPA) and the FDEP each have their own set of risk-based screening criteria for soil and groundwater and for residential and industrial receptors. The USEPA's risk-based concentrations are the RSLs, which are updated semiannually. The FDEP's risk-based concentrations are the cleanup target levels (CTLs), which were developed in 2005.

Based on the USEPA methodology, the cancer risks for exposure to soil by the hypothetical future resident, industrial worker, maintenance worker, and the construction worker exceeded the target risk of 1E-6. The noncancer hazard index (HI) for exposure to soil by all receptors was less than the target of 1.0.

Based upon FDEP methodology, the cancer risk for exposure to soil by the hypothetical future resident, the industrial worker, and the construction worker exceeded the target risk level of 1E-6; the cancer risks for exposure to soil by the maintenance worker was less than the target risk level. The noncancer HIs for exposure to soil by hypothetical future resident, the industrial worker, and the maintenance worker were less than the target of 1.0. Noncancer HI for exposure to soil by the construction worker was greater than the target of 1.0.

ES.4 REMEDIAL ACTION OBJECTIVES AND PRELIMINARY REMEDIAL ACTION GOALS

The following RAOs were developed for PSC 38:

- Prevent unacceptable human health risk from exposure to surface soil (0 to 2 feet below ground surface) with concentrations of arsenic and aroclor-1260 in excess of the lower of the FDEP industrial SCTLs and USEPA industrial Regional Screening Levels (RSLs).
- Prevent unacceptable human health risk from exposure to subsurface soil (2 to 4 feet below ground surface) with concentrations of arsenic in excess of the lower of the FDEP industrial SCTL and USEPA industrial RSL.

A Preliminary Remediation Goal (PRG) is the target concentration to which a COC must be reduced within a particular medium of concern to achieve one or more of the established RAOs. PRGs are developed to ensure that contaminant concentration levels left on site are protective of human and ecological receptors.

For PSC 38, soil PRGs were established based on the following criteria:

- Protection of human health from direct exposure to contaminated soil.
- Compliance with Applicable or Relevant and Appropriate Requirements (ARARs) and To Be Considered (TBCs) to the extent practicable.

Accordingly, the following PRGs for soil were established:

COC	PRGs[1]
Arsenic	3.0 mg/kg
Aroclor-1260	1,000 µg/kg

(1) USEPA industrial RSL (USEPA)

ES.5 DEVELOPMENT OF REMEDIAL ACTION ALTERNATIVES

Based on the RAOs and PRGs, the following alternatives for soil remediation have been developed for PSC 38:

Alternative 1: No Action

This alternative is a "walk-away" alternative that is required under CERCLA to establish a basis for comparison with other alternatives. This alternative cannot be chosen for PSC 38 because waste would remain on site without any use restrictions.

Alternative 2: Institutional Controls and Monitoring

Institutional controls would consist of limiting land use to industrial purposes. A Land Use Control (LUC) Implementation Plan (LUCIP) would be prepared and implemented to ensure that, prior to any development at PSC 38, adequate measures would be taken to minimize adverse human health and environmental effects. In particular, LUCs would prevent residential development of PSC 38. Regular site inspections would be performed to verify the continued implementation of the LUCIP.

Monitoring would consist of regularly checking COC concentrations by collecting soil samples in the areas of highest recorded contamination based on previously collected data and collecting groundwater samples from proposed wells in the contaminated soil and downgradient area. Soil and groundwater samples would be analyzed for the PSC 38 soil COCs.

Monitoring would be conducted for 30 years, and the data would be evaluated to determine the need for additional remedial action at the site. Every 5 years, site reviews, including evaluation of sampling data, would be conducted to evaluate the continued adequacy of the remedial alternative.

Alternative 3: Excavation to Below Industrial Cleanup Criteria, Off-Base Disposal, and Land Use Controls

This alternative would allow greater use of the site. Soil contaminated with concentrations of COCs exceeding the lower of the FDEP industrial SCTL and USEPA industrial RSL would be excavated. Two areas contaminated primarily with arsenic and aroclor-1260 would be excavated. Following excavation, the excavated areas would be backfilled with clean fill, graded, vegetated, and the site would be restored to pre-excavation conditions.

The excavated soil would be transported to an off-base permitted landfill. Based on previously determined COC concentrations in soil at PSC 38, it is assumed that the excavated soil could be disposed of in a non-hazardous Resource Conservation and Recovery Act (RCRA) Subtitle D type landfill. However, the exact disposal requirements would be determined by the designated landfill based upon actual analysis of the contaminated soil.

Institutional controls would consist of limiting land use to industrial purposes. A LUCIP would be prepared and implemented to ensure that, prior to any development at PSC 38, adequate measures would be taken to minimize adverse human health and environmental effects. In particular, LUCs would prevent residential development of PSC 38. Regular site inspections would be performed to verify the continued implementation of the LUCIP.

ES.6 COMPARATIVE ANALYSIS OF REMEDIAL ALTERNATIVES

Overall protection of human health and the environment would not be met by Alternative 1, but both Alternatives 2 and 3 would be protective. Alternative 3 would be more protective because the risk associated with soil COCs above the lower of the FDEP SCTLs and EPA RSLs would be removed rather than just restricted.

Alternative 1 would not achieve compliance with ARARs and TBCs. Alternative 2 would comply with location-specific and action-specific ARARs and TBCs, but not chemical-specific ARARs and TBCs. Alternative 3 would comply with all three types of ARARs and TBCs for COCs in the soil.
Long-term effectiveness and permanence cannot be determined under Alternative 1. Both Alternatives 2 and 3 would have long-term effectiveness and would be permanent solutions.

Alternatives 1 and 2 would not reduce contaminant toxicity, mobility, or volume. Alternative 3 would remove approximately 570 cubic yards (cy) of contaminated soil, thereby permanently reducing the volume of contamination at PSC 38.

Alternative 1 would not result in any short-term risks to site workers, but it also would not be effective in the short term either. Alternative 2 would have a slight risk to site workers during field sampling efforts, but RAOs would be achieved immediately. These risks would be mitigated by appropriate health and safety procedures. It is unlikely that PRGs could be achieved in the long term through natural attenuation. Alternative 3 would result in a greater risk to site workers during excavation and disposal activities. The RAOs and PRGs would be achieved immediately upon implementation and completion of the soil removal.

Alternative 1 would be simple to implement because no action would occur. Alternative 2 is relatively easy to implement through administrative means, and resources, materials and equipment are readily available for the monitoring efforts. Alternative 3 would be more difficult, although still possible to implement, because contaminated soil would have to be excavated and transported off site for disposal.

There is no cost for Alternative 1. Alternative 2 would have an initial cost of $18,000, annual costs of $1,000 to verify implementation of institutional controls, and costs every five years of $17,000 for monitoring and reporting for a net present worth of $64,000 over the projected 30 years. Alternative 3 would have an initial cost of $210,000, annual costs of $1,000 to verify implementation of institutional controls, and costs every five years of $7,000 for reporting for a net present worth of $236,000 over the projected 30 years.

ES.7 RECOMMENDED REMEDIAL ALTERNATIVE

It is not acceptable to select the No Action alternative; this alternative is used only for comparison. Alternatives 2 and 3 are both technically feasible and environmentally acceptable. Alternative 2 is less expensive, but Alternative 3 will provide greater protection for future site workers and allow greater use of the site. It is anticipated the area of PSC 38 will continue to have industrial use for the foreseeable future. For this reason, Alternative 3, excavating contaminated soil exceeding industrial cleanup criteria with off-base disposal and land use controls is the recommended alternative for this removal action.

1.0 INTRODUCTION

Solutions-IES, Inc. (SIES) has been contracted by the Navy (NAVFAC SE) to prepare this Engineering Evaluation /Cost Analysis (EE/CA) for Potential Source of Contamination (PSC) 38 at Naval Air Station (NAS) Jacksonville located in Jacksonville, Florida. Work associated with this EE/CA was performed under contract number N69450-11-D-0100 Task Order 0032. This EE/CA is being prepared to comply with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requirements for a non-time-critical removal action, as identified in Section 300.415(b)(4)(I) of the National Oil and Hazardous Substance Pollution Contingency Plan (NCP). The goal of this EE/CA is to identify remedial action objectives (RAOs); develop remedial alternatives to achieve these RAOs; and then evaluate the alternatives with regards to cost, effectiveness and implementability in order to select the most appropriate alternative.

Although both soil and groundwater impacts have been identified at PSC 38, the RAOs and remedial alternatives identified in this EE/CA are limited to shallow (0 to 4 feet below ground surface [ft bgs]) soil impacts above the lower of the Florida Department of Environmental Protection (FDEP) industrial Soil Cleanup Target Levels (SCTLs) and United States Environmental Protection Agency (USEPA) industrial Regional Screening Levels (RSLs). This EE/CA evaluates alternatives for leaving the soil contamination in place (no action alternative), for leaving the contamination in place and restricting future land use, and for removal of contaminated soil to industrial levels with land use controls (LUCs).

2.0 SITE CHARACTERIZATION

The information in the following sections was obtained from the *Draft Remedial Investigation Report for Potential Source of Contamination 38 Torpedo Rework Facility* (RI) (Tetra Tech, 2014).

2.1 SITE DESCRIPTION AND BACKGROUND

The following sections provide a historical overview of the NAS Jacksonville installation and a site-specific background for PSC 38. Background information on the geography, physiography and topography, climate, soil, regional geology and regional hydrogeology are also summarized.

2.1.1 Location and Description

NAS Jacksonville occupies approximately 3,896 acres in southeastern Duval County, Florida and is located approximately 9 miles south of downtown Jacksonville. The facility is located on the St. Johns

River approximately 24 miles upstream from its confluence with the Atlantic Ocean. The main portion of NAS Jacksonville is bordered to the north by the Timaquana Country Club, to the east and northeast by the St. Johns River, to the south by a residential area and to the west by Highway 17 (Roosevelt Boulevard) with Westside Regional Park, commercial developments and other NAS Jacksonville operations beyond. The location of NAS Jacksonville and PSC 38 is presented on **Figure 1**.

NAS Jacksonville is home to Patrol Squadron Thirty, the Navy's largest aviation squadron and the only P-3 Orion/P-8 Poseidon Fleet Replacement Squadron that prepares and trains U.S. and foreign pilots, air crew and maintenance personnel for further operational assignments. Support facilities include an airfield for pilot training, a maintenance depot, a naval hospital, a Fleet Industrial Supply Center and a Navy Fleet and Family Support Center.

Work in support of the base mission includes fuel storage and transportation systems and the overhaul, intermediate maintenance and repair of aircraft and engines. Maintenance activities at NAS Jacksonville over the years generated a variety of materials, of which some were disposed of on the base. These include materials resulting from construction activities; municipal solid waste and municipal wastewater treatment plant sludge; and miscellaneous industrial wastes including waste oils or solvents, paints and spilled fuels. Current disposal practices are regularly surveyed for conformity to local, state, and federal regulations.

2.1.2 NAS Jacksonville History

NAS Jacksonville was commissioned on October 15, 1940, to provide facilities for pilot training and a Navy Aviation Trade (NAT) School for ground crewmen. With the advent of World War II, the physical size of the NAS Jacksonville more than doubled, and military functions supported the war effort. During 1942, the Navy phased out pilot training, and the installation became the headquarters for the Chief of Naval Operational Training, the final training phase before fleet assignment. The NAT School became the Naval Air Technical Training Center under the Chief of Naval Air Technical Training, NAS Memphis. The operational areas of the installation still maintained coastal protection with seaplanes. The facility reached a peak of 42,000 Naval personnel and 11,000 civilians by 1946.

At the conclusion of World War II, NAS Jacksonville was devoted entirely to aviation training. In 1945 Chief of Naval Operational Training was redesignated Chief Naval Air Advanced Training. In July 1946 the Seventh Naval District was transferred from Miami, Florida to the NAS Jacksonville facility, as joint

command with Chief Naval Air Advanced Training. On April 5, 1948, the Navy transferred the Chief Naval Air Training and all training facilities to NAS Corpus Christi, Texas.

By January 1949 NAS Jacksonville's mission was to support the operational carrier squadrons with fleet squadrons assigned to Commander, Naval Air Bases, Sixth District, and patrol squadrons assigned to Combat Patrol Wing Eleven. On January 1, 1951, the Navy reactivated the Naval Air Technical Training Center and Marine Air Division activities in support of the Korean build-up of facilities. This joint operational and training status continues to this time.

2.1.3 PSC 38 Location and Description

PSC 38, the Torpedo Rework Facility (now identified as the Advanced Underwater Weapons Facility), encompasses approximately 2.5 acres within the restricted Magazine Area in the central-western portion of NAS Jacksonville. The site is surrounded by an 8-foot high fence and is accessible from Allegheny Road via a paved driveway, but access is limited to Navy personnel with weapons clearance. There are three buildings within PSC 38: Building 327, the Torpedo Rework Facility; Building 367, the Bulk Waste Storage Area; and Building 330, a storage building for paint and hazardous materials. An aerial photograph of PSC 38 that shows the building locations and the surrounding area is presented on **Figure 2**.

In general the topography at PSC 38 is flat and gently slopes to the south and east. An unlined ditch parallels the eastern and southern boundaries of PSC 38 and then flows westward under Allegheny Road. Surface drainage eventually discharges into the tributaries of the Ortega River, which is located about 1 mile west of PSC 38.

2.1.4 PSC 38 History

Work in support of the base mission that is carried out at PSC 38 includes the repair and cleaning of torpedo propulsion systems, the addition of fuel to torpedoes and inspection of torpedoes. A variety of materials are used as part of the maintenance and support activities at PSC 38, which resulted in chemical releases to the environment.

Specifically, processes for reworking torpedoes generated approximately one 55-gallon drum of solid waste material per day (gloves and rags containing Otto fuel). Additionally, unmonitored underground storage tanks (USTs), lead acid battery disposal areas and gravel sumps may have contributed contaminants to the site.

2.1.5 Regional Geology and Hydrogeology

According to the RI Report (Tetra Tech, 2014), the geologic profile at NAS Jacksonville is comprised of unconsolidated surficial deposits of predominantly fine to very fine clastic sediments that range from clean fine to medium-grained sands, to silty sands, to sandy and silty clay overlying thick deposits of phosphatic sands and clays of the Hawthorn Group and limestones and dolomites of the Floridan aquifer system.

The Hawthorn Group is significant at NAS Jacksonville because it contains as much as 200 feet of low permeability, silty, sand-clay layers. This low permeability deposit acts as an aquiclude for the underlying Floridan aquifer system. The Floridan aquifer system is the major source of potable water in the Jacksonville area and throughout much of northeastern and central Florida.

Three aquifer systems have been identified in the Jacksonville area including the surficial aquifer, the intermediate aquifer, and the Floridan aquifer system. The surficial deposits consist of sediments of Late Miocene to Recent age. The sediments are highly variable and include sands, shelly sands, coquina, silts, clay, and shell beds. While the surficial aquifer may be considered a single unit on a regional or base-wide scale, localized clay layers or discontinuous lenses may divide the aquifer into distinct permeable units. The contact between the surficial aquifer deposits and the underlying Hawthorn Group is an unconformity generally identified by a coarse phosphatic sand and gravel bed. Average well yields in Jacksonville for the shallow groundwater aquifer were estimated by the City of Jacksonville Planning Department to be between 200 and 500 gallons per day (Toth, 1990). This groundwater is primarily used for lawn irrigations, domestic purposes, and the heat exchange unit in air conditioning and heating units.

The Hawthorn Group consists mainly of dark-gray and olive-green sandy to silty clay, clayey sand, clay, and sandy limestone at a depth of approximately 60 to 70 feet below land surface (bls) at NAS Jacksonville. Black phosphatic sand, granules, and pebbles are common throughout the Hawthorn Group. The combination of numerous thick clay layers within the Hawthorn Group serves as confining layers that separate the surficial aquifer from the underlying Floridan aquifer system. The most common carbonate components of the Hawthorn Group are dolomite and dolosilt. Clay minerals associated with the Hawthorn Group sediments are smectite, illite, palygorskite and kaolinite.

The intermediate aquifer has been identified at NAS Jacksonville as permeable sediments in the upper part of the Hawthorne formation.

A marine carbonate sequence makes up the Floridan aquifer system beneath NAS Jacksonville. The formation groups of the Floridan aquifer are Eocene in age and consist of, in descending order, the Ocala Group, Avon Park Limestone, Lake City Limestone, and Oldsmar Limestone. The Floridan aquifer system is the principal source of fresh water in northeast Florida. The water bearing zones consist of soft, porous limestone and porous dolomite beds. The top of the Floridan aquifer in the vicinity of NAS Jacksonville occurs at a depth of about 400 feet bls. Published transmissivities of the Floridan aquifer in eastern Duval County range from approximately 85,000 to 160,000 gallons per day per foot (Leve, 1966). Groundwater in the Floridan aquifer in the vicinity of NAS Jacksonville moves eastward toward areas of heavy pumping (Fairchild, 1977). Floridan aquifer wells in the vicinity of NAS Jacksonville are under sufficient artesian pressure to flow at the surface.

Hydrogeologic information for water supply wells located within 1 mile south of the site can be found in the *Navy Installation Restoration Program Plan, Naval Air Station, Jacksonville, Florida, Volume 1, Organization and Planning, September 1991* by Geraghty and Miller, Inc. This Plan contains information related to seasonal variation of surface water and groundwater flow, geological cross sections, and regional surveys.

2.2 PREVIOUS SITE INVESTIGATIONS AND REMEDIAL ACTIONS

The following is a summary of previous investigations conducted at PSC 38 as provided in the RI Report (Tetra Tech, 2014).

1983 - The Torpedo Rework Facility was identified as a PSC during the Initial Assessment Study (IAS). IAS interviews revealed that the processes associated with reworking torpedoes generated up to one 55-gallon drum of solid waste material (gloves and rags containing Otto fuel) at the facility per day; the drums containing wastes had always been disposed of off-site. Because no wastes were disposed of onsite and no releases of Otto fuel were documented, the IAS report did not recommend a confirmation study for PSC 38.

1991 - Geraghty and Miller, Inc. (G&M) discovered that unmonitored USTs might be present at PSC 38. In addition to these USTs the report mentioned two gravel sumps on the east side of Building 327 that may have received waste. The exact locations of these sumps were not provided. Volume 1 of the Navy Installation Restoration Program (IRP) Plan recommended site screening to determine if leakage from the

gravel sumps had contaminated soil or groundwater in the vicinity of PSC 38. However, no sampling was conducted at that time.

1994 - During a PSC 38 reconnaissance, ABB Environmental Services, Inc. (ABB-ES) observed fill ports for two USTs, confirming the presence of the two USTs noted previously by G&M. NAS Jacksonville personnel confirmed that one tank was installed in 1958 and held 350 gallons of diesel fuel for an emergency generator. The second tank was a 1,000-gallon steel heating oil UST that was no longer in use. No records of tightness testing for either UST were available. ABB-ES observed dead grass around the fill port of the diesel fuel UST during the PSC reconnaissance, indicating that diesel fuel may have spilled or overflowed.

ABB-ES found several maps showing a below-grade acid pit on the east side of Building 327. This pit is believed to have functioned as a disposal area for lead battery acid; however, its presence has not been confirmed. A septic tank was also identified on a facility utility map that was connected to sanitary facilities inside Building 327. ABB-ES also observed a 3-foot by 6-foot concrete-bermed gravel drain on the west side of Building 330. Facility employees did not know its function and could not confirm it as a drain. No evidence of contamination, such as stained soil, odor, or stressed vegetation, was observed around the gravel drain.

1996 - Brown and Root Environmental, Inc. collected three surface soil samples and analyzed them for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), TCL pesticides and polychlorinated biphenyls (PCBs) and Target Analyte List (TAL) inorganics (metals and cyanide). The three sample locations were selected in areas of suspected contamination: (1) within stained soil and stressed vegetation near the diesel fuel UST port; (2) within the area of sparse vegetation at the southeast corner of Building 327; and (3) near the gravel drain adjacent to the doorway of Building 330. No organic chemicals were detected above FDEP SCTLs; however, several metals were detected in each sample. Of particular interest, concentrations of arsenic, chromium and copper slightly exceeded NAS Jacksonville background concentrations; and concentrations of antimony, arsenic, beryllium, cadmium, chromium, lead and zinc exceeded their respective SCTLs for residential direct exposure.

1997 to 1999 - Support facilities such as USTs, a below-grade acid pit, a hazardous material and paint storage area, gravel sumps and a concrete-bermed gravel drain were determined to be areas of interest and were the focus of a 1997 site investigation by Harding Lawson Associates (HLA). HLA collected soil

samples from nine different locations at PSC 38. Groundwater samples were also collected in downgradient locations. Surface water and sediment samples were collected from the unlined drainage ditch that surrounds the fenced in area of PSC 38. The samples were analyzed for TCL VOCs, TCL SVOCs, TCL pesticides and PCBs, and TAL inorganics. The results of the 1997 sampling events and a summary of the previous site activities were documented in a Sampling Event Report.

HLA identified certain contaminants that significantly exceeded guidance and regulatory levels, including one surface soil sample containing lead in excess of the then-current FDEP SCTL and one groundwater sample containing trichloroethene and its breakdown products 1,2-dichloroethene and vinyl chloride in excess of the FDEP Groundwater Cleanup Target Levels (GCTLs) and the United States Environmental Protection Agency (USEPA) Maximum Contaminant Levels (MCLs). Focused risk evaluations (FREs) were performed as part of the site screening evaluation to assist in determining whether or not the existing risk at a PSC (1) supports a no further action (NFA) decision, (2) indicates the need for an interim remedial action, or (3) requires additional investigation to make a decision. The documentation of the decision for PSC 38 may be found in the 1995 Remedial Response Decision System document for PSC 38 prepared by ABB-ES. The FREs were not intended to characterize "baseline" risk at the PSC, but rather were used as a decision making tool.

1999 - In June 1999 the Navy IRP Plan, Volume 2, Appendix D presented No Further Response Action Planned summaries for PSCs, including PSC 38. Additional pertinent site history identified in this report includes the following:

- April 20, 1998 – Site screening completed and an interim removal action (IRA) was recommended to address contamination at or near the gravel sump. Also, additional site characterization to determine the extent of groundwater contamination has been recommended and USEPA and FDEP concurred.
- January 1999 – Bechtel Environmental, Inc. excavated sumps and soil at the gravel sump area.
- June 1, 1999 – Regulators concurred to determine extent of contamination and the IRA.

2005 - In July 2005 the Agency for Toxic Substances and Disease Registry (ATSDR) completed a Public Health Assessment (PHA) for NAS Jacksonville, including all PSCs and Operable Units. The PHA identified a number of contaminants at PSC 38 with maximum concentrations exceeding their comparison value (CV), a risk-based screening value that ATSDR utilizes to support the PHA. The information on the concentrations exceeding their CV could not be verified. Therefore, this information, when referenced herein, is included for the purpose of providing a complete document. Irreversible decisions

should not be made based solely on these values. The PHA also described two gravel pits as "wet mop swab pits" that have been either covered or removed.

2012 – 2014 - A multi-phase RI was performed to further characterize the site from February 2012 to April 2014. RI activities and results are summarized in the sections below. During the first two soil sampling phases of the RI, sample results were compared to the project action limits (PALs) derived from the following:

- NAS Jacksonville Basewide Background Concentrations (for metals).
- FDEP SCTLs - Residential direct exposure (SCTL-RES) and leachability based on groundwater criteria (SCTL-LCH).
- The laboratory practical quantitation limit (PQL) if it is less stringent than the cleanup target levels (CTLs)
- USEPA Regions 3, 6, and 9 RSLs for Chemical Contaminants at Superfund Sites - Residential soil values (USEPA-RES) and risk-based migration-to-groundwater Soil Screening Levels (USEPA-RISK).

2.2.1 Phase I – Soil Sampling Results

The Phase I soil sampling was conducted on March 19, 2012. The samples were analyzed for the target analytes utilizing the following methods: metals (USEPA Method 6010C; except mercury where USEPA 7471B was used), PCBs (USEPA Method 8082), polycyclic aromatic hydrocarbons (PAHs) (USEPA Method 8270D SIM), SVOCs (USEPA Method 8270D), VOCs (USEPA Method 8260B), pesticides (USEPA Method 8081) and 1,2-propylene glycol dinitrate (PGDN) (USEPA SW-846 Method 8330). The results by analyte groups are discussed in Subsections 2.2.2.1 through 2.2.2.7.

2.2.1.1 Metals

Three metals were detected at concentrations in excess of the PALs. The only metal with analytical results greater than the SCTLs was arsenic, reported above the residential SCTL of 2.1 milligrams per kilogram (mg/kg). No other samples exceeded any other SCTL.

2.2.1.2 PCBs

Three surface soil samples and one subsurface soil sample exceeded the applicable PALs for PCBs. Only one surface soil sample was reported to contain PCBs (aroclor-1260) above the residential SCTL of 0.5 mg/kg and industrial SCTL of 2.6 mg/kg for PCBs. No other samples exceeded any other SCTL.

2.2.1.3 PAHs

No PAHs were detected in any of the soil samples.

2.2.1.4 Pesticides

Eight pesticides were detected at concentrations above the PALs. Two surface samples also exceeded the leachability SCTL of 2 micrograms per kilogram (µg/kg) for dieldrin. No other samples exceeded any other SCTL.

2.2.1.5 PGDN

No PGDN was detected in any of the soil samples.

2.2.1.6 SVOCs

No SVOCs were detected in any of the soil samples.

2.2.1.7 VOCs

No VOCs were detected in any of the soil samples.

2.2.2 Phase II – Soil Sampling Results

The Phase II soil sampling was conducted on October 18 and 19, 2012. The samples were analyzed for the target analytes utilizing the following methods: metals (USEPA Method 6010C; except mercury where USEPA 7471B was used), PCBs (USEPA Method 8082) and pesticides (USEPA Method 8081). The results by analyte groups are discussed in **Subsections 2.2.2.1** through **2.2.2.3**.

2.2.2.1 Metals

Eleven metals were detected at concentrations above the PALs. The only metals with analytical results greater the SCTLs were arsenic, barium and chromium. For arsenic, four soil samples exceeded the residential SCTL of 2.1 mg/kg and one sample exceeded the industrial SCTL of 12 mg/kg. For barium, one soil sample exceeded the residential SCTL of 120 mg/kg. For chromium, two soil samples exceeded the leachability SCTL of 38 mg/kg. No other samples exceeded any other SCTL.

2.2.2.2 PCBs

For aroclor-1260, there were two exceedances of the applicable PALs in surface soil and one exceedance in the subsurface soil. None of these samples exceeded the SCTLs.

2.2.2.3 Pesticides

Seven pesticides were detected at concentrations above the PALs. None of these samples exceeded the SCTLs.

2.2.3 Phase III – Soil Sampling Results

The Phase III soil sampling was conducted on March 5, 2013. Samples were collected for analysis of metals by USEPA Method 6010C/7471B. Six metals were detected at concentrations above the PALs. The only metals with analytical results greater than the SCTLs were arsenic and chromium. Arsenic exceeded the residential SCTL of 2.1 mg/kg in four soil samples and exceeded the industrial SCTL of 12 mg/kg in one sample. For chromium, three soil samples exceeded the residential SCTL of 210 mg/kg and four soil samples exceeded the leachability SCTL of 38 mg/kg. No other samples exceeded any other SCTL.

2.2.4 Phase IV – Soil Sampling Results

The Phase IV soil sampling was conducted on April 3, 2014. Samples were collected for analysis of metals by USEPA Method 6010C/7471B. Eight metals were detected at concentrations above the PALs. The only metals with analytical results greater than the SCTLs were arsenic and chromium. For arsenic, two soil samples exceeded the residential SCTL of 2.1 mg/kg. For chromium, two soil samples exceeded the residential SCTLs of 210 mg/kg and four additional soil samples exceeded the leachability SCTLs of 38 mg/kg. No other samples exceeded any other SCTL.

2.2.5 Interpretation of Soil Data

For Phase I, three soil sample locations had no exceedances of the PALs at any of the depths. Furthermore, there were no detections of PGDN and no exceedances of PALs for VOCs, SVOCS and low level PAHs in soil. While three metals (arsenic, iron, and mercury), one PCB (aroclor-1260) and eight pesticides (aldrin, alpha chlordane, dieldrin, gamma BHC, gamma chlordane, heptachlor, and heptachlor epoxide) exceeded PALs, only arsenic, aroclor-1260 and dieldrin exceeded FDEP SCTLs. Arsenic was reported above the residential SCTL; aroclor-1260 was reported above the residential and industrial SCTLs; and dieldrin was reported above the SCTL for leachability.

Based on the results for Phase I, the NAS Jacksonville Installation Restoration Partnering Team (Partnering Team) agreed to remove PGDN, VOCs, SVOCs and low level PAHs from future soil sampling at PSC 38 and step out to collect additional soil samples to define the extent of soil contamination.

For Phase II, only one sample location had no exceedances of the PALs at any of the sampling depths. Eleven metals (arsenic, barium, cadmium, chromium, cobalt, copper, iron, manganese, mercury, and silver), one PCB (aroclor-1260) and six pesticides (4,4'-DDD, alpha chlordane, dieldrin, gamma

chlordane, heptachlor, and heptachlor epoxide) were detected at concentrations above the PALs. Only arsenic, barium and chromium were detected at concentrations greater than FDEP SCTLs. Arsenic was detected above the residential SCTL and industrial SCTL; barium was detected above the residential SCTL; and chromium was detected above leachability SCTL.

Based on the Phase II results, the Partnering Team agreed to collect soil samples from nine additional locations, analyzing for metals only. These soil samples were intended to delineate to the FDEP industrial SCTLs as opposed to delineating to PALs. Previous PAL exceedances, without SCTL exceedances, were based on USEPA Regions 3, 6, and 9 Risk-Based Migration to Groundwater Soil Screening Levels. Although dieldrin was detected above the FDEP leachability SCTL during the Phase I and II soil sampling events, pesticides were not detected in groundwater samples collected during the RI and were eliminated from the additional soil sampling phases.

During Phase III, six metals (arsenic, cadmium, chromium, iron, mercury, and silver) were detected at concentrations in exceedance of the PALs. The only metals with analytical results greater than the SCTLs were arsenic and chromium. For arsenic, four soil samples exceeded the residential SCTL and one sample exceeded the industrial SCTL. For chromium, three soil samples exceeded the residential SCTL and four soil samples exceeded the leachability SCTL.

During Phase IV, arsenic was reported in two soil samples at concentrations exceeding the residential SCTLs. For chromium, two soil samples exceeded the residential SCTL and four additional soil samples exceeded the leachability SCTL.

2.3 NATURE AND EXTENT OF CONTAMINATION

Historical activities related to site operations at PSC 38 led to contamination in surface soil and groundwater. Chemical concentrations in soil and groundwater were identified during previous investigations of several potential source areas associated with PSC 38. These include the two USTs and the associated piping, the below-grade acid pit and the 3-foot by 6-foot concrete bermed gravel drain.

Spills and releases from general site activities at PSC 38 are the likely sources of contamination. The historical operations at the site and analytical results from previous site investigations indicate that limited releases have occurred directly onto the surface or indirectly into the subsurface via USTs or below-grade pits and potentially have migrated into site soil and groundwater. Previous limited analytical results

provide evidence that chlorinated organic solvents exist in groundwater and numerous metals exist in soil at the site, including elevated levels of lead near a gravel sump that was removed in 1999. Based on limited site operational data and historical analytical results, VOCs, SVOCs, pesticides, PCBs and metals may have been released from processes at the site.

A multi-phase RI was performed to further characterize the site from February 2012 to April 2014. The RI included additional groundwater and soil sampling and analysis to help delineate the extent of contamination at PSC 38. The soil and groundwater analytical results were compared against PALs that incorporated NAS Jacksonville basewide background concentrations for metals, the FDEP SCTLs and GCTLs.

Although both soil and groundwater impacts were identified at PSC 38 during the RI, the remedial alternatives addressed in this EE/CA are limited to soil impacts above the lower of the FDEP industrial SCTLs and USEPA industrial RSLs. The soil analytical results from the RI are summarized in **Table 1** and shown on **Figure 3**. Based on the data presented in the RI (Tetra Tech, 2014), concentrations of arsenic in two samples (12.6 mg/kg at 2 to 4 ft bgs in 38SO043 and 18.6 mg/kg at 0.5 to 3 ft bgs in 38SO048), and aroclor-1260 in one sample (4,190 µg/kg at 0 to 2 ft bgs in 38SO012) exceed the lower of the FDEP industrial SCTLs and USEPA industrial RSLs.

2.4 RISK EVALUATION

The Human Health Risk Evaluation (HHRA) and Ecological Risk Assessment (ERA) were completed as part of the RI Report for PSC 38 (Tetra Tech, 2014). At PSC 38, the focus of the RI was on soil and groundwater; however, soil is the media evaluated in this EE/CA. Hypothetical future residents, industrial receptors, maintenance workers and potential future construction workers were evaluated for potential risks associated with direct contact exposures to soil. The following sections summarize the soil exposure risks from the RI Report.

2.4.1 Human Health Risks

The HHRA at PSC 38 was conducted as a screening risk evaluation (SRE). The Human Health SRE is an evaluation of potential risks from site constituents to human receptors at the site by comparing exposure concentrations of chemicals to appropriate risk-based screening levels.

The Human Health SRE for direct contact exposures was conducted by generating a cancer risk or hazard quotient (HQ) by creating ratios between the analyte exposure concentration and the appropriate

screening value. The USEPA and the FDEP each have their own set of risk-based screening criteria for soil and groundwater and for residential and industrial receptors. The USEPA's risk-based concentrations are the RSLs, which are updated semiannually. The FDEP's risk-based concentrations are the cleanup target levels (CTLs), which were developed in 2005.

Based on the USEPA methodology, the cancer risks for exposure to soil by the hypothetical future resident, industrial worker, maintenance worker and the construction worker exceeded the target risk of 1E-6. The noncancer hazard index (HI) for exposure to soil by all receptors was less than the target of 1.0.

Based upon FDEP methodology, the cancer risk for exposure to soil by the hypothetical future resident, the industrial worker and the construction worker exceeded the target risk level of 1E-6; the cancer risks for exposure to soil by the maintenance worker was less than the target risk level. The noncancer HIs for exposure to soil by hypothetical future resident, the industrial worker, and the maintenance worker were less than the target of 1.0. Noncancer HI for exposure to soil by the construction worker was greater than the target of 1.0.

2.4.2 Ecological Risks

The ERA evaluated the potential risk to ecological receptors that may be exposed to soil and groundwater. Typically, ecological receptors can be exposed only to surface media – surface soil, surface water, and the upper layers of wetland sediments. However, PSC 38 does not present the type of habitat that would be exploited by ecological receptors. The potential for exposure of ecological receptors to target analytes at PSC 38 is insignificant and the site presents no unacceptable risk to ecological receptors (as agreed by the Partnering Team during the development of data quality objectives; Tetra Tech, 2011).

3.0 IDENTIFICATION OF REMEDIAL ACTION OBJECTIVES

This section develops RAOs and derives Preliminary Remedial Goals (PRGs) and General Response Actions (GRAs) for soil at PSC 38 based on the regulatory requirements and guidance that may potentially govern remedial activities. In addition, this section presents the constituents of concern (COCs) identified in **Section 2.0** and the conceptual pathways through which these chemicals may affect human health.

3.1 REMEDIAL ACTION OBJECTIVES

The purpose of this section is to develop soil RAOs for PSC 38 at NAS Jacksonville. The RAOs specify the COCs, potential exposure routes and receptors, and an acceptable contaminant level (i.e., PRGs) for the site. RAOs are developed to evaluate a range of treatment and containment alternatives. This EE/CA is limited to soil contamination at PSC 38 above the lower of the FDEP industrial SCTLs and USEPA industrial RSLs. To protect the public from potential current and future health risks, as well as to protect the environment, the following RAO has been developed:

- Prevent unacceptable human health risk from exposure to surface soil (0 to 2 ft bgs) with concentrations of arsenic and aroclor-1260 in excess of the lower of the FDEP industrial SCTLs and USEPA industrial RSLs.
- Prevent unacceptable human health risk from exposure to subsurface soil (2 to 4 ft bgs) with concentrations of arsenic in excess of the lower of the FDEP industrial SCTL and USEPA industrial RSL.

3.2 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS AND TO BE CONSIDERED CRITERIA

3.2.1 Chemical-Specific ARARs and TBCs

This section presents a summary of Federal and state chemical-specific ARARs and to be considered (TBCs). These ARARs and TBCs provide medium-specific guidance on “acceptable” or “permissible” concentrations of contaminants. **Tables 2** and **3** present a list of Federal and State of Florida chemical-specific ARARs and TBCs, respectively, for this EE/CA.

3.2.2 Location-specific ARARs and TBCs

This section presents a summary of Federal location-specific ARARs and TBCs. These ARARs and TBCs place restrictions on concentrations of contaminants or the conduct of activities based upon the site’s particular characteristics or location. **Table 4** presents a list of Federal location-specific ARARs and TBCs for this EE/CA. There are no State of Florida location-specific ARARs and TBCs for this EE/CA.

3.2.3 Action-Specific ARARs and TBCs

Action-specific ARARs and TBCs are presented in **Section 3.6** along with the GRA discussion.

3.3 MEDIA OF CONCERN

Based upon the discussion in **Section 2.0**, the media of concern was determined to be soil and groundwater; however, soil is the media evaluated in this EE/CA.

3.4 CONSTITUENTS OF CONCERN FOR REMEDIATION

Previous sampling identified several chemicals in the soil as a concern to human receptors. Based upon the results of the comparison of the detected analytes to the FDEP industrial SCTLs, arsenic and aroclor-1260 were retained as COCs.

3.5 PRELIMINARY REMEDIATION GOALS

A PRG is the target concentration to which a COC must be reduced within a particular medium of concern to achieve one or more of the established RAOs. PRGs are developed to ensure that contaminant concentration levels left on site are protective of human and ecological receptors.

For PSC 38, soil PRGs were established based on the following criteria:

- Protection of human health from direct exposure to contaminated soil.
- Compliance with ARARs and TBCs to the extent practicable.

Accordingly, the following PRGs for soil were established:

COC	PRGs[1]
Arsenic	3.0 mg/kg
Aroclor-1260	1,000 µg/kg

(1) USEPA industrial RSL (USEPA)

3.6 GRAs AND ACTION-SPECIFIC ARARs

GRAs are broadly defined remedial approaches that may be used to attain the RAOs. Action-specific ARARs and TBCs are those regulations, criteria and guidance that must be complied with or taken into consideration during remedial activities on site.

3.6.1 General Response Actions

GRAs describe categories of actions that could be implemented to satisfy or address a component of the RAOs for the site. Remedial action alternatives will then be composed using GRAs singly or in combination to meet the RAOs. The remedial action alternatives, composed of GRAs, will be capable of achieving the RAOs for each contaminated medium at the site.

The following GRAs will be considered for soil at PSC 38:

- No Action,
- Institutional Controls and Monitoring, and
- Limited Soil Removal with LUCs.

3.6.2 Action-Specific ARARs

Action-specific ARARs and TBCs are technology- or activity-based regulatory requirements or guidance that would control or restrict remedial action. **Tables 5** and **6** present a list of Federal and state action-specific ARARs and TBCs, respectively, for this EE/CA.

3.7 ESTIMATED VALUES OF CONTAMINATED MEDIA

For remedial action purposes, preliminary volumes of contaminated soil were estimated based on the location of samples where COCs were detected in excess of PRGs. Excavation extents at PSC 38 were based on detections of arsenic and aroclor-1260 above the PRGs.

The total area of soil contaminated in excess of the USEPA industrial RSLs is estimated to be approximately 4,000 square feet (sf) and divided into two separate locations. The first location was identified based on the presence of PCBs (namely aroclor-1260) and is approximately 300 sf (**Figure 4**) with estimated impacts to a depth of 2 ft for an estimated volume of 22 cubic yards (cy). The second location was identified based on the presence of arsenic and is 3,700 sf (**Figure 5**). This impact area extends to a depth of 4 ft for an estimated volume of 550 cy.

4.0 IDENTIFICATION AND ANALYSIS OF REMOVAL ACTION ALTERNATIVES

Several technologies and process options were evaluated to achieve the RAOs for PSC 38. **Table 7** summarizes the technology screening process. The following is a summary of the technologies (with descriptions) retained from the technology screening process for development into removal action alternatives:

1) No Action
2) Institutional Controls and Monitoring
3) Excavation to Below Industrial Cleanup Criteria with LUCs, Off-Base Disposal, and Land Use Controls

A description and detailed analysis of these alternatives are provided in the following sections.

4.1 ALTERNATIVE 1: NO ACTION

This alternative is a "walk-away" alternative that is required under CERCLA to establish a basis for comparison with other alternatives. Under this alternative, the property would be released for unrestricted use. This alternative cannot be chosen if waste remains on site.

4.1.1 Effectiveness

4.1.1.1 Overall Protection of Human Health and the Environment

Alternative 1 would not provide protection of human health and the environment. The potential for direct human exposure to contaminated soil under a future residential land use scenario would remain, leading to unacceptable risks. The potential would also continue to exist for the undetected migration of soil COCs to groundwater.

4.1.1.2 Compliance with ARARs and TBCs

Alternative 1 would not comply with chemical-specific ARARs and TBCs since no action would be taken to reduce COCs concentrations. Alternative 1 would also not comply with location-specific ARARs. Action-Specific ARARs are not applicable.

4.1.1.3 Long-term Effectiveness and Permanence

Alternative 1 would have no long-term effectiveness and permanence because contaminated soil would remain on site. As there would be no institutional controls to prevent residential development, the potential would exist for future unacceptable risk to human receptors. Since there would be no monitoring, the possible migration of soil COCs to groundwater would not be detected. Although COC concentrations might eventually decrease to acceptable levels through natural attenuation, no monitoring would verify this.

4.1.1.4 Reduction of Toxicity, Mobility, or Volume through Treatment

Alternative 1 would not reduce toxicity, mobility or volume of COCs through treatment since no treatment would occur. Some reduction of toxicity or volume might occur through natural dispersion, dilution or other attenuation process but no monitoring would be performed to verify this.

4.1.1.5 Short-term Effectiveness

Since no action would occur, implementation of Alternative 1 would not pose any risks to onsite workers or result in adverse impact to the local community and the environment. Alternative 1 would not achieve the RAOs and although the soil PRGs might eventually be achieved through natural attenuation, it would not be known when.

4.1.2 Implementability

Alternative 1 would be readily implementable since there would be nothing to implement. The technical feasibility criteria, including constructability, operability and reliability, are not applicable. The implementability of administrative measures is not applicable since no such measures would be taken.

4.1.3 Cost

There would be no costs associated with Alternative 1.

4.2 ALTERNATIVE 2: INSTITUTIONAL CONTROLS AND MONITORING

Alternative 2 would consist of two major components:

1. Institutional controls and
2. Monitoring

<u>Component 1: Institutional Controls</u>

Institutional controls would consist of limiting land use to industrial purposes. A LUC Implementation Plan (LUCIP) would be prepared and implemented to ensure that, prior to any development at PSC 38, adequate measures would be taken to minimize adverse human health and environmental effects. In particular, LUCs would prevent residential development of PSC 38. Regular site inspections would be performed to verify the continued implementation of the LUCIP.

<u>Component 2: Monitoring</u>

Monitoring would consist of regularly checking COC concentrations by collecting soil samples in the areas of highest recorded contamination based on previously collected data. Monitoring would also consist of collecting groundwater samples from proposed wells in the contaminated soil and downgradient area. Soil and groundwater samples would be analyzed for COCs.

Monitoring would be conducted for 30 years and the data would be evaluated to determine the need for additional remedial action at the site. Sampling frequency would be on a five year basis. Each sampling round would consist of advancing and sampling four soil borings and sampling two monitoring wells.

Every 5 years, site reviews would be conducted to evaluate the continued adequacy of the remedial alternative. These site reviews are required because this alternative allows contaminants to remain in soil at levels that exceed PRGs.

If the 5-year site reviews indicate that COCs are migrating into groundwater at PSC 38, the site will be reevaluated at that time to determine whether excavation and disposal of all or part of the impacted soil would be necessary, or whether groundwater treatment would be necessary. Likewise, if the annual inspection indicates the site is not being properly maintained according to the LUC, the site will also be reevaluated to determine if excavation of contaminated soil is required.

4.2.1 Effectiveness

4.2.1.1 Overall Protection of Human Health and the Environment

Alternative 2 would be protective of human health and the environment. Institutional controls restricting PSC 38 to industrial use would be protective of human health by preventing unacceptable risks to future residents from direct exposure to contaminated soil. Monitoring would be protective of the environment by detecting the potential migration of soil COCs to groundwater.

4.2.1.2 Compliance with ARARs and TBCs

Alternative 2 would not comply with Federal and state chemical-specific ARARs because COC concentrations would not actively be reduced. Chemical-specific ARARs might eventually be achieved through natural attenuation. Alternative 2 would comply with all location-, and action-specific ARARs and TBCs.

4.2.1.3 Long-term Effectiveness and Permanence

Alternative 2 would provide long-term effectiveness and permanence. Although soil COC concentrations would not actively be reduced, risks to human health and the environment would be minimized through land use restrictions.

4.2.1.4 Reduction of Toxicity, Mobility, or Volume through Treatment

Alternative 2 would not reduce toxicity, mobility or volume of COCs through treatment since no treatment would occur. Some reduction of toxicity and volume might occur through natural attenuation, and this would be verified through monitoring.

4.2.1.5 Short-term Effectiveness

Alternative 2 would have minimal short-term effectiveness concerns. Any exposure of workers to contaminated soil during the collection of soil samples and the maintenance and sampling of proposed monitoring wells would be minimized by appropriate personal protection equipment (PPE) and compliance with site-specific health and safety procedures. Implementation of institutional controls and monitoring would not adversely impact the surrounding community or the environment.

The RAOs would be achieved immediately upon implementation of institutional controls and monitoring. Eventual attainment of PRGs through natural attenuation would be determined through monitoring.

4.2.2 Implementability

Alternative 2 would be easily implementable. Sampling and analysis of soil and groundwater, and performance of regular site inspections and 5-year reviews could readily be accomplished. The resources, equipment and materials for all these activities are readily available. The administrative aspects of Alternative 2 would be relatively simple to implement. No construction permit would be required for this alternative.

4.2.3 Cost

The estimated costs for Alternative 2 have been estimated as total capital costs, 30-year operation and maintenance (O&M) costs associated with the annual site inspections and five-year monitoring, and the 30-year Net Present Worth (NPW). These costs have been rounded up to the nearest $1,000 to reflect the preliminary nature of the estimates:

- Capital Cost: $18,000
- 30-Year O&M Cost: $1,000 / year; $17,000 / 5-years
- 30-Year NPW: $64,000

A detailed cost estimate for this alternative is provided in **Appendix A**.

4.3 ALTERNATIVE 3: EXCAVATION WITH LUCs

Alternative 3 would consist of two major components:

1) Excavation to industrial USEPA RSLs and off-base disposal, and
2) LUCs

Component 1: Excavation

Soil contaminated with concentrations of COCs in excess of the USEPA industrial RSLs would be excavated. An area approximately 300 sf in size (**Figure 4**) contaminated with PCBs (aroclor-1260) would be excavated to a depth of approximately 2 ft bgs. This corresponds to a volume of approximately 22 cy of excavated material. A second area of approximately 3,700 sf (**Figure 5**) contaminated with arsenic would be excavated to a depth of approximately 4 ft bgs corresponding to a volume of approximately 550 cy. Following excavation, the excavated areas would be backfilled with clean fill, graded, vegetated and the site would be restored to pre-excavation conditions.

The excavated soil would be transported to an off-base landfill permitted to accept soil contaminated with arsenic and PCBs. It is assumed that the excavated soil would be non-hazardous and would be disposed of in a Resource Conservation and Recovery Act (RCRA) Subtitle D type landfill. Samples of the excavated soil would be collected and analyzed to ensure that the soil complies with the landfill permit.

Component 2: LUCs

Institutional controls would consist of limiting land use to industrial purposes. A LUCIP would be prepared and implemented to ensure that, prior to any development at PSC 38, adequate measures would be taken to minimize adverse human health and environmental effects. In particular, LUCs would prevent residential development of PSC 38. Regular site inspections would be performed to verify the continued implementation of the LUCIP.

4.3.1 Effectiveness

4.3.1.1 Overall Protection of Human Health and the Environment

Alternative 3 would be protective of human health and the environment. Excavation of soil contaminated in excess of industrial cleanup criteria would minimize the potential for unacceptable human health risk as a result of exposure to contaminated soil. Excavation of contaminated soil would also reduce the potential for soil COCs to migrate to the groundwater.

Off-base disposal of the excavated soil at a permitted Subtitle D landfill would protect human health and the environment. Some short-term risks could be incurred by workers from exposure to contaminated soil during on site remedial activities. The potential for exposure would be minimized by the implementation of engineering controls (e.g., dust suppression), the wearing of appropriate PPE and compliance with Occupational Safety and Health Administration (OSHA) regulations and site-specific health and safety

procedures. Potential negative short-term impacts to the surrounding community and environment from fugitive emissions and/or spillage of contaminated soil could be minimized through the implementation of appropriate monitoring and engineering controls (e.g., perimeter air monitoring, spill prevention procedures, etc.).

4.3.1.2 Compliance with ARARs and TBCs

Alternative 3 would comply with chemical-, location- and action-specific ARARs and TBCs.

4.3.1.3 Long-term Effectiveness and Permanence

Alternative 3 would provide long-term effectiveness and permanence. Excavation of soil with COC concentrations in excess of the USEPA industrial RSLs would effectively reduce the potential for unacceptable human health risk to future site workers. Excavation would also effectively reduce the potential for COC migration from soil to groundwater. Off-base disposal would effectively minimize adverse impacts from contaminated soil on human health and the environment.

4.3.1.4 Reduction of Toxicity, Mobility, or Volume through Treatment

Alternative 3 would reduce the volume of contaminants through excavation and offsite disposal at an approved facility.

4.3.1.5 Short-term Effectiveness

Implementation of the excavation and off-base disposal components of Alternative 3 could expose construction workers to contaminated soil. This potential for exposure would be minimized by the implementation of engineering controls, such as dust suppression, and air quality monitoring. The potential for worker exposure would be further reduced by the wearing of appropriate PPE, compliance with applicable OSHA regulations and proper site-specific health and safety procedures.

Implementation of the excavation and off-site disposal components are not expected to adversely impact either the surrounding community or the environment. Measures such as spill prevention and containment, erosion and sedimentation control, perimeter air monitoring and traffic control would be taken to insure that the impact remains acceptable.

4.3.2 Implementability

Alternative 3 would be easily implementable. The excavation component of this alternative could be performed with standard resources, equipment and materials that would be readily available for this

purpose. Since the excavation would be limited to 4 ft bgs, the need for shoring and dewatering would be minimal.

The administrative aspects of Alternative 3 would be relatively simple to implement. A construction permit would have to be obtained. The off-site transportation and disposal of the excavated soil would require the completion of relatively numerous administrative procedures which, while constituting a significant effort, could readily be accomplished. Permitted Subtitle D landfills with non-hazardous landfilling capabilities are readily available which would make implementation of this alternative relatively easy.

4.3.3 Cost

The estimated costs for Alternative 3, provided as total capital costs, 30-year O&M costs and the 30-year NPW, are as follows:

- Capital Cost: $210,000
- 30-Year O&M Cost: $1,000 / year; $7,000 / 5-years
- 30-Year NPW: $236,000

A detailed cost estimate for this alternative is provided in **Appendix A**.

5.0 COMPARATIVE ANALYSIS OF REMEDIAL ACTION ALTERNATIVES

This section compares the analyses that were presented for each of the remedial alternatives in **Section 4.0** of this EE/CA. The criteria for comparison are identical to those used for the detailed analysis of individual alternatives.

5.1 COMPARISON OF SOIL REMEDIAL ALTERNATIVES BY CRITERIA

The following remedial alternatives for soil are being compared in this section:

1) No Action
2) Institutional Controls and Monitoring
3) Excavation to Below Industrial Cleanup Criteria with LUCs and Off-Base Disposal

5.1.1 Overall Protection of Health and Environment

Alternative 1 would not provide protection of human health or the environment because the potential would remain for unacceptable risk due to direct exposure to contaminated soil and future development.

Potential for the migration of soil COCs to groundwater would remain and, since no monitoring would be performed, this migration would remain unknown.

Alternative 2 would be protective of human health and the environment. Institutional controls would provide protection by preventing residential development. Monitoring would provide protection by detecting potential migration of soil COCs to the groundwater. Some potentially adverse ecological risk would remain because of residual metals contamination in the soil.

Alternative 3 would be the most protective alternative. Soil contaminated above industrial PRGs would be excavated and taken to an off-base permitted landfill for disposal. LUCs would prevent unacceptable risk from future site development.

5.1.2 Compliance with ARARs and TBCs

Alternative 1 would not comply with chemical-specific ARARs. No action-specific ARARs or TBCs apply to this alternative.

Alternative 2 would not comply with chemical-specific ARARs and TBCs because COC concentrations would not actively be reduced. Chemical-specific ARARs might eventually be achieved through natural attenuation. Alternative 2 would comply with all location- and action-specific ARARs and TBCs.

Alternative 3 would comply with state and Federal chemical-, location- and action-specific ARARs and TBCs.

5.1.3 Long-term Effectiveness and Permanence

Alternative 1 would have very limited long-term effectiveness and permanence because contaminated soil would remain on site. Since there would be no institutional controls to prevent residential development, the potential would continue to exist for unacceptable risk to develop for possible future residents. Residential development at PSC 38 could also result in unacceptable risk to a correspondingly increased population of ecological receptors from exposure to contaminated soil. Since there would be no monitoring, potential migration of soil COCs to groundwater would go undetected.

Alternative 2 would provide long-term effectiveness and permanence provided leaching does not occur. Institutional controls including prevention of residential development would effectively and permanently

reduce the risk from direct exposure of human and ecological receptors to contaminated soil. Long-term monitoring would be effective for the detection of potential migration of soil COCs to the groundwater.

Alternative 3 would offer the best long-term effectiveness and permanence. Soil contaminated above the industrial PRGs would be excavated and taken to a permitted off-base landfill. These remedial actions would effectively reduce the risk from direct exposure to contaminated soil and the potential for soil COCs to migrate to the groundwater.

5.1.4 Reduction of Toxicity, Mobility, or Volume through Treatment

Alternative 1 would not achieve reduction of toxicity, mobility or volume of contaminants through treatment. This alternative might achieve some reduction of contaminant toxicity and volume through natural processes but this would not be verified through monitoring.

Alternative 2 would not reduce contaminant toxicity, mobility and volume through treatment because no treatment would occur. Some reduction in toxicity and volume might occur through natural attenuation and this would be verified through monitoring.

Alternative 3 would best reduce contaminant toxicity, mobility and volume through offsite disposal. The excavation of contaminated soil at PSC 38 would permanently reduce the volume of the COCs.

5.1.5 Short-term Effectiveness

Implementation of Alternative 1 would not result in risks to remedial workers or adversely impact the surrounding community or environment since no remedial activities would be performed. Alternative 1 would not achieve the RAOs, although the soil PRGs might eventually be achieved over time through natural processes, this would not be verified through monitoring.

Alternative 2 would have minimal short-term effectiveness concerns. Any exposure of workers to contaminated soil during the collection of soil samples and the maintenance and sampling of proposed monitoring wells would be minimized by appropriate PPE and compliance with site-specific health and safety procedures. Implementation of institutional controls and monitoring would not adversely impact the surrounding community or the environment. The RAOs would be achieved immediately upon implementation of institutional controls and monitoring. Eventual attainment of PRGs through natural attenuation is unlikely do to the nature of the COCs.

Implementation of Alternative 3 would result in a greater possibility of exposing construction workers to contaminated soil during the excavation and off-base transportation and disposal activities. However, these risks of exposure would be effectively controlled by the implementation of engineering controls (e.g., dust suppression), by the wearing of appropriate PPE and by compliance with applicable OSHA regulations and proper site-specific health and safety procedures. With the implementation of Alternative 3, there will be a slight risk to the surrounding community during the transportation of the contaminated soil to the off-base landfill. This risk would be controlled through adherence to Department of Transportation regulations and implementation of traffic control and spill prevention measures.

5.1.6 Implementability

Alternative 1 would be very simple to implement since no action would occur. The technical feasibility criteria, including constructability, operability and reliability, are not applicable. The implementation of administrative measures is not applicable because no such measures would be taken.

Alternative 2 would be readily implementable. Maintenance of monitoring wells, sampling and analysis of soil and groundwater and performance of regular site inspections and 5-year reviews could readily be accomplished. The resources, equipment and materials required for all these activities are readily available. The administrative aspects of Alternative 2 would be relatively simple to implement. No construction permit would be required for this alternative. Appropriate provisions will be incorporated into the LUCIP to ensure continued implementation of land use restrictions and monitoring.

Alternative 3 would be relatively easy to implement. The necessary resources are readily available for the excavation and disposal of contaminated soil. Long-term institutional controls and monitoring would also be easy to implement. Administratively, implementation of Alternative 3 would require a construction permit for soil excavation, manifesting and landfill acceptance of the excavated soil.

5.1.7 Cost

The capital and O&M costs and NPW of the soil alternatives are as follows. Costs have been rounded to the nearest $1,000 to reflect the preliminary nature of the estimates. Detailed cost estimates are provided in **Appendix A**.

Alternative	Capital ($)	NPW of O&M ($)	NPW ($)
1	0	0	0
2	18,000	46,000	64,000
4	210,000	26,000	236,000

5.2 SUMMARY OF COMPARATIVE ANALYSIS OF SOIL REMEDIAL ALTERNATIVES

Table 8 summarizes the comparative analysis of the three soil remedial alternatives.

6.0 RECOMMENDED REMEDIAL ACTION ALTERNATIVE

This section provides a recommendation for selection of an alternative to address soil contamination identified at PSC 38. As presented in the previous sections, the alternatives evaluated include:

1) Alternative 1: No Action
2) Alternative 2: Institutional Controls and Monitoring
3) Alternative 3: Excavation to Industrial USEPA RSLs with LUCs

It is not acceptable to select the No Action alternative; it is used only for comparison. Alternatives 2 and 3 are both technically feasible and environmentally acceptable. Alternative 2 is less expensive, but Alternative 3 will permit greater flexibility of use of the site and provide greater protection for future human contact with soil.

It is anticipated that PSC 38 and surrounding area will continue to have industrial use for the foreseeable future. Implementing Alternative 3, however, would reduce the future risk of direct exposure to site maintenance, utility and construction workers. For this reason, Alternative 3, excavating contaminated soil exceeding USEPA industrial RSLs with off-base disposal and LUCs is the recommended alternative for this remedial action.

7.0 REFERENCES

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Toth, D. J., 1990. *Geohydrologic Summary of the Floridan Aquifer in Coastal Areas of Nassau, Duval, and Northern St. Johns Counties*: St. Johns River Water Management District Technical Publication SJ90-5, Palatka, Florida.

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FIGURES

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SITE LOCATION MAP
PSC 38
NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA

FIGURE:
1

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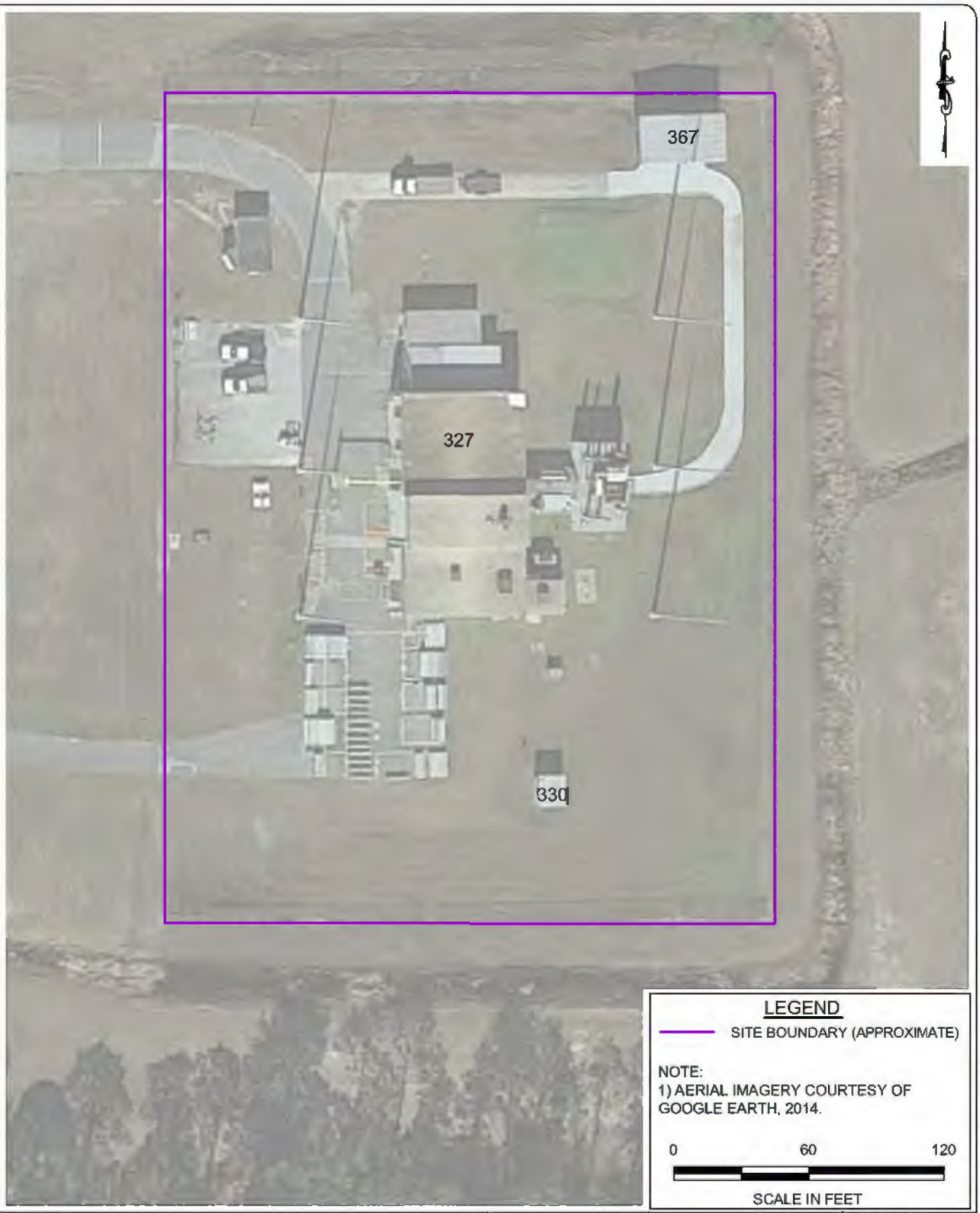

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SITE MAP
PSC 38 - TORPEDO REWORK FACILITY
NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA

FIGURE:
2

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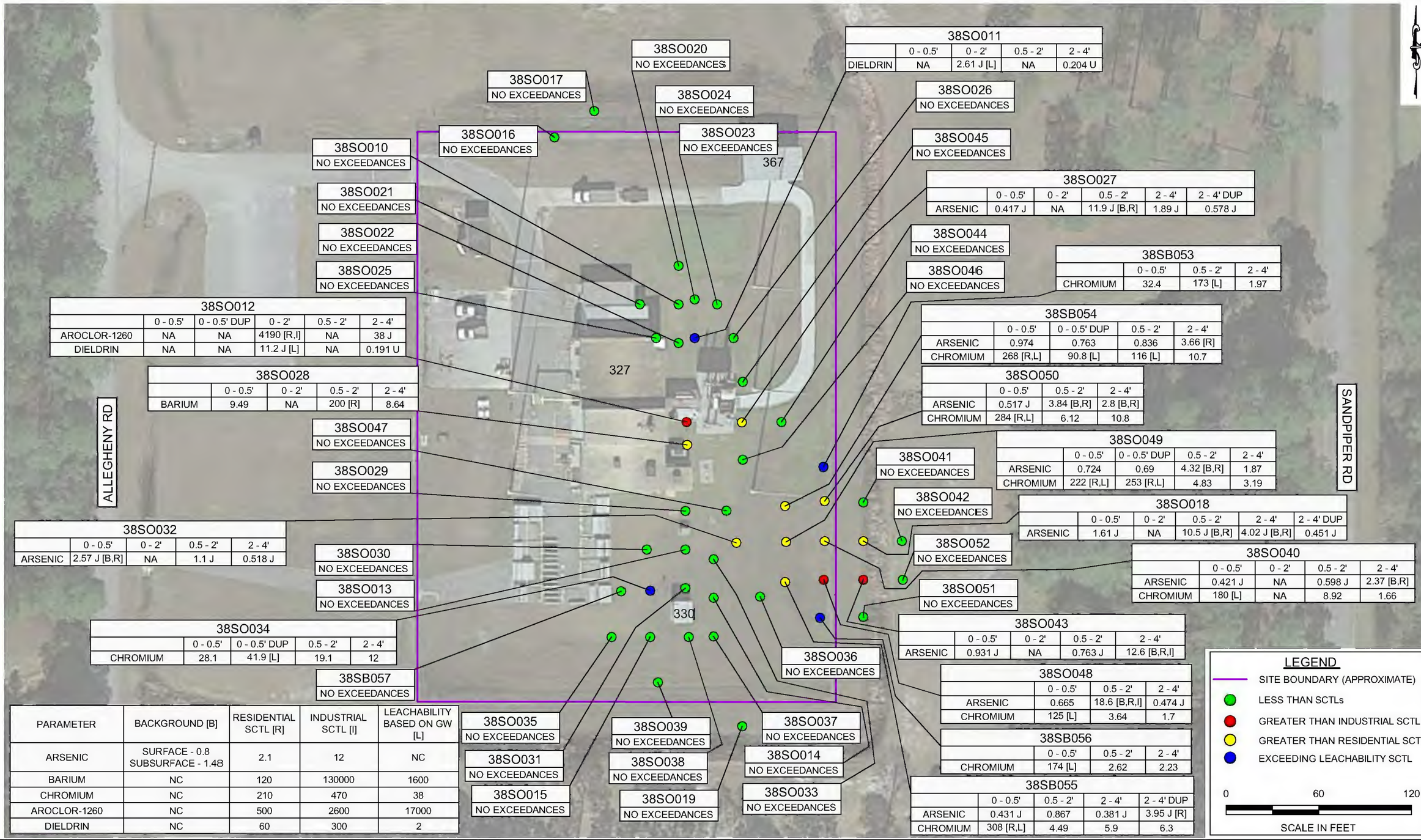

38SO011

	0 - 0.5'	0 - 2'	0.5 - 2'	2 - 4'
DIELDRIN	NA	2.61 J [L]	NA	0.204 U

38SO027

	0 - 0.5'	0 - 2'	0.5 - 2'	2 - 4'	2 - 4' DUP
ARSENIC	0.417 J	NA	11.9 J [B,R]	1.89 J	0.578 J

38SB053

	0 - 0.5'	0.5 - 2'	2 - 4'
CHROMIUM	32.4	173 [L]	1.97

38SB054

	0 - 0.5'	0 - 0.5' DUP	0.5 - 2'	2 - 4'
ARSENIC	0.974	0.763	0.836	3.66 [R]
CHROMIUM	268 [R,L]	90.8 [L]	116 [L]	10.7

38SO012

	0 - 0.5'	0 - 0.5' DUP	0 - 2'	0.5 - 2'	2 - 4'
AROCLOR-1260	NA	NA	4190 [R,I]	NA	38 J
DIELDRIN	NA	NA	11.2 J [L]	NA	0.191 U

38SO028

	0 - 0.5'	0 - 2'	0.5 - 2'	2 - 4'
BARIUM	9.49	NA	200 [R]	8.64

38SO050

	0 - 0.5'	0.5 - 2'	2 - 4'
ARSENIC	0.517 J	3.84 [B,R]	2.8 [B,R]
CHROMIUM	284 [R,L]	6.12	10.8

38SO049

	0 - 0.5'	0 - 0.5' DUP	0.5 - 2'	2 - 4'
ARSENIC	0.724	0.69	4.32 [B,R]	1.87
CHROMIUM	222 [R,L]	253 [R,L]	4.83	3.19

38SO018

	0 - 0.5'	0 - 2'	0.5 - 2'	2 - 4'	2 - 4' DUP
ARSENIC	1.61 J	NA	10.5 J [B,R]	4.02 J [B,R]	0.451 J

38SO032

	0 - 0.5'	0 - 2'	0.5 - 2'	2 - 4'
ARSENIC	2.57 J [B,R]	NA	1.1 J	0.518 J

38SO040

	0 - 0.5'	0 - 2'	0.5 - 2'	2 - 4'
ARSENIC	0.421 J	NA	0.598 J	2.37 [B,R]
CHROMIUM	180 [L]	NA	8.92	1.66

38SO034

	0 - 0.5'	0 - 0.5' DUP	0.5 - 2'	2 - 4'
CHROMIUM	28.1	41.9 [L]	19.1	12

38SO043

	0 - 0.5'	0 - 2'	0.5 - 2'	2 - 4'
ARSENIC	0.931 J	NA	0.763 J	12.6 [B,R,I]

38SO048

	0 - 0.5'	0.5 - 2'	2 - 4'
ARSENIC	0.665	18.6 [B,R,I]	0.474 J
CHROMIUM	125 [L]	3.64	1.7

38SB056

	0 - 0.5'	0.5 - 2'	2 - 4'
CHROMIUM	174 [L]	2.62	2.23

38SB055

	0 - 0.5'	0.5 - 2'	2 - 4'	2 - 4' DUP
ARSENIC	0.431 J	0.867	0.381 J	3.95 J [R]
CHROMIUM	308 [R,L]	4.49	5.9	6.3

PARAMETER	BACKGROUND [B]	RESIDENTIAL SCTL [R]	INDUSTRIAL SCTL [I]	LEACHABILITY BASED ON GW [L]
ARSENIC	SURFACE - 0.8 SUBSURFACE - 1.48	2.1	12	NC
BARIUM	NC	120	130000	1600
CHROMIUM	NC	210	470	38
AROCLOR-1260	NC	500	2600	17000
DIELDRIN	NC	60	300	2

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SOURCE: DRAFT RI REPORT FOR POTENTIAL SOURCE OF CONTAMINATION 38 TORPEDO REWORK FACILITY (TETRA TECH, 20144)

NOTES:
1) AERIAL IMAGERY COURTESY OF GOOGLE EARTH, 2014.
2) "SO" LOCATIONS BASED ON NIRIS COORDINATES, "SB" LOCATIONS AND 38SO057 BASED ON DRAFT RI REPORT LOCATIONS.
3) NC = NO CRITERION

RI SOIL
CONTAMINANT CONCENTRATION MAP

NAVAL AIR STATION JACKSONVILLE
PSC 38 -TORPEDO REWORK FACILITY
JACKSONVILLE, FLORIDA

FIGURE: 3

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PROPOSED SOIL EXCAVATION: PCBs
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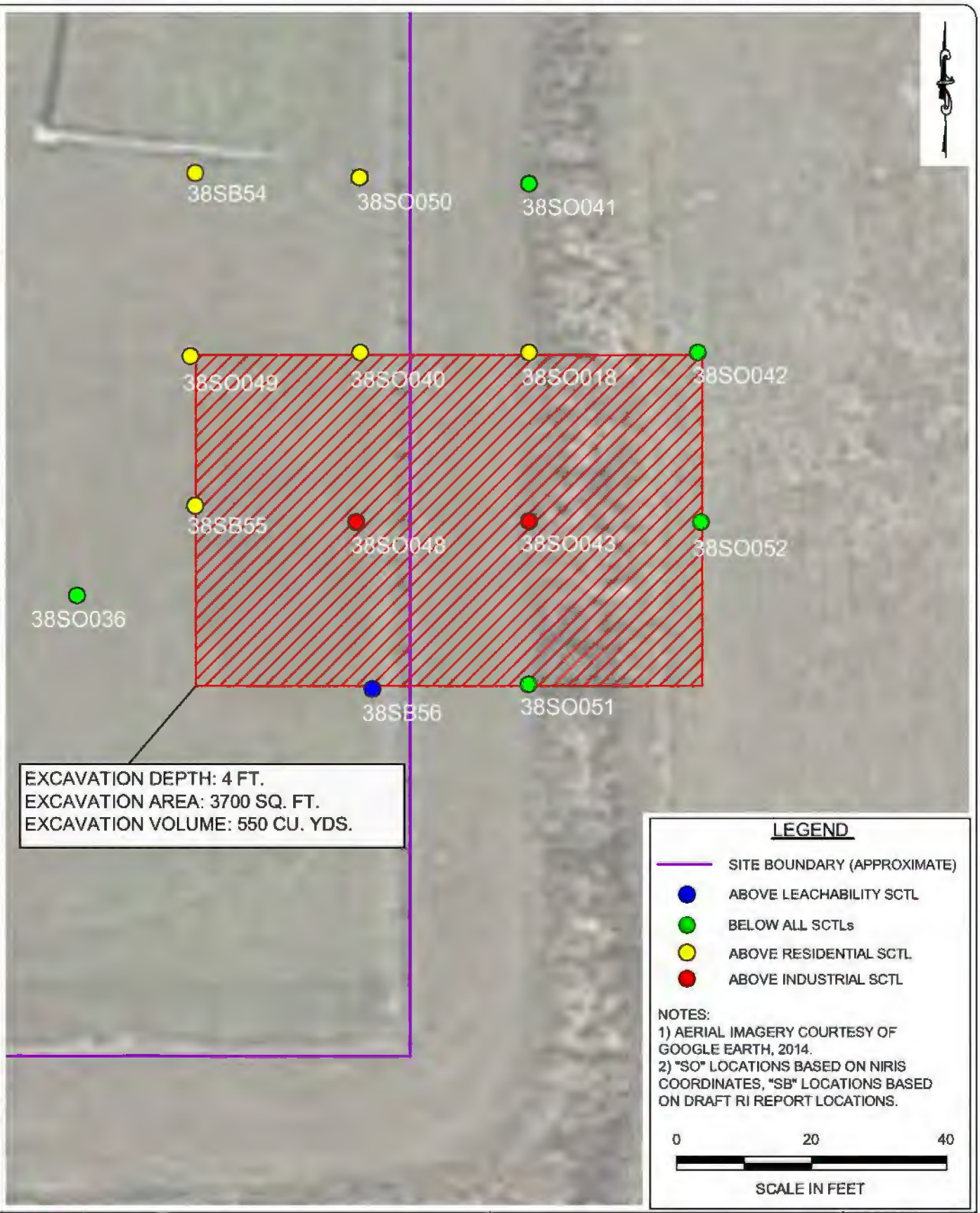
NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA

FIGURE:
4



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PROPOSED SOIL EXCAVATION: ARSENIC
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NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA

FIGURE: 5

TABLES

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SB010-0204	38SS010-0002	38SS010-000X	38SS010-0X02	38SB011-0204	38SS011-0002	38SS011-000X	38SS011-0X02	38SB012-0204
SAMPLE DATE					3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**896**	NA	**1700**	**706**	**1450**	NA	**1790**	**554**	**2190**
ANTIMONY	NC	27	370	5.4	0.304 UJ	NA	0.277 UJ	0.28 UJ	0.292 UJ	NA	0.274 UJ	0.298 UJ	0.281 UJ
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.321 J**	NA	**0.374 J**	**0.192 J**	**0.302 J**	NA	**0.338 J**	**0.211 J**	**0.404 J**
BARIUM	NC	120	130000	1600	**13.3**	NA	**9.71**	**8.09**	**8.53**	NA	**9.68**	**5.13**	**10.1**
BERYLLIUM	NC	120	1400	63	0.0608 U	NA	0.0553 U	0.0559 U	0.0584 U	NA	0.0548 U	0.0597 U	0.0562 U
CADMIUM	NC	82	1700	7.5	0.0608 U	NA	**0.241 J**	0.0559 U	0.0584 U	NA	**0.187 J**	0.0597 U	**1.02**
CALCIUM	NC	NC	NC	NC	**1140**	NA	**1190**	**679**	**666**	NA	**755**	**414**	**722**
CHROMIUM	NC	210	470	38	**1.19**	NA	**2.7**	**1.2**	**1.54**	NA	**4.75**	**1.19**	**5.85**
COBALT	NC	1700	42000	NC	0.304 U	NA	0.277 U	0.28 U	0.292 U	NA	0.274 U	0.298 U	0.281 U
COPPER	NC	150	89000	NC	**0.659 J**	NA	**5.34 J**	**1.27 J**	**0.246 J**	NA	**6.15 J**	**1.33 J**	**16.8 J**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**691**	NA	**997**	**841**	**497**	NA	**1160**	**412**	**2260**
LEAD	NC	400	1400	NC	**5.76 J**	NA	**12 J**	**12.8 J**	**2.77 J**	NA	**36.8 J**	**4.09 J**	**17.9 J**
MAGNESIUM	NC	NC	NC	NC	60.8 U	NA	55.3 U	55.9 U	58.4 U	NA	**99.1 J**	59.7 U	**124 J**
MANGANESE	NC	3500	43000	NC	**3.3**	NA	**7.29**	**4.6**	**2.97**	NA	**5.99**	**2.61**	**4.98**
MERCURY	NC	3	17	2.1	**0.0352 J**	NA	**0.0226 J**	**0.0178 J**	**0.0168 J**	NA	**0.0568**	**0.0146 J**	**0.0286 J**
NICKEL	NC	340	35000	130	**0.35 J**	NA	**0.803**	**0.437 J**	**0.376 J**	NA	**1.1**	**0.266 J**	**0.81**
POTASSIUM	NC	NC	NC	NC	60.8 U	NA	55.3 U	55.9 U	58.4 U	NA	54.8 U	59.7 U	56.2 U
SELENIUM	NC	440	11000	5.2	0.182 U	NA	0.166 U	0.168 U	0.175 U	NA	0.164 U	0.179 U	0.168 U
SILVER	NC	410	8200	17	0.0608 U	NA	0.0553 U	0.0559 U	0.0584 U	NA	0.0548 U	0.0597 U	0.0562 U
VANADIUM	NC	67	10000	980	**2.49**	NA	**2.97**	**1.45**	**1.56**	NA	**4.04**	**1.89**	**3.9**
ZINC	NC	26000	630000	NC	**0.651 J**	NA	**24.6 J**	**3.36 J**	**0.592 J**	NA	**31.5 J**	**2.57 J**	**61.9 J**
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	5 U	4.34 U	NA	NA	5.05 U	**197 J**	NA	NA	**38 J**
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	**1.42 J**	0.176 U	NA	NA	**3.38 J**	**2.05 J**	NA	NA	0.191 U
4,4'-DDE	NC	2900	15000	18000	**5.63**	0.176 U	NA	NA	**3.27**	**10.3 J**	NA	NA	0.191 U
4,4'-DDT	NC	2900	15000	11000	**0.51 J**	0.176 U	NA	NA	**0.326 J**	**2.26 J**	NA	NA	**0.807 J**
ALDRIN	NC	60	300	200	0.131 U	0.114 U	NA	NA	0.132 U	**1.63 J**	NA	NA	**0.977**
ALPHA-CHLORDANE	NC	NC	NC	NC	0.131 U	0.114 U	NA	NA	**5.22**	**691 J**	NA	NA	**5.08 J**
BETA-BHC	NC	500	2400	1	0.131 U	0.114 U	NA	NA	0.132 U	**0.649 J**	NA	NA	0.124 U
DELTA-BHC	NC	24000	490000	200	0.131 U	0.114 U	NA	NA	0.132 U	**1.19 J**	NA	NA	**1.17 J**
DIELDRIN	NC	60	300	2	0.202 U	0.176 U	NA	NA	0.204 U	**2.61 J**	NA	NA	0.191 U
ENDOSULFAN I	NC	NC	NC	NC	0.131 U	0.114 U	NA	NA	0.132 U	**1.47 J**	NA	NA	0.124 U
ENDOSULFAN II	NC	NC	NC	NC	0.202 U	0.176 U	NA	NA	0.204 U	**3.45 J**	NA	NA	**1.49**
ENDOSULFAN SULFATE	NC	NC	NC	NC	0.202 U	0.176 U	NA	NA	0.204 U	**0.494 J**	NA	NA	0.191 U
ENDRIN	NC	25000	510000	1000	0.202 U	0.176 U	NA	NA	0.204 U	**3.51 J**	NA	NA	**1.58 J**
ENDRIN ALDEHYDE	NC	NC	NC	NC	0.202 U	0.176 U	NA	NA	0.204 U	**1.42 J**	NA	NA	0.191 U
ENDRIN KETONE	NC	NC	NC	NC	0.202 U	0.176 U	NA	NA	0.204 U	0.183 U	NA	NA	0.191 U
GAMMA-BHC (LINDANE)	NC	700	2500	9	0.131 U	0.114 U	NA	NA	0.132 U	**0.421 J**	NA	NA	0.124 U
GAMMA-CHLORDANE	NC	NC	NC	NC	0.131 U	0.114 U	NA	NA	**6.12 J**	**739 J**	NA	NA	**4.06 J**
HEPTACHLOR	NC	200	1000	23000	0.131 U	0.114 U	NA	NA	0.132 U	**2.67 J**	NA	NA	**0.23 J**
HEPTACHLOR EPOXIDE	NC	100	500	600	0.131 U	0.114 U	NA	NA	0.132 U	**6.46 J**	NA	NA	**0.476 J**
METHOXYCHLOR	NC	420000	8800000	160000	0.131 U	0.114 U	NA	NA	0.132 U	0.118 U	NA	NA	0.124 U
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	0.00198 U	NA	0.00186 U	0.00184 U	0.00198 U	NA	**0.0043 J**	0.00199 U	0.00184 U
ANTHRACENE	NC	21000	300000	2500	0.00198 U	NA	0.00186 U	0.00184 U	0.00198 U	NA	0.00181 U	0.00199 U	0.00184 U
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	0.00198 U	NA	0.00186 U	0.00184 U	0.00198 U	NA	**0.0119**	0.00199 U	0.00184 U
BENZO(A)PYRENE	NC	0.1	0.7	8	0.00198 U	NA	0.00186 U	0.00184 U	0.00198 U	NA	**0.0187**	0.00199 U	0.00184 U

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	**Background**	**Residential SCTL**	**Industrial SCTL**	**Leachability based on GW**	**38SB010-0204**	**38SS010-0002**	**38SS010-000X**	**38SS010-0X02**	**38SB011-0204**	**38SS011-0002**	**38SS011-000X**	**38SS011-0X02**	**38SB012-0204**
SAMPLE DATE					3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	0.00198 U	NA	0.00186 U	0.00184 U	0.00198 U	NA	**0.0183**	0.00199 U	0.00184 U
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	0.00198 U	NA	0.00186 U	0.00184 U	0.00198 U	NA	**0.0162**	0.00199 U	**0.00516 J**
BENZO(K)FLUORANTHENE	NC	NC	NC	24	0.00198 U	NA	0.00186 U	0.00184 U	0.00198 U	NA	**0.0176**	0.00199 U	0.00184 U
CHRYSENE	NC	NC	NC	77	**0.00538 J**	NA	0.00186 U	0.00184 U	0.00198 U	NA	**0.0173**	0.00199 U	0.00184 U
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	0.00198 U	NA	0.00186 U	0.00184 U	0.00198 U	NA	0.00181 U	0.00199 U	0.00184 U
FLUORANTHENE	NC	3200	59000	1200	**0.00725 J**	NA	**0.00409 J**	0.00184 U	0.00198 U	NA	**0.0247**	0.00199 U	**0.00376 J**
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	0.00198 U	NA	0.00186 U	0.00184 U	0.00198 U	NA	**0.0118**	0.00199 U	0.00184 U
PHENANTHRENE	NC	2200	36000	250	**0.00726 J**	NA	0.00186 U	0.00184 U	0.00198 U	NA	**0.00676 J**	0.00199 U	0.00184 U
PYRENE	NC	2400	45000	880	**0.00531 J**	NA	0.00186 U	0.00184 U	0.00198 U	NA	**0.0264**	0.00199 U	**0.00344 J**
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	**0.121 J**	NA	0.0926 U	**0.123 J**	**0.165 J**	NA	0.0903 U	0.0994 U	0.0918 U
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	0.0985 U	NA	0.0926 U	0.0916 U	0.0988 U	NA	0.0903 U	0.0994 U	**0.179 J**
CAPROLACTAM	NC	NC	NC	NC	0.0985 U	NA	**0.387 J**	0.0916 U	**0.322 J**	NA	0.0903 U	0.0994 U	**0.675 J**
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	0.0985 U	NA	0.0926 U	0.0916 U	**0.101 J**	NA	0.0903 U	0.0994 U	0.0918 U
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	4.22 U	NA	NA	2.51 U	2.6 U	NA	NA	2.21 U	2.22 U
ACETONE	NC	11000000	68000000	25000	**10.6 J**	NA	NA	**5.03 J**	**41 J**	NA	NA	4.41 UJ	4.44 UJ
METHYL ACETATE	NC	6800000	38000000	16000	**13.2 J**	NA	NA	2.51 U	2.6 U	NA	NA	2.21 U	2.22 U

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS012-0002	38SS012-000X	38SS012-000X-D	38SS012-0X02	38SB013-0204	38SS013-0002	38SS013-000X	38SS013-0X02	38SB014-0204
SAMPLE DATE					3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	NA	**3080**	**4430**	**2400**	**249**	NA	**696**	**289**	**218**
ANTIMONY	NC	27	370	5.4	NA	0.319 UJ	0.258 UJ	0.282 UJ	0.266 UJ	NA	0.296 UJ	0.32 UJ	1.36 UJ
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	NA	**0.662**	**0.579**	**0.615**	**0.692**	NA	**0.44 J**	**0.361 J**	0.813 U
BARIUM	NC	120	130000	1600	NA	**10**	**8.85**	**8.37**	**0.938 J**	NA	**2.82**	**1.22 J**	**13.3**
BERYLLIUM	NC	120	1400	63	NA	0.0638 U	0.0517 U	0.0565 U	0.0532 U	NA	0.0593 U	0.0639 U	0.271 U
CADMIUM	NC	82	1700	7.5	NA	**0.882**	0.0517 U	**0.611**	0.0532 U	NA	**0.116 J**	0.0639 U	0.271 U
CALCIUM	NC	NC	NC	NC	NA	**2510 J**	**307 J**	**8400**	53.2 U	NA	**160 J**	**65.2 J**	271 U
CHROMIUM	NC	210	470	38	NA	**10.1 J**	**5.23 J**	**10.2**	**0.784**	NA	**1.63**	**0.715**	**0.565 J**
COBALT	NC	1700	42000	NC	NA	**0.409 J**	0.258 U	**0.375 J**	0.266 U	NA	0.296 U	0.32 U	1.36 U
COPPER	NC	150	89000	NC	NA	**7.05 J**	**0.85 J**	**4.92 J**	0.213 UJ	NA	**1.33 J**	**0.47 J**	1.08 UJ
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	NA	**1880**	**1900**	**1690**	**1780**	NA	**1200**	**899**	**415**
LEAD	NC	400	1400	NC	NA	**23.5 J**	**4.16 J**	**18.9 J**	**1.05 J**	NA	**3.35 J**	**1.28 J**	**1.42 J**
MAGNESIUM	NC	NC	NC	NC	NA	**208 J**	**155 J**	**223 J**	53.2 U	NA	59.3 U	63.9 U	271 U
MANGANESE	NC	3500	43000	NC	NA	**6.93 J**	**2.4 J**	**6.45**	**1.01**	NA	**1.96**	**0.716 J**	**2.84 J**
MERCURY	NC	3	17	2.1	NA	0.016 U	0.0123 U	**0.0418**	0.0119 U	NA	**0.0157 J**	0.0143 U	**0.0151 J**
NICKEL	NC	340	35000	130	NA	**2.59**	**0.663**	**2.13**	0.16 U	NA	**0.282 J**	0.192 U	0.813 U
POTASSIUM	NC	NC	NC	NC	NA	**125 J**	**122 J**	**108 J**	53.2 U	NA	59.3 U	63.9 U	271 U
SELENIUM	NC	440	11000	5.2	NA	**0.204 J**	0.155 U	**0.199 J**	0.16 U	NA	0.178 U	0.192 U	0.813 U
SILVER	NC	410	8200	17	NA	**0.243 J**	0.0517 U	**0.163 J**	0.0532 U	NA	0.0593 U	0.0639 U	0.271 U
VANADIUM	NC	67	10000	980	NA	**5.96**	**7.02**	**4.97**	**1.12**	NA	**2.13**	**0.98**	1.36 U
ZINC	NC	26000	630000	NC	NA	**17.7 J**	**2.26 J**	**16.9 J**	**0.494 J**	NA	**3.28 J**	**1.36 J**	1.36 UJ
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	**4190**	NA	NA	NA	4.27 U	**133 J**	NA	NA	4.54 U
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	1.88 U	NA	NA	NA	0.173 U	0.171 U	NA	NA	0.184 U
4,4'-DDE	NC	2900	15000	18000	1.88 U	NA	NA	NA	0.173 U	0.171 U	NA	NA	0.184 U
4,4'-DDT	NC	2900	15000	11000	**45.4 J**	NA	NA	NA	0.173 U	0.171 U	NA	NA	0.184 U
ALDRIN	NC	60	300	200	0.121 U	NA	NA	NA	0.112 U	0.111 U	NA	NA	0.119 U
ALPHA-CHLORDANE	NC	NC	NC	NC	1.21 U	NA	NA	NA	0.112 U	0.111 U	NA	NA	0.119 U
BETA-BHC	NC	500	2400	1	0.121 U	NA	NA	NA	0.112 U	0.111 U	NA	NA	0.119 U
DELTA-BHC	NC	24000	490000	200	0.121 U	NA	NA	NA	0.112 U	0.111 U	NA	NA	0.119 U
DIELDRIN	NC	60	300	2	**11.2 J**	NA	NA	NA	0.173 U	**0.368 J**	NA	NA	0.184 U
ENDOSULFAN I	NC	NC	NC	NC	0.121 U	NA	NA	NA	0.112 U	0.111 U	NA	NA	0.119 U
ENDOSULFAN II	NC	NC	NC	NC	0.188 U	NA	NA	NA	0.173 U	0.171 U	NA	NA	0.184 U
ENDOSULFAN SULFATE	NC	NC	NC	NC	0.188 U	NA	NA	NA	0.173 U	0.171 U	NA	NA	0.184 U
ENDRIN	NC	25000	510000	1000	**42.9 J**	NA	NA	NA	0.173 U	**0.729 J**	NA	NA	0.184 U
ENDRIN ALDEHYDE	NC	NC	NC	NC	**7.81 J**	NA	NA	NA	0.173 U	**0.205 J**	NA	NA	0.184 U
ENDRIN KETONE	NC	NC	NC	NC	**4.2 J**	NA	NA	NA	0.173 U	0.171 U	NA	NA	0.184 U
GAMMA-BHC (LINDANE)	NC	700	2500	9	0.121 U	NA	NA	NA	0.112 U	0.111 U	NA	NA	0.119 U
GAMMA-CHLORDANE	NC	NC	NC	NC	1.21 U	NA	NA	NA	0.112 U	0.111 U	NA	NA	0.119 U
HEPTACHLOR	NC	200	1000	23000	0.121 U	NA	NA	NA	0.112 U	0.111 U	NA	NA	0.119 U
HEPTACHLOR EPOXIDE	NC	100	500	600	0.121 U	NA	NA	NA	0.112 U	0.111 U	NA	NA	0.119 U
METHOXYCHLOR	NC	420000	8800000	160000	1.21 U	NA	NA	NA	0.112 U	0.111 U	NA	NA	0.119 U
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	0.00205 U	0.00174 U	0.00174 U	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
ANTHRACENE	NC	21000	300000	2500	NA	**0.00437 J**	0.00174 U	**0.00539 J**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	**0.0174**	0.00174 U	**0.0386**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	**0.0187**	0.00174 U	**0.0436**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	**Background**	**Residential SCTL**	**Industrial SCTL**	**Leachability based on GW**	**38SS012-0002**	**38SS012-000X**	**38SS012-000X-D**	**38SS012-0X02**	**38SB013-0204**	**38SS013-0002**	**38SS013-000X**	**38SS013-0X02**	**38SB014-0204**
SAMPLE DATE					3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	0.00205 U	0.00174 U	**0.0491**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	**0.0145**	0.00174 U	**0.0274**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	0.00205 U	0.00174 U	**0.0425**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
CHRYSENE	NC	NC	NC	77	NA	**0.0207**	0.00174 U	**0.0452**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	0.00205 U	0.00174 U	**0.00584 J**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
FLUORANTHENE	NC	3200	59000	1200	NA	**0.0365 J**	0.00174 UJ	**0.0553**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	**0.013**	0.00174 U	**0.0264**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
PHENANTHRENE	NC	2200	36000	250	NA	**0.0168**	0.00174 U	**0.0176**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
PYRENE	NC	2400	45000	880	NA	**0.0329 J**	0.00174 UJ	**0.0495**	0.00174 U	NA	0.00189 U	0.00218 U	0.00178 U
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	0.102 U	0.0868 U	0.0866 U	0.0868 U	NA	0.0942 U	0.109 U	**0.122 J**
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	**0.149 J**	0.0868 U	0.0866 U	0.0868 U	NA	0.0942 U	0.109 U	0.0889 U
CAPROLACTAM	NC	NC	NC	NC	NA	**0.327 J**	0.0868 U	0.0866 U	0.0868 U	NA	0.0942 U	**0.328 J**	0.0889 U
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	0.102 U	0.0868 U	0.0866 U	0.0868 U	NA	0.0942 U	0.109 U	0.0889 U
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	2.38 U	2.67 U	NA	NA	3.26 U	2.73 U
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	4.76 UJ	5.34 UJ	NA	NA	6.52 UJ	5.47 UJ
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	2.38 U	2.67 U	NA	NA	3.26 U	2.73 U

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS014-0002	38SS014-000X	38SS014-0X02	38SB015-0204	38SS015-0002	38SS015-000X	38SS015-0X02	38SS015-0X02-D	38SB016-0204
SAMPLE DATE					3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	NA	**1080**	**1180**	**1320**	NA	**1780**	**1890**	**1550**	**3200 J**
ANTIMONY	NC	27	370	5.4	NA	0.268 UJ	0.276 UJ	0.319 UJ	NA	0.263 UJ	0.274 UJ	0.303 UJ	0.292 U
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	NA	**0.554**	**0.361 J**	**0.307 J**	NA	**0.402 J**	**0.918**	**0.268 J**	**0.282 J**
BARIUM	NC	120	130000	1600	NA	**7.26**	**2.93**	**4.51**	NA	**5.69**	**4.97**	**8.48**	**3.21 J**
BERYLLIUM	NC	120	1400	63	NA	0.0537 U	0.0552 U	0.0639 U	NA	0.0526 U	0.0548 U	0.0606 U	0.0583 U
CADMIUM	NC	82	1700	7.5	NA	**0.813**	0.0552 U	0.0639 U	NA	**0.0925 J**	0.0548 U	**0.0757 J**	0.0583 U
CALCIUM	NC	NC	NC	NC	NA	**131 J**	55.2 U	63.9 U	NA	**119 J**	**79.7 J**	**570**	**156 J**
CHROMIUM	NC	210	470	38	NA	**31.2**	**1.1**	**1.35**	NA	**2**	**1.8**	**2.8**	**2.18**
COBALT	NC	1700	42000	NC	NA	0.268 U	0.276 U	0.319 U	NA	0.263 U	0.274 U	0.303 U	0.292 U
COPPER	NC	150	89000	NC	NA	**2.71 J**	0.221 UJ	0.256 UJ	NA	**1.2 J**	**0.338 J**	**3.16 J**	0.233 U
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	NA	**1730**	**561**	**310**	NA	**866**	**1980 J**	**790 J**	**213 J**
LEAD	NC	400	1400	NC	NA	**23 J**	**1.76 J**	**2.18 J**	NA	**5.06 J**	**2.69 J**	**10.2 J**	**2.82 J**
MAGNESIUM	NC	NC	NC	NC	NA	53.7 U	55.2 U	63.9 U	NA	52.6 U	54.8 U	**64.5 J**	58.3 U
MANGANESE	NC	3500	43000	NC	NA	**1.91**	**1.22**	**1.45**	NA	**2.82**	**2.1**	**2.99**	**1.34**
MERCURY	NC	3	17	2.1	NA	**0.0374**	**0.0131 J**	**0.0184 J**	NA	**0.0328 J**	**0.0199 J**	**0.0217 J**	**0.0149 J**
NICKEL	NC	340	35000	130	NA	**0.533 J**	**0.169 J**	**0.257 J**	NA	**0.458 J**	**0.312 J**	**0.512 J**	**0.346 J**
POTASSIUM	NC	NC	NC	NC	NA	53.7 U	55.2 U	63.9 U	NA	52.6 U	54.8 U	60.6 U	58.3 U
SELENIUM	NC	440	11000	5.2	NA	**0.203 J**	**0.175 J**	0.192 U	NA	**0.161 J**	**0.215 J**	0.182 U	**0.339 J**
SILVER	NC	410	8200	17	NA	**0.667**	0.0552 U	0.0639 U	NA	**0.142 J**	0.0548 U	0.0606 U	0.0583 U
VANADIUM	NC	67	10000	980	NA	**2.65**	**2.64**	**1.87**	NA	**3.15**	**9.2 J**	**3.17 J**	**1.33**
ZINC	NC	26000	630000	NC	NA	**5.32 J**	**0.584 J**	**0.65 J**	NA	**3.93 J**	**0.793 J**	**9.65 J**	0.583 U
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	5.64 U	NA	NA	5.37 U	4.37 U	NA	NA	NA	4.88 U
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	0.228 U	NA	NA	0.217 U	0.177 U	NA	NA	NA	0.197 U
4,4'-DDE	NC	2900	15000	18000	0.228 U	NA	NA	**0.488 J**	0.177 U	NA	NA	NA	0.197 U
4,4'-DDT	NC	2900	15000	11000	0.228 U	NA	NA	**0.57 J**	0.177 U	NA	NA	NA	0.197 U
ALDRIN	NC	60	300	200	0.148 U	NA	NA	0.141 U	0.115 U	NA	NA	NA	0.128 U
ALPHA-CHLORDANE	NC	NC	NC	NC	0.148 U	NA	NA	0.141 U	0.115 U	NA	NA	NA	0.128 U
BETA-BHC	NC	500	2400	1	0.148 U	NA	NA	0.141 U	0.115 U	NA	NA	NA	0.128 U
DELTA-BHC	NC	24000	490000	200	0.148 U	NA	NA	0.141 U	0.115 U	NA	NA	NA	0.128 U
DIELDRIN	NC	60	300	2	0.228 U	NA	NA	0.217 U	0.177 U	NA	NA	NA	0.197 U
ENDOSULFAN I	NC	NC	NC	NC	0.148 U	NA	NA	0.141 U	0.115 U	NA	NA	NA	0.128 U
ENDOSULFAN II	NC	NC	NC	NC	0.228 U	NA	NA	0.217 U	0.177 U	NA	NA	NA	0.197 U
ENDOSULFAN SULFATE	NC	NC	NC	NC	0.228 U	NA	NA	0.217 U	0.177 U	NA	NA	NA	0.197 U
ENDRIN	NC	25000	510000	1000	0.228 U	NA	NA	0.217 U	0.177 U	NA	NA	NA	0.197 U
ENDRIN ALDEHYDE	NC	NC	NC	NC	0.228 U	NA	NA	0.217 U	0.177 U	NA	NA	NA	0.197 U
ENDRIN KETONE	NC	NC	NC	NC	0.228 U	NA	NA	0.217 U	0.177 U	NA	NA	NA	0.197 U
GAMMA-BHC (LINDANE)	NC	700	2500	9	0.148 U	NA	NA	0.141 U	0.115 U	NA	NA	NA	0.128 U
GAMMA-CHLORDANE	NC	NC	NC	NC	0.148 U	NA	NA	0.141 U	0.115 U	NA	NA	NA	0.128 U
HEPTACHLOR	NC	200	1000	23000	0.148 U	NA	NA	0.141 U	0.115 U	NA	NA	NA	0.128 U
HEPTACHLOR EPOXIDE	NC	100	500	600	**0.438 J**	NA	NA	**0.56 J**	0.115 U	NA	NA	NA	0.128 U
METHOXYCHLOR	NC	420000	8800000	160000	0.148 U	NA	NA	0.141 U	0.115 U	NA	NA	NA	0.128 U
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	0.002 U	0.00189 U
ANTHRACENE	NC	21000	300000	2500	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	0.002 U	0.00189 U
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	**0.00521 J**	0.00189 U
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	**0.00726 J**	0.00189 U

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	**Background**	**Residential SCTL**	**Industrial SCTL**	**Leachability based on GW**	**38SS014-0002**	**38SS014-000X**	**38SS014-0X02**	**38SB015-0204**	**38SS015-0002**	**38SS015-000X**	**38SS015-0X02**	**38SS015-0X02-D**	**38SB016-0204**
SAMPLE DATE					3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	**0.00711 J**	0.00189 U
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	0.002 U	0.00189 U
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	**0.00698 J**	0.00189 U
CHRYSENE	NC	NC	NC	77	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	**0.00702 J**	0.00189 U
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	0.002 U	0.00189 U
FLUORANTHENE	NC	3200	59000	1200	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	**0.00836**	0.00189 U
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	**0.00606 J**	0.00189 U
PHENANTHRENE	NC	2200	36000	250	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	0.002 U	0.00189 U
PYRENE	NC	2400	45000	880	NA	0.00171 U	0.0018 U	0.00216 U	NA	0.00174 U	0.00172 U	**0.00922**	0.00189 U
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	**0.1 J**	0.0898 U	**0.176 J**	NA	**0.115 J**	**0.119 J**	0.0997 U	0.0942 U
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	0.0853 U	0.0898 U	0.108 U	NA	0.0868 U	0.0856 U	0.0997 U	0.0942 U
CAPROLACTAM	NC	NC	NC	NC	NA	0.0853 U	0.0898 U	0.108 U	NA	0.0868 U	0.0856 U	**0.446**	0.0942 U
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	0.0853 U	0.0898 U	**0.132 J**	NA	0.0868 U	0.0856 U	0.0997 U	0.0942 U
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	2.53 U	2.68 U	NA	NA	2.52 U	2.5 U	2.53 U
ACETONE	NC	11000000	68000000	25000	NA	NA	5.06 UJ	5.37 UJ	NA	NA	**6.63 J**	5 UJ	5.06 UJ
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	2.53 U	2.68 U	NA	NA	2.52 U	2.5 U	2.53 U

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS016-0002	38SS016-000X	38SS016-0X02	38SB017-0204	38SS017-0002	38SS017-000X	38SS017-0X02	38SB018-0204	38SB018-0204-D
SAMPLE DATE					3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	NA	**105 J**	**3920 J**	**548 J**	NA	**39.7 J**	**747 J**	**850 J**	**1990 J**
ANTIMONY	NC	27	370	5.4	NA	0.255 U	0.31 U	0.283 U	NA	0.256 U	0.298 U	0.308 U	0.296 U
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	NA	0.153 UJ	**0.317 J**	**0.28 J**	NA	**0.167 J**	**0.247 J**	**4.02 J**	**0.451 J**
BARIUM	NC	120	130000	1600	NA	**2.24 J**	**3.18 J**	**2.02 J**	NA	**0.727 J**	**3.6 J**	**2.32 J**	**8.93 J**
BERYLLIUM	NC	120	1400	63	NA	0.051 U	0.062 U	0.0566 U	NA	0.0512 U	0.0597 U	0.0616 U	0.0593 U
CADMIUM	NC	82	1700	7.5	NA	**0.0589 J**	0.062 U	0.0566 U	NA	0.0512 U	0.0597 U	0.0616 U	0.0593 U
CALCIUM	NC	NC	NC	NC	NA	**396 J**	**224 J**	**584 J**	NA	**176 J**	**535 J**	**83.5 J**	**676 J**
CHROMIUM	NC	210	470	38	NA	**0.442 J**	**2.97**	**0.727**	NA	**0.315 J**	**1.68**	**1.38**	**2.54**
COBALT	NC	1700	42000	NC	NA	0.255 U	0.31 U	0.283 U	NA	0.256 U	0.298 U	0.308 U	0.296 U
COPPER	NC	150	89000	NC	NA	**1.38**	0.248 U	**0.34 J**	NA	**0.836**	0.239 U	0.247 U	**0.855**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	NA	**105 J**	**173 J**	**93.4 J**	NA	**46.6 J**	**332 J**	**7820 J**	**780 J**
LEAD	NC	400	1400	NC	NA	**1.82 J**	**4.04 J**	**1.51 J**	NA	**0.612 J**	**1.86 J**	**2.13 J**	**7.45 J**
MAGNESIUM	NC	NC	NC	NC	NA	51 U	62 U	56.6 U	NA	51.2 U	59.7 U	61.6 U	**70.2 J**
MANGANESE	NC	3500	43000	NC	NA	**3.4**	**1.27**	**2.01**	NA	**2.42**	**1.45**	**0.863 J**	**3.35**
MERCURY	NC	3	17	2.1	NA	0.0335 U	**0.0254 J**	0.039 U	NA	0.0348 U	0.0403 U	0.039 U	**0.0174 J**
NICKEL	NC	340	35000	130	NA	**0.16 J**	**0.274 J**	0.17 U	NA	0.154 U	0.179 U	0.185 U	**0.591 J**
POTASSIUM	NC	NC	NC	NC	NA	51 U	62 U	56.6 U	NA	51.2 U	59.7 U	61.6 U	59.3 U
SELENIUM	NC	440	11000	5.2	NA	0.153 U	**0.495 J**	0.17 U	NA	0.154 U	0.179 U	0.185 U	0.178 U
SILVER	NC	410	8200	17	NA	0.051 U	0.062 U	0.0566 U	NA	0.0512 U	0.0597 U	0.0616 U	0.0593 U
VANADIUM	NC	67	10000	980	NA	**0.631 J**	**1.25**	**0.569 J**	NA	**0.432 J**	**0.868**	**3.29**	**2.52**
ZINC	NC	26000	630000	NC	NA	**3.39**	0.62 U	0.566 U	NA	1.09 U	0.821 U	1.79 U	**4.05**
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	4.98 U	NA	NA	4.71 U	5.15 U	NA	NA	4.9 U	**19.9 J**
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	0.202 U	NA	NA	0.19 U	0.208 U	NA	NA	0.198 UJ	**3.8 J**
4,4'-DDE	NC	2900	15000	18000	0.202 U	NA	NA	0.19 U	0.208 U	NA	NA	0.198 UJ	**4.67 J**
4,4'-DDT	NC	2900	15000	11000	0.202 U	NA	NA	0.19 U	0.208 U	NA	NA	0.198 U	0.192 U
ALDRIN	NC	60	300	200	0.13 U	NA	NA	0.123 U	0.135 U	NA	NA	0.128 U	0.124 U
ALPHA-CHLORDANE	NC	NC	NC	NC	0.13 U	NA	NA	0.123 U	0.135 U	NA	NA	0.128 UJ	**47.8 J**
BETA-BHC	NC	500	2400	1	0.13 U	NA	NA	0.123 U	0.135 U	NA	NA	0.128 U	0.124 U
DELTA-BHC	NC	24000	490000	200	0.13 U	NA	NA	0.123 U	0.135 U	NA	NA	0.128 U	0.124 U
DIELDRIN	NC	60	300	2	0.202 U	NA	NA	0.19 U	0.208 U	NA	NA	0.198 U	**0.57 J**
ENDOSULFAN I	NC	NC	NC	NC	0.13 U	NA	NA	0.123 U	0.135 U	NA	NA	0.128 U	0.124 U
ENDOSULFAN II	NC	NC	NC	NC	0.202 U	NA	NA	**0.247 J**	0.208 U	NA	NA	0.198 U	0.192 U
ENDOSULFAN SULFATE	NC	NC	NC	NC	0.202 U	NA	NA	0.19 U	0.208 U	NA	NA	0.198 U	**0.863 J**
ENDRIN	NC	25000	510000	1000	0.202 U	NA	NA	0.19 U	0.208 U	NA	NA	0.198 U	0.192 U
ENDRIN ALDEHYDE	NC	NC	NC	NC	0.202 U	NA	NA	0.19 U	0.208 U	NA	NA	0.198 U	0.192 U
ENDRIN KETONE	NC	NC	NC	NC	0.202 U	NA	NA	0.19 U	0.208 U	NA	NA	0.198 U	0.192 U
GAMMA-BHC (LINDANE)	NC	700	2500	9	0.13 U	NA	NA	0.123 U	0.135 U	NA	NA	0.128 U	0.124 U
GAMMA-CHLORDANE	NC	NC	NC	NC	0.13 U	NA	NA	0.123 U	0.135 U	NA	NA	0.128 UJ	**49.7 J**
HEPTACHLOR	NC	200	1000	23000	0.13 U	NA	NA	0.123 U	0.135 U	NA	NA	0.128 U	0.124 U
HEPTACHLOR EPOXIDE	NC	100	500	600	**0.361 J**	NA	NA	0.123 U	0.135 U	NA	NA	0.128 U	**0.357 J**
METHOXYCHLOR	NC	420000	8800000	160000	0.13 U	NA	NA	0.123 U	0.135 U	NA	NA	0.128 U	0.124 U
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
ANTHRACENE	NC	21000	300000	2500	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	**Background**	**Residential SCTL**	**Industrial SCTL**	**Leachability based on GW**	**38SS016-0002**	**38SS016-000X**	**38SS016-0X02**	**38SB017-0204**	**38SS017-0002**	**38SS017-000X**	**38SS017-0X02**	**38SB018-0204**	**38SB018-0204-D**
SAMPLE DATE					3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
CHRYSENE	NC	NC	NC	77	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
FLUORANTHENE	NC	3200	59000	1200	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
PHENANTHRENE	NC	2200	36000	250	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
PYRENE	NC	2400	45000	880	NA	0.00167 U	0.00208 U	0.00187 U	NA	0.00174 U	0.0019 U	0.00193 U	0.00191 U
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	0.0831 U	**0.136 J**	0.0933 U	NA	0.0867 U	0.0947 U	0.0965 U	0.0951 U
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	0.0831 U	0.104 U	0.0933 UJ	NA	0.0867 U	0.0947 U	0.0965 UJ	0.0951 UJ
CAPROLACTAM	NC	NC	NC	NC	NA	0.0831 U	0.104 U	0.0933 U	NA	0.0867 U	0.0947 U	0.0965 U	**0.356 J**
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	0.0831 U	0.104 U	0.0933 U	NA	0.0867 U	0.0947 U	0.0965 U	0.0951 U
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	2.92 U	2.51 U	NA	NA	2.54 U	2.43 U	**4.21 J**
ACETONE	NC	11000000	68000000	25000	NA	NA	5.84 UJ	5.02 UJ	NA	NA	5.08 UJ	4.86 UJ	**27.6 J**
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	2.92 U	2.51 U	NA	NA	2.54 U	2.43 U	2.68 U

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS018-0002	38SS018-000X	38SS018-0X02	38SB019-0204	38SS019-0002	38SS019-000X	38SS019-0X02	38SB020-0204-101812	38SS020-000X-101812
SAMPLE DATE					3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	10/18/2012	10/18/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	NA	**413 J**	**460 J**	**2750 J**	NA	**4180 J**	**3360 J**	**1430 J**	**1440 J**
ANTIMONY	NC	27	370	5.4	NA	0.255 U	0.268 U	0.272 U	NA	0.303 U	0.269 U	0.323 UJ	0.665 UJ
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	NA	**1.61 J**	**10.5 J**	**0.317 J**	NA	**0.382 J**	**0.334 J**	**1.47**	0.399 U
BARIUM	NC	120	130000	1600	NA	**0.772 J**	**0.63 J**	**2.22 J**	NA	**4.42 J**	**3.13 J**	**2.74**	**7.52**
BERYLLIUM	NC	120	1400	63	NA	0.051 U	0.0536 U	0.0543 U	NA	0.0605 U	0.0538 U	0.0646 U	0.133 U
CADMIUM	NC	82	1700	7.5	NA	0.051 U	0.0536 U	0.0543 U	NA	0.0605 U	0.0538 U	0.0646 U	0.133 U
CALCIUM	NC	NC	NC	NC	NA	**115 J**	**81.2 J**	**175 J**	NA	**1800 J**	**673 J**	**216 J**	**1420**
CHROMIUM	NC	210	470	38	NA	**0.719**	**1.16**	**1.53**	NA	**2.65**	**1.89**	**1.29**	**2.01**
COBALT	NC	1700	42000	NC	NA	0.255 U	0.268 U	0.272 U	NA	0.303 U	0.269 U	0.323 U	0.665 U
COPPER	NC	150	89000	NC	NA	**0.722**	0.215 U	0.217 U	NA	**0.327 J**	**2.04**	0.258 U	**3.77**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	NA	**1500 J**	**9170 J**	**343 J**	NA	**260 J**	**458 J**	**3370 J**	**1040 J**
LEAD	NC	400	1400	NC	NA	**0.997 J**	**1.17 J**	**2.39 J**	NA	**3.87 J**	**2.94 J**	**1.72**	**7.21**
MAGNESIUM	NC	NC	NC	NC	NA	51 U	53.6 U	54.3 U	NA	60.5 U	53.8 U	64.6 U	133 U
MANGANESE	NC	3500	43000	NC	NA	**0.685 J**	**0.394 J**	**1.22**	NA	**1.13**	**1.55**	**1.82**	**6.64**
MERCURY	NC	3	17	2.1	NA	**0.0119 J**	0.0364 U	**0.0252 J**	NA	**0.024 J**	**0.016 J**	0.0174 U	**0.0203**
NICKEL	NC	340	35000	130	NA	0.153 U	0.161 U	**0.328 J**	NA	**0.294 J**	**0.46 J**	**0.294 J**	**0.646 J**
POTASSIUM	NC	NC	NC	NC	NA	51 U	53.6 U	54.3 U	NA	60.5 U	53.8 U	64.6 U	133 U
SELENIUM	NC	440	11000	5.2	NA	0.153 U	0.161 U	**0.298 J**	NA	**0.436 J**	**0.305 J**	0.194 U	0.399 U
SILVER	NC	410	8200	17	NA	0.051 U	0.0536 U	0.0543 U	NA	0.0605 U	0.0538 U	0.0646 U	0.133 U
VANADIUM	NC	67	10000	980	NA	**2.66**	**3.11**	**2.19**	NA	**1.82**	**2.46**	**15.1 J**	**2.71 J**
ZINC	NC	26000	630000	NC	NA	1.14 U	1.2 U	0.584 U	NA	0.907 U	**7.84**	**1.66**	**11.1**
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	4.48 U	NA	NA	4.48 U	4.42 U	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	0.181 U	NA	NA	0.181 U	0.179 U	NA	NA	NA	NA
4,4'-DDE	NC	2900	15000	18000	0.181 U	NA	NA	0.181 U	0.179 U	NA	NA	NA	NA
4,4'-DDT	NC	2900	15000	11000	0.181 U	NA	NA	0.181 U	0.179 U	NA	NA	NA	NA
ALDRIN	NC	60	300	200	0.117 U	NA	NA	0.117 U	0.116 U	NA	NA	NA	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	0.117 U	NA	NA	0.117 U	0.116 U	NA	NA	NA	NA
BETA-BHC	NC	500	2400	1	0.117 U	NA	NA	0.117 U	0.116 U	NA	NA	NA	NA
DELTA-BHC	NC	24000	490000	200	0.117 U	NA	NA	0.117 U	0.116 U	NA	NA	NA	NA
DIELDRIN	NC	60	300	2	0.181 U	NA	NA	0.181 U	0.179 U	NA	NA	NA	NA
ENDOSULFAN I	NC	NC	NC	NC	0.117 U	NA	NA	0.117 U	0.116 U	NA	NA	NA	NA
ENDOSULFAN II	NC	NC	NC	NC	0.181 U	NA	NA	0.181 U	0.179 U	NA	NA	NA	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	0.181 U	NA	NA	0.181 U	0.179 U	NA	NA	NA	NA
ENDRIN	NC	25000	510000	1000	0.181 U	NA	NA	0.181 U	0.179 U	NA	NA	NA	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	0.181 U	NA	NA	0.181 U	0.179 U	NA	NA	NA	NA
ENDRIN KETONE	NC	NC	NC	NC	0.181 U	NA	NA	0.181 U	0.179 U	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	0.117 U	NA	NA	0.117 U	0.116 U	NA	NA	NA	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	0.117 U	NA	NA	0.117 U	0.116 U	NA	NA	NA	NA
HEPTACHLOR	NC	200	1000	23000	0.117 U	NA	NA	0.117 U	0.116 U	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	0.117 U	NA	NA	0.117 U	0.116 U	NA	NA	NA	NA
METHOXYCHLOR	NC	420000	8800000	160000	0.117 U	NA	NA	0.117 U	0.116 U	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	**Background**	**Residential SCTL**	**Industrial SCTL**	**Leachability based on GW**	**38SS018-0002**	**38SS018-000X**	**38SS018-0X02**	**38SB019-0204**	**38SS019-0002**	**38SS019-000X**	**38SS019-0X02**	**38SB020-0204-101812**	**38SS020-000X-101812**
SAMPLE DATE					3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	3/19/2012	10/18/2012	10/18/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
CHRYSENE	NC	NC	NC	77	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
PYRENE	NC	2400	45000	880	NA	0.00171 U	0.00175 U	0.00179 U	NA	0.00194 U	0.00183 U	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	0.0853 U	0.0872 U	0.0895 U	NA	0.0969 U	0.091 U	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	0.0853 UJ	**0.314 J**	0.0895 UJ	NA	0.0969 UJ	0.091 UJ	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	0.0853 U	0.0872 U	0.0895 U	NA	0.0969 U	0.091 U	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	0.0853 U	0.0872 U	0.0895 U	NA	0.0969 U	0.091 U	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	2.71 U	2.69 U	NA	NA	2.61 U	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	5.41 UJ	5.39 U	NA	NA	5.21 U	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	2.71 U	2.69 U	NA	NA	2.61 U	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS020-0X02-101812	38SB021-0204-101812	38SS021-000X-101812	38SS021-0X02-101812	38SB022-0204-101812	38SB022-0204-101812-D	38SS022-000X-101812	38SS022-0X02-101812	38SB023-0204-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**58.5 J**	**9810 J**	**2150 J**	**1160 J**	**667**	**666**	**1100 J**	**606 J**	**1470**
ANTIMONY	NC	27	370	5.4	0.583 UJ	0.608 UJ	0.563 UJ	0.3 UJ	1.46 U	1.5 U	0.581 UJ	0.605 UJ	1.56 U
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	0.35 U	**1.44**	**0.659 J**	**0.66**	0.878 U	0.898 U	0.349 U	0.363 U	0.936 U
BARIUM	NC	120	130000	1600	**1.85 J**	**21.4 J**	**8.2**	**8.34**	**6.53 J**	**5.94 J**	**10.8**	**5.3**	**14.6**
BERYLLIUM	NC	120	1400	63	0.117 U	**0.149**	0.113 U	0.06 U	0.293 U	0.299 U	0.116 U	0.121 U	0.312 U
CADMIUM	NC	82	1700	7.5	0.117 U	0.122 U	**0.199**	0.06 U	0.293 U	0.299 U	**1.72**	0.121 U	0.312 U
CALCIUM	NC	NC	NC	NC	**172 J**	**1170**	**23800 J**	**1620**	**837 J**	**646 J**	**717**	**656**	**1460 J**
CHROMIUM	NC	210	470	38	**0.549 J**	**9.54**	**4.94**	**1.1**	**0.916 J**	**1.04 J**	**3.1**	**0.755 J**	**2.22 J**
COBALT	NC	1700	42000	NC	0.583 U	0.608 U	0.563 U	0.3 U	1.46 U	1.5 U	0.581 U	0.605 U	1.56 U
COPPER	NC	150	89000	NC	0.467 U	**1.07 J**	**6.67**	**1.49**	1.17 U	1.2 U	**100**	**0.977 J**	1.25 U
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**75.3 J**	**10800 J**	**1690 J**	**1640 J**	**451**	**453**	**730 J**	**265 J**	**1050**
LEAD	NC	400	1400	NC	**0.636**	**5.62**	**45**	**2.69**	**1.88**	**2.09**	**34.6**	**4.35**	**4.8**
MAGNESIUM	NC	NC	NC	NC	117 U	**270 J**	**231 J**	60 U	293 U	299 U	116 U	121 U	312 U
MANGANESE	NC	3500	43000	NC	**2.7**	**4.34**	**15.8**	**3.33**	**3.63 J**	**3.77 J**	**8.2**	**3.14**	**6.08**
MERCURY	NC	3	17	2.1	0.0158 U	**0.0228 J**	**0.0448**	**0.0168 J**	0.0148 U	0.0156 U	**0.0472**	0.0162 U	**0.017 J**
NICKEL	NC	340	35000	130	0.35 U	**2.02 J**	**1.01 J**	**0.278 J**	0.878 U	0.898 U	**0.958 J**	0.363 U	0.936 U
POTASSIUM	NC	NC	NC	NC	117 U	122 U	113 U	60 U	293 U	299 U	116 U	121 U	312 U
SELENIUM	NC	440	11000	5.2	0.35 U	0.365 U	0.338 U	0.18 U	0.878 U	0.898 U	0.349 U	0.363 U	0.936 U
SILVER	NC	410	8200	17	0.117 U	0.243 U	0.113 U	0.06 U	0.293 U	0.299 U	**0.15 J**	0.121 U	0.312 U
VANADIUM	NC	67	10000	980	0.583 UJ	**30.5 J**	**4.26 J**	**6.74 J**	1.46 U	1.5 U	**2.74 J**	**0.978 J**	**1.95 J**
ZINC	NC	26000	630000	NC	**2.74**	**38.5**	**35.9**	**2.88**	1.74 U	3.81 U	**67.3**	**4.43**	**5.56 J**
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NC	2900	15000	18000	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NC	2900	15000	11000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALDRIN	NC	60	300	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
BETA-BHC	NC	500	2400	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
DELTA-BHC	NC	24000	490000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NC	60	300	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN	NC	25000	510000	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR	NC	200	1000	23000	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS020-0X02-101812	38SB021-0204-101812	38SS021-000X-101812	38SS021-0X02-101812	38SB022-0204-101812	38SB022-0204-101812-D	38SS022-000X-101812	38SS022-0X02-101812	38SB023-0204-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS023-000X-101812	38SS023-0X02-101812	38SB024-0204-101812	38SB024-0204-101812-D	38SS024-0002-101812	38SS024-000X-101812	38SS024-0X02-101812	38SB025-0204-101812	38SS025-0002-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/19/2012	10/20/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**2390**	**1680**	**223 J**	**1370 J**	NA	**3160**	**805**	**3830**	NA
ANTIMONY	NC	27	370	5.4	0.617 U	1.51 U	0.31 UJ	0.308 UJ	NA	0.639 UJ	0.597 UJ	0.31 UJ	NA
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	0.37 U	0.907 U	0.186 UJ	**0.292 J**	NA	**0.552 J**	0.358 UJ	**0.76 J**	NA
BARIUM	NC	120	130000	1600	**8.6**	**12.4**	**1.3 J**	**1.67 J**	NA	**10.4**	**6.81**	**12**	NA
BERYLLIUM	NC	120	1400	63	0.123 U	0.302 U	0.0619 U	**0.0721 J**	NA	0.128 U	0.119 U	**0.0918 J**	NA
CADMIUM	NC	82	1700	7.5	0.123 U	0.302 U	0.0619 U	0.0617 U	NA	**0.234 J**	0.119 U	0.0619 U	NA
CALCIUM	NC	NC	NC	NC	**1630**	**1340 J**	**114 J**	**233 J**	NA	**2010 J**	**616 J**	**540 J**	NA
CHROMIUM	NC	210	470	38	**2.5**	**2.44 J**	**0.536 J**	**1.05**	NA	**3.67**	**1.37**	**4.4**	NA
COBALT	NC	1700	42000	NC	0.617 U	1.51 U	0.31 U	0.308 U	NA	0.639 U	0.597 U	0.31 U	NA
COPPER	NC	150	89000	NC	**1.32**	**5.24**	0.248 U	0.247 U	NA	**2.99**	**1.16 J**	**1.68**	NA
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**889**	**1410**	**123 J**	**302 J**	NA	**2120**	**1080**	**4560**	NA
LEAD	NC	400	1400	NC	**3.73**	**14**	**0.911**	**1.29**	NA	**9.95**	**8.02**	**3.23**	NA
MAGNESIUM	NC	NC	NC	NC	123 U	302 U	61.9 U	61.7 U	NA	128 U	119 U	**117 J**	NA
MANGANESE	NC	3500	43000	NC	**6.05**	**6.2**	**1.17**	**1.59**	NA	**14**	**4.82**	**4.39**	NA
MERCURY	NC	3	17	2.1	0.0161 U	**0.0214 J**	0.0156 U	0.0166 U	NA	0.0166 U	0.0154 U	0.016 U	NA
NICKEL	NC	340	35000	130	**0.616 J**	0.907 U	**0.196 J**	**0.28 J**	NA	**1.16 J**	**0.359 J**	**0.751**	NA
POTASSIUM	NC	NC	NC	NC	123 U	302 U	61.9 U	61.7 U	NA	128 U	119 U	61.9 U	NA
SELENIUM	NC	440	11000	5.2	0.37 U	0.907 U	0.186 U	0.185 U	NA	0.383 U	0.358 U	0.186 U	NA
SILVER	NC	410	8200	17	0.123 U	0.302 U	0.0619 U	0.0617 U	NA	0.128 U	0.119 U	0.0619 U	NA
VANADIUM	NC	67	10000	980	**3.12**	**3.51 J**	**0.418 J**	**2.03**	NA	**4.43**	**1.45 J**	**5.63**	NA
ZINC	NC	26000	630000	NC	**7.6**	**22.2**	1.39 U	**3.17**	NA	**16.1**	2.73 U	**3.02**	NA
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	5.04 U	4.96 UJ	5.08 U	NA	NA	5.1 U	242 U
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	0 U	0 U	0 U	NA	NA	0 U	0 U
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	**0.204 J**	0.201 UJ	**0.504 J**	NA	NA	**0.392 J**	**123 J**
4,4'-DDE	NC	2900	15000	18000	NA	NA	0.204 U	0.201 UJ	**1.23 J**	NA	NA	**0.973**	**4.59 J**
4,4'-DDT	NC	2900	15000	11000	NA	NA	0.204 U	0.201 UJ	0.206 U	NA	NA	0.207 U	**17.2 J**
ALDRIN	NC	60	300	200	NA	NA	0.132 U	0.13 UJ	0.133 U	NA	NA	0.134 U	**0.523 J**
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	**0.744 J**	**0.757 J**	**1.8 J**	NA	NA	**7.11 J**	**331 J**
BETA-BHC	NC	500	2400	1	NA	NA	0.132 U	0.13 UJ	0.133 U	NA	NA	0.134 U	0.127 U
DELTA-BHC	NC	24000	490000	200	NA	NA	0.132 UJ	0.13 UJ	0.133 UJ	NA	NA	0.134 U	**0.447 J**
DIELDRIN	NC	60	300	2	NA	NA	0.204 U	0.201 UJ	0.206 U	NA	NA	0.207 U	**0.922 J**
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	0.132 U	0.13 UJ	0.133 U	NA	NA	0.134 U	0.127 U
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	0.204 U	0.201 UJ	0.206 U	NA	NA	0.207 U	**19.9 J**
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	0.204 U	0.201 UJ	0.206 U	NA	NA	**0.283 J**	**3.59 J**
ENDRIN	NC	25000	510000	1000	NA	NA	**0.478 J**	0.201 UJ	0.206 U	NA	NA	0.207 U	**22.2 J**
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	0.204 U	0.201 UJ	0.206 U	NA	NA	0.207 U	**21.8**
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	0.204 U	0.201 UJ	0.206 U	NA	NA	0.207 U	0.196 U
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	0.132 UJ	0.13 UJ	0.133 UJ	NA	NA	0.134 U	0.127 UJ
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	4.61 U	4.7 U	5.32 U	NA	NA	14.2 U	**1830 J**
HEPTACHLOR	NC	200	1000	23000	NA	NA	0.132 U	0.13 UJ	0.133 U	NA	NA	0.134 U	**5.15 J**
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	0.132 U	0.13 UJ	0.133 U	NA	NA	**0.444 J**	**4.42 J**
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	0.132 U	0.13 UJ	0.133 U	NA	NA	0.134 U	0.127 U
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS023-000X-101812	38SS023-0X02-101812	38SB024-0204-101812	38SB024-0204-101812-D	38SS024-0002-101812	38SS024-000X-101812	38SS024-0X02-101812	38SB025-0204-101812	38SS025-0002-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/19/2012	10/20/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS025-000X-101812	38SS025-0X02-101812	38SB026-0204-101812	38SS026-0002-101812	38SS026-000X-101812	38SS026-0X02-101812	38SB027-0204-101812	38SB027-0204-101812-D	38SS027-0002-101812
SAMPLE DATE					10/21/2012	10/22/2012	10/23/2012	10/24/2012	10/25/2012	10/26/2012	10/18/2012	10/18/2012	10/18/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**1150**	**2310**	**2540**	NA	**2250**	**2190**	**10200 J**	**4080 J**	NA
ANTIMONY	NC	27	370	5.4	0.576 UJ	0.605 UJ	0.594 UJ	NA	0.614 UJ	0.587 UJ	0.631 UJ	0.312 UJ	NA
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.463 J**	**0.774 J**	**0.544 J**	NA	0.368 UJ	**0.353 J**	**1.89 J**	**0.578 J**	NA
BARIUM	NC	120	130000	1600	**6.06**	**6.53**	**11**	NA	**8.14**	**11**	**16.2**	**9.94**	NA
BERYLLIUM	NC	120	1400	63	0.115 U	0.121 U	0.119 U	NA	0.123 U	0.117 U	**0.126 J**	0.0624 U	NA
CADMIUM	NC	82	1700	7.5	**1.31**	**0.311 J**	0.119 U	NA	**0.184 J**	0.117 U	0.126 U	**0.0679 J**	NA
CALCIUM	NC	NC	NC	NC	**608 J**	**465 J**	**498 J**	NA	**3060 J**	**1060 J**	**944 J**	**582 J**	NA
CHROMIUM	NC	210	470	38	**2.26**	**3.08**	**2.28**	NA	**3.97**	**2.75**	**15.8 J**	**6.62 J**	NA
COBALT	NC	1700	42000	NC	0.576 U	0.605 U	0.594 U	NA	0.614 U	0.587 U	0.631 U	0.312 U	NA
COPPER	NC	150	89000	NC	**37.7**	**77.9**	0.475 U	NA	**5.78**	**5.62**	**1.23 J**	**1.61**	NA
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**759**	**1960**	**1910**	NA	**1420**	**1430**	**9460 J**	**1330 J**	NA
LEAD	NC	400	1400	NC	**12.1**	**4.31**	**3.16**	NA	**24.8**	**11.9**	**7.01**	**4.85**	NA
MAGNESIUM	NC	NC	NC	NC	115 U	121 U	119 U	NA	123 U	117 U	**368 J**	**201 J**	NA
MANGANESE	NC	3500	43000	NC	**9.41**	**7.81**	**6.61**	NA	**13.4**	**15.2**	**6.26**	**3.7**	NA
MERCURY	NC	3	17	2.1	**0.176**	**0.169**	**0.0167 J**	NA	**0.0314 J**	**0.027 J**	**0.0192 J**	0.0167 U	NA
NICKEL	NC	340	35000	130	**0.934 J**	**0.874 J**	**0.509 J**	NA	**1.07 J**	**0.749 J**	**1.62**	**0.847**	NA
POTASSIUM	NC	NC	NC	NC	115 U	121 U	119 U	NA	123 U	117 U	**228 J**	**101 J**	NA
SELENIUM	NC	440	11000	5.2	0.345 U	0.363 U	0.356 U	NA	0.368 U	0.352 U	0.379 U	0.187 U	NA
SILVER	NC	410	8200	17	0.115 U	0.121 U	0.119 U	NA	0.123 U	0.117 U	0.252 U	0.0624 U	NA
VANADIUM	NC	67	10000	980	**2.34**	**3.97**	**2.26**	NA	**3.53**	**3.05**	**30.7 J**	**5.36 J**	NA
ZINC	NC	26000	630000	NC	**79.1**	**49.2**	1.07 U	NA	**74.9**	**15.1**	**20.4 J**	**7.03 J**	NA
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	4.84 UJ	**166 J**	NA	NA	5.09 U	5.07 U	4.68 U
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	0 U	**166**	NA	NA	0 U	0 U	0 U
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	**0.468 J**	**0.7 J**	NA	NA	**0.206 J**	0.205 U	0.19 UJ
4,4'-DDE	NC	2900	15000	18000	NA	NA	**0.222 J**	**1.4 J**	NA	NA	**0.61 J**	**0.577 J**	0.19 U
4,4'-DDT	NC	2900	15000	11000	NA	NA	0.196 UJ	**1.37 J**	NA	NA	0.206 U	0.205 U	**0.456 J**
ALDRIN	NC	60	300	200	NA	NA	0.127 UJ	0.13 U	NA	NA	0.133 U	0.133 U	0.123 U
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	**0.668 J**	**0.832 J**	NA	NA	**12.6 J**	**12.5 J**	**2.07**
BETA-BHC	NC	500	2400	1	NA	NA	0.127 UJ	0.13 U	NA	NA	0.133 U	0.133 U	0.123 U
DELTA-BHC	NC	24000	490000	200	NA	NA	0.127 UJ	0.13 UJ	NA	NA	0.133 UJ	0.133 UJ	0.123 UJ
DIELDRIN	NC	60	300	2	NA	NA	0.196 UJ	0.202 U	NA	NA	0.206 U	0.205 U	0.19 U
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	0.127 UJ	0.13 U	NA	NA	0.133 U	0.133 U	0.123 U
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	0.196 UJ	**2.87 J**	NA	NA	0.206 U	0.205 U	0.19 U
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	0.196 UJ	0.202 U	NA	NA	0.206 U	0.205 U	0.19 U
ENDRIN	NC	25000	510000	1000	NA	NA	0.196 UJ	0.202 U	NA	NA	0.206 U	0.205 U	0.19 U
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	0.196 UJ	**0.356 J**	NA	NA	0.206 U	0.205 U	0.19 U
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	0.196 UJ	**0.909 J**	NA	NA	0.206 U	0.205 U	0.19 U
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	0.127 UJ	0.13 UJ	NA	NA	**0.9 J**	**0.199 J**	0.123 UJ
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	6.28 U	7.22 U	NA	NA	**77.6 J**	**75.6 J**	4.3 U
HEPTACHLOR	NC	200	1000	23000	NA	NA	0.127 UJ	0.13 U	NA	NA	0.133 U	0.133 U	0.123 U
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	**0.244 J**	0.13 U	NA	NA	**1.55 J**	**2.02 J**	**0.175 J**
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	0.127 UJ	**1.38 J**	NA	NA	0.133 U	0.133 U	0.123 U
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS025-000X-101812	38SS025-0X02-101812	38SB026-0204-101812	38SS026-0002-101812	38SS026-000X-101812	38SS026-0X02-101812	38SB027-0204-101812	38SB027-0204-101812-D	38SS027-0002-101812
SAMPLE DATE					10/21/2012	10/22/2012	10/23/2012	10/24/2012	10/25/2012	10/26/2012	10/18/2012	10/18/2012	10/18/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS027-000X-101812	38SS027-0X02-101812	38SB028-0204-101812	38SS028-0002-101812	38SS028-000X-101812	38SS028-0X02-101812	38SB029-0204-101812	38SB029-0204-101812-D	38SS029-0002-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**4040**	**7420**	**2760**	NA	**3220**	**8660**	**2140**	**2120**	NA
ANTIMONY	NC	27	370	5.4	0.559 UJ	1.45 UJ	0.616 UJ	NA	0.556 UJ	**0.817 J**	0.3 UJ	0.304 UJ	NA
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.417 J**	**11.9 J**	**0.646 J**	NA	**0.701 J**	**1.26 J**	**0.629 J**	**0.728**	NA
BARIUM	NC	120	130000	1600	**20.9**	**9.48 J**	**8.64**	NA	**9.49**	**200**	**6.73**	**6.25**	NA
BERYLLIUM	NC	120	1400	63	**0.407 J**	0.289 U	0.123 U	NA	0.111 U	**1.05**	**0.0644 J**	**0.0633 J**	NA
CADMIUM	NC	82	1700	7.5	**0.212 J**	0.289 U	**0.228 J**	NA	**1.38**	**4.52**	0.06 U	0.0608 U	NA
CALCIUM	NC	NC	NC	NC	**6970 J**	**517 J**	**1080 J**	NA	**2090 J**	**18900 J**	**292 J**	**279 J**	NA
CHROMIUM	NC	210	470	38	**4.87**	**11.4**	**4.07**	NA	**12.6**	**7.93**	**2.75**	**2.6**	NA
COBALT	NC	1700	42000	NC	0.559 U	1.45 U	0.616 U	NA	0.556 U	0.596 U	0.3 U	0.304 U	NA
COPPER	NC	150	89000	NC	**2.33**	**1.27 J**	**18.1**	NA	**9.42**	**26.3**	**0.691**	**0.562 J**	NA
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**1570**	**16800**	**6310**	NA	**2090**	**3470**	**1840**	**1870**	NA
LEAD	NC	400	1400	NC	**7.57**	**6.94**	**11.6**	NA	**27.6**	**24.7**	**2.38**	**2.31 J**	NA
MAGNESIUM	NC	NC	NC	NC	**1910 J**	289 U	123 U	NA	**221 J**	**6290 J**	**81.4 J**	**66.8 J**	NA
MANGANESE	NC	3500	43000	NC	**91.4**	**5.6**	**9.05**	NA	**10.9**	**203**	**3.16**	**2.82**	NA
MERCURY	NC	3	17	2.1	0.0158 U	**0.0194 J**	**0.0286 J**	NA	**0.0547**	**0.0327 J**	0.0164 U	0.0165 U	NA
NICKEL	NC	340	35000	130	**0.686 J**	**1.18 J**	**0.892 J**	NA	**3.32**	**1.78**	**0.43 J**	**0.431 J**	NA
POTASSIUM	NC	NC	NC	NC	**355 J**	289 U	123 U	NA	**121 J**	**728 J**	60 U	60.8 U	NA
SELENIUM	NC	440	11000	5.2	0.335 U	0.868 U	0.369 U	NA	0.334 U	0.358 U	0.18 U	0.182 U	NA
SILVER	NC	410	8200	17	0.112 U	0.289 U	0.123 U	NA	**0.372 J**	0.119 U	0.06 U	0.0608 U	NA
VANADIUM	NC	67	10000	980	**6.98**	**41.6**	**5.24**	NA	**5.35**	**7.53**	**3.7**	**3.6**	NA
ZINC	NC	26000	630000	NC	**23.4**	**8.7**	**56.3**	NA	**37.1**	**148**	**172**	**194**	NA
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	**27.8**	**309 J**	NA	NA	4.97 U	5.09 U	4.66 UJ
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	**27.8**	**309**	NA	NA	0 U	0 U	0 U
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	0.206 U	0.194 UJ	NA	NA	0.201 U	0.206 UJ	0.189 UJ
4,4'-DDE	NC	2900	15000	18000	NA	NA	0.206 U	0.194 UJ	NA	NA	0.201 U	0.206 U	0.189 UJ
4,4'-DDT	NC	2900	15000	11000	NA	NA	**0.263 J**	**2.31 J**	NA	NA	0.201 U	0.206 U	0.189 UJ
ALDRIN	NC	60	300	200	NA	NA	0.133 U	0.126 UJ	NA	NA	0.13 U	0.133 U	0.122 UJ
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	**1.46**	**1.95 J**	NA	NA	**0.524 J**	**0.254 J**	0.122 UJ
BETA-BHC	NC	500	2400	1	NA	NA	0.133 U	0.126 UJ	NA	NA	0.13 U	0.133 U	0.122 UJ
DELTA-BHC	NC	24000	490000	200	NA	NA	0.133 UJ	**0.636 J**	NA	NA	0.13 UJ	0.133 UJ	0.122 UJ
DIELDRIN	NC	60	300	2	NA	NA	0.206 U	**1.22 J**	NA	NA	0.201 U	0.206 U	0.189 UJ
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	0.133 U	0.126 UJ	NA	NA	0.13 U	0.133 U	0.122 UJ
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	0.206 U	**5.85 J**	NA	NA	0.201 U	0.206 U	0.189 UJ
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	0.206 U	0.194 UJ	NA	NA	0.201 U	0.206 U	0.189 UJ
ENDRIN	NC	25000	510000	1000	NA	NA	0.206 U	0.194 UJ	NA	NA	0.201 U	0.206 U	0.189 UJ
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	0.206 U	**0.76 J**	NA	NA	0.201 U	0.206 U	0.189 UJ
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	0.206 U	**0.467 J**	NA	NA	0.201 U	0.206 U	0.189 UJ
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	0.133 UJ	**0.145 J**	NA	NA	0.13 UJ	0.133 UJ	0.122 UJ
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	5.02 U	4.67 U	NA	NA	3.02 U	6.29 U	**0.384 J**
HEPTACHLOR	NC	200	1000	23000	NA	NA	0.133 U	0.126 UJ	NA	NA	0.13 U	0.133 U	0.122 UJ
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	0.133 U	**0.817 J**	NA	NA	0.13 U	0.133 U	0.122 UJ
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	**0.262 J**	**2.64 J**	NA	NA	0.13 U	0.133 U	0.122 UJ
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS027-000X-101812	38SS027-0X02-101812	38SB028-0204-101812	38SS028-0002-101812	38SS028-000X-101812	38SS028-0X02-101812	38SB029-0204-101812	38SB029-0204-101812-D	38SS029-0002-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS029-000X-101812	38SS029-0X02-101812	38SB030-0204-101812	38SS030-0002-101812	38SS030-000X-101812	38SS030-0X02-101812	38SB031-0204-101812	38SS031-0002-101812	38SS031-000X-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/19/2012	10/20/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**1500**	**3340**	**892**	NA	**1420**	**2360**	**381**	NA	**1490**
ANTIMONY	NC	27	370	5.4	0.573 UJ	0.578 UJ	0.301 UJ	NA	0.584 UJ	0.585 UJ	0.3 UJ	NA	1.43 UJ
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.775 J**	**0.999 J**	**0.979**	NA	**0.485 J**	**0.675 J**	**0.402 J**	NA	**1.37 J**
BARIUM	NC	120	130000	1600	**5.91**	**8.64**	**2.01 J**	NA	**7.44**	**8.56**	**1.74 J**	NA	**10.4 J**
BERYLLIUM	NC	120	1400	63	0.115 U	0.116 U	0.0602 U	NA	0.117 U	0.117 U	0.0601 U	NA	0.287 U
CADMIUM	NC	82	1700	7.5	**0.232 J**	0.116 U	0.0602 U	NA	**1.37**	0.117 U	0.0601 U	NA	**0.292 J**
CALCIUM	NC	NC	NC	NC	**488 J**	**540 J**	**120 J**	NA	**858 J**	**603 J**	60.1 UJ	NA	**338 J**
CHROMIUM	NC	210	470	38	**3.62**	**3.93**	**1.01**	NA	**4.02**	**2.8**	**1.1**	NA	**8.59**
COBALT	NC	1700	42000	NC	0.573 U	0.578 U	0.301 U	NA	0.584 U	0.585 U	0.3 U	NA	1.43 U
COPPER	NC	150	89000	NC	**7.84**	**28.7**	0.241 U	NA	**8.47**	**0.597 J**	**0.244 J**	NA	**24.8**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**2290**	**5590**	**3170**	NA	**1190**	**2530**	**542**	NA	**7420**
LEAD	NC	400	1400	NC	**5.73**	**5.03**	**1.13 J**	NA	**12.8 J**	**2.89 J**	**1.6 J**	NA	**20.2 J**
MAGNESIUM	NC	NC	NC	NC	115 U	**118 J**	60.2 U	NA	117 U	117 U	60.1 U	NA	287 U
MANGANESE	NC	3500	43000	NC	**7.1**	**3.77**	**2.11**	NA	**6.15**	**9.52**	**2.02**	NA	**4.59**
MERCURY	NC	3	17	2.1	**0.019 J**	0.0142 U	0.0147 U	NA	0.0149 U	0.0147 U	0.0155 U	NA	0.0146 U
NICKEL	NC	340	35000	130	**0.564 J**	**0.559 J**	**0.266 J**	NA	**0.726 J**	**0.517 J**	0.18 UJ	NA	0.861 UJ
POTASSIUM	NC	NC	NC	NC	115 U	116 U	60.2 U	NA	117 U	117 U	60.1 U	NA	287 U
SELENIUM	NC	440	11000	5.2	0.344 U	0.347 U	0.181 U	NA	0.35 U	0.351 U	0.18 U	NA	0.861 U
SILVER	NC	410	8200	17	**0.252 J**	0.116 U	0.0602 U	NA	**0.762 J**	0.117 U	0.0601 U	NA	0.287 U
VANADIUM	NC	67	10000	980	**2.97**	**5.58**	**5.84**	NA	**2.74**	**3.57**	**2.14**	NA	**5.68**
ZINC	NC	26000	630000	NC	**17**	**9.18**	0.72 U	NA	**20.9**	2.17 U	1.41 U	NA	**34.9**
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	4.91 U	4.73 UJ	NA	NA	4.95 UJ	4.73 U	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	0 U	0 U	NA	NA	0 U	0 U	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	0.199 UJ	**0.775 J**	NA	NA	0.2 UJ	**0.777 J**	NA
4,4'-DDE	NC	2900	15000	18000	NA	NA	0.199 UJ	0.191 UJ	NA	NA	0.2 UJ	**0.283 J**	NA
4,4'-DDT	NC	2900	15000	11000	NA	NA	0.199 U	**0.791 J**	NA	NA	0.2 UJ	**1.35 J**	NA
ALDRIN	NC	60	300	200	NA	NA	0.129 U	0.124 U	NA	NA	0.13 UJ	0.124 U	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	**0.325 J**	**3.77 J**	NA	NA	0.13 UJ	**0.699 J**	NA
BETA-BHC	NC	500	2400	1	NA	NA	0.129 U	0.124 U	NA	NA	0.13 UJ	0.124 U	NA
DELTA-BHC	NC	24000	490000	200	NA	NA	0.129 UJ	0.124 UJ	NA	NA	0.13 UJ	0.124 UJ	NA
DIELDRIN	NC	60	300	2	NA	NA	0.199 U	0.191 U	NA	NA	0.2 UJ	0.191 U	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	0.129 U	0.124 U	NA	NA	0.13 UJ	0.124 U	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	0.199 U	**0.44 J**	NA	NA	0.2 UJ	**0.739 J**	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	0.199 UJ	**0.341 J**	NA	NA	0.2 UJ	**0.514 J**	NA
ENDRIN	NC	25000	510000	1000	NA	NA	0.199 U	0.191 U	NA	NA	0.2 UJ	0.191 U	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	0.199 U	0.191 U	NA	NA	0.2 UJ	0.191 U	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	0.199 U	0.191 U	NA	NA	0.2 UJ	0.191 U	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	0.129 UJ	0.124 UJ	NA	NA	0.13 UJ	0.124 UJ	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	13.6 U	12.3 U	NA	NA	3.73 U	6.77 U	NA
HEPTACHLOR	NC	200	1000	23000	NA	NA	0.129 U	0.124 U	NA	NA	0.13 UJ	0.124 U	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	**0.151 J**	**0.328 J**	NA	NA	0.13 UJ	0.124 U	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	0.129 U	0.124 U	NA	NA	0.13 UJ	**0.173 J**	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS029-000X-101812	38SS029-0X02-101812	38SB030-0204-101812	38SS030-0002-101812	38SS030-000X-101812	38SS030-0X02-101812	38SB031-0204-101812	38SS031-0002-101812	38SS031-000X-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/19/2012	10/20/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS031-0X02-101812	38SB032-0204-101812	38SS032-0002-101812	38SS032-000X-101812	38SS032-0X02-101812	38SB033-0204-101812	38SS033-000X-101812	38SS033-0X02-101812	38SB034-0204-101812
SAMPLE DATE					10/21/2012	10/22/2012	10/23/2012	10/24/2012	10/25/2012	10/26/2012	10/18/2012	10/18/2012	10/18/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**937**	**262**	NA	**2020**	**847**	**327**	**1240**	**944**	**1020**
ANTIMONY	NC	27	370	5.4	0.594 UJ	0.294 UJ	NA	1.53 UJ	0.585 UJ	0.3 UJ	0.593 UJ	0.294 UJ	0.309 UJ
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.771 J**	**0.518 J**	NA	**2.57 J**	**1.1 J**	**0.825**	**1 J**	**0.743**	**0.321 J**
BARIUM	NC	120	130000	1600	**3.82 J**	**1.57 J**	NA	**3.22 J**	**2.84 J**	**1.04 J**	**3 J**	**1.58 J**	**4.89**
BERYLLIUM	NC	120	1400	63	0.119 U	0.0587 U	NA	0.306 U	0.117 U	0.0599 U	0.119 U	0.0589 U	0.0618 U
CADMIUM	NC	82	1700	7.5	0.119 U	0.0587 U	NA	0.306 U	0.117 U	0.0599 U	**0.163 J**	0.0589 U	**0.45**
CALCIUM	NC	NC	NC	NC	**158 J**	58.7 UJ	NA	306 UJ	**288 J**	59.9 UJ	**146 J**	58.9 UJ	**806 J**
CHROMIUM	NC	210	470	38	**2.01**	**0.742**	NA	**4.46**	**1.02 J**	**0.895**	**2.54**	**1.02**	**12**
COBALT	NC	1700	42000	NC	0.594 U	0.294 U	NA	1.53 U	0.585 U	0.3 U	0.593 U	0.294 U	0.309 U
COPPER	NC	150	89000	NC	**2.24**	0.235 U	NA	**1.5 J**	0.468 U	0.24 U	**1.04 J**	0.236 U	**11.3**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**1540**	**1100**	NA	**13100**	**1720**	**1690**	**3430**	**1170**	**659**
LEAD	NC	400	1400	NC	**3.15 J**	**1.26 J**	NA	**7.14 J**	**1.79 J**	**1.25 J**	**5.12 J**	**1.57 J**	**20.6 J**
MAGNESIUM	NC	NC	NC	NC	119 U	58.7 U	NA	306 U	117 U	59.9 U	119 U	58.9 U	61.8 U
MANGANESE	NC	3500	43000	NC	**1.99**	**1.27**	NA	**1.75 J**	**1.45 J**	**1.79**	**2.01**	**1.47**	**4.36**
MERCURY	NC	3	17	2.1	**0.0208 J**	0.0142 U	NA	**0.0216 J**	0.0154 U	0.0145 U	0.0162 U	**0.0434**	**0.0318 J**
NICKEL	NC	340	35000	130	0.357 UJ	0.176 UJ	NA	0.917 UJ	0.351 UJ	0.18 UJ	0.356 UJ	**0.217 J**	**1.05 J**
POTASSIUM	NC	NC	NC	NC	119 U	58.7 U	NA	306 U	117 U	59.9 U	119 U	58.9 U	61.8 U
SELENIUM	NC	440	11000	5.2	0.357 U	0.176 U	NA	0.917 U	0.351 U	0.18 U	0.356 U	0.177 U	0.185 U
SILVER	NC	410	8200	17	0.119 U	0.0587 U	NA	0.306 U	0.117 U	0.0599 U	0.119 U	0.0589 U	**0.147 J**
VANADIUM	NC	67	10000	980	**2.02**	**1.49**	NA	**6.96**	**1.75**	**3.45**	**3.6**	**2**	**2.08**
ZINC	NC	26000	630000	NC	2.53 U	0.869 U	NA	**10.4**	1.08 U	0.587 U	3.88 U	0.826 U	**24.5**
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	4.74 U	5.2 U	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	0 U	0 U	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	0.192 UJ	**0.515 J**	NA	NA	NA	NA	NA	NA
4,4'-DDE	NC	2900	15000	18000	NA	0.192 U	0.21 U	NA	NA	NA	NA	NA	NA
4,4'-DDT	NC	2900	15000	11000	NA	0.192 U	0.21 U	NA	NA	NA	NA	NA	NA
ALDRIN	NC	60	300	200	NA	0.124 U	0.136 U	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	0.124 U	**0.189 J**	NA	NA	NA	NA	NA	NA
BETA-BHC	NC	500	2400	1	NA	0.124 U	0.136 U	NA	NA	NA	NA	NA	NA
DELTA-BHC	NC	24000	490000	200	NA	0.124 UJ	0.136 UJ	NA	NA	NA	NA	NA	NA
DIELDRIN	NC	60	300	2	NA	0.192 U	0.21 U	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	0.124 U	0.136 U	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	0.192 U	**0.31 J**	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	0.192 U	**1.2 J**	NA	NA	NA	NA	NA	NA
ENDRIN	NC	25000	510000	1000	NA	0.192 U	0.21 U	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	0.192 U	0.21 U	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	0.192 U	0.21 U	NA	NA	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	0.124 UJ	0.136 UJ	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	4.56 U	6.61 U	NA	NA	NA	NA	NA	NA
HEPTACHLOR	NC	200	1000	23000	NA	0.124 U	**0.161 J**	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	0.124 U	0.136 U	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	0.124 U	0.136 U	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS031-0X02-101812	38SB032-0204-101812	38SS032-0002-101812	38SS032-000X-101812	38SS032-0X02-101812	38SB033-0204-101812	38SS033-000X-101812	38SS033-0X02-101812	38SB034-0204-101812
SAMPLE DATE					10/21/2012	10/22/2012	10/23/2012	10/24/2012	10/25/2012	10/26/2012	10/18/2012	10/18/2012	10/18/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS034-000 X-101812	38SS034-000 X-101812-D	38SS034-0X0 2-101812	38SB035-0204 -101812	38SS035-000 X-101812	38SS035-0X0 2-101812	38SB036-0204 -101812	38SS036-000 X-101812	38SS036-0X0 2-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**2390**	**3060**	**2330**	**546**	**1770**	**904**	**1200**	**1110**	**1400**
ANTIMONY	NC	27	370	5.4	0.569 UJ	0.567 UJ	**0.366 J**	0.295 UJ	0.278 UJ	0.293 UJ	0.306 UJ	0.304 UJ	0.592 UJ
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.553 J**	**0.631 J**	**0.53 J**	**0.452 J**	**0.616**	**0.45 J**	**0.439 J**	**0.636**	**1.39**
BARIUM	NC	120	130000	1600	**9.3**	**14.3**	**8.5**	**2.65**	**4.34**	**2.98**	**4.49**	**4.17**	**3.1 J**
BERYLLIUM	NC	120	1400	63	0.114 U	0.113 U	0.0592 U	0.059 U	0.0557 U	0.0586 U	0.0612 U	0.0608 U	0.118 U
CADMIUM	NC	82	1700	7.5	**3.17**	**3.42**	**2.1**	0.059 U	**0.183 J**	0.0586 U	0.0612 U	**0.239 J**	0.118 U
CALCIUM	NC	NC	NC	NC	**1850 J**	**3020 J**	**1980 J**	59 UJ	**140 J**	58.6 UJ	61.2 UJ	**297 J**	**143 J**
CHROMIUM	NC	210	470	38	**28.1**	**41.9**	**19.1**	**1.01**	**1.84**	**1.18**	**1.14**	**6.8**	**2.05**
COBALT	NC	1700	42000	NC	**0.669 J**	**0.639 J**	**0.515 J**	0.295 U	0.278 U	0.293 U	0.306 U	0.304 U	0.592 U
COPPER	NC	150	89000	NC	**22.4**	**24.4**	**18**	0.236 U	**0.522 J**	0.234 U	0.245 U	**1.63**	**0.597 J**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**1980**	**2100**	**1570**	**477**	**1260**	**670**	**703**	**1470**	**9880 J**
LEAD	NC	400	1400	NC	**60 J**	**67.8 J**	**46.7 J**	**1.81 J**	**3.24 J**	**1.82 J**	**2.03 J**	**13.7 J**	**6.52 J**
MAGNESIUM	NC	NC	NC	NC	**136 J**	**443 J**	**108 J**	59 U	55.7 U	58.6 U	61.2 U	60.8 U	118 U
MANGANESE	NC	3500	43000	NC	**13.7**	**15.5**	**9.43**	**1.36**	**1.47**	**1.42**	**1.34**	**2.87**	**1.43 J**
MERCURY	NC	3	17	2.1	**0.129**	**0.237**	**0.434**	0.0145 U	**0.0189 J**	0.0148 U	**0.0149 J**	**0.026 J**	**0.0185 J**
NICKEL	NC	340	35000	130	**6.93 J**	**7.55 J**	**5.28 J**	0.177 UJ	**0.359 J**	**0.188 J**	**0.248 J**	**0.352 J**	0.355 UJ
POTASSIUM	NC	NC	NC	NC	114 U	113 U	59.2 U	59 U	55.7 U	58.6 U	61.2 U	60.8 U	118 U
SELENIUM	NC	440	11000	5.2	0.342 U	0.34 U	**0.24 J**	0.177 U	0.167 U	0.176 U	0.184 U	0.182 U	0.355 U
SILVER	NC	410	8200	17	**1.07 J**	**1.08 J**	**0.892**	0.059 U	0.0557 U	0.0586 U	0.0612 U	**0.145 J**	0.118 U
VANADIUM	NC	67	10000	980	**3.84**	**4.07**	**3.56**	**1.29**	**3.52**	**1.85**	**1.64**	**2.86**	**4.19**
ZINC	NC	26000	630000	NC	**56.2**	**62.6**	**37.7**	0.599 U	1.71 U	0.654 U	1.15 U	**8.33**	2.99 U
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NC	2900	15000	18000	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NC	2900	15000	11000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALDRIN	NC	60	300	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
BETA-BHC	NC	500	2400	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
DELTA-BHC	NC	24000	490000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NC	60	300	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN	NC	25000	510000	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR	NC	200	1000	23000	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS034-000X-101812	38SS034-000X-101812-D	38SS034-0X02-101812	38SB035-0204-101812	38SS035-000X-101812	38SS035-0X02-101812	38SB036-0204-101812	38SS036-000X-101812	38SS036-0X02-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS036-0X02-101812-D	38SB037-0204-101812	38SS037-000X-101812	38SS037-0X02-101812	38SB038-0204-101812	38SS038-000X-101812	38SS038-0X02-101812	38SB039-0204-101812	38SS039-000X-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**1030**	**513**	**1100**	**845**	**823**	**1630**	**1130**	**14700**	**1660**
ANTIMONY	NC	27	370	5.4	0.605 U	0.297 U	0.299 U	0.297 U	0.295 U	0.292 U	0.299 U	0.669 U	0.558 U
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.679 J**	**0.329 J**	**0.393 J**	**0.306 J**	**0.271 J**	**0.352 J**	**0.62**	**1.6**	**0.441 J**
BARIUM	NC	120	130000	1600	**2.64 J**	**2.36 J**	**3.37**	**2.15 J**	**3.85**	**4.94**	**2.51**	**28.8**	**3.93 J**
BERYLLIUM	NC	120	1400	63	0.121 U	0.0594 U	0.0597 U	0.0594 U	0.059 U	0.0583 U	0.0598 U	**0.158 J**	0.112 U
CADMIUM	NC	82	1700	7.5	0.121 U	0.0594 U	**0.116 J**	0.0594 U	0.059 U	**0.137 J**	0.0598 U	0.134 U	0.112 U
CALCIUM	NC	NC	NC	NC	**124 J**	59.4 U	**174 J**	59.4 U	59 U	**122 J**	59.8 U	**228 J**	112 U
CHROMIUM	NC	210	470	38	**1.85**	**0.792**	**4.66**	**1.01**	**0.942**	**1.88**	**1.14**	**13.2**	**1.72**
COBALT	NC	1700	42000	NC	0.605 U	0.297 U	0.299 U	0.297 U	0.295 U	0.292 U	0.299 U	0.669 U	0.558 U
COPPER	NC	150	89000	NC	**0.74 J**	0.237 U	**0.971**	0.238 U	0.236 U	**0.993**	**0.256 J**	0.535 U	**1.42**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**2050 J**	**271**	**414**	**315**	**271**	**709**	**897**	**17200**	**942**
LEAD	NC	400	1400	NC	**4.55**	**1.55**	**6.2**	**1.56**	**1.49**	**6.49**	**1.88**	**7.89**	**4.45**
MAGNESIUM	NC	NC	NC	NC	121 U	59.4 U	59.7 U	59.4 U	59 U	58.3 U	59.8 U	**498 J**	112 U
MANGANESE	NC	3500	43000	NC	**1.88**	**1.4**	**1.91**	**1.36**	**1.64**	**2.03**	**1.53**	**3.23 J**	**1.52 J**
MERCURY	NC	3	17	2.1	**0.0205 J**	0.016 U	**0.0211 J**	0.0153 U	0.0164 U	**0.0385**	0.0145 U	0.0174 U	**0.0316 J**
NICKEL	NC	340	35000	130	0.363 U	0.178 U	**0.342 J**	**0.229 J**	**0.3 J**	**0.354 J**	**0.262 J**	**1.37 J**	0.335 U
POTASSIUM	NC	NC	NC	NC	121 U	59.4 U	59.7 U	59.4 U	59 U	58.3 U	59.8 U	134 U	112 U
SELENIUM	NC	440	11000	5.2	0.363 U	0.178 U	0.179 U	0.178 U	0.177 U	0.175 U	0.179 U	0.401 U	0.335 U
SILVER	NC	410	8200	17	0.121 U	0.0594 U	**0.0947 J**	0.0594 U	0.059 U	**0.0793 J**	0.0598 U	0.134 U	**0.141 J**
VANADIUM	NC	67	10000	980	**2.3**	**1.67**	**2**	**1.63**	**1.35**	**2.35**	**3.09**	**26.4**	**3.29**
ZINC	NC	26000	630000	NC	2.09 U	0.63 U	**5.72**	1.29 U	**4.69**	**16.5**	**6.37**	5.16 U	4.46 U
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NC	2900	15000	18000	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NC	2900	15000	11000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALDRIN	NC	60	300	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
BETA-BHC	NC	500	2400	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
DELTA-BHC	NC	24000	490000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NC	60	300	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN	NC	25000	510000	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR	NC	200	1000	23000	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS036-0X02-101812-D	38SB037-0204-101812	38SS037-000X-101812	38SS037-0X02-101812	38SB038-0204-101812	38SS038-000X-101812	38SS038-0X02-101812	38SB039-0204-101812	38SS039-000X-101812
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS039-000 X-101812-D	38SS039-0X0 2-101812	38SS040-0002 -101812	38SS040-000 X-101812	38SS040-0204 -101812	38SS040-0X0 2-101812	38SB041-0204 -101912	38SS041-0002 -101912	38SS041-000 X-101912
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/19/2012	10/19/2012	10/19/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**1850**	**1110**	NA	**708**	**265 J**	**377 J**	**1770 J**	NA	**559 J**
ANTIMONY	NC	27	370	5.4	0.563 U	0.594 U	NA	2.98 U	0.313 UJ	0.315 UJ	0.293 UJ	NA	0.304 UJ
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.501 J**	**0.365 J**	NA	**0.421 J**	**2.37**	**0.598 J**	**1.27**	NA	**0.28 J**
BARIUM	NC	120	130000	1600	**5**	**3 J**	NA	**14.7**	**1 J**	**2.13 J**	**8.84 J**	NA	**3.07 J**
BERYLLIUM	NC	120	1400	63	0.113 U	0.119 U	NA	0.119 U	0.0626 U	0.0629 U	**0.0943 J**	NA	0.0608 U
CADMIUM	NC	82	1700	7.5	0.113 U	0.119 U	NA	**3.26**	**0.0801 J**	**0.69**	0.0587 U	NA	0.0608 U
CALCIUM	NC	NC	NC	NC	**120 J**	119 U	NA	**411 J**	62.6 U	**82.7 J**	**223 J**	NA	**733 J**
CHROMIUM	NC	210	470	38	**1.97**	**1.35**	NA	**180**	**1.66**	**8.92**	**2.23**	NA	**1.03**
COBALT	NC	1700	42000	NC	0.563 U	0.594 U	NA	0.597 U	0.313 U	0.315 U	0.293 U	NA	0.304 U
COPPER	NC	150	89000	NC	**2.09**	0.475 U	NA	**10.2**	**0.295 J**	**1.89**	0.235 U	NA	**6.93**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**1100**	**510**	NA	**1460**	**2260**	**1580**	**3150**	NA	**718**
LEAD	NC	400	1400	NC	**5.16**	**2.03**	NA	**16.8**	**1.31**	**1.71**	**2.12**	NA	**2.92**
MAGNESIUM	NC	NC	NC	NC	113 U	119 U	NA	119 U	62.6 U	62.9 U	**79.5 J**	NA	**113 J**
MANGANESE	NC	3500	43000	NC	**2.32**	**1.46 J**	NA	**5.5**	**1.01**	**1.89**	**2.32**	NA	**2.41**
MERCURY	NC	3	17	2.1	**0.0311 J**	**0.0166 J**	NA	**0.127**	0.0141 U	0.0157 U	0.0168 U	NA	0.0163 U
NICKEL	NC	340	35000	130	**0.481 J**	0.357 U	NA	**0.905 J**	0.188 U	**0.31 J**	**0.427 J**	NA	**0.229 J**
POTASSIUM	NC	NC	NC	NC	113 U	119 U	NA	119 U	62.6 U	62.9 U	58.7 U	NA	60.8 U
SELENIUM	NC	440	11000	5.2	0.338 U	0.357 U	NA	0.358 U	0.188 U	0.189 U	0.176 U	NA	0.182 U
SILVER	NC	410	8200	17	**0.163 J**	0.119 U	NA	**4.34**	0.0626 U	**0.445 J**	0.0587 U	NA	**0.124 J**
VANADIUM	NC	67	10000	980	**3.52**	**1.33 J**	NA	**1.07 J**	**1.19**	**2.01**	**3.49**	NA	**1.39**
ZINC	NC	26000	630000	NC	**7.29**	1.86 U	NA	**21.7**	1.25 U	**2.87**	2.48 U	NA	**9.45**
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	0.2 UJ	NA	0.198 UJ	NA	0.202 UJ	0.2 UJ	NA
4,4'-DDE	NC	2900	15000	18000	NA	NA	**0.794**	NA	0.198 U	NA	0.202 U	0.2 UJ	NA
4,4'-DDT	NC	2900	15000	11000	NA	NA	**0.387 J**	NA	0.198 U	NA	0.202 U	0.2 UJ	NA
ALDRIN	NC	60	300	200	NA	NA	0.129 U	NA	0.128 U	NA	0.131 U	0.13 UJ	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	0.129 U	NA	0.128 U	NA	**0.258 J**	0.13 UJ	NA
BETA-BHC	NC	500	2400	1	NA	NA	0.129 U	NA	0.128 U	NA	0.131 U	0.13 UJ	NA
DELTA-BHC	NC	24000	490000	200	NA	NA	0.129 UJ	NA	0.128 UJ	NA	0.131 UJ	0.13 UJ	NA
DIELDRIN	NC	60	300	2	NA	NA	0.2 U	NA	0.198 U	NA	0.202 U	0.2 UJ	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	0.129 U	NA	0.128 U	NA	0.131 U	0.13 UJ	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	**0.34 J**	NA	0.198 U	NA	0.202 U	0.2 UJ	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	0.2 U	NA	0.198 U	NA	0.202 U	0.2 UJ	NA
ENDRIN	NC	25000	510000	1000	NA	NA	0.2 U	NA	0.198 U	NA	0.202 U	0.2 UJ	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	0.2 U	NA	0.198 U	NA	0.202 U	0.2 UJ	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	0.2 U	NA	0.198 U	NA	0.202 U	0.2 UJ	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	0.129 UJ	NA	0.128 UJ	NA	0.131 UJ	0.13 UJ	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	4.75 U	NA	5.08 U	NA	2.66 U	**0.639 J**	NA
HEPTACHLOR	NC	200	1000	23000	NA	NA	0.129 U	NA	0.128 U	NA	0.131 U	0.13 UJ	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	0.129 U	NA	0.128 U	NA	0.131 U	0.13 UJ	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	0.129 U	NA	0.128 U	NA	0.131 U	0.13 UJ	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS039-000X-101812-D	38SS039-0X02-101812	38SS040-0002-101812	38SS040-000X-101812	38SS040-0204-101812	38SS040-0X02-101812	38SB041-0204-101912	38SS041-0002-101912	38SS041-000X-101912
SAMPLE DATE					10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012	10/19/2012	10/19/2012	10/19/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS041-0X02-101912	38SB042-0204-101912	38SB042-0204-101912-D	38SS042-0002-101912	38SS042-000X-101912	38SS042-0X02-101912	38SB043-0204-101912	38SS043-0002-101912	38SS043-000X-101912
SAMPLE DATE					10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**312 J**	**398 J**	**431 J**	NA	**664 J**	**252 J**	**3680 J**	NA	**1480 J**
ANTIMONY	NC	27	370	5.4	0.31 UJ	0.31 UJ	0.308 UJ	NA	0.322 UJ	0.301 UJ	0.635 UJ	NA	0.575 UJ
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.745**	**0.464 J**	**0.452 J**	NA	**0.526 J**	**1.77**	**12.6**	NA	**0.931 J**
BARIUM	NC	120	130000	1600	**1.28 J**	**1.74 J**	**1.87 J**	NA	**2.84 J**	**1.07 J**	**9.7 J**	NA	**5.01 J**
BERYLLIUM	NC	120	1400	63	0.062 U	0.062 U	0.0617 U	NA	0.0645 U	0.0602 U	**0.157 J**	NA	0.115 U
CADMIUM	NC	82	1700	7.5	0.062 U	0.062 U	0.0617 U	NA	**0.0873 J**	0.0602 U	0.127 U	NA	0.115 U
CALCIUM	NC	NC	NC	NC	**74.7 J**	**66.8 J**	**70.3 J**	NA	**338 J**	60.2 U	127 U	NA	**172 J**
CHROMIUM	NC	210	470	38	**0.776**	**1.05**	**1.08**	NA	**1.38**	**0.693**	**3.56**	NA	**2.41**
COBALT	NC	1700	42000	NC	0.31 U	0.31 U	0.308 U	NA	0.322 U	0.301 U	0.635 U	NA	0.575 U
COPPER	NC	150	89000	NC	0.248 U	0.248 U	0.247 U	NA	**5.07**	**0.447 J**	0.508 U	NA	**5.33**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**2380**	**675**	**773**	NA	**976**	**2730**	**14200**	NA	**5450**
LEAD	NC	400	1400	NC	**1.26**	**1.63**	**1.76**	NA	**3.72**	**1.09**	**3.36**	NA	**7.54**
MAGNESIUM	NC	NC	NC	NC	62 U	62 U	61.7 U	NA	64.5 U	60.2 U	127 U	NA	115 U
MANGANESE	NC	3500	43000	NC	**1.25**	**1.17**	**1.34**	NA	**1.65**	**0.751 J**	**1.35 J**	NA	**1.48 J**
MERCURY	NC	3	17	2.1	0.0142 U	0.0149 U	0.0155 U	NA	0.0155 U	0.016 U	0.0166 U	NA	**0.0189 J**
NICKEL	NC	340	35000	130	0.186 U	0.186 U	0.185 U	NA	**0.309 J**	0.181 U	0.381 UJ	NA	**0.416 J**
POTASSIUM	NC	NC	NC	NC	62 U	62 U	61.7 U	NA	64.5 U	60.2 U	127 U	NA	115 U
SELENIUM	NC	440	11000	5.2	0.186 U	0.186 U	0.185 U	NA	0.193 U	0.181 U	0.381 U	NA	0.345 U
SILVER	NC	410	8200	17	0.062 U	0.062 U	0.0617 U	NA	**0.227 J**	0.0602 U	0.127 U	NA	**0.958 J**
VANADIUM	NC	67	10000	980	**0.916**	**1.41**	**1.41**	NA	**2.02**	**1.16**	**13.7**	NA	**3.58**
ZINC	NC	26000	630000	NC	**3.64**	1.51 U	1.57 U	NA	**11**	1.04 U	2.22 U	NA	3.66 U
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	0.202 UJ	0.205 UJ	**0.575 J**	NA	NA	0.202 UJ	**0.421 J**	NA
4,4'-DDE	NC	2900	15000	18000	NA	0.202 U	0.205 UJ	**0.553 J**	NA	NA	0.202 UJ	**0.993 J**	NA
4,4'-DDT	NC	2900	15000	11000	NA	0.202 U	0.205 UJ	**0.634 J**	NA	NA	0.202 UJ	**0.993 J**	NA
ALDRIN	NC	60	300	200	NA	0.131 U	0.132 UJ	0.127 U	NA	NA	0.131 UJ	0.124 UJ	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	**0.239 J**	0.132 UJ	**0.363 J**	NA	NA	0.131 UJ	**0.262 J**	NA
BETA-BHC	NC	500	2400	1	NA	0.131 U	0.132 UJ	0.127 U	NA	NA	0.131 UJ	0.124 UJ	NA
DELTA-BHC	NC	24000	490000	200	NA	0.131 UJ	0.132 UJ	0.127 UJ	NA	NA	0.131 UJ	0.124 UJ	NA
DIELDRIN	NC	60	300	2	NA	0.202 U	0.205 UJ	0.197 U	NA	NA	0.202 UJ	0.192 UJ	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	0.131 U	0.132 UJ	0.127 U	NA	NA	0.131 UJ	0.124 UJ	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	0.202 U	0.205 UJ	0.197 U	NA	NA	0.202 UJ	0.192 UJ	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	0.202 U	0.205 UJ	0.197 U	NA	NA	0.202 UJ	0.192 UJ	NA
ENDRIN	NC	25000	510000	1000	NA	0.202 U	0.205 UJ	0.197 U	NA	NA	0.202 UJ	0.192 UJ	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	0.202 U	0.205 UJ	0.197 U	NA	NA	0.202 UJ	0.192 UJ	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	0.202 U	0.205 UJ	0.197 U	NA	NA	0.202 UJ	0.192 UJ	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	0.131 UJ	0.132 UJ	0.127 UJ	NA	NA	0.131 UJ	0.124 UJ	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	3.92 U	0.923 U	7.83 U	NA	NA	1.1 U	1.87 U	NA
HEPTACHLOR	NC	200	1000	23000	NA	0.131 U	0.132 UJ	0.127 U	NA	NA	0.131 UJ	0.124 UJ	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	0.131 U	0.132 UJ	0.127 U	NA	NA	0.131 UJ	0.124 UJ	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	0.131 U	0.132 UJ	0.127 U	NA	NA	0.131 UJ	0.124 UJ	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS041-0X02-101912	38SB042-0204-101912	38SB042-0204-101912-D	38SS042-0002-101912	38SS042-000X-101912	38SS042-0X02-101912	38SB043-0204-101912	38SS043-0002-101912	38SS043-000X-101912
SAMPLE DATE					10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS043-0X02-101912	38SB044-0204-030513	38SS044-000X-030513	38SS044-0X02-030513	38SB045-0204-030513	38SS044-0X02-030513-D	38SS045-000X-030513	38SS045-0X02-030513	38SB046-0204-030513
SAMPLE DATE					10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	3/5/2013	3/5/2013	3/5/2013
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**1200 J**	**1310**	**1940**	**1280**	**3180**	**1630**	**2050**	**3550**	**861**
ANTIMONY	NC	27	370	5.4	0.573 UJ	0.594 U	0.591 U	0.599 U	0.603 U	0.596 U	0.567 U	0.574 U	0.593 U
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.763 J**	**0.315 J**	**0.706**	**0.351 J**	**0.414 J**	**0.579 J**	**0.405 J**	**0.518 J**	**0.456 J**
BARIUM	NC	120	130000	1600	**3.13 J**	**3.57**	**9.79**	**8.24**	**8.63**	**8.78**	**10.5**	**9.51**	**6.89**
BERYLLIUM	NC	120	1400	63	0.115 U	0.297 U	**0.0701 J**	0.299 U	0.301 U	0.298 U	0.283 U	0.287 U	0.296 U
CADMIUM	NC	82	1700	7.5	0.115 U	0.297 U	**0.447**	0.299 U	0.301 U	**0.105 J**	**0.165 J**	0.287 U	**0.0983 J**
CALCIUM	NC	NC	NC	NC	**145 J**	**631**	**57500**	**59200 J**	**817**	**34000 J**	**1060**	**916**	**388**
CHROMIUM	NC	210	470	38	**2.41**	**1.86**	**6.72**	**3.54**	**4.11**	**3.22**	**3.77**	**4.11**	**1.84**
COBALT	NC	1700	42000	NC	0.573 U	0.742 U	0.738 U	0.748 U	0.753 U	0.746 U	0.709 U	0.718 U	0.741 U
COPPER	NC	150	89000	NC	**1.64**	0.594 U	**7.3**	**2.51**	**1.02**	**1.9**	**2.5**	**0.849**	**2.77**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**2930**	**1500**	**2600**	**1940**	**1370**	**2230**	**1700**	**1930**	**1620**
LEAD	NC	400	1400	NC	**5.4**	**1.9**	**11**	**14**	**5.26**	**10.8**	**8.65**	**6.08**	**5.24**
MAGNESIUM	NC	NC	NC	NC	115 U	297 U	**441**	**406**	**84.2 J**	**258 J**	**91.3 J**	**94.3 J**	296 U
MANGANESE	NC	3500	43000	NC	**1.31 J**	**3.31**	**17.3**	**10.8**	**5.05**	**9.12**	**9.8**	**6.04**	**4.7**
MERCURY	NC	3	17	2.1	**0.0172 J**	0.039 U	**0.0253 J**	**0.0212 J**	0.0387 U	**0.0167 J**	0.0378 U	0.0389 U	**0.0201 J**
NICKEL	NC	340	35000	130	0.344 U	**0.279 J**	**0.945**	**0.604**	**0.853**	**0.605**	**0.939**	**0.835**	**0.465 J**
POTASSIUM	NC	NC	NC	NC	115 U	297 U	295 U	299 U	**74.8 J**	298 U	**69.4 J**	**106 J**	296 U
SELENIUM	NC	440	11000	5.2	0.344 U	0.594 U	0.591 U	0.599 U	0.603 U	0.596 U	**0.208 J**	**0.187 J**	0.593 U
SILVER	NC	410	8200	17	**0.118 J**	0.594 U	**1.82**	0.599 U	0.603 U	0.596 U	0.567 U	0.574 U	0.593 U
VANADIUM	NC	67	10000	980	**3.06**	**2.01**	**5.87**	**3.1**	**4.36**	**3.4**	**3.7**	**4.79**	**2.45**
ZINC	NC	26000	630000	NC	1.39 U	1.38 U	**20.8**	**26.4**	**6.77**	**24**	**207**	**11**	**7.54**
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NC	2900	15000	18000	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NC	2900	15000	11000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALDRIN	NC	60	300	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
BETA-BHC	NC	500	2400	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
DELTA-BHC	NC	24000	490000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NC	60	300	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN	NC	25000	510000	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR	NC	200	1000	23000	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS043-0X02-101912	38SB044-0204-030513	38SS044-000X-030513	38SS044-0X02-030513	38SB045-0204-030513	38SS044-0X02-030513-D	38SS045-000X-030513	38SS045-0X02-030513	38SB046-0204-030513
SAMPLE DATE					10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	10/19/2012	3/5/2013	3/5/2013	3/5/2013
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS046-000 X-030513	38SS046-0X0 2-030513	38SB047-0204 -030513	38SS047-000 X-030513	38SS047-0X0 2-030513	38SB048-0204 -030513	38SS048-000 X-030513	38SS048-0X0 2-030513	38SB049-0204 -030513
SAMPLE DATE					3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**4800**	**1210**	**1320**	**2070**	**1240**	**411**	**489**	**419**	**334**
ANTIMONY	NC	27	370	5.4	0.616 U	0.585 U	0.608 U	0.625 U	0.596 U	0.602 U	0.588 U	0.666 U	0.591 U
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.689**	**0.433 J**	**0.583 J**	**0.557 J**	**1.13**	**0.474 J**	**0.665**	**18.6**	**1.87**
BARIUM	NC	120	130000	1600	**15.7**	**7.3**	**7.76**	**7.85**	**7.08**	**2.91**	**13.7**	**0.996 J**	**1.25 J**
BERYLLIUM	NC	120	1400	63	0.308 U	0.292 U	0.304 U	0.312 U	0.298 U	0.301 U	0.294 U	0.333 U	0.296 U
CADMIUM	NC	82	1700	7.5	**0.392**	**0.11 J**	0.304 U	**0.937**	**0.0801 J**	**0.097 J**	**3.03**	**0.248 J**	**0.0637 J**
CALCIUM	NC	NC	NC	NC	**2170**	**695**	**408**	**6340**	**703**	301 U	**587**	333 U	296 U
CHROMIUM	NC	210	470	38	**12.1**	**3.1**	**2.35**	**14.4**	**2.11**	**1.7**	**125**	**3.64**	**3.19**
COBALT	NC	1700	42000	NC	**0.367 J**	0.731 U	0.76 U	0.781 U	0.745 U	0.752 U	0.736 U	0.832 U	0.739 U
COPPER	NC	150	89000	NC	**4.56**	**2.16**	**0.56 J**	**5.91**	**0.87**	**0.5 J**	**23.9**	**1.23**	**0.3 J**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**3870**	**1780**	**1430**	**1720**	**2670**	**632**	**1640**	**4170**	**3450**
LEAD	NC	400	1400	NC	**8.81**	**9.03**	**4.51**	**26.2**	**3.73**	**1.55**	**14.1**	**1.24**	**1.56**
MAGNESIUM	NC	NC	NC	NC	**139 J**	**82.9 J**	304 U	**142 J**	298 U	301 U	**70.6 J**	333 U	296 U
MANGANESE	NC	3500	43000	NC	**9.46**	**4.69**	**3.35**	**7.35**	**2.73**	**2.49**	**9.26**	**1.58**	**2.02**
MERCURY	NC	3	17	2.1	**0.0229 J**	0.0409 U	0.0407 U	**0.0418**	**0.0184 J**	0.0411 U	**0.0511**	0.044 U	0.0394 U
NICKEL	NC	340	35000	130	**1.79**	**0.933**	**0.567 J**	**2.03**	**0.46 J**	**0.295 J**	**0.854**	0.666 U	0.591 U
POTASSIUM	NC	NC	NC	NC	**80.1 J**	292 U	304 U	**63.5 J**	298 U	301 U	294 U	333 U	296 U
SELENIUM	NC	440	11000	5.2	**0.222 J**	0.585 U	0.608 U	**0.284 J**	**0.265 J**	0.602 U	**0.199 J**	0.666 U	0.591 U
SILVER	NC	410	8200	17	**0.224 J**	**0.0802 J**	0.608 U	**0.407 J**	0.596 U	**0.0648 J**	**2.33**	**0.205 J**	0.591 U
VANADIUM	NC	67	10000	980	**6.4**	**2.84**	**2.77**	**4.18**	**3.52**	**1.59**	**2.32**	**9.22**	**2.54**
ZINC	NC	26000	630000	NC	**22.9**	**9.58**	**4.01**	**38.7**	**9.17**	**3.29**	**57.1**	**10.9**	1.13 U
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NC	2900	15000	18000	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NC	2900	15000	11000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALDRIN	NC	60	300	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
BETA-BHC	NC	500	2400	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
DELTA-BHC	NC	24000	490000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NC	60	300	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN	NC	25000	510000	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR	NC	200	1000	23000	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS046-000X-030513	38SS046-0X02-030513	38SB047-0204-030513	38SS047-000X-030513	38SS047-0X02-030513	38SB048-0204-030513	38SS048-000X-030513	38SS048-0X02-030513	38SB049-0204-030513
SAMPLE DATE					3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS049-000 X-030513	38SS049-000 X-030513-D	38SS049-0X0 2-030513	38SB050-0204 -030513	38SS050-000 X-030513	38SS050-0X0 2-030513	38SB051-0204 -030513	38SB051-0204 -030513-D	38SS051-000 X-030513
SAMPLE DATE					3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**664**	**704**	**337**	**9350**	**1500**	**1150**	**612**	**793**	**978**
ANTIMONY	NC	27	370	5.4	0.616 U	0.604 U	0.588 U	1.25 U	0.614 U	0.597 U	0.636 U	0.637 U	0.628 U
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.724**	**0.69**	**4.32**	**2.8**	**0.517 J**	**3.84**	**0.35 J**	**0.451 J**	**0.629**
BARIUM	NC	120	130000	1600	**18.4**	**21**	**1.37 J**	**19.3**	**26**	**2.39**	**3.69**	**3.91**	**5.87**
BERYLLIUM	NC	120	1400	63	0.308 U	0.302 U	0.294 U	**0.255 J**	0.307 U	**0.0681 J**	0.318 U	0.318 U	0.314 U
CADMIUM	NC	82	1700	7.5	**4.61**	**5.27**	**0.255 J**	0.626 U	**6.84**	**1.04**	0.318 U	0.318 U	**0.196 J**
CALCIUM	NC	NC	NC	NC	**362**	**345**	294 U	**680**	**4780**	**162 J**	**113 J**	**141 J**	**552**
CHROMIUM	NC	210	470	38	**222**	**253**	**4.83**	**10.8**	**284**	**6.12**	**1.67**	**2.14**	**2.67**
COBALT	NC	1700	42000	NC	0.77 U	0.755 U	0.734 U	1.57 U	0.767 U	0.747 U	0.795 U	0.796 U	0.784 U
COPPER	NC	150	89000	NC	**11.9**	**13.7**	**0.811**	**0.54 J**	**42.6**	**1.35**	**0.482 J**	**0.689**	**12.4**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**1910**	**1990**	**5770**	**34800**	**3530**	**15300**	**492**	**800**	**1380**
LEAD	NC	400	1400	NC	**20.5**	**23.1**	**1.24**	**4.66**	**29.2**	**2.13**	**1.9**	**2.09**	**7.61**
MAGNESIUM	NC	NC	NC	NC	308 U	302 U	294 U	**298 J**	**101 J**	299 U	318 U	318 U	314 U
MANGANESE	NC	3500	43000	NC	**7.16**	**7.97**	**1.45**	**3.89**	**16.2**	**7.74**	**3.18**	**3.61**	**7.52**
MERCURY	NC	3	17	2.1	**0.102**	**0.1**	0.0377 U	0.0423 U	**0.13**	0.041 U	0.0418 U	0.0422 U	0.0428 U
NICKEL	NC	340	35000	130	**1.61**	**1.66**	**0.231 J**	**0.945 J**	**13.6**	**0.762**	**0.314 J**	**0.368 J**	**0.667**
POTASSIUM	NC	NC	NC	NC	308 U	302 U	294 U	626 U	307 U	299 U	318 U	318 U	314 U
SELENIUM	NC	440	11000	5.2	0.616 U	**0.205 J**	**0.181 J**	**0.656 J**	**0.318 J**	0.597 U	0.636 U	0.637 U	**0.239 J**
SILVER	NC	410	8200	17	**4.82**	**5.31**	**0.114 J**	1.25 U	**6.66**	**0.179 J**	0.636 U	0.637 U	**0.287 J**
VANADIUM	NC	67	10000	980	**2.85**	**2.95**	**1.06**	**15.3**	**4.11**	**12.6**	**1.43**	**2.44**	**3.01**
ZINC	NC	26000	630000	NC	**15.5**	**17.4**	**2.26**	3.46 U	**114**	**21**	**2.34**	**2.73**	**18.9**
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NC	2900	15000	18000	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NC	2900	15000	11000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALDRIN	NC	60	300	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
BETA-BHC	NC	500	2400	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
DELTA-BHC	NC	24000	490000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NC	60	300	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN	NC	25000	510000	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR	NC	200	1000	23000	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS049-000X-030513	38SS049-000X-030513-D	38SS049-0X02-030513	38SB050-0204-030513	38SS050-000X-030513	38SS050-0X02-030513	38SB051-0204-030513	38SB051-0204-030513-D	38SS051-000X-030513
SAMPLE DATE					3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS051-0X02-030513	38SB052-0204-030513	38SS052-000X-030513	38SS052-0X02-030513	38SB053-0204-040314	38SS053-000X-040314	38SS053-0X02-040314	38SB054-0204-040314	38SS054-000X-040314
SAMPLE DATE					3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	4/3/2014	4/3/2014	4/3/2014
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**499**	**535**	**1160**	**938**	**1080**	**6180**	**4450**	**10200**	**4010**
ANTIMONY	NC	27	370	5.4	0.608 U	0.629 U	0.551 U	0.624 U	0.403 U	0.354 U	**0.966**	0.778 U	**1.23**
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.833**	**0.374 J**	**0.473 J**	**0.553 J**	**0.492 J**	**0.921**	**1.32**	**3.66**	**0.974**
BARIUM	NC	120	130000	1600	**4.94**	**2.07 J**	**3.31**	**2.09 J**	**2.78 J**	**21.5**	**22.9**	**18.4**	**23.2**
BERYLLIUM	NC	120	1400	63	0.304 U	0.314 U	0.275 U	0.312 U	0.0807 U	**0.148 J**	**0.0867 J**	**0.263 J**	0.0827 U
CADMIUM	NC	82	1700	7.5	0.304 U	0.314 U	0.275 U	0.312 U	0.0807 U	**0.611**	**3.99**	0.156 U	**4.69**
CALCIUM	NC	NC	NC	NC	**212 J**	314 U	275 U	312 U	**199 J**	**30800**	**12100**	**379 J**	**989**
CHROMIUM	NC	210	470	38	1.25 U	1.25 U	**1.81**	**1.98**	**1.97**	**32.4**	**173**	**10.7**	**268**
COBALT	NC	1700	42000	NC	0.76 U	0.786 U	0.688 U	0.78 U	0.403 U	**0.475 J**	0.389 U	**0.914 J**	0.413 U
COPPER	NC	150	89000	NC	**1.14**	**0.396 J**	**0.59**	0.624 U	0.323 U	**3.84**	**10.2**	0.622 U	**15.2**
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**995**	**1120**	**1040**	**723**	**5550**	**3990**	**5900**	**30100**	**7030**
LEAD	NC	400	1400	NC	**3.66**	**1.44**	**3.95**	**2.68**	**2.16**	**8.82**	**17.7**	**5.76**	**26.7**
MAGNESIUM	NC	NC	NC	NC	304 U	314 U	275 U	312 U	80.7 U	**485**	**226 J**	**373 J**	**120 J**
MANGANESE	NC	3500	43000	NC	**3.13**	**3.29**	**2.87**	**4.28**	**5.48**	**9.78**	**8.42**	**4.21**	**9.19**
MERCURY	NC	3	17	2.1	0.0403 U	0.0427 U	0.0376 U	0.0414 U	0.0176 U	**0.0298 J**	**0.153**	0.0172 U	**0.126**
NICKEL	NC	340	35000	130	**0.328 J**	**0.235 J**	**0.375 J**	**0.275 J**	**0.33 J**	**1.98**	**2.27**	**1.26 J**	**2.2**
POTASSIUM	NC	NC	NC	NC	304 U	314 U	275 U	312 U	80.7 U	**169 J**	**87 J**	156 U	82.7 U
SELENIUM	NC	440	11000	5.2	0.608 U	0.629 U	0.551 U	0.624 U	0.305 U	0.26 U	0.478 U	0.896 U	0.424 U
SILVER	NC	410	8200	17	0.608 U	0.629 U	**0.0753 J**	0.624 U	0.0807 U	**0.518 J**	**3.97**	0.156 U	**5.99**
VANADIUM	NC	67	10000	980	**2.05**	**1.78**	**2.84**	**2.9**	**1.88**	**10.8**	**7.87**	**13.4**	**6.7**
ZINC	NC	26000	630000	NC	**8.41**	0.84 U	1.45 U	0.997 U	2.54 U	**17.1**	**15.8**	2.9 U	**48**
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NC	2900	15000	18000	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NC	2900	15000	11000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALDRIN	NC	60	300	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
BETA-BHC	NC	500	2400	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
DELTA-BHC	NC	24000	490000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NC	60	300	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN	NC	25000	510000	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR	NC	200	1000	23000	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS051-0X02-030513	38SB052-0204-030513	38SS052-000X-030513	38SS052-0X02-030513	38SB053-0204-040314	38SS053-000X-040314	38SS053-0X02-040314	38SB054-0204-040314	38SS054-000X-040314
SAMPLE DATE					3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	3/5/2013	4/3/2014	4/3/2014	4/3/2014
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS054-0X02-040314	38SS054-0X02-040314-D	38SB055-0204-040314	38SB055-0204-040314-D	38SS055-000X-040314	38SS055-0X02-040314	38SB056-0204-040314	38SS056-000X-040314	38SS056-0X02-040314
SAMPLE DATE					4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014
METALS (MG/KG)													
ALUMINUM	NC	80000	NC	NC	**1090**	**1350**	**1020 J**	**2350 J**	**867**	**2250**	**1290**	**782**	**2630**
ANTIMONY	NC	27	370	5.4	**0.395 J**	**0.605 J**	0.383 U	0.372 U	**1.49**	0.394 U	0.393 U	**0.869**	0.379 U
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.763**	**0.836**	**0.381 J**	**3.95 J**	**0.431 J**	**0.867**	**0.297 J**	**0.477 J**	**0.513 J**
BARIUM	NC	120	130000	1600	**11**	**12**	**3.12**	**3.18**	**29.2**	**3.31**	**3.61**	**18.1**	**3.08**
BERYLLIUM	NC	120	1400	63	0.0749 U	0.0755 U	0.0766 U	**0.0803 J**	0.0759 U	0.0788 U	0.0786 U	0.0765 U	0.0759 U
CADMIUM	NC	82	1700	7.5	**3.03**	**3.62**	**0.135 J**	**0.128 J**	**6.69**	**0.211 J**	0.0786 U	**3.71**	0.0759 U
CALCIUM	NC	NC	NC	NC	**558**	**667**	76.6 U	74.4 U	**512**	**89.2 J**	78.6 U	**2780**	**90.2 J**
CHROMIUM	NC	210	470	38	**90.8**	**116**	**5.9**	**6.3**	**308**	**4.49**	**2.23**	**174**	**2.62**
COBALT	NC	1700	42000	NC	0.374 U	0.378 U	0.383 U	0.372 U	0.38 U	0.394 U	0.393 U	0.383 U	0.379 U
COPPER	NC	150	89000	NC	**8.02**	**9.84**	**0.388 J**	0.298 U	**17.6**	**0.716 J**	0.315 U	**18**	0.304 U
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**2690**	**2860**	**618 J**	**10500 J**	**1520**	**1650**	**326**	**885**	**547**
LEAD	NC	400	1400	NC	**9.53**	**12.7**	**2.41**	**2.68**	**27.7**	**3.28**	**2.54**	**18.8**	**3.1**
MAGNESIUM	NC	NC	NC	NC	74.9 U	75.5 U	76.6 U	74.4 U	75.9 U	78.8 U	78.6 U	76.5 U	75.9 U
MANGANESE	NC	3500	43000	NC	**6.47**	**7.41**	**2.57**	**1.88**	**7.27**	**1.96**	**2.81**	**6.14**	**1.95**
MERCURY	NC	3	17	2.1	**0.0701**	**0.142**	0.0179 U	0.0179 U	**0.122**	0.0209 U	0.0225 U	**0.142**	0.0208 U
NICKEL	NC	340	35000	130	**1.68**	**2.66**	**0.391 J**	**0.229 J**	**1.69**	**0.681 J**	**0.401 J**	**0.956**	**0.424 J**
POTASSIUM	NC	NC	NC	NC	74.9 U	75.5 U	76.6 U	74.4 U	75.9 U	78.8 U	78.6 U	76.5 U	75.9 U
SELENIUM	NC	440	11000	5.2	0.227 U	0.31 U	0.234 U	0.418 U	0.335 U	0.427 U	0.236 U	0.282 U	0.405 U
SILVER	NC	410	8200	17	**2.43**	**3.06**	0.0766 U	**0.086 J**	**6.34**	**0.118 J**	0.0786 U	**3.39**	0.0759 U
VANADIUM	NC	67	10000	980	**2.92**	**3.89**	**2.56 J**	**27.8 J**	**1.67**	**3.35**	**2.26**	**2.53**	**4.01**
ZINC	NC	26000	630000	NC	**11.1**	**13.2**	2.11 U	1.8 U	**20.4**	2.84 U	2.62 U	**42.2**	1.98 U
PCBS (UG/KG)													
AROCLOR-1260	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
PESTICIDES (UG/KG)													
4,4'-DDD	NC	4200	22000	5800	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	NC	2900	15000	18000	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	NC	2900	15000	11000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALDRIN	NC	60	300	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
BETA-BHC	NC	500	2400	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
DELTA-BHC	NC	24000	490000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NC	60	300	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN	NC	25000	510000	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	NA	NA	NA	NA	NA	NA	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR	NC	200	1000	23000	NA	NA	NA	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	NA	NA	NA	NA	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)													
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	Background	Residential SCTL	Industrial SCTL	Leachability based on GW	38SS054-0X02-040314	38SS054-0X02-040314-D	38SB055-0204-040314	38SB055-0204-040314-D	38SS055-000X-040314	38SS055-0X02-040314	38SB056-0204-040314	38SS056-000X-040314	38SS056-0X02-040314
SAMPLE DATE					4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014	4/3/2014
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA	NA	NA	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA	NA	NA	NA	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
SEMIVOLATILES (MG/KG)													
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)													
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA	NA	NA	NA	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA	NA	NA	NA	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	**Background**	**Residential SCTL**	**Industrial SCTL**	**Leachability based on GW**	**38SB057-0204-040314**	**38SS057-000X-040314**	**38SS057-0X02-040314**
SAMPLE DATE					4/3/2014	4/3/2014	4/3/2014
METALS (MG/KG)							
ALUMINUM	NC	80000	NC	NC	**740**	**1640**	**2560**
ANTIMONY	NC	27	370	5.4	0.384 U	0.38 U	0.389 U
ARSENIC	0.8 (Surface) 1.48 (Subsurface)	2.1	12	NC	**0.372 J**	**0.484 J**	**0.664 J**
BARIUM	NC	120	130000	1600	**8.09**	**4.47**	**9.39**
BERYLLIUM	NC	120	1400	63	0.0768 U	0.0759 U	0.0778 U
CADMIUM	NC	82	1700	7.5	0.0768 U	**0.583**	0.0778 U
CALCIUM	NC	NC	NC	NC	**580**	**642**	**526**
CHROMIUM	NC	210	470	38	**0.999**	**2.11**	**2.72**
COBALT	NC	1700	42000	NC	0.384 U	0.38 U	0.389 U
COPPER	NC	150	89000	NC	0.307 U	**1.37**	0.311 U
IRON	852 (Surface) 5818.2 (Subsurface)	53000	NC	NC	**295**	**934**	**2370**
LEAD	NC	400	1400	NC	**2.35**	**5.54**	**4.08**
MAGNESIUM	NC	NC	NC	NC	76.8 U	75.9 U	**100 J**
MANGANESE	NC	3500	43000	NC	**2.78**	**2.97**	**2.83**
MERCURY	NC	3	17	2.1	0.021 U	**0.0266 J**	0.0187 U
NICKEL	NC	340	35000	130	0.23 U	**0.466 J**	**0.394 J**
POTASSIUM	NC	NC	NC	NC	76.8 U	75.9 U	77.8 U
SELENIUM	NC	440	11000	5.2	0.267 U	0.272 U	0.287 U
SILVER	NC	410	8200	17	0.0768 U	0.0759 U	0.0778 U
VANADIUM	NC	67	10000	980	**1.63**	**3.22**	**5.48**
ZINC	NC	26000	630000	NC	1.36 U	4.79 U	1.88 U
PCBS (UG/KG)							
AROCLOR-1260	NC	500	2600	17000	NA	NA	NA
TOTAL AROCLOR	NC	500	2600	17000	NA	NA	NA
PESTICIDES (UG/KG)							
4,4'-DDD	NC	4200	22000	5800	NA	NA	NA
4,4'-DDE	NC	2900	15000	18000	NA	NA	NA
4,4'-DDT	NC	2900	15000	11000	NA	NA	NA
ALDRIN	NC	60	300	200	NA	NA	NA
ALPHA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA
BETA-BHC	NC	500	2400	1	NA	NA	NA
DELTA-BHC	NC	24000	490000	200	NA	NA	NA
DIELDRIN	NC	60	300	2	NA	NA	NA
ENDOSULFAN I	NC	NC	NC	NC	NA	NA	NA
ENDOSULFAN II	NC	NC	NC	NC	NA	NA	NA
ENDOSULFAN SULFATE	NC	NC	NC	NC	NA	NA	NA
ENDRIN	NC	25000	510000	1000	NA	NA	NA
ENDRIN ALDEHYDE	NC	NC	NC	NC	NA	NA	NA
ENDRIN KETONE	NC	NC	NC	NC	NA	NA	NA
GAMMA-BHC (LINDANE)	NC	700	2500	9	NA	NA	NA
GAMMA-CHLORDANE	NC	NC	NC	NC	NA	NA	NA
HEPTACHLOR	NC	200	1000	23000	NA	NA	NA
HEPTACHLOR EPOXIDE	NC	100	500	600	NA	NA	NA
METHOXYCHLOR	NC	420000	8800000	160000	NA	NA	NA
POLYCYCLIC AROMATIC HYDROCARBONS (MG/KG)							
ACENAPHTHYLENE	NC	1800	20000	27	NA	NA	NA
ANTHRACENE	NC	21000	300000	2500	NA	NA	NA
BENZO(A)ANTHRACENE	NC	NC	NC	0.8	NA	NA	NA
BENZO(A)PYRENE	NC	0.1	0.7	8	NA	NA	NA

TABLE 1
SUMMARY OF RI SOIL ANALYTICAL RESULTS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

SAMPLE ID	**Background**	**Residential SCTL**	**Industrial SCTL**	**Leachability based on GW**	**38SB057-0204-040314**	**38SS057-000X-040314**	**38SS057-0X02-040314**
SAMPLE DATE					4/3/2014	4/3/2014	4/3/2014
BENZO(B)FLUORANTHENE	NC	NC	NC	2.4	NA	NA	NA
BENZO(G,H,I)PERYLENE	NC	2500	52000	32000	NA	NA	NA
BENZO(K)FLUORANTHENE	NC	NC	NC	24	NA	NA	NA
CHRYSENE	NC	NC	NC	77	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NC	NC	NC	0.7	NA	NA	NA
FLUORANTHENE	NC	3200	59000	1200	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NC	NC	NC	6.6	NA	NA	NA
PHENANTHRENE	NC	2200	36000	250	NA	NA	NA
PYRENE	NC	2400	45000	880	NA	NA	NA
SEMIVOLATILES (MG/KG)							
BENZALDEHYDE	NC	3300	24000	4.8	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NC	72	390	3600	NA	NA	NA
CAPROLACTAM	NC	NC	NC	NC	NA	NA	NA
N-NITROSODIPHENYLAMINE	NC	180	730	0.4	NA	NA	NA
VOLATILES (UG/KG)							
2-BUTANONE	NC	16000000	110000000	17000	NA	NA	NA
ACETONE	NC	11000000	68000000	25000	NA	NA	NA
METHYL ACETATE	NC	6800000	38000000	16000	NA	NA	NA

Notes:

Data provided in the Draft Remedial Investigation Report for PSC 38, May 2014.
Background - NAS Jacksonville Operable Unit 1 background concentrations
SCTL - Florida Department of Environmental Protection Soil Cleanup Target Level
Bold - Analyte was detected.
Shading - Analyte concentration exceeds both the background concentration and the SCTL
NA - Not analyzed
NC - No criterion
J - Estimated value above the laboratory detection limit but below the laboratory quantitation limit
U - Analyte was not detected at the reported detection limit.
R - The analyte was rejected

TABLE 2
FEDERAL CHEMICAL-SPECIFIC ARARs
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
Safe Drinking Water Act (SDWA) Regulations, MCLs	40 CFR Part 141	Relevant and Appropriate	Establishes enforceable standards for potable water for specific contaminants that have been determined to adversely affect human health.	Would be used as protective levels for groundwater or surface waters that are current or potential drinking water sources if soil contamination would potentially leach to groundwater sources.
SDWA Regulations, National Secondary Drinking Water Standards	40 CFR Part 143	TBC	Establishes welfare-based standards for public water systems for specific contaminants or water characteristics that may affect the aesthetic qualities of drinking water.	Would be used as protective levels for groundwater or surface waters that are current or potential drinking water source if soil contamination would potentially leach to groundwater sources.
USEPA Office of Drinking Water, Health Advisories	- - -	Potential TBC	Health advisories are estimates of non-carcinogenic risk due to consumption of contaminated drinking water.	These advisories would be considered for contaminants in surface water and groundwater that is or could be used as a potable water source if soil contamination would potentially leach to groundwater sources.
Cancer Slope Factors (CSFs)	- - -	TBC	CSFs are guidance values used to evaluate the potential carcinogenic hazard caused by exposure to contaminants.	CSFs would be considered for development of human health protection PRGs for soil at this site.
Reference Doses (RfDs)	- - -	TBC	RfDs are guidance values used to evaluate the potential noncarcinogenic hazard caused by exposure to contaminants.	RfDs would be considered for development of human health protection PRGs for soil at this site.

Notes:
MCL = Maximum contaminant levels
CFR = Code of Federal Regulations
TBC = To be considered

TABLE 3
STATE CHEMICAL-SPECIFIC ARARs
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
Surface Water Quality Standards	Chapter 62-302, F.A.C.	Potentially Applicable	This rule distinguishes surface water into five classes based on designated uses and establishes ambient water quality standards (called Florida Water Quality Standards) for listed pollutants.	Because these standards are specifically tailored to Florida waters, they should be used to establish cleanup levels rather than the federal Ambient Water Quality Criteria.
Groundwater Classes, Standards and Exemptions	Chapter 62-520, F.A.C.	Applicable	This rule designates the groundwater of the state into five classes and establishes minimum "free from" criteria. This rule also specifies that Classes I and II must meet the primary and secondary drinking water standards listed in Chapter 62-550.	This rule would be used to establish PRGs for groundwater that is a potential source of drinking water if soil contamination would potentially leach and impact groundwater source.
Drinking Water Criteria	Chapter 62-550, F.A.C.	TBC	This rule provides primary and secondary drinking water quality criteria.	This rule would be considered for the establishment of PRGs.
Contaminant Cleanup Target Levels Rule	Chapter 62-777, F.A.C.	Applicable	This rule provides guidance for soil, groundwater, and surface water cleanup levels that can be developed on a site-by-site basis.	This rule would be considered for the establishment of PRGs.

Notes:
F.A.C = Florida Administrative Code
TBC = To be considered

TABLE 4
FEDERAL LOCATION-SPECIFIC ARARs
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
Endangered Species Act Regulations	50 CFR Parts 81, 225, 402	Potentially Applicable	Requires federal agencies to act to avoid jeopardizing the continued existence of federally listed endangered or threatened species.	If a site investigation or remediation could potentially affect an endangered species, these regulations would apply.
Historic Sites Act Regulations	36 CFR Part 62	Potentially Applicable	Requires federal agencies to consider to existence and location of landmarks on the National Registry of Natural Landmarks to avoid undesirable impacts on such landmarks.	The existence of natural landmarks would be identified prior to remedial activities on site, including remedial investigations.
Fish and Wildlife Coordination Act Regulations	33 CFR Subsection 320.3	Potentially Applicable	Requires that the United States Fish and Wildlife Service (USFWS), National Marine Fisheries Service, and related state agencies be consulted prior to structural modification of any body of water, including wetlands. If modifications must be conducted, the regulation requires that adequate protection be provided for fish and wildlife resources.	If a remedial alternative involves the alteration of a stream or wetland, these agencies would be consulted.
National Environmental Policy Act Regulations, Wetlands, Floodplains, etc.	40 CFR Subsection 6.302 [a]	Potentially Applicable	These regulations contain the procedures for complying with Executive Order 11990 on wetlands protection. Appendix A states that no remedial alternative may adversely affect a wetland if another practicable alternative is available. If no alternative is available, impacts from implementing the chosen alternative must	If remedial action affects a wetland, these regulations would apply.
National Environmental Policy Act Regulations, Floodplain Management, Executive Order 11988	40 CFR Part 6, Appendix A	Potentially Applicable	Appendix A describes the policy for carrying out the Executive Order regarding floodplains. If no practicable alternative exists to performing cleanup in a floodplain, potential harm must be mitigated and actions taken to preserve the beneficial value of the floodplain.	If removal actions take place in a floodplain, alternatives would be considered that would reduce the risk of flood loss and restore and preserve the floodplain.
Fish and Wildlife Conservation Act	40 CFR Section 6.302	Potentially Applicable	Requires action to be taken to protect fish and wildlife from projects affecting streams or rivers.	USFWS officials would be consulted on how to minimize impacts of any remedial activities on any wildlife.

Note:
CFR = Code of Federal Regulations

TABLE 5
FEDERAL ACTION-SPECIFIC ARARs
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
Occupational Safety and Health Act (OSHA) Regulations, General Industry Standards	29 CFR Part 1910	Applicable	Requires establishment of programs to assure worker health and safety at hazardous waste sites, including employee training requirements.	These regulations would apply to all response activities.
OSHA Regulations, Occupational Health and Safety Regulations	29 CFR Part 1910, Subpart Z	Potentially Applicable	Establishes permissible exposure limits for workplace exposure to a specific listing of chemicals.	Standards are applicable for worker exposure to OSHA hazardous chemicals during remedial activities.
OSHA Regulations, Recordkeeping, Reporting, and Related Regulations	29 CFR Part 1904	Potentially Applicable	Provides recordkeeping and reporting requirements applicable to remedial activities.	These requirements apply to all site contractors and subcontractors and must be followed during all site work.
OSHA Regulations, Health and Safety Standards	29 CFR Part 1926	Potentially Applicable	Specifies the type of safety training, equipment, and procedures to be used during the site investigation and remediation.	All phases of the remedial response project would be executed in compliance with this regulation.
Resource Conservation and Recovery Act (RCRA) Regulations, Contingency Plan and Emergency Procedures	40 CFR 264, Subpart D	Potentially Relevant and Appropriate	Outlines requirements for emergency procedures to be followed in case of an emergency.	The administrative requirements established in this rule would be met for remedial actions involving the management of hazardous waste.
RCRA Regulations, General Facility Standards	40 CFR Subpart B, 264.10-264.18	Potentially Relevant and Appropriate	Sets the general facility requirements including general waste analysis, security measures, inspections, and training requirements. Section 264.18 establishes that a facility located in a 100-year floodplain must be designed, constructed, and maintained to prevent washout of any hazardous wastes by a 100-year flood.	If the remedial action involves construction of an on-site treatment facility, such as a groundwater treatment facility, the substantive requirements of this rule would be applicable requirements. A permitted treatment facility must be selected for off-site treatment. These regulations do not apply to the aboveground treatment or storage of hazardous waste before it is injected into underground. However, this rule may be an applicable requirement for alternatives that do not involve groundwater reinjection.

TABLE 5
FEDERAL ACTION-SPECIFIC ARARs
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
RCRA Regulations, Miscellaneous Units	40 CFR Part 264, Subpart X	Potentially Relevant and Appropriate	These standards are applicable to miscellaneous units not previously defined under existing RCRA regulations. Subpart X outlines performance requirements that miscellaneous units be designed, constructed, operated, and maintained to prevent releases to the subsurface, groundwater, and wetland that may have adverse effects on human health and the environment.	The design of proposed treatment alternatives, not specifically regulated under other subparts of RCRA, must prevent the release of hazardous constituents and future impacts on the environment. This subpart would apply to on-site construction of any treatment facility that is not previously defined under the RCRA regulation.
RCRA Regulations, Preparedness and Prevention	40 CFR Part 264, Subpart C	Potentially Relevant and Appropriate	Outlines requirements for safety equipment and spill control for hazardous waste facilities. Facilities must be designed, maintained, constructed, and operated to minimize the possibility of an unplanned release that could threaten human health or the environment.	Safety and communication equipment would be incorporated into all aspects of the remedial process and local authorities would be familiarized with site operations.
RCRA Regulations, Releases from Solid Waste Management Units (SWMUs)	40 CFR Part 264, Subpart F	Potentially Relevant and Appropriate	Establishes the requirements for SWMUs at RCRA regulated treatment, storage, and disposal facilities (TSDFs). The scope of the regulation encompasses groundwater protection standards, point of compliance, compliance period, and requirements for groundwater monitoring.	These regulations would be followed for the treatment of hazardous waste.
RCRA Regulations, Standards for Owners and Operators of Hazardous Waste TSDFs	40 CFR Part 264	Potentially Relevant and Appropriate	Establishes minimum national standards defining the acceptable management of hazardous wastes for owners and operators of facilities that treat, store, or dispose of hazardous wastes.	If remedial actions involving management of RCRA wastes at an off-site (TSDF) or if RCRA wastes are managed onsite, the requirements of this rule would be followed.
RCRA Regulations, Use and Management of Containers	40 CFR Part 264, Subpart I	Potentially Relevant and Appropriate	Sets standards for the storage of containers of hazardous waste.	This requirement would apply if a remedial alternative involves the storage of a hazardous waste (i.e., contaminated groundwater) in containers, prior to treatment.

Note:
CFR = Code of Federal Regulations

TABLE 6
STATE ACTION-SPECIFIC ARARs
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
Florida Hazardous Waste Rules – October 1993	Chapter 62-730, F.A.C.	Potentially Applicable	Adopts by reference sections of the Federal hazardous waste regulations and establishes minor additions to these regulations concerning the generation, storage, treatment, transportation, and disposal of hazardous wastes.	These regulations would apply if waste on site was deemed hazardous and needed to be stored, transported, or disposed properly.
Florida Drinking Water Standards	Chapter 62-550, F.A.C.	Potentially Applicable	This rule adopts Federal primary and secondary drinking water standards.	These regulations would apply to remedial activities that have the potential to impact sources of drinking water.
Florida Wetland Application Regulations - November, 1989	Chapter 62-611, F.A.C.	Potentially Applicable	Sets requirements for discharge of domestic wastewater to wetland. This rule mainly addresses the discharge of domestic wastewater to wetlands. Discharge limits are established for biochemical oxygen demand, total suspended solids, nitrogen, and phosphorus.	This rule would be considered for remedial alternatives that would result in discharges to wetlands where these limits may be approached.
Florida Wastewater Facility Permits	Chapter 62-620, F.A.C.	Potentially Applicable	This rule establishes requirements for wastewater permits. It was published in November 1994; however, it is not effective until Florida is recognized as a "delegated" state.	Upon delegation, facilities in Florida requiring a wastewater permit will meet the permitting requirements under this rule. Upon Florida becoming a "delegated" state, facilities will be allowed to have a single permit to meet both Federal and State discharge requirements.
Florida Regulation of Stormwater Discharge – May 1993	Chapter 62-25, F.A.C.	Potentially Relevant and Appropriate	Establishes requirements for discharges of untreated stormwater to ensure protection of the surface water of the state.	Remedial actions would consider the impact of the discharge of untreated stormwater from excavation.

TABLE 6
STATE ACTION-SPECIFIC ARARs
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

Requirement	Citation	Status	Synopsis	Evaluation/Action to be Taken
Florida Groundwater Permitting and Monitoring Requirements - April 1994	Chapter 62-522, F.A.C.	Potentially Applicable	Establishes permitting and monitoring requirements tor installations discharging to groundwater.	The substantive requirements of this rule would be met when discharge to groundwater is a possible remedial action. It these requirements are met under another permit, a separate discharge permit may not be required.
Florida Water Well Permitting and Construction Requirements - March 1992	Chapter 62-532, F.A.C.	Applicable	Establishes minimum standards for the location, construction, repair, and abandonment of water wells. Permitting requirements and procedures are established.	The substantive requirements tor permitting would be met it remedial actions involve the construction, repair, or abandonment of monitoring, extraction, or injection wells.
Florida Rules on Hazardous Waste Warning Signs – July 1991	Chapter 62-736, F.A.C.	Applicable	Requires warning signs at National Priorities List and FDEP identified hazardous waste sites to inform the public of the presence of potentially harmful conditions.	This requirement will be met.
Florida Rules on Permits – November 1994	Chapter 62-4, F.A.C.	Potentially Applicable	Establishes procedures for obtaining permits for sources of pollution. This rule also establishes a "mixing zone" rule tor facilities that discharge wastewater into the surface waters of the state.	These substantive requirements would be met during remediation. Through dilution, applying the "mixing zone" rule allows wastewater with higher concentrations of pollutants to be discharged into surface water, while still maintaining the Florida water quality standards.

Notes:
F.A.C = Florida Administrative Code

TABLE 7
PRELIMINARY SCREENING OF SOIL REMEDIATION TECHNOLOGIES AND PROCESS OPTIONS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

General Response Action	Remedial Technology	Process Option	Description	Screening Comment
No Action	None	Not applicable	No activities conducted at the site to address contamination.	Required by the NCP. Retain for baseline comparison to other technologies.
Limited Action	Land Use Controls	Active Controls: Physical Barriers/ Security Guards	Fencing, markers, warning signs, and monitoring to restrict site access.	Eliminate because of lack of space.
		Passive Controls: Deed or Land Use Restrictions	Administrative action using property deeds or other land use prohibitions to restrict future site activities.	Retain. Deed or Land Use Restrictions would prevent residential use. All soil is below industrial SCTLs.
	Monitoring	Sampling and Analysis	Sampling and analysis of soil and groundwater to evaluate migration of chemical constituents in the environment.	Retain. Any alternative that does not remove all contamination exceeding Cleanup Target Levels will require continued periodic sampling to ensure COCs are not migrating beyond the PSC 38 area.
Containment	Surface Protection	Asphalt/Multimedia Cover	Installation of an asphalt or multimedia cover to prevent direct exposure to contaminated soil and offsite migration of soil through erosion.	Eliminate because cover systems will leave the contaminated soil in place.
Removal	Bulk Excavation	Excavation	Use of construction equipment such as backhoe, front-end loader, gradeall, etc. to remove contaminated soil.	Retain. Excavation would effectively remove contaminated soil from the site
In-Situ Treatment	Biological	Anaerobic/Aerobic Treatment	Innoculation of microorganisms and nutrients to enhance naturally occurring biodegradation of COCs.	Eliminate because biodegradation is ineffective and not practical for metals contamination
	Physical/ Chemical	Soil Flushing	Use of water or other solvents to remove COCs by flushing and collecting and treating or disposing of the contaminated fluids.	Eliminate because this process would be very difficult to control *in situ* due to the distribution of contamination within the PSC 38 area.
		Dynamic Underground	Injection of steam at the periphery of the contaminated area to volatilize COCs and removal of these COCs through a centrally located extraction well.	Eliminate because of the non- or low-volatility of metals.
		Soil Vapor Extraction	Use of vacuum and possibly air sparging to volatilize COCs	Eliminate because soil vapor extraction is not practical for metals contamination.
		Chemical Fixation/ Solidification	Mixing of pozzolanic agents in the vadose zone to chemically fix COCs and solidify the matrix. This technology is primarily used to reduce the mobility of contaminants, but it can also be used to prepare a surface barrier for human uptake.	Eliminate because reduction in mobility of COCs is not an RAO. The use of this technology to prepare a surface barrier by *in situ* application would be difficult to control due to the very heterogeneous nature of the soil.
	Thermal	Vitrification/ Radiofrequency Heating	Use of moderate to high temperature to either volatilize COCs or to fuse them into a glass matrix.	Eliminate because COCs are not particularly volatile.

TABLE 7
PRELIMINARY SCREENING OF SOIL REMEDIATION TECHNOLOGIES AND PROCESS OPTIONS
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

General Response Action	Remedial Technology	Process Option	Description	Screening Comment
Ex-Situ Treatment	Physical/ Chemical	Soil Washing/Solvent	Use of water or other solvents to remove COCs by solubilizing and/or gravity-based separation of contaminated soil particles.	Eliminate from consideration because soil grain distribution of the surface soils will not allow for effective soil washing reducing contaminant volume.
		Chemical Fixation/ Stabilization	Mixing of pozzolanic agents to chemically fix COCs and stabilize the soil matrix.	Eliminate from consideration because there is no evidence that the soil of concern is hazardous.
	Biological	Onsite Landfarming	Spreading and tilling of contaminated soil into layers of clean surface soil to aerate and biodegrade organic COCs.	Eliminate because it would not be effective for the removal of site COCs and on-yard areas for construction of a treatment bed are very limited.
		Bioslurry Reactor/Biopile	Treatment of soil in a bioslurry reactor or biopile under controlled conditions using natural or cultured microorganisms to biodegrade organic COCs.	Eliminate because it would not be effective for the removal of metals.
	Thermal	Incineration	Use of high temperatures to destroy COCs.	Eliminate because it would be ineffective for destroying metals.
		Low-Temperature Thermal Desorption	Use of low to moderate temperatures to evaporate COCs and remove them from soil.	Eliminate because it would not be effective in removing metals.
	Solids Processing	Screening	Removal/segregation of material based on size either as a means to remove associated COCs or as a preliminary process to aid in downstream treatment.	Eliminate because it would be ineffective for destroying metals.
		Crushing/Grinding	Size reduction of wastes as a preliminary process to aid in downstream treatment.	Eliminate because it would be ineffective for destroying metals.
Disposal	Landfill/Recycling	On Site Landfilling	Disposal of excavated soil and treatment residues in an on-site landfill.	Eliminate because of lack of space.
		Offsite Landfilling/Recycling	Disposal of excavated soil and treatment residues in an off yard permitted TSDF.	Retain, excavated soils would be disposed offsite at a permitted facility.

Notes:

NCP = National Contingency Plan
SCTLs = Soil Cleanup Target Level
COC = Contaminant of Concern
PSC = Potential Source of Contamination
RAO = Removal Action Objective

TABLE 8
COMPARATIVE ANALYSIS OF REMEDIAL ACTION ALTERNATIVES
PSC 38
NAS JACKSONVILLE
JACKSONVILLE, FLORIDA

Evaluation Criteria	Alternative 1: No Action	Alternative 2: Institutional Controls and Monitoring	Alternative 3: Excavation and LUCs
Overall Protection of Human Health and Environment	Would not be protective of human health and the environment because the threats of direct human and ecological exposure to contaminated soil and soil COCs migrating to the groundwater would remain.	Would be protective of the environment by preventing residential development and detecting the migration of soil COCs	Would be most protective by eliminating the risk of exposure to soil contaminated above SCTLs for direct residential exposure and minimizing the potential for migration of COCs to groundwater
Compliance with ARARs and TBCs: Chemical-Specific Location Specific Action-Specific	 Would not comply Would not comply Not applicable	 Would not comply Would comply Would comply	 Would comply Would comply Would comply
Long-term Effectiveness and Permanence	Would have no long- term effectiveness and permanence since all contaminants would remain on-site. Any long-term effectiveness would not be known since monitoring would not occur.	Would be long-term effective and permanent. The prevention of residential development through deed restrictions and the monitoring of contaminants to evaluate their migration would provide long-term effectiveness and permanence.	Would provide the most long-term effectiveness and permanence. Risks from exposure to soil contaminated above the SCTLs tor direct residential exposure and from potential migration of contaminants would be effectively and permanently eliminated through excavation and disposal.
Reduction of Contaminant Toxicity, Mobility, or Volume through Treatment	Would not achieve reduction of toxicity, mobility, or volume of contaminants through treatment but may achieve some reduction through natural processes.	Would not achieve reduction of toxicity, mobility, or volume of contaminants through treatment but may achieve some reduction through natural processes.	Would reduce volume of contaminated soil at PSC 38 through excavation and offsite disposal.
Short-term Effectiveness	Would not result in short-term risks to site workers or adversely impact the surrounding community but would also not achieve RAOs through treatment.	Would result in slight risk to site workers during sampling of the soil and groundwater. This risk would be reduced through the wearing of appropriate PPE and the compliance with site-specific health and safety procedures. RAOs would be achieved immediately upon implementation. Eventual compliance with PRGs would be determined through monitoring.	Would result in a significant risk of exposure to site workers to contaminated soil during the excavation and disposal activities. This risk would be reduced through wearing of appropriate PPE and compliance with site-specific health and safety procedures. The RAOs would be achieved immediately upon implementation. PRGs would be attained within 2 months.
Implementability	Would be simple to implement since no action would occur.	Would be easy to implement since the resources, materials, and equipment are readily available.	Would be more difficult to implement since contaminated soil would have to be excavated and transported off-base for disposal. A construction permit and manifesting would also be required.
Costs: Capital Average Yearly O&M Average 5 Year Cost NPW	 $0 $0 $0 $0	 $18,000 $1,000 $17,000 $64,000	 $210,000 $1,000 $7,000 $236,000

Notes:

COC = Contaminant of Concern
ARARs = Applicable or Relevant and Appropriate Requirement
TBCs = To Be Considered
SCTLs = Soil Cleanup Target Levels
PSC = Potential Source of Contamination
RAO = Removal Action Objective
PPE = Personal Protective Equipment
PRGs = Preliminary Remediation Goals

APPENDIX A

COST ESTIMATE

PSC 38
NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA
ALTERNATIVE 2: INSTITUTIONAL CONTROLS AND MONITORING
CAPITAL COST

Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
1 PROJECT PLANNING											
1.1 Prepare Monitoring Plan	30	hr		$ -	$ 40	$ -	$ -	$ -	$ 1,200	$ -	$ 1,200
2 INSTITUTIONAL CONTROLS											
2.1 Prepare LUCs	160	hr		$ -	$ 40	$ -	$ -	$ -	$ 6,400	$ -	$ 6,400
Subtotal							$ -	$ -	$ 7,600	$ -	$ 7,600
Overhead on Labor Cost @ 100%									$ 7,600		$ 7,600
G & A on Labor Cost @ 10%									$ 760		$ 760
G & A on Material Cost @ 10%								$ -			$ -
G&A on Subcontractor Cost @ 10%							$ -				$ -
Total Direct Cost							$ -	$ -	$ 15,960	$ -	$ 15,960
Profit on Total Direct Cost @ 10%											$ 1,596
Subtotal											$ 17,556
Health & Safety Monitoring @ 0%											$ -
Contingency on Subtotal Costs @ 0%											$ -
Engeneering on Subtotal Cost @ 0%											$ -
TOTAL COST											**$ 17,556**

PSC 38
NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA
ALTERNATIVE 2: INSTITUTIONAL CONTROLS AND MONITORING
ANNUAL COST

Item	Item Cost Annually	Item Cost Every 5 Years	Notes
Sampling		$ 4,000	Labor, field supplies
Groundwater Analysis		$ 1,946	Sample for VOCs, SVOCs, PCBs and metals at four locations plus one duplicate and one trip blank.
Soil Analysis		$ 2,160	Sample for VOCs, SVOCs, PCBs and metals at four locations plus one duplicate and one trip blank.
Annual Report		$ 1,600	Yearly Site Inspection Report (not inclusive of sampling and analysis costs)
Site Inspection	$ 1,000		To verify continued implementation of the LUCIP
Site Review		$ 7,000	Five year review of site conditions with report
TOTALS	$ 1,000	$ 16,706	

PSC 38
NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA
ALTERNATIVE 2: INSTITUTIONAL CONTROLS AND MONITORING
PRESENT WORTH ANALYSIS

Year	Capital Cost	Annual Cost	Total Year Cost	Annual Discount Rate at 7%	Present Worth
0	$ 17,556		$ 17,556	1.000	$ 17,556
1		$ 1,000	$ 1,000	0.935	$ 935
2		$ 1,000	$ 1,000	0.873	$ 873
3		$ 1,000	$ 1,000	0.816	$ 816
4		$ 1,000	$ 1,000	0.763	$ 763
5		$ 16,706	$ 16,706	0.713	$ 11,911
6		$ 1,000	$ 1,000	0.666	$ 666
7		$ 1,000	$ 1,000	0.623	$ 623
8		$ 1,000	$ 1,000	0.582	$ 582
9		$ 1,000	$ 1,000	0.544	$ 544
10		$ 16,706	$ 16,706	0.508	$ 8,492
11		$ 1,000	$ 1,000	0.475	$ 475
12		$ 1,000	$ 1,000	0.444	$ 444
13		$ 1,000	$ 1,000	0.415	$ 415
14		$ 1,000	$ 1,000	0.388	$ 388
15		$ 16,706	$ 16,706	0.362	$ 6,055
16		$ 1,000	$ 1,000	0.339	$ 339
17		$ 1,000	$ 1,000	0.317	$ 317
18		$ 1,000	$ 1,000	0.296	$ 296
19		$ 1,000	$ 1,000	0.277	$ 277
20		$ 16,706	$ 16,706	0.258	$ 4,317
21		$ 1,000	$ 1,000	0.242	$ 242
22		$ 1,000	$ 1,000	0.226	$ 226
23		$ 1,000	$ 1,000	0.211	$ 211
24		$ 1,000	$ 1,000	0.197	$ 197
25		$ 16,706	$ 16,706	0.184	$ 3,078
26		$ 1,000	$ 1,000	0.172	$ 172
27		$ 1,000	$ 1,000	0.161	$ 161
28		$ 1,000	$ 1,000	0.150	$ 150
29		$ 1,000	$ 1,000	0.141	$ 141
30		$ 16,706	$ 16,706	0.131	$ 2,195
				TOTAL PRESENT WORTH	**$ 63,856**

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NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA
ALTERNATIVE 3: EXCAVATION AND LUCs
CAPITAL COST

Item	Quantity	Unit	Unit Cost				Extended Cost				Subtotal
			Subcontract	Material	Labor	Equipment	Subcontract	Material	Labor	Equipment	
1 PROJECT PLANNING											
1.1 Site Meeting, Project Management, Administrative Support	80	hr	$ -	$ -	$ 100.00	$ -	$ -	$ -	$ 8,000	$ -	$ 8,000
1.2 Prepare Work Plan	50	hr	$ -	$ -	$ 100.00	$ -	$ -	$ -	$ 5,000	$ -	$ 5,000
1.3 Prepare Health and Safety Plan (APP and SSHP)	10	hr	$ -	$ -	$ 100.00	$ -	$ -	$ -	$ 1,000	$ -	$ 1,000
1.4 Prepare Waste Management Plan (WMP)	20	hr	$ -	$ -	$ 100.00	$ -	$ -	$ -	$ 2,000	$ -	$ 2,000
2 MOBILIZATION/DEMOBILIZATION											
2.1 Equipment Mobilization/Demobilization and Excavation	1	ls	$ -	$ -	$ -	$ 2,000.00	$ -	$ -	$ -	$ 2,000	$ 2,000
2.2 Site Utility Locate	1	ea	$ 1,000.00	$ -	$ -	$ -	$ 1,000	$ -	$ -	$ -	$ 1,000
3 DECONTAMINATION											
3.1 Equipment Decon Pad (Installation and Removal)	1	ls	$ -	$ -	$ 2,000.00	$ 1,000.00	$ -	$ -	$ 2,000	$ 1,000	$ 3,000
3.2 Decontamination Water	2,000	gal	$ -	$ 0.20	$ -	$ -	$ -	$ 400	$ -	$ -	$ 400
3.3 Disposal of Deconatmination Wastes	5	day	$ -	$ -	$ 100.00	$ -	$ -	$ -	$ 500	$ -	$ 500
3.4 PPE	1	ls	$ -	$ 806.00	$ -	$ -	$ -	$ 806	$ -	$ -	$ 806
4 SOIL EXCAVATION AND ANALYSIS											
4.1 Arsenic and PCB Contaminated Soil Excavation	572	cy	$ -	$ -	$ -	$ 6.00	$ -	$ -	$ -	$ 3,432	$ 3,432
4.2 Confirmatory Excavation Sampling	10	ea	$ 420.00	$ -	$ -	$ -	$ 4,200	$ -	$ -	$ -	$ 4,200
5 SOIL DISPOSAL											
5.1 Waste Soil Characterization Testing	2	ea	$ 245.00	$ -	$ -	$ -	$ 490	$ -	$ -	$ -	$ 490
5.2 Soil Transportation and Disposal (Subtitle D Landfill)	858	ton	$ -	$ 49.00	$ -	$ -	$ -	$ 42,042	$ -	$ -	$ 42,042
6 SITE RESTORATION											
6.1 Backfill Material Characterization Testing	2	ea	$ 420.00	$ -	$ -	$ -	$ 840	$ -	$ -	$ -	$ 840
6.2 Import, Place and Compact Clean Backfill	498	cy	$ -	$ 45.00	$ -	$ -	$ -	$ 22,410	$ -	$ -	$ 22,410
6.3 Import and Place Topsoil	74	cy	$ -	$ 12.30	$ 2.40	$ 6.90	$ -	$ 910	$ 178	$ 511	$ 1,598
6.4 Fine Grade and Seed Topsoil	4,000	sf	$ -	$ 0.26	$ 1.16	$ 0.18	$ -	$ 1,040	$ 4,640	$ 720	$ 6,400
7 PROJECT DOCUMENTATION											
7.1 Interim Action Construction Completion Report	50	hours		$ -	$ 100.00	$ -	$ -	$ -	$ 5,000	$ -	$ 5,000
8 INSTITUTIONAL CONTROLS											
8.1 Prepare LUCs	200	hours		$ -	$ 100.00	$ -	$ -	$ -	$ 20,000	$ -	$ 20,000
Subtotal							$ 6,530	$ 67,608	$ 48,318	$ 7,663	$ 130,118
Overhead on Labor Cost @ 100%									$ 48,318		$ 48,318
G & A on Labor Cost @ 10%									$ 4,832		$ 4,832
G & A on Material Cost @ 10%								$ 6,760.82			$ 6,761
G&A on Subcontractor Cost @ 10%							$ 653				$ 653
Total Direct Cost							$ 7,183	$ 74,369	$ 101,467	$ 7,663	$ 190,682
Profit on Total Direct Cost @ 10%											$ 19,068.16
Subtotal											$ 209,750
Health & Safety Monitoring @ 0%											$ -
Contingency on Subtotal Costs @ 0%											$ -
Engeneering on Subtotal Cost @ 0%											$ -
TOTAL COST											**$ 209,750**

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NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA
ALTERNATIVE 3: EXCAVATION AND LUCs
ANNUAL COST

Item	Item Cost Annually	Item Cost Every 5 Years	Notes
Site Inspection	$ 1,000		To verify continued implementation of the LUCs
Site Review		$ 7,000	Five year review of site conditions
TOTALS	$ 1,000	$ 7,000	

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NAVAL AIR STATION JACKSONVILLE
JACKSONVILLE, FLORIDA
ALTERNATIVE 3: EXCAVATION AND LUCs
PRESENT WORTH ANALYSIS

Year	Capital Cost	Annual Cost	Total Year Cost	Annual Discount Rate at 7%	Present Worth
0	$ 209,750		$ 209,750	1.000	$ 209,750
1		$ 1,000	$ 1,000	0.935	$ 935
2		$ 1,000	$ 1,000	0.873	$ 873
3		$ 1,000	$ 1,000	0.816	$ 816
4		$ 1,000	$ 1,000	0.763	$ 763
5		$ 7,000	$ 7,000	0.713	$ 4,991
6		$ 1,000	$ 1,000	0.666	$ 666
7		$ 1,000	$ 1,000	0.623	$ 623
8		$ 1,000	$ 1,000	0.582	$ 582
9		$ 1,000	$ 1,000	0.544	$ 544
10		$ 7,000	$ 7,000	0.508	$ 3,558
11		$ 1,000	$ 1,000	0.475	$ 475
12		$ 1,000	$ 1,000	0.444	$ 444
13		$ 1,000	$ 1,000	0.415	$ 415
14		$ 1,000	$ 1,000	0.388	$ 388
15		$ 7,000	$ 7,000	0.362	$ 2,537
16		$ 1,000	$ 1,000	0.339	$ 339
17		$ 1,000	$ 1,000	0.317	$ 317
18		$ 1,000	$ 1,000	0.296	$ 296
19		$ 1,000	$ 1,000	0.277	$ 277
20		$ 7,000	$ 7,000	0.258	$ 1,809
21		$ 1,000	$ 1,000	0.242	$ 242
22		$ 1,000	$ 1,000	0.226	$ 226
23		$ 1,000	$ 1,000	0.211	$ 211
24		$ 1,000	$ 1,000	0.197	$ 197
25		$ 7,000	$ 7,000	0.184	$ 1,290
26		$ 1,000	$ 1,000	0.172	$ 172
27		$ 1,000	$ 1,000	0.161	$ 161
28		$ 1,000	$ 1,000	0.150	$ 150
29		$ 1,000	$ 1,000	0.141	$ 141
30		$ 7,000	$ 7,000	0.131	$ 920
				TOTAL PRESENT WORTH	**$ 235,106**