# Fourth Five-Year Report For American Creosote Works, Inc. (Pensacola Plant) FLD008161994

Pensacola Escambia County, Florida

September 2016

United States Environmental Protection Agency Region 4 Atlanta, Georgia

Approved by:

Date:

Franklin E. Hill, Director Superfund Division

11050380

# Fourth Five-Year Review Report

#### for

# American Creosote Works, Inc. (Pensacola Plant) 701 South J Street

# Pensacola

# Escambia County, Florida

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List of Acronyms

ACL Alternate Concentration Limit ACW American Creosote Works, Inc.

ARAR Applicable or Relevant and Appropriate Requirement

bgs Below Ground Surface BRA Baseline Risk Assessment

CERCLA Comprehensive Environmental Response, Compensation and Liability Act

CFR Code of Federal Regulations

CIC Community Involvement Coordinator

COC Contaminant of Concern

cPAH Carcinogenic Polynuclear Aromatic Hydrocarbon

DNAPL Dense Non-Aqueous Phase Liquid
EPA U.S. Environmental Protection Agency
ESD Explanation of Significant Differences

FDEP Florida Department of Environmental Protection FDER Florida Department of Environmental Regulation

FS Feasibility Study
FYR Five-Year Review
HI Hazard Index
HQ Hazard Quotient
IC Institutional Control

LTRA Long-Term Response Action
MCL Maximum Contaminant Level

μg/L Micrograms per Liter
mg/kg Milligrams per Kilogram

NCP National Oil and Hazardous Substances Pollution Contingency Plan

ng/kg Nanograms per Kilogram NPL National Priorities List

NWFWMD Northwest Florida Water Management District

O&M Operation and Maintenance

OU Operable Unit

PAH Polynuclear Aromatic Hydrocarbon

PCP Pentachlorophenol

PRP Potentially Responsible Party

PYC Pensacola Yacht Club RA Remedial Action

RAO Remedial Action Objective

RCRA Resource Conservation and Recovery Act

RI Remedial Investigation
ROD Record of Decision
RPM Remodial Investigation

RPM Remedial Project Manager RSL Regional Screening Level

SVOC Semi-Volatile Organic Compound

SWCTL State of Florida Surface Water Cleanup Target Levels

TCDD Tetrachlorodibenzo-p-Dioxin

TEQ Toxicity Equivalents

VISL Vapor Intrusion Screening Level VOC Volatile Organic Compound

## **Executive Summary**

The American Creosote Works, Inc. (Pensacola Plant) Superfund site (the Site) is located in downtown Pensacola, Escambia County, Florida at 701 South J Street. From 1902 until 1981, a wood treating facility operated on the Site. During operation, American Creosote Works, Inc. (ACW) used creosote and pentachlorophenol (PCP) to treat wood. Improper management of these chemicals resulted in contamination of soil, sediment and groundwater.

The U.S. Environmental Protection Agency designated three operable units (OUs) for the Site's cleanup: OU1 addresses on-facility and select off-facility surface soil, subsurface soil, sludge and sediment contamination; OU2 addresses groundwater contamination; and OU3 addresses off-facility, dioxinimpacted soils. The EPA selected the remedy for OU1 in the 1985 and 1989 Records of Decision (RODs) and later modified those selections in the 1999 ROD Amendment. The selected remedy includes disposal of process area foundations and debris in an off-facility landfill; excavation of contaminated surface soils, subsurface soils and sediments from off-facility residential areas, the Pensacola Yacht Club (PYC) and the PYC Ditch; consolidation of excavated material onto the former facility property; restoration of excavated areas; construction of a surface cap over on-facility consolidated materials; installation of a surface water drainage system; groundwater monitoring for 30 years to evaluate effectiveness of containment system; and implementation of institutional controls. To date, the OU1 remedy has been partially implemented; it will be completed based on a planned sitewide ROD.

The EPA selected the remedy for OU2 in a 1994 ROD, which included two phases: Dense Non-Aqueous Phase Liquid (DNAPL) recovery and groundwater treatment. In 2012, the EPA issued a remedy failure notice for the DNAPL recovery. The EPA plans to issue an interim ROD to address containment of source materials and a subsequent final sitewide ROD to address residual contamination.

The EPA has not selected the remedy for OU3, so OU3 is not subject to this five-year review (FYR). A final remedy for OU3 will be selected in the planned sitewide ROD.

The triggering action for this statutory review is the signing of the Site's third FYR on September 19, 2011.

The remedy at OU1 is expected to be protective of human health and the environment upon completion. In the interim, remedial activities completed to date have adequately addressed all exposure pathways that could result in unacceptable risks in these areas. The former facility area is fenced, and warning signage is in place. The EPA remediated the PYC Ditch and returned it to unrestricted use. The OU1 off-facility soil confirmation samples indicate that there are still exceedances of COCs; these are on vacant, non-residential areas and are expected to be addressed in the final sitewide ROD. A screening-level risk evaluation also indicated that several soil cleanup goals exceeded acceptable risks, and there are currently no OU1 land use restrictions; however, it is expected that the EPA will address these outstanding issues in the final sitewide ROD.

The remedy at OU2 is currently not protective, but it is expected to be protective of human health and the environment upon completion of the final sitewide ROD. In the interim, remedial activities completed to date have addressed all exposure pathways that could result in unacceptable risks in these areas. The amount of free product was reduced by the groundwater treatment system and there are ICs in place to prevent anyone from installing a drinking water well in the area. OU2 will be protective after evaluating the vapor intrusion pathway using multiple lines of evidence and implementing a new remedy

to address the remaining groundwater contamination. It is expected that the EPA outstanding issues in the final sitewide ROD.	will address these

# Five-Year Review Summary Form

SITE IDENTIFICATION

**Site Name:** American Creosote Works, Inc. (Pensacola Plant)

**EPA ID:** FLD008161994

Region: 4 State: FL City/County: Pensacola/ Escambia County

SITE STATUS

**NPL Status:** Final

Multiple OUs? Has the site achieved construction completion?

Yes No

**REVIEW STATUS** 

Lead agency: EPA

Author name: Peter Thorpe (EPA), Sabrina Foster and Kelly MacDonald (Skeo)

Author affiliation: EPA and Skeo

**Review period:** 11/17/2015 – 09/19/2016

Date of site inspection: 03/29/2016

Type of review: Statutory

Review number: 4

Triggering action date: 09/19/2011

Due date (five years after triggering action date): 09/19/2016

#### **Five-Year Review Summary Form (continued)**

# Issues/Recommendations

OUs without Issues/Recommendations Identified in the Five-Year Review:

None.

#### Issues and Recommendations Identified in the Five-Year Review:

OU(s): 1 & 2	Issue Category: Remedy Performance				
	<b>Issue:</b> The OU1 remedy has not been fully implemented and the EPA has declared a remedy failure of the groundwater extraction and treatment system for OU2.				
·	Recommendation: Evaluate cleanup options/cleanup levels and implement a final sitewide remedy that addresses remaining cleanup needs for all OUs.				
Affect Current Protectiveness					
Yes	Yes EPA EPA 09/30/2017				

OU(s): 2	Issue Category:	gory: Remedy Performance			
	Issue: The screening-level vapor intrusion evaluation indicates additional information is needed to determine if this exposure pathway is complete.				
	Recommendation: Conduct a more detailed vapor intrusion evaluation utilizing multiple lines of evidence to determine if any additional response action is warranted.				
Affect Current Protectiveness	Affect Future Protectiveness	Implementing Party	Oversight Party	Milestone Date	
Yes	Yes EPA EPA 09/30/2017				

# **Protectiveness Statements**

Operable Unit: 1	Protectiveness Determination: Partially Protective	
completion. In the interim, exposure pathways that of area is fenced, and warr returned it to unrestricted are still exceedances of to be addressed in the final several soil cleanup goals	pected to be protective of human hear remedial activities completed to date could result in unacceptable risks in the large signage is in place. The EPA reuse. The OU1 off-facility soil confirmations; these are on vacant, non-residual sitewide ROD. A screening-level rist exceeded acceptable risks, and there expected that the EPA will address the	have adequately addressed all hese areas. The former facility emediated the PYC Ditch and tion samples indicate that there lential areas and are expected k evaluation also indicated that are currently no OU1 land use
Operable Unit:	Protectiveness Determination:	Addendum Due Date:
2	Not Protective	09/30/2017
health and the environme remedial activities comple in unacceptable risks in the groundwater treatment sy drinking water well in the pathway using multiple lin	rrently not protective, but it is expected in the upon completion of the final sitewide ted to date have addressed all exposites areas. The amount of free produstem and there are ICs in place to present a complete to protective after evalues of evidence and implementing a nontamination. It is expected that the E	le ROD. In the interim, ure pathways that could result uct was reduced by the event anyone from installing a alluating the vapor intrusion ew remedy to address the
- Current human exposure - Current groundwater mig	Environmental Indicators es at the Site are not under control. gration is under control.	
Are	Necessary Institutional Controls in	n Place?
☐ All ⊠ Some ☐ None		
Has EPA Desig	nated the Site as Sitewide Ready fo	or Anticipated Use?
☐ Yes ⊠ No		
	Has the Site Been Put into Reus	e?
☐ Yes ⊠ No		

# Fourth Five-Year Review Report for American Creosote Works, Inc. (Pensacola Plant) Superfund Site

#### 1.0 Introduction

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy will continue to be protective of human health and the environment. FYR reports document FYR methods, findings and conclusions. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency prepares FYRs pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Section 121 and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). CERCLA Section 121 states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each 5 years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.

The EPA interpreted this requirement further in the NCP, 40 Code of Federal Regulations (CFR) Section 300.430(f)(4)(ii), which states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after initiation of the selected remedial action.

Skeo, an EPA Region 4 contractor, conducted the FYR and prepared this report regarding the remedy implemented at the American Creosote Works, Inc. (Pensacola Plant) Superfund site (the Site) in Pensacola, Escambia County, Florida. The EPA's contractor conducted this FYR from November 2015 to September 2016. The EPA is the lead agency for developing and implementing the remedy for the Superfund-financed cleanup at the Site. The Florida Department of Environmental Protection (FDEP), as the support agency representing the State of Florida, has reviewed all supporting documentation and provided input to the EPA during the FYR process.

This is the fourth FYR for the Site. The triggering action for this statutory review is the previous FYR. The FYR is required because hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure. The Site consists of three operable units (OUs): on-facility and select off-facility soil, sediment and sludge contamination (OU1), groundwater contamination (OU2), and off-facility dioxin soil contamination (OU3). A remedy has not been selected for OU3; therefore, OU3 will not be subject to this FYR. This FYR report will review remedial actions and performance at OU1 and OU2.

# 2.0 Site Chronology

Table 1 lists the dates of important events for the Site.

**Table 1: Chronology of Site Events** 

Event	Date
Earliest documented spill from American Creosote Works, Inc. (ACW)	1978
Spill from ACW due to flooding	March 1979
Initial City of Pensacola discovery of creosote contamination in	January 1981
groundwater	·
United States Geological Survey installed groundwater monitoring wells	July 1981
ACW ceased facility operations and filed for bankruptcy	May 1982
The EPA proposed the Site to the National Priorities List (NPL)	December 30, 1982
Sitewide removal action start date	February 16, 1983
Sitewide removal action completion date	February 19, 1983
Sitewide removal action start date	April 7, 1983
Sitewide removal action completion date	April 8, 1983
The EPA initiated OU1 combined remedial investigation and feasibility	August 18, 1983
study (RI/FS)	
The EPA finalized the Site on the NPL	September 8, 1983
Immediate removal action performed by the EPA to dewater the main	September 20, 1983
and overflow ponds and stabilize and cap the sludge resulting from the	F
ponds	
Immediate removal action completed	November 20, 1983
State of Florida conducted site inspection	June 1, 1984
The EPA completed OU1 combined RI/FS;	September 30, 1985
The EPA issued OU1 Record of Decision (ROD)	
Sitewide removal action start date (railroad spur on right of way)	November 18, 1985
Sitewide removal action completion date (railroad spur on right of way)	April 18, 1986
The EPA issued Consent Decree	August 4, 1988
The EPA conducted post-RI	1988
The EPA completed post-FS and OU1 baseline risk assessment (BRA)	1989
The EPA initiated first OU1 remedial design (RD)	September 25, 1989
The EPA completed revised OU1 ROD and initiated second OU1 RD	September 28, 1989
The EPA initiated OU2 combined RI/FS	November 28, 1989
The EPA initiated OU1 treatability study	February 15, 1990
The EPA issued an Explanation of Significant Differences (ESD) to the	August 1990
1989 OU1 ROD	
The EPA completed first OU1 RD	August 13, 1990
The EPA initiated OU1 remedial action (RA)	September 10, 1990
The EPA completed OU1 treatability study	September 11, 1990
Second OU1 RD completed	February 28, 1992
The EPA completed OU1 ecological risk assessment and OU1 health risk	August 2, 1993
assessment	1.08.00 2, 1,7,7
The EPA completed OU2 combined RI/FS and issued OU2 ROD	February 3, 1994
The EPA initiated OU2 RD	April 18, 1994
OU2 RD completed	May 15, 1997
The EPA initiated OU2 RA	September 11, 1997
The EPA completed OU1 ROD Amendment	May 21, 1999
The EPA initiated third OU1 RD (additional characterization of	September 28, 1999
contamination)	September 20, 1999
The EPA completed OU2 RA;	September 30, 1999
The EPA initiated OU2 long-term response action	September 50, 1777
The LITT initiated OOZ long-term response action	<del>_</del>

Event	Date
The EPA completed third OU1 RD (additional characterization of	September 22, 2000
contamination)	_
The EPA completed first FYR	September 25, 2001
OU1 removal action initiated by the EPA	February 24, 2003
OU1 removal action completed	March 5, 2003
Hurricane Ivan disabled OU2 remedy	September 16, 2004
Fourth OU1 RD (soil and sediment excavation) initiated by the EPA	September 24, 2004
OU2 remedy re-initiated by the EPA	December 2005
The EPA initiated OU2 RD	August 14, 2006
The EPA completed the second FYR	September 21, 2006
OU3 combined RI/FS initiated by the EPA	April 6, 2007
Fourth OU1 RD (soil and sediment excavation) completed	November 25, 2009
OU1 RA (southeast drainage ditch) initiated by the EPA	January 11, 2010
OU1 RA (southeast drainage ditch) completed	January 29, 2010
The EPA completed the third FYR	September 19, 2011
The EPA shut down the OU2 dense non-aqueous phase liquid (DNAPL)	December 2011
extraction system	
The City of Pensacola rerouted the stormwater drainage from the	August 2012
Pensacola Yacht Club (PYC) ditch	
The EPA completed sitewide FS	November 2012
The EPA issued OU2 remedy failure letter	December 2012
The EPA initiated cleanup of the PYC Ditch	June 1, 2016
The EPA completed cleanup of the PYC Ditch	August 2016

# 3.0 Background

# 3.1 Physical Characteristics

The Site is located in downtown Pensacola, Escambia County, Florida at 701 South J Street. It is about 600 yards north of Pensacola Bay and Bayou Chico (Figure 1). As of 2010, the Census population estimate within 1 mile of the Site was 3,503. The Site includes several main areas: the former facility area, the Pensacola Yacht Club (PYC) ditch and the Southeast Ditch (Figures 1 and 2). Before cleanup, a railroad spur, plant buildings, equipment and surface impoundments occupied the 18-acre former facility area, but it is now cleared, vacant and fenced off. The former facility area now contains the former groundwater treatment shed, two empty aboveground storage tanks (previously used to hold extracted dense non-aqueous phase liquid (DNAPL), and an on-site office trailer. The EPA consolidated contaminated soil and debris under a black fabric liner and clay cap cover within the fenced former facility area (Figure 2). The PYC Ditch formerly drained surface water from streets and storm drains into Pensacola Bay. In 2012, the City of Pensacola redirected stormwater to flow via underground piping under J Street instead. The EPA remediated the PYC Ditch from June to August 2016 and left a level grassy area. The Southeast Ditch is currently a flat, grassy unfenced area. The Site's remedy has been divided into three OUs: OU1 addresses on-facility and select off-facility surface soil, subsurface soil, sludge and sediment contamination (Figure 2); OU2 addresses groundwater contamination; and OU3 will address off-facility, dioxin-impacted soils.

There are three major aquifers in the site area: the shallow Sand-and-Gravel Aquifer and the deep upper and lower limestones of the Floridan Aquifer. The Pensacola Clay, a thick section of relatively impermeable clay, separates the Sand-and-Gravel Aquifer from the upper Floridan Aquifer.

The Sand-and-Gravel Aquifer is a shallow aquifer of sand and gravel with interbedded layers of silt and clay; it is recharged by rainfall with relatively high infiltration rates because of the sandy aquifer and overlying soils. The direction of groundwater flow is south, with discharge to Pensacola Bay.

#### 3.2 Land and Resource Use

American Creosote Works, Inc. (ACW) operated as a wood treating facility on the Site from 1902 until 1981. The company filed for bankruptcy in 1982. Most of the former facility area has been vacant and unused since ACW ceased operations. The City of Pensacola filed a tax deed application for the former facility area in May 2016. There is a privately-owned parcel in the southwestern portion of the former facility area that was used for temporary storage, but is now vacant. According to the Escambia County Property Appraiser GIS website, most of the former facility area is zoned as M-2, Heavy Industrial, but the privately-owned parcel is zoned R-2, Residential/Office. The PYC parcel is also zoned R-2. The City of Pensacola changed the future anticipated land use to recreational use.

The City of Pensacola completed a reuse plan for the Site in 2003 and EPA updated that plan in 2010. It is anticipated that the former facility area will be reused. The EPA is currently drafting an interim Record of Decision (ROD) to address contaminant source areas and anticipates finalizing it in fall 2016. The EPA will then select a subsequent ROD to address remaining contamination. Because remedial components may change, reuse options may be revisited after implementation of the revised remedy.

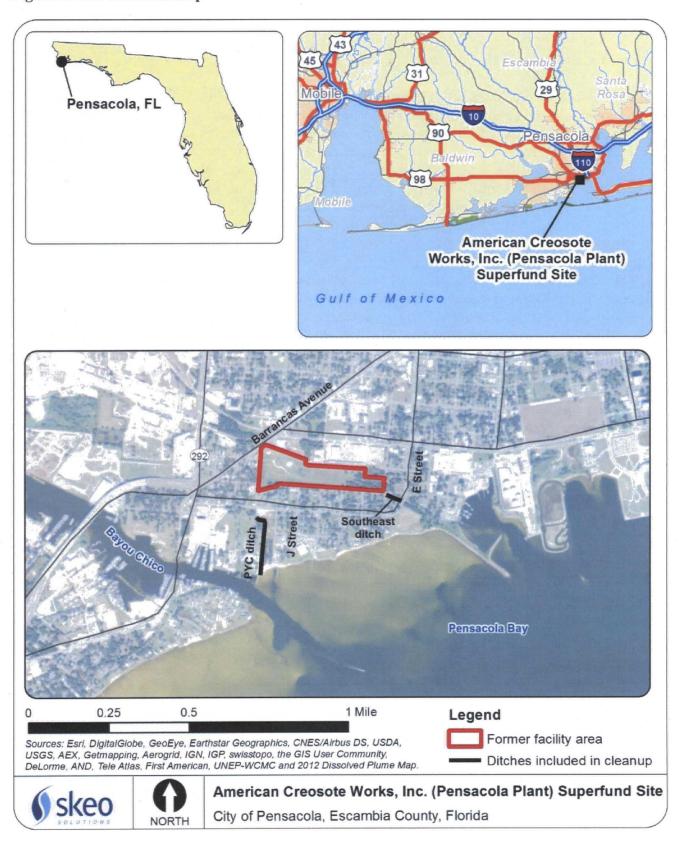
The Site is in a primarily residential area. There is also commercial development near the Site, including a lighting manufacturer immediately north of the Site. Two recreational facilities, the PYC and the Sanders Beach - Corinne Jones Resource Center, are located southwest and south of the Site, respectively.

The Sand-and-Gravel Aquifer is the primary source of public water for the area, including the City of Pensacola. Area residents are connected to the city water supply. According to the Emerald Coast Utility Authority in 2016, their nearest public well is about 1.1 miles north of the Site. The EPA performed a well survey in 2013 that identified several active, inactive and possible irrigation wells on residential properties downgradient of the former facility area.<sup>2</sup>

<sup>1</sup> http://www.escpa.org/CAMAGIS/

<sup>&</sup>lt;sup>2</sup> Possible wells are wells that were previously identified, but could not be verified during this survey.

Figure 1: Site Location Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding the EPA's response actions at the Site.

Figure 2: Detailed Site Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding the EPA's response actions at the Site.

#### 3.3 History of Contamination

Before 1950, ACW used creosote to treat wood poles at the former facility. Beginning in 1950, ACW used pentachlorophenol (PCP) to treat wood. The use of PCP led to dioxin contamination at the Site; dioxins are a common impurity in commercial-grade PCP.

There were four surface impoundments in the western portion of the former facility area. The larger impoundments, the main pond and the overflow pond, were used for disposal of process wastes. Before about 1970, wastewaters in these ponds were allowed to overflow through a spillway and follow a drainage course on the PYC property into Pensacola Bay and Bayou Chico. In subsequent years, wastewater was periodically drawn off of the larger impoundments and collected in the smaller railroad impoundment and holding pond, which were south and southeast, respectively, of the main and overflow ponds. Wastewater was also discharged to a designated "spillage area" on the northeast portion of the former facility area. Additional discharges occurred during heavy rainfall and flooding when the ponds overflowed the containment dikes.

#### 3.4 Initial Response

After documented releases from the ACW property in 1978 and 1979, the Florida Department of Environmental Regulation (FDER, predecessor to the current FDEP) began monitoring the Site.

In 1981, FDER issued a notice of violation for corrective action, alleging soil and groundwater contamination. FDER subsequently entered an Administrative Order on Consent for ACW to address violations and construct a wastewater treatment system. The United States Geological Survey installed nine groundwater monitoring wells in the site area; samples identified a contaminant plume moving from the facility toward Pensacola Bay. In April 1981, FDER filed for enforcement and civil penalties against ACW for non-compliance. ACW filed for organizational bankruptcy in May 1982.

In 1984, the bankruptcy court presented a final court stipulation that if the former facility area was leased or sold, half of the proceeds would go to the EPA and FDER and half would go to the Savings Life Insurance Company, which held a \$675,000 mortgage on the property. The stipulation was finalized, and the Consent Decree was entered by the court in August 1988.

The EPA proposed the Site for listing on the National Priorities List (NPL) on December 30, 1982. The EPA conducted a site investigation in 1983 that found site-related contamination in groundwater, on-facility soils and the PYC drainage ditch. The major contaminants found were polynuclear aromatic hydrocarbons (PAHs), which are common creosote constituents.

The Site was finalized on the NPL on September 8, 1983. Because of the threat to human health and the environment by frequent overflows from the impoundments, the EPA Region 4 Emergency Response and Control Section and FDER performed an emergency cleanup during September and October 1983. The immediate cleanup work included treatment and discharge of wastewater in the two large impoundments; stabilization of contaminated soil and sludge; placement of a temporary clay cap; and revegetation. FDER installed a fence and warning signs around the former facility area. In 1985, the EPA sent a notice letter to Burlington Northern Railroad requesting removal of a railroad spur line along their right of way on the former facility area; the railroad company completed the removal in 1986.

#### 3.5 Basis for Taking Action

The EPA performed separate baseline risk assessments (BRAs) in 1989 and 1993, respectively.<sup>3</sup> The 1989 BRA evaluated risks associated with on-facility and off-facility (residential) surface soil and PYC Ditch sediment. The 1993 BRA evaluated risks associated with subsurface soil, solidified material (stabilized sludge) and groundwater.

The 1989 BRA evaluated risks posed by potential exposure to surface soil contamination from zero to three feet bgs in several areas. Excess lifetime cancer risks associated with ingestion and dermal exposure to dioxins and cPAHs in surface soil by a trespasser on the former facility property exceeded the EPA's acceptable risk range. The 1989 BRA indicated the potential for non-carcinogenic health risks on the former facility property and in the Yachtsman Cove Condominium block (south of the facility area) due to ingestion and dermal exposure to dioxins and dibenzofurans. The 1989 BRA also included an ecological risk evaluation for Pensacola Bay and Bayou Chico; sediment data suggested that polynuclear aromatic hydrocarbon (PAH) and carcinogenic polynuclear aromatic hydrocarbon (cPAH) contamination in the PYC Ditch and its delta represented a potentially unacceptable risk to human and environmental receptors.

The EPA completed a 1993 BRA to evaluate subsurface soil, solidified material (stabilized sludge) and groundwater. The BRA evaluated exposure to contaminated groundwater through inhalation, ingestion and dermal contact for both on-facility and off-facility child and adult residents. The non-carcinogenic hazard quotients (HQs) for all residents were above the acceptable limit for all pathways. The excess lifetime cancer risks exceeded the acceptable range for ingestion and dermal contact with groundwater for all residents; these risks are primarily associated with PAHs in the groundwater. The carcinogenic risk from inhalation of contaminated groundwater was acceptable for on-facility residents, but unacceptable for off-facility residents.

The 1993 BRA also discussed environmental risks; the PYC Ditch had received surface runoff from the former facility area, and it was thought that contaminated groundwater may be discharging to the ditch. For this reason, the EPA developed cleanup goals to provide protection of surface water potentially impacted by discharges of contaminated groundwater.

#### 4.0 Remedial Actions

In accordance with CERCLA and the NCP, the overriding goals for any remedial action are protection of human health and the environment and compliance with applicable or relevant and appropriate requirements (ARARs). A number of remedial alternatives were considered for the Site, and final selection was made based on an evaluation of each alternative against nine evaluation criteria that are specified in Section 300.430(e)(9)(iii) of the NCP. The nine criteria are:

- 1. Overall Protection of Human Health and the Environment
- 2. Compliance with ARARs
- 3. Long-Term Effectiveness and Permanence

<sup>&</sup>lt;sup>3</sup> Before 1994, the EPA defined OU1 as surface soil contamination from 0 to 3 feet below ground surface (bgs) and OU2 as contaminated groundwater, subsurface soil and solidified sludge from the former impoundments. In 1994, the EPA redefined OU1 to address all solid media and OU2 to address groundwater exclusively. However, documents in the Site's Administrative Record prior to 1994, including the risk assessments, reflect the former definition of OUs. For this reason, the BRAs are discussed by media rather than by OU.

- 4. Reduction of Toxicity, Mobility or Volume through Treatment
- 5. Short-Term Effectiveness
- 6. Implementability
- 7. Cost
- 8. State Acceptance
- 9. Community Acceptance

#### 4.1 Remedy Selection

The Site's cleanup is being addressed in three OUs: OU1 addresses on-facility and select off-facility surface soil, subsurface soil, sludge and sediment contamination (Figure 2); OU2 addresses groundwater contamination; and OU3 will address off-facility, dioxin-impacted soils. The EPA established OU3 in 2007 and has not selected its remedy, but the EPA is considering excavation for off-facility areas not addressed under OU1. The EPA declared the DNAPL recovery system a failure in 2010, but there has been groundwater monitoring and institutional controls (Groundwater Delineated Area) in place since failure was declared. The EPA is currently drafting an interim ROD to address source area DNAPL contamination; completion of this interim ROD is anticipated for fall 2016. This ROD will determine a new remedy for OU2. After issuance of the interim ROD, the EPA will issue a final ROD to address residual groundwater contamination, as well as to combine the final remediation of OU1 and OU3 so contaminated OU3 soil and contaminated OU1 media can be placed under the same cap on the former facility area.

#### OU1

The EPA signed a ROD for OU1 in September 1985. FDEP did not concur with the remedy, citing the need to evaluate additional treatment technologies. In 1989, the EPA issued a revised OU1 ROD to address contaminated surface soil through excavation, bioremediation and on-facility disposal. The 1989 ROD called for treatability studies to determine the most effective biological treatment. From studies completed in 1990, the EPA determined that the 1989 remedy would not adequately address surface soil contamination. In 1990, the EPA issued an Explanation of Significant Differences (ESD) to add cleanup activities necessary before remedy implementation. These activities included site preparation, fence repair, drum sampling analysis and disposal, demolition of buildings and removal of debris, well closure, cap repair and revegetation.

In 1999, the EPA issued an OU1 ROD Amendment with a remedial action objective (RAO) to control risks posed by ingestion, inhalation and direct contact with soil, sludge and sediment contamination through excavation, treatment and containment. The remedy's goal was to isolate the Site as a source of groundwater and surface water contamination and reduce the risks associated with exposure to contaminated materials.

The remedy included the following remedial components:

- Demolition, decontamination and disposal of process area foundations and debris in an off-site landfill.
- Excavation of contaminated surface and subsurface soil above the EPA's remedial goals in residential areas and the PYC; consolidation of these materials on the ACW property.
- Backfill of excavated areas with clean fill; regrading and landscaping of disturbed areas.

- Excavation of contaminated sediment in the PYC drainage ditch exceeding the EPA's remedial goal (to a maximum depth of 3 feet) and consolidation of this material on the ACW property.
- Regrading, revegetation and restoration of disturbed areas of the PYC Ditch.
- Construction of a surface cap (in accordance with Resource Conservation and Recovery Act (RCRA) closure requirements under 40 CFR 264.228(a)(2)) over consolidated materials and contaminated areas of the Site.
- Installation of drainage channels, a stormwater retention pond, and other drainage improvements to manage stormwater runoff from the Site.
- Repair or replacement of existing security fence around the Site as needed.
- Periodic sampling of sediment in the PYC drainage ditch and regular mowing and maintenance of the surface cap on the Site.
- Groundwater monitoring as needed to evaluate the effectiveness of the containment system for 30 years.
- Future uses of the property would also be limited by the application of deed restrictions.

The 1999 OU1 ROD Amendment selected cleanup goals for 16 contaminants of concern (COCs) in surface soil, subsurface soil, sediment and sludge (Table 2).

Table 2: Soil, Sediment and Sludge COC Cleanup Goals

	Subsurface	Surface Soil (mg/kg)		PYC
Soil, Sediment and Sludge COCs	Soil/Sludge (mg/kg)	On-Facility	Off-Facility residential	Sediment (mg/kg)
2,3,7,8-tetrachlorodibenzo-p-dioxin (expressed as TCDD Toxic Equivalents) (TEQ))	-	0.0025	0.001	-
Acenaphthene	876	-	-	-
Anthracene	145	-	-	-
Benzo(a)anthracene	740	-	-	-
Benzo(a)pyrene	-		0.33	
Benzo(b)fluoranthene	153,065	-	-	-
Benzo(k)fluoranthene	153,065	-	-	-
Chrysene	2,090	-	<u>.</u>	-
Dibenzofuran	24	_	-	-
Fluoranthene	1,450	-	-	-
Fluorene	78	-	-	-
Naphthalene	235	-	-	-
Pentachlorophenol (PCP)	138,000	30	-	-
Phenanthrene	148	-	-	-
Pyrene	1,070	-	-	-
Total Carcinogenic PAHs (cPAHs) <sup>a</sup>	-	50	-	0.655

Notes:

Source: Table 2, 1999 OU1 ROD Amendment.

mg/kg= milligrams per kilogram

Chrysene, Dibenzo(a,h)Anthracene and Indeno(1,2,3-c,d)Pyrene.

<sup>&</sup>lt;sup>a</sup> Total Carcinogenic PAHs include Benzo(a)Anthracene, Benzo(b&k)Fluoranthene, Benzo(a)Pyrene,

#### OU2

The EPA issued a remedy failure letter for the DNAPL recovery remedy in 2012 and is currently developing a sitewide interim ROD for containing source contamination. The EPA determined that the selected remedy for OU2 was not achieving the groundwater RAOs within a reasonable timeframe. Some of the reasons supporting this decision to halt the selected remedy and explore a new remedial approach include:

- 1. Remedy implementation issues due to incompatible materials, such as extraction tubing that cracked under continued exposure to the creosote being extracted;
- 2. Extensive damage to the OU2 remedial system from Hurricane Ivan in September 2004, which resulted in minimal system operation until repairs could be completed in June 2007;
- 3. Incorrect characterization of DNAPL source area during the remedial design phase means that the selected remedial system is not designed to achieve hydraulic control of the entire estimated DNAPL plume area; and
- 4. System operation yielded a recovery volume of DNAPL well below recovery estimates; the system had been designed to recover the majority of DNAPL source material within five years, but the actual rate of recovery would take an estimated 80 years to capture all 1,000,000 recoverable gallons of DNAPL.

The EPA will subsequently select a new final remedy for residual groundwater contamination. Since the remedy failure letter, the EPA has continued groundwater monitoring, and ICs are in place.

The EPA selected the current groundwater remedy in the 1994 OU2 ROD. The remedy's goals were to manage contaminated groundwater migration, to prevent statistically significant increases in surface water contaminant concentrations resulting from groundwater discharges, and to prevent the use of groundwater through institutional controls. The RAOs were:

- Prevent ingestion of groundwater with concentrations representing a total excess cancer risk greater than 1 x 10<sup>-6</sup>, a non-carcinogenic hazard index (HI) greater than 1, or concentrations that exceed federal and state ARARs.
- Managing pollutant migration beyond the existing limits of the contaminant plume.

The OU2 remedy included two phases. The objective of Phase I was to reduce source material contributing to groundwater contamination and consisted of the following remedial components:

- Enhanced DNAPL recovery using a combination of water, alkaline, surfactant and polymer flooding.
- DNAPL/water separation and groundwater treatment.
- Off-site transport and recycling of recovered DNAPL and reinjection of treated groundwater.
- Periodic groundwater monitoring to evaluate DNAPL recovery efficiency.
- Implementation of state-imposed well permit restrictions.

Based on Phase I groundwater monitoring data, the EPA would determine whether to continue enhanced DNAPL recovery or to implement Phase II. The objective of Phase II was to address residual groundwater contamination to prevent migration of contamination to surface water. Phase II consisted of the following remedial components:

- Groundwater removal via extraction wells.
- On-facility treatment of contaminated groundwater.
- Nutrient and hydrogen peroxide additions to treated water.
- Reinjection of treated groundwater, with nutrients, into the contaminated portion of the aquifer to stimulate in-situ biological treatment of groundwater.
- Dewatering of waste sludge from the treatment process and disposal at an off-site RCRA landfill.
- Periodic groundwater and surface water monitoring to evaluate treatment system performance.

In the 1994 OU2 ROD, the EPA determined that since residents and businesses in the site area are connected to the city water supply, which draws groundwater from upgradient of the Site, remediation of groundwater to health-based levels (e.g., maximum contaminant levels (MCLs) and risk-based remedial goals) was not necessary. Instead, the EPA selected alternate concentration limits (ACLs) as cleanup goals to protect surface water potentially impacted by discharges of contaminated groundwater (Table 3).

**Table 3: OU2 Groundwater COC Cleanup Goals** 

Groundwater COC	Cleanup Goal (µg/L)
Acenaphthene	9,000
Benzene	91
Dibenzofuran	44
Fluoranthene	1,500
Naphthalene	21,900
PCP	296,000
Total cPAHs <sup>a</sup>	1,100

Notes:

Source: Table 8, 1994 OU2 ROD.

μg/L = micrograms per liter

#### OU3

The OU3 remedy has not been selected but will be part of the final sitewide ROD. The OU3 portion of the remedy will address off-facility mainly residential soils contaminated with dioxin and not previously remediated under OU1.

#### 4.2 Remedy Implementation

The interim ROD is expected to provide a new remedy for OU2. The EPA's schedule proposes signing the interim ROD in fall 2016, remedial design from fall 2016 to fall 2017, and beginning the remedial action in fall 2017. Under the final sitewide ROD, remedial actions for OU1 will be completed, and

<sup>&</sup>lt;sup>a</sup> Total Carcinogenic PAHs include Benzo(a)Anthracene, Benzo(b&k)Fluoranthene, Benzo(a)Pyrene, Chrysene, Anthracene, Fluorene, Phenanthrene and Pyrene.

cleanup for OU3 will be selected and implemented. The OU1 and OU2 remedial components that have been implemented are listed below. The interim OU2 remedy will be part of the future sitewide ROD.

#### OU1

There have been several OU1 remedial designs, completed in in 1990, 1992, 2000 and 2009. In September 2002, the EPA and FDEP signed a State Superfund Contract to conduct an interim removal of contaminated off-facility soils and sediments exceeding the EPA's guidance levels in areas including the PYC Ditch, the Yachtsman Cove Condominiums and several residential properties (Figure 2). In November 2003, the contractor encountered higher contaminant levels than expected during soil excavation east of the PYC Ditch, and the agencies halted the field work. Excavated soils have been temporarily consolidated and secured on the fenced former facility area, pending finalization of the new sitewide interim remedy. In June 2009, the EPA installed a fence around the PYC Ditch to prevent exposure to contaminated sediments where excavation work had not yet been completed. The EPA completed soil excavation and restoration of the Southeast Ditch to residential standards in January 2010; this flat, grassy area is unfenced.

To improve the water quality of the stormwater entering Pensacola Bay, the City of Pensacola redirected the stormwater pathway that formerly flowed through the PYC Ditch to J Street in August 2012. The EPA assisted with management and treatment of contaminated water recovered during dewatering for construction of the stormwater line connection. The City of Pensacola encountered contaminated soils while digging the path for the new pipeline and closing off the prior stormwater access to the PYC Ditch. The City excavated and consolidated contaminated soils on the former facility area, where they will be addressed during site remediation. This stormwater line relocation project allows the contaminated PYC Ditch sediment removal to be conducted under drier conditions, reducing the risk of contaminant discharge. The EPA cleaned up the PYC Ditch from June to August 2016.

#### OU2

The EPA completed the first OU2 remedial design in May 1997. The EPA completed construction of the DNAPL-extraction system in September 1998. The EPA began the second remedial design in August 2006, which has not been completed. In November 2009, the EPA installed five new extraction wells to enhance DNAPL extraction. The EPA has since deemed the DNAPL recovery a failure and consequently shut down the system in late December 2011. The two aboveground storage tanks, which held DNAPL pumped from the extraction system before disposal at a permitted off-site facility, have been emptied. The last off-site shipment of DNAPL occurred in January 2012. 197,415 gallons of total DNAPL were removed during system operation. The EPA issued a remedy failure letter for OU2 in December 2012.

#### 4.3 Operation and Maintenance (O&M)

The EPA's 10-year long-term response action (LTRA) period ended in 2011. Since then, the EPA's contractor has performed upkeep activities to maintain site conditions until the revised remedy is selected. Upkeep activities include mowing the grass, maintaining the fence and signs and removing dumped debris.

The 1999 OU1 ROD Amendment estimated annual O&M costs of \$5,800, and the 1994 OU2 ROD estimated annual O&M costs of \$789,000 for the DNAPL extraction system. The annual upkeep costs

are listed in Table 4. Costs were higher in 2011, 2012 and 2015 than in 2013 and 2014. In 2011, the EPA conducted official O&M, shut down the DNAPL extraction system, and performed quarterly groundwater sampling in addition to site upkeep. In 2012, activities included clearing and sampling the PYC Ditch, conducting a well survey, and supporting stormwater line relocation activities, such as treating groundwater, monitoring air and stockpiling soil. In 2015, activities also included the removal and disposal of the former extraction well pipe network.

Table 4: Annual Site Upkeep Costs

Year	Total Cost
2011	\$237,000
2012	\$287,000
2013	\$72,000
2014	\$76,000
2015	\$94,000

## 5.0 Progress Since the Last Five-Year Review

The protectiveness statement from the 2011 FYR for the Site stated the following:

"The remedy at OU1 is expected to be protective of human health and the environment upon completion, and in the interim, exposure pathways that could result in unacceptable risks are being controlled. All off-facility OU1 materials have been excavated and consolidated under a temporary clay cap on the Site with the exception of the PYC Ditch, which has been fenced to restrict access. The Site is secured by a perimeter fence which prevents access to the consolidated materials on site as well as the areas that remain to be remediated in the western portion of the Site. The Site parcel owned by a private citizen is fenced and a layer of gravel has been placed as an interim cap over contaminated soil to prevent exposure. A final remedy will be selected in the forthcoming ROD for OU1/OU3.

The remedy at OU2 currently protects human health and the environment in the short term because the groundwater remediation system continues to operate and institutional controls are in place to prevent exposure to groundwater contamination. However, in order for the remedy to be protective in the long term, EPA is currently evaluating options to improve the groundwater remedy in order to achieve cleanup goals more efficiently. An amended remedy that will address long-term protectiveness is expected following completion of an updated groundwater evaluation."

The 2011 FYR included three issues and recommendations. This report summarizes each recommendation and its current status below.

Table 5: Progress on Recommendations from the 2011 FYR

Recommendations	Party Responsible	Milestone Date	Action Taken and Outcome	Date of Action
Evaluate options to improve the OU2 remedy to achieve a more efficient remediation of groundwater and modify the remedy as appropriate. As part of efforts to re-evaluate the OU2 remedy, characterize the full extent of the current groundwater plume area associated with the Site.	EPA	06/01/2013	Ongoing. The EPA issued a failure letter for the DNAPL recovery remedy in 2010. The EPA is currently preparing an interim ROD, which will include a new groundwater remedy.	Anticipated date of fall 2016
Perform a well survey of the area surrounding the Site to identify any newly installed wells and to locate wells from previous contamination delineation activities. At the conclusion of the survey, address active and non-abandoned wells as appropriate.	EPA	03/01/2012	Ongoing. The EPA conducted a well survey in February 2013. Active wells have not yet been addressed.	February 2013
Select a final remedy for soil, subsurface soil and sediment, combining OU1 and OU3, and include appropriate institutional controls.	EPA	09/30/2012	Ongoing. The EPA is currently preparing an OU2 interim ROD and will subsequently prepare a final sitewide ROD.	Anticipated date of 12/01/2016

#### 6.0 Five-Year Review Process

#### 6.1 Administrative Components

EPA Region 4 initiated the FYR in November 2015 and scheduled its completion for September 2016. The EPA remedial project manager (RPM) Peter Thorpe led the EPA site review team, which also included the EPA site attorney Rudy Tanasijevich, the EPA community involvement coordinator (CIC) L'Tonya Spencer and contractor support provided to the EPA by Skeo. In November 2015, the EPA held a scoping call with the review team to discuss the Site and items of interest as they related to the protectiveness of the remedy currently in place. The review schedule established consisted of the following activities:

- Community notification.
- Document review.
- Data collection and review.
- Site inspection.
- Local interviews.
- FYR Report development and review.

#### 6.2 Community Involvement

In September 2016, the EPA published a public notice in the *Pensacola News Journal* newspaper announcing the commencement of the FYR process for the Site, providing contact information for Peter Thorpe (RPM) and L'Tonya Spencer (CIC) and inviting community participation. The press notice is available in Appendix B. No one contacted the EPA as a result of the advertisement.

The EPA will make the final FYR Report available to the public. Upon completion of the FYR, the EPA will place copies of the document in the designated site repository: West Florida Genealogy Branch Library at 5740 North 9th Avenue, Pensacola, Florida.

#### 6.3 Document Review

This FYR included a review of relevant site-related documents, including RODs, ROD Amendments, ESDs and recent monitoring data. Appendix A provides a complete list of the documents reviewed.

#### **ARARs Review**

CERCLA Section 121(d)(1) requires that Superfund remedial actions attain "a degree of cleanup of hazardous substances, pollutants, and contaminants released into the environment and of control of further release at a minimum which assures protection of human health and the environment." The remedial action must achieve a level of cleanup that at least attains those requirements that are legally applicable or relevant and appropriate.

- Applicable requirements are those cleanup standards, standards of control and other substantive
  requirements, criteria or limitations promulgated under federal environmental or state
  environmental or facility siting laws that specifically address a hazardous substance, remedial
  action, location or other circumstance found at a CERCLA site.
- Relevant and appropriate requirements are those standards that, while not "applicable," address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site. Only those state standards more stringent than federal requirements may be applicable or relevant and appropriate.
- To-Be-Considered criteria are non-promulgated advisories and guidance that are not legally binding, but should be considered in determining the necessary remedial action. For example, To-Be-Considered criteria may be particularly useful in determining health-based levels where no ARARs exist or in developing the appropriate method for conducting a remedial action.

Chemical-specific ARARs are health- or risk-based numerical values or methodologies which, when applied to site-specific conditions, result in the establishment of numerical values. These values establish an acceptable amount or concentration of a chemical that may remain in, or be discharged to, the ambient environment. Examples of chemical-specific ARARs include MCLs under the federal Safe Drinking Water Act and ambient water quality criteria enumerated under the federal Clean Water Act.

Action-specific ARARs are technology- or activity-based requirements or limits on actions taken with respect to a particular hazardous substance. These requirements are triggered by a particular remedial activity, such as discharge of contaminated groundwater or in-situ remediation.

Location-specific ARARs are restrictions on hazardous substances or the conduct of the response activities solely based on their location in a special geographic area. Examples include restrictions on activities in wetlands, sensitive habitats and historic places.

Remedial actions are required to comply with the chemical-specific ARARs identified in the ROD. In performing the FYR for compliance with ARARs, only those ARARs that address the protectiveness of the remedy are reviewed.

#### Groundwater ARARs

The 1994 OU2 ROD identified federal MCLs as chemical-specific ARARs. However, the EPA also identified ACLs for site groundwater, pursuant to CERCLA Section 121(d)(2)(B)(ii). The EPA designed ACLs to be protective of aquatic life based on the point of exposure where groundwater discharges to surface water. Given state restrictions on groundwater withdrawal for potable use, the Northwest Florida Water Management District's (NWFWMD) restriction on permitting of wells in the site area, and the fact that area residents and businesses rely on the city water supply for potable water, ACLs were considered to be more appropriate than health-based remedial goals or primary drinking water standards (i.e., MCLs). Therefore, the 1994 OU2 ROD states that the EPA waived MCLs and that ACLs were used as cleanup goals for groundwater restoration (Table 3). This decision will be reviewed in the interim/final ROD to confirm that the groundwater cleanup levels are protective.

Surface Soil, Subsurface Soil and Sediment Cleanup Goals

Chemical-specific ARARs were not established for surface soil, subsurface soil and sediment COCs. The cleanup goals are reviewed further in Section 7.2. Available ARARs and/or ACL will be evaluated for inclusion in the final sitewide ROD.

#### Institutional Control Review

The 1994 OU2 ROD stated that the following existing groundwater institutional controls were sufficiently restrictive. The Site and surrounding area are within a Florida Groundwater Delineated Area, which restricts well installations and potable use of the aquifer (Figure 3). In addition, the NWFWMD handles requests for well installations on a case-by-case basis. In November 1993, NWFWMD advised the EPA and area water-well contractors that "the District intends to seek denial of any potable or irrigation well permit proposed in [the site] area." The 1994 OU2 ROD also states that the EPA will conduct a well survey during each FYR to find any illegal wells. In 2013, the EPA conducted a well inventory of public and private wells within a 1-mile radius of the Site using publicly available resources and a door-to-door well survey of the residents within 500 feet of the Site. The EPA discovered five active irrigation wells, six inactive irrigation wells and four possible wells (property owners were not at home to grant access); these wells were already known to exist at these locations. The locations of these wells are in Appendix F. The EPA is currently seeking resources in order to appropriately abandon all legacy irrigation wells and will contact property owners for these wells to offer irrigation well sampling.

The former facility area, PYC Ditch and Southeast Ditch consist of six property parcels and two property right of ways (Table 6, Figure 4). The 2011 FYR states that the Southeast Ditch area was a City of Pensacola right of way, but 2016 research found this property to be a Burlington & Northern Railroad right of way. All other ownership information has remained the same.

**Table 6: Site-Related Parcel Ownership** 

Owner	Parcel Identification Number	Map ID (see Figure 4)	Total Parcel Acres
Alabama & Gulf Coast Railroad Right of Way	NA	A	NA
American Creosote Works	9080-2-156	В	0.41
	9080-1-164	С	7.53
	9080-11-168	D	0.92
Pensacola Creosoting Co.	9080-1-163	Е	2.55
John D. Barksdale	9080-1-183	F	0.45
Burlington & Northern Railroad Right of Way	NA	G	0.5
Pensacola Yacht Club, Inc.	9080-6-188	Н	21.46

Notes:

Source: Escambia County Property Appraiser GIS website: <a href="http://www.escpa.org/CAMAGIS/">http://www.escpa.org/CAMAGIS/</a>, accessed 4/22/2016.

NA: Not available

The 1999 OU1 ROD Amendment called for deed restrictions at the Site. There is an institutional control with the Escambia County Tax Collector, in which parcels B through F have a flag on their tax payment page indicating that they are part of a Superfund site (Table 6, Figure 4).<sup>4</sup> Should an individual or organization attempt to obtain one of these parcels through a tax deed application, this flag on the parcel triggers notification of the EPA RPM for the Site. The flag will not block a sale, but allows the EPA to communicate with potential purchasers about the site history, land use and liabilities prior to the purchase. Areas A and G do not have this flag because they are right of ways, and the PYC property also does not have this flag. There are currently no land use restrictions on OU1 soil, and OU1 will require additional restrictions that are expected to be implemented as part of the new sitewide remedy.

For OU3, FDEP currently sends a letter every five years to residents near the former facility area to warn them of dioxin soil contamination on their properties. The letter indicates that pollutants were found in the soil at the recipient's property. It includes information about the location and levels of specific pollutants found, as well as any applicable cleanup levels based on health risks or on water taste and odor concerns. The letter includes recommendations to cover impacted areas with clean soil, leaves or pine straw and to take care to wash hands thoroughly after gardening, playing or working in the yard. The letter also provides web links to additional information about contamination through FDEP's Contamination Locator Map and OCULUS<sup>TM</sup>, FDEP's electronic site file system. EPA will evaluate the existing ICs as a part of the development of the sitewide ROD to determine if these measures will be effective.

Table 7 lists the institutional controls associated with areas of interest at the Site.

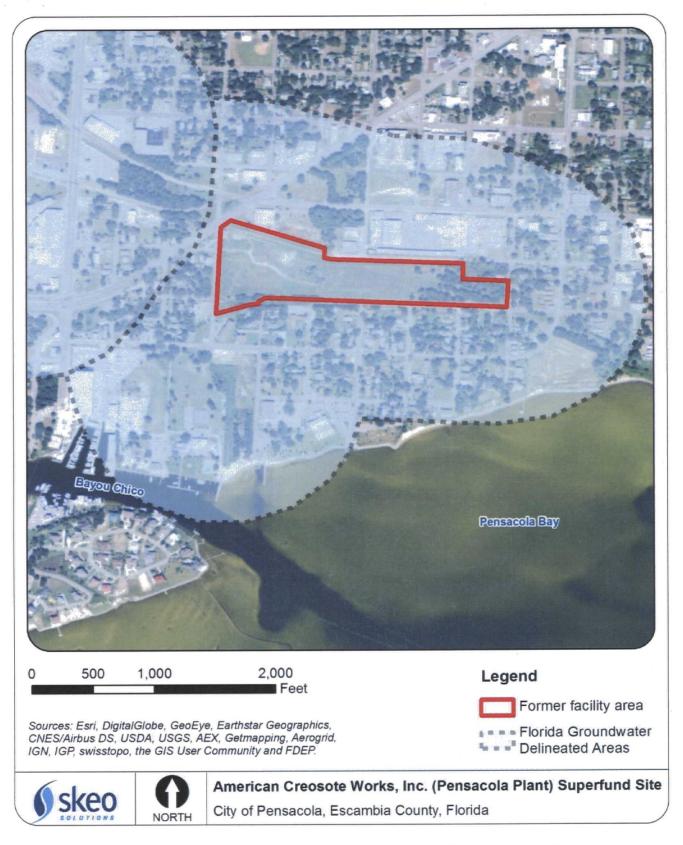
<sup>4</sup> https://escambia.county-taxes.com/public

Table 7: Institutional Control (IC) Summary Table

ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Instrument in Place
Yes	Yes	Site and surrounding area	Prevent use of contaminated groundwater	The Site lies within a Florida Groundwater Delineated Area, which restricts well placement.  NWFWMD denies any potable or irrigation well permit proposed in the site area.  The EPA conducts a well survey during each FYR to identify whether any wells have been placed without appropriate permits.
Yes	No	Residential area near former facility (OU3)	Prevent exposure to contaminated residential soils	FDEP sends a letter every five years to residents near the former facility area to warn them of dioxin soil contamination on their properties.
Yes	Yes	Parcels B through F	Notify potential purchasers about site history, appropriate land use and liability	Parcels B through F have a flag on their Escambia County Tax Collector payment page indicating that they are part of a Superfund Site.
Yes	Yes	OU1	Prevent exposure to contaminated media	No instrument is currently in place that restricts land uses.
	Yes	ICs Needed Decision Documents  Yes Yes  Yes No  Yes Yes	ICs Needed       for in the Decision Documents       Impacted Parcel(s)         Yes       Yes       Site and surrounding area         Yes       No       Residential area near former facility (OU3)         Yes       Yes       Parcels B through F	ICs Needed       for in the Decision Documents       Impacted Parcel(s)       IC Objective         Yes       Yes       Site and surrounding area       Prevent use of contaminated groundwater         Yes       No       Residential area near former facility (OU3)       Prevent exposure to contaminated residential soils         Yes       Yes       Parcels B through F       Notify potential purchasers about site history, appropriate land use and liability         Yes       Yes       OU1       Prevent exposure to contaminated

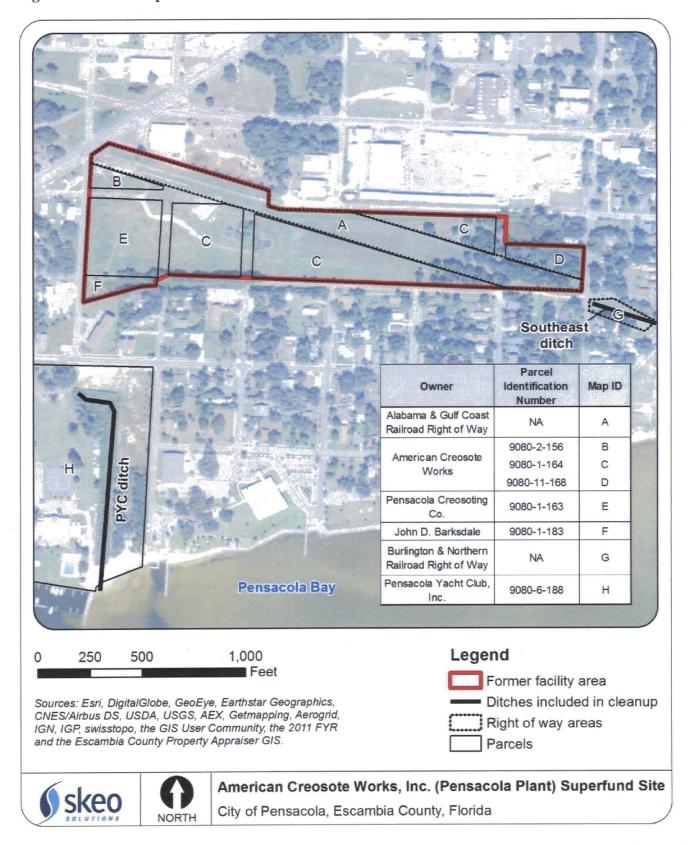
<sup>1.</sup> Florida's groundwater delineation information is available online at <a href="http://www.dep.state.fl.us/water/groundwater/delineate.htm">http://www.dep.state.fl.us/water/groundwater/delineate.htm</a>.

Figure 3: Florida Groundwater Delineated Area Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding the EPA's response actions at the Site.

Figure 4: Parcel Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding the EPA's response actions at the Site.

#### 6.4 Data Review

#### Groundwater

In 2010, the EPA determined that the DNAPL recovery remedy had failed. The 10-year LTRA O&M period ended in 2011. The EPA is developing an interim ROD for DNAPL contamination; this section reviews available groundwater data collected since the previous FYR to illustrate groundwater conditions.

In 2011, groundwater samples were collected in March, June and September. Samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and dioxins/furans. Groundwater samples were collected from on-facility monitoring wells and groundwater treatment system locations (Appendix G). At the groundwater treatment system locations, acenaphthene, fluoranthene, naphthalene, selected cPAHs and dibenzofuran exceeded their respective remedial goals. Selected cPAHs and dibenzofuran also exceeded their remedial goals after treatment (Appendix G) demonstrating that the treatment system was not effective in achieving the groundwater cleanup goals. Graphs in Appendix G also compare contaminant concentrations from two on-facility monitoring wells in the northwestern part of the former facility area (MW5LS and MW5US) to wells at the southwestern former facility boundary and downgradient of the main DNAPL plume (MW6LS and MW6US). The downgradient wells have much higher COC concentrations than the MW5 wells. DNAPL plume maps from November 2011 are shown in Figure 5.

Since 2011, groundwater sampling has focused on updating groundwater conditions at the Site. The EPA sampled 83 wells in and around the Site in January 2012 and 64 wells in March 2013, January 2014 and January 2015. Table 8 shows the number of wells with exceedances of ACLs or State of Florida Marine Surface Water Cleanup Target Levels (SWCTLs) by year.

Table 8: Number of Wells with Exceedances from 2012 to 2015

	2012	2013	2014	2015
Number of wells with exceedances of Marine SWCTLs or	9/83	19/64	21/64	19/64
ACLs for one or more compounds/number of wells sampled a		<u> </u>	L	

Notes:

Sources: 2012-2015 EPA Groundwater Sampling Investigation Reports.

One of the goals of the OU2 remedy was to prevent groundwater from contaminating surface water; therefore, groundwater concentrations are compared to the Marine SWCTLs. Contaminant concentrations above the Marine SWCTLs include benzene, 1,1-biphenyl, 2,4-dimethylphenol, 2-methylphenol, acenaphthene, anthracene, carbazole, dibenzofuran, fluoranthene, fluorene, naphthalene, PCP, phenanthrene, phenol and pyrene. Several of these are not site COCs. Contaminants are generally on the southern edge of the former facility area or south and southwest of the former facility area. For example, in 2015 well C506 had the highest concentrations of several SVOCs (Table 9, Figure 5). Further refinement of the area of contaminated groundwater will be developed as part of the planned sitewide ROD.

<sup>&</sup>lt;sup>a</sup> ACLs were used for comparison in 2012, but from 2013 on, the EPA compared groundwater samples to the Marine SWCTLs rather than the ROD ACLs per the RPM's request. The EPA and FDEP are potentially considering Marine SWCTLs for protection of Pensacola Bay for the planned sitewide ROD.

Table 9: 2015 Well C506 SVOC Sampling Results

Contaminant	Marine SWCTL (μg/L)	2015 Concentration in Well C506* (µg/L)
(3-and/or 4-)Methylphenol	450/70 <sup>b</sup>	11,000
1,1-Biphenyl	18	110
2,4-Dimethylphenol	160	7,700
2-Methylphenol	250	4,900
Acenaphthene	3	400
Anthracene	0.3	16 J, O
Carbazole	47	340
Dibenzofuran	67	230
Fluoranthene	0.3	14 J, O
Fluorene	30	240
Naphthalene	26	7,100
Pentachlorophenol	7.9	140
Phenanthrene	0.031	160
Phenol	6.5	3,400
Pyrene	0.3	< 20 U

Notes:

Sources: 2015 EPA Groundwater Sampling Investigation Report and 2008 Final Comprehensive Groundwater Sampling Report.

 $\mu g/L = micrograms per liter$ 

N/A = not applicable

**Bold** = exceedance of Marine SWCTL

U = The analyte was not detected at or above the reporting limit.

J = The identification of the analyte is acceptable; the reported value is an estimate.

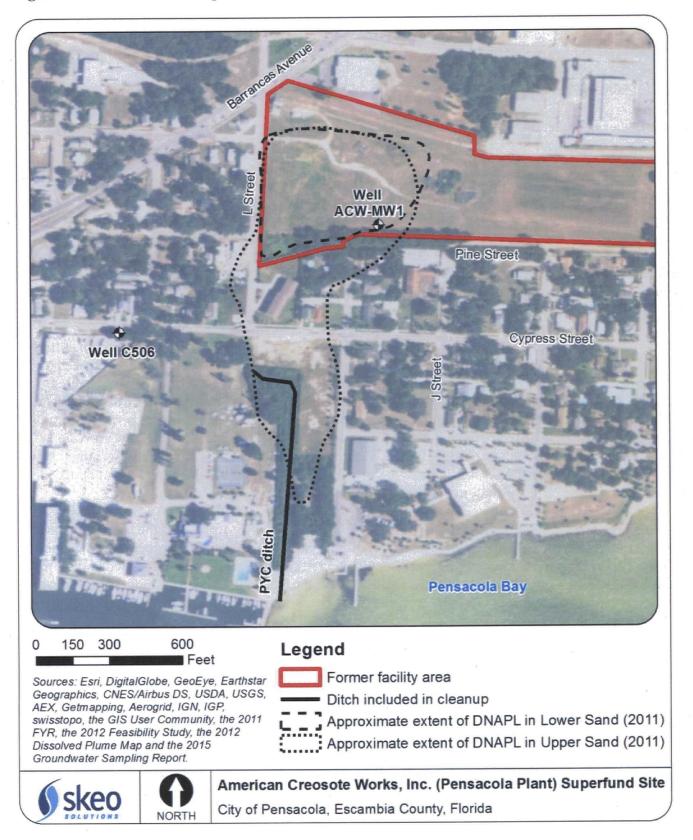
O = Other qualifiers have been assigned providing additional information.

Complete VOC and SVOC sampling results for 2012 to 2015 are included in Appendix G.

a. Well C506 is from the Sand-and-Gravel aquifer screened at a depth interval of 17-27 feet bgs.

b. The Marine SWCTL for 3-methylphenol is 450  $\mu$ g/L and for 4-methylphenol is 70  $\mu$ g/L.

Figure 5: DNAPL Plume Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding the EPA's response actions at the Site.

#### 6.5 Site Inspection

A site inspection was conducted on March 29, 2016. Site inspection participants included: Peter Thorpe (EPA RPM), L'Tonya Spencer (EPA CIC), Kelsey Helton (FDEP), Richard Kinsella (U.S. Army Corps of Engineers), Jeff Day (Seneca, U.S. Army Corps of Engineers' contractor), and Sabrina Foster and Melissa Oakley (Skeo, EPA's contractor).

Following a brief meeting, site inspection participants toured the Site, starting at the western end of the former facility area near the groundwater treatment system building. The groundwater treatment system has not operated since EPA declared DNAPL recovery a failure in 2010; the system was not inspected for this FYR. Site inspection participants observed several extraction well housings with pumps and piping removed. A black fabric liner covers contaminated soil excavated from the Southeast Ditch. Except for a small hole in the liner and a plant growing in the middle of the area, the liner appeared to be in good condition. The plant and small hole will be addressed during routine site upkeep activities. The vegetation on the large clay cap at the center of the former facility area is healthy. No evidence of cap subsidence or erosion was observed. No wet areas or standing water were observed on the cap. The former facility area appeared well maintained. The grass is routinely mowed on an as-needed basis, and undergrowth at the eastern end of the former facility area is bush-hogged as needed. The former facility area is secured by a perimeter fence with locked access gates. The fence was repaired after a vehicle crashed into it, which has occurred twice in the last five years. The fence was in good condition at the time of the site inspection. Warning signs are posted at regular intervals along the perimeter fence. All monitoring wells observed appeared to be in good condition, were clearly labeled, and were secured with locks or bolts. A mattress was observed just inside the southern perimeter fence. Mr. Day indicated that local residents sometimes throw discarded items over the fence. The mattress will be removed as part of routine site upkeep. The southwestern corner of the former facility area, owned by a private individual, is secured within a separate tall fence. The property does not appear to be in use. A resident immediately south of the former facility area has planted a small fig tree and a bamboo plant between the southern perimeter fence and Pine Street. The plants are next to two monitoring wells.

Following the tour of the former facility area, site inspection participants inspected the PYC Ditch and Southeast Ditch. During the March 2016 site inspection, a tall fence topped with barbed wire surrounded the PYC Ditch, restricting access to the area. Remediation of the PYC Ditch had not started at the time of the site inspection but is now complete. Immediately west of the PYC Ditch fence, site inspection participants observed new concrete pads around several flush-mounted monitoring wells. Each of the wells were secured with bolts. The Southeast Ditch area is an open, flat grassy area where soil was cleaned to residential standards. The grass covering the area appeared healthy.

Following the site inspection, Skeo staff visited the local information repository for the Site, located at the West Florida Genealogy Branch Library at 5740 North 9<sup>th</sup> Avenue in Pensacola, Florida. A records review verified that a large collection of site-related documents is available for public viewing at the information repository, including documents up through the 2011 FYR.

Following the site inspection, Skeo staff visited the Escambia County Clerk of Courts Office to research deed records pertaining to the Site. Appendix D includes a completed Site Inspection Checklist. Appendix E includes photographs taken during the site inspection.

#### 6.6 Interviews

The FYR process included interviews with parties affected by the Site, including the current landowners and regulatory agencies involved in Site activities or aware of the Site. The purpose was to document the perceived status of the Site and any perceived problems or successes with the phases of the remedy implemented to date. The interviews are summarized below. Appendix C provides the complete interviews.

Peter Thorpe: Peter Thorpe is the current EPA Region 4 RPM for the Site. Overall, he believes the Site is moving along well. He commented that the PYC Ditch will be cleaned up shortly and that once this is done, OU1 will be complete. He noted that the EPA is working with FDEP on a Probabilistic Risk Assessment for the off-facility dioxin cleanup number and an interim ROD should be complete before the calendar year is over, which will also address the need for a new remedy for OU2. He commended the U.S. Army Corps of Engineers' contractor, Seneca, for doing a great job cleaning the Site and clearing the wooded area on the far eastern part of the Site, despite several comments from residents about the area. He mentioned that the City of Pensacola is very interested in redeveloping the Site and that the community is very interested in seeing the Site redeveloped into a park. There will need to be one more institutional control put in place, but it cannot be implemented until the Site's final conditions are known. Lastly, Mr. Thorpe commented that the community is very focused on the pace of the cleanup and wants the Site cleaned up soon.

<u>Jeff Day</u>: Jeff Day of Seneca SCMC, LLC (the remedial contractor) stated that he had a good overall impression of the Site, that it is well-maintained and that the cleanup actions seem appropriate. He noted that the remedial DNAPL system was shut down at the end of 2011 and since then the Site has been maintained by weekly upkeep activities, including mowing, erosion control, perimeter trimming, inspections, brush clearing, debris pickup/disposal, fence repairs and sign replacement. Mr. Day noted that cars occasionally run through the perimeter fence, and the fence must be repaired in a timely manner to maintain site security. He also said EPA is responsive to the community.

<u>Public Meeting Participants</u>: Community members and several local government officials were present at the EPA's public meeting about the Site on March 28, 2016. The public meeting participants responded collectively to the EPA's interview questions. The group affirmed that they are aware of the former environmental issues at the Site and mentioned that the cleanup process has been very slow. The group commented on observing homeless activity on the north side of the Site, between the Site and the lumber company. However, the participants could not confirm whether these individuals are accessing the Site or just camping in the dense brush outside the Site's perimeter fence. Other meeting participants also noted homeless activity on the eastern boundary. The group also commented that there has been dense brush growth following brush removal a few years ago.

While the group felt well informed of site activities, they would like more frequent updates from the EPA. They mentioned that several area residents do have private wells on their property, but do not use them for any purpose. Nevertheless, several residents expressed interest in being able to use the wells for irrigation. The group raised several concerns about the City of Pensacola's zoning of the site property and about the future use of the Site. Area residents are in favor of a recreational reuse of the Site, but the Site is currently zoned for industrial use. The community is concerned that this zoning designation would impede their desired use for the land. Community members have heard that the City may pursue other non-recreational uses for the property, such as a truck parking area, and do not want the Site to be reused in this way. Lastly, the group would like the cleanup to be completed as soon as possible.

#### 7.0 Technical Assessment

#### 7.1 Question A: Is the remedy functioning as intended by the decision documents?

The OU1 remedy has been partially implemented. The former facility area is fenced off and well-marked. The EPA has consolidated contaminated soil on the former facility area and covered these soils with a black fabric liner or a temporary vegetated clay cap. These covers are maintained through routine site upkeep activities and appear to be in good condition. There is no evidence of cap subsidence, erosion or standing water. OU1 off-facility soil remediation areas have been remediated but are not fenced.

The EPA remediated the PYC Ditch from June to August 2016. Prior to remediation, a tall fence topped with barbed wire restricted access to the ditch. The 2012 relocation of the stormwater line previously running through the PYC Ditch has enabled cleanup of this area. The property is currently unfenced and level with the rest of the PYC property. Excavated soil from the cleanup will be placed under the cap on the former facility area and will be incorporated into the final remedy for the Site.

The EPA completed soil excavation and restoration of the Southeast Ditch in January 2010. The flat, grassy area is unfenced. The contaminated soil excavated from the Southeast Ditch is covered by a black fabric liner on the former facility area.

While there are flags on several parcels on the Escambia County Tax Collector website to make prospective purchasers aware of the Site's history, this institutional control is informational and does not implement any land use restrictions. There are currently no land use restrictions for OU1, but the EPA plans to select appropriate land use controls in the final sitewide remedy, and these will be implemented by the property owner(s). As of June 2016, the City of Pensacola had filed a tax deed application to acquire the former facility property. The City has not taken ownership of the property as of now. Currently, access to the former facility area is restricted by a fence and signs, but there are areas of off-facility soil excavation not included in the fenced area that warrant institutional controls (Figure 2). For OU3 soil, FDEP currently sends a letter to residences every five years to warn them of soil contamination.

The OU2 remedy was not achieving its RAOs or functioning as intended by the ROD. Therefore, the EPA issued a failure letter in 2012; however, groundwater monitoring has continued, and institutional controls are in place. The EPA is working on a sitewide interim ROD for containing source material and will later select a remedy for residual groundwater contamination. Residents in the area are connected to the city water supply, so the drinking water exposure pathway is incomplete. In 2013, the EPA conducted a well survey in the residential area near the former facility area. This survey confirmed the existence of several legacy irrigation wells -- four active, six inactive and four possible wells. The EPA and FDEP recommend using city water instead of water from irrigation wells, and if irrigation wells must be used, they recommend frequent sampling to ensure water drawn from the well is safe to use. The EPA is trying to secure funding to plug and abandon the known irrigation wells; the 1994 OU2 ROD stated that plugging and abandonment of existing private irrigation wells in the site area was necessary to prevent future exposure to contaminated groundwater. The EPA will offer sampling of these legacy irrigation wells and is currently working to secure resources to appropriately abandon these wells. The EPA should also explore opportunities for informational outreach to residents near the former facility area, to prevent illegal well installations.

# 7.2 Question B: Are the exposure assumptions, toxicity data, cleanup levels and remedial action objectives (RAOs) used at the time of remedy selection still valid?

The exposure assumptions and remedial action objectives are still valid. Some of the toxicity data and cleanup levels are no longer valid due to changes in toxicity information for site COCs and some established cleanup levels being outside of current acceptable risk range.

The 1999 OU1 ROD Amendment established risk-based cleanup goals for four surface soil COCs: total cPAHs, PCP, 2,3,7,8-tetrachlorodibenzo-p-dioxin (expressed as TCDD Toxic Equivalents (TEQ)) and benzo(a)pyrene. The ROD Amendment expanded source control cleanup goals to address subsurface soils/sludges and sediments. The ROD Amendment also added cleanup goals for acenaphthene, anthracene, fluorine, naphthalene, phenanthrene and pyrene. These remedial goals were developed to be protective for anticipated future industrial use of the former facility area.

To determine if the cleanup goals are still valid based on toxicity value changes, a screening-level risk evaluation was conducted as part of this FYR. The risk evaluation compares the cleanup goals to the EPA's residential and industrial Regional Screening Levels (RSLs) for soil (based on 1 x 10-6 cancer risk or noncancer hazard quotient (HQ) of 1) resulting in a conservative screening-level equivalent estimate of cancer risk and noncancer HQs. The resultant cancer risk was compared to the EPA's risk management range of 1 x 10-6 to 1 x 10-4 and the noncancer HQ was compared to the EPA's threshold of 1.0.

Screening results indicate several soil, sludge and sediment cleanup goals are equivalent to carcinogenic risk values outside the EPA's acceptable range and non-carcinogenic HQs greater than 1 for both residential and industrial uses (Appendix H). Both the off-facility (residential) and on-facility 2,3,7,8-TCDD (TEQ) surface soil cleanup goals from the 1999 ROD Amendment equal or exceed the EPA's upper bound of the acceptable risk range, with carcinogenic risk values of 2 x 10<sup>-4</sup> and 1 x 10<sup>-4</sup> and non-carcinogenic values of 20 and 4, respectively.

The 1999 ROD Amendment states that the residential surface soil remedial goal for dioxin of 0.001 mg/kg was subject to review and possible revision because EPA's Final Dioxin Reassessment effort was incomplete at the time; therefore, the EPA and FDEP agreed to designate the cleanup of residential areas as an interim action. The EPA and FDEP are currently evaluating a site-specific soil remedial goal for dioxin in OU3 off-facility soils, based on unrestricted residential land use using two separate probabilistic risk assessments. The EPA should determine if the on-facility dioxin cleanup goal also requires revision. For residential and industrial scenarios, several subsurface soil cleanup goals also exceeded the current acceptable risk range. The EPA has not yet established a cleanup goal for dioxin in subsurface soil. Evaluation of appropriate dioxin cleanup goals for all areas of the Site will occur as part of the new sitewide remedy selection process.

A screening-level risk evaluation was also conducted as part of this FYR for confirmation soil samples collected from the OU1 off-facility remediated areas by comparing the confirmation results to the EPA's soil RSLs to provide a conservative screening-level equivalent estimate of cancer risk and noncancer HQs. While most samples were below the 2,3,7,8-TCDD (TEQ) non-carcinogenic residential regional screening level (RSL) of 51 nanograms per kilogram (ng/kg), several exceeded this value with non-carcinogenic HIs of 3.5 and 2.1 for the two highest exceedances (Appendix H, Table H-5). Several samples also exceeded the cleanup goals for benzo(a)pyrene and total cPAHs, with carcinogenic risk

values ranging from  $2.0 \times 10^{-2}$  to  $3.6 \times 10^{-1}$  (Appendix H, Table H-5). Because the remedy at OU1 is still under construction and is being revisited in the sitewide final ROD, it is expected that the EPA will consider whether additional actions for OU1 off-facility remediated areas are warranted (Figure 2). Currently, the areas with exceedances are vacant and not residential; they include areas near the PYC Ditch and West Gimble Street.

The Site's groundwater cleanup goals were ACLs, which were not based on health standards; therefore, no risk evaluation of these standards was conducted for this FYR. The EPA will revisit groundwater cleanup goals as part of the new groundwater remedy. Groundwater monitoring over the past five years identified several non-COC contaminants above their Marine SWCTLs, including 1,1-biphenyl, 2,4-dimethylphenol, 2-methylphenol, carbazole and phenol. The EPA will consider expanding the final groundwater remedy's COC list to include these contaminants and any other site-related contaminants that present unacceptable risks.

The primary RAOs for the groundwater remedy are to prevent ingestion and prevent migration of COCs to surface water; however, an RAO for vapor intrusion has not been considered. Due to the presence of VOCs in groundwater under the Site, vapor intrusion is also a potential completed exposure pathway for commercial and residential structures in the site area. Based on the EPA's June 2015 Vapor Intrusion Guidance, a screening-level vapor intrusion evaluation was conducted. <sup>5</sup> The screening-level analysis used the EPA's Vapor Intrusion Screening Level (VISL) calculator to determine if this potential exposure pathway requires more in-depth analysis. Groundwater data obtained from wells screened across or as close to the top of the water table as possible were used in the evaluation to best represent contamination at the groundwater surface. As shown in Table 10, monitoring wells C506 and ACW-MW1 had the highest naphthalene and benzene concentrations in the most recent sampling event (January 2015) for the shallow aquifer zone; these concentrations resulted in cancer risks above the EPA's risk management range of 1 x 10<sup>-6</sup> to 1 x 10<sup>-4</sup> and above the non-carcinogenic HQ of 1 for both commercial and residential uses. Both wells can be seen in Figure 5; well C506 is close to several buildings, and well ACW-MW1 is at the former facility area and is not located near buildings. All remaining shallow wells in Table 10 exhibited concentrations within or below the EPA's risk management range of 1 x 10<sup>-6</sup> to 1 x 10<sup>-4</sup> and below the non-carcinogenic HQ of 1 for both commercial and residential uses, indicating the vapor intrusion exposure pathway is likely not a concern in the vicinity of monitoring wells C605, 220, 282, 420 and 720.

The variability in results demonstrates the uncertainties in evaluating this exposure pathway. Most of the wells at the Site are screened at depths well below the top of water, thus, the screening level is limited to those locations where shallow screens were available. Vapor intrusion guidance discourages the use of wells with deeper screened intervals because the concentrations are not representative of concentrations closest to a building slab. Use of deeper screened wells tend to unnecessarily overestimate the vapor intrusion pathway where concentrations tend to be higher due to the presence of DNAPL as a source at the Site.

The vapor intrusion exposure pathway should be evaluated further using additional lines of evidence to determine the relative significance of this exposure pathway. Since VISLs are significantly more stringent than the Marine SWCTLs, groundwater cleanup goals may need to be changed based on the outcome of further vapor intrusion studies. For example, the current Marine SWCTL for naphthalene is

<sup>&</sup>lt;sup>5</sup> OSWER Publication 9200.2-154, Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air, U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, June 2015.

21,900  $\mu$ g/L while the EPA has established the 1 x 10<sup>-6</sup> risk-based and non-carcinogenic-based (HQ=1) vapor intrusion screening levels of 4.6  $\mu$ g/L and 170  $\mu$ g/L, respectively.

**Table 10: VISL Results** 

100	Groundwater	2016 VISL Calculator <sup>b</sup> (average groundwater temperature 25°C)				
606	Concentration Detected in Jan. 2015 (μg/L) <sup>a</sup>	Industrial Exposure		Residential Exposure		
COC		Cancer Risk	Non-carcinogenic HQ	Cancer Risk	Non-carcinogenic HQ	
		C506 (17-				
Naphthalene	7,100	3.5 x 10 <sup>-4</sup>	9.7	1.5 x 10 <sup>-3</sup>	41	
Benzene	140	2.0 x 10 <sup>-5</sup>	0.2	8.8 x 10 <sup>-5</sup>	1.0	
		C605 (9-	19 ft bgs)			
Naphthalene	<2.1	1.0 x 10 <sup>-7</sup>	0.003	4.6 x 10 <sup>-7</sup>	0.01	
Benzene	< 0.5	7.2 x 10 <sup>-8</sup>	0.001	$3.2 \times 10^{-7}$	0.004	
		ACW-MW1	(5–15 ft bgs)			
Naphthalene	3700	1.8 x 10 <sup>-4</sup>	5.1	8.1 x 10 <sup>-4</sup>	21	
Benzene	56	8.1 x 10 <sup>-6</sup>	0.1	$3.5 \times 10^{-5}$	0.4	
		220 (20-2	23 ft bgs)	-		
Naphthalene	18	9.0 x 10 <sup>-7</sup>	0.03	4.0 x 10 <sup>-6</sup>	0.1	
Benzene	0.2	2.9 x 10 <sup>-8</sup>	0.0004	1.3 x 10 <sup>-7</sup>	0.002	
		282 (8-1	3 ft bgs)			
Naphthalene	<2.0	1.0 x 10 <sup>-7</sup>	0.003	$4.4 \times 10^{-7}$	0.01	
Benzene	0.14	2.0 x 10 <sup>-8</sup>	0.0002	8.8 x 10 <sup>-8</sup>	0.001	
		420 (15-1	18 ft bgs)			
Naphthalene	6.1	3.0 x 10 <sup>-7</sup>	0.008	1.3 x 10 <sup>-6</sup>	0.04	
Benzene	0.52	7.5 x 10 <sup>-8</sup>	0.001	3.3 x 10 <sup>-7</sup>	0.004	
		720 (17-2	20 ft bgs)			
Naphthalene	2.1	1.0 x 10 <sup>-7</sup>	0.003	4.6 x 10 <sup>-7</sup>	0.01	
Benzene	0.5	7.2 x 10 <sup>-8</sup>	0.001	3.2 x 10 <sup>-7</sup>	0.004	

<sup>&</sup>lt;sup>a</sup> June 2015 Final Report for ACW Groundwater Sampling Event.

**Bolded**: exceedance of 1 x 10<sup>-4</sup> cancer risk or a non-carcinogenic HQ of 1.

 $\mu g/L = micrograms per liter$ 

# 7.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

There is no new information that could call into question the protectiveness of the remedy.

# 7.4 Technical Assessment Summary

The OU1 remedy has been partially implemented. Remediation is complete at the Southeast Ditch and in several off-facility residential areas. The PYC Ditch was remediated from June to August 2016. Completion of the OU1 remedy has been delayed to tentatively combine the capping of contaminated media with OU3 off-facility contaminated soils. The former facility area is fenced, and warning signage is in place to prevent human exposures. Fencing and signage around the PYC Ditch was removed as cleanup was completed. The OU1 off-facility soil remediation areas and the Southeast Ditch are unfenced. A screening level risk evaluation noted that the ROD's off-facility (residential) and on-facility 2,3,7,8-TCDD (TEQ) surface soil cleanup goals and several subsurface soil cleanup goals exceed the

b Accessed 5/2/2016 at http://www.epa.gov/vaporintrusion.

EPA's acceptable risk range. As part of the new sitewide remedy, the EPA will determine if the onfacility and off-facility soil cleanup goals require revision based on additional site-specific risk evaluations. Another screening level risk evaluation found that contaminant concentrations in confirmation samples from the OU1 off-facility remediation areas exceeded the acceptable risk range for 2,3,7,8-TCDD (TEQ), benzo(a)pyrene and total cPAHs. The EPA will determine if any additional response actions, such as cleanup or institutional controls, are warranted, particularly for the OU1 off-facility soil remediation areas. The areas with exceedances are currently vacant and not residential. The flag on the Escambia County Tax Collector's website acts as an informational institutional control for OU1 soil. The EPA plans to include institutional controls in the sitewide remedy once site ownership is resolved.

The EPA determined that the groundwater extraction and treatment remedy had failed and is in the process of selecting a final groundwater remedy. Area residents and businesses are connected to city water supply, and the EPA is securing funding to appropriately abandon legacy irrigation wells. EPA will also be offering to sample these private irrigation wells for residents. Groundwater monitoring over the past five years indicates that several non-COCs exceeded their Marine SWCTLs. The EPA will consider expanding the final groundwater remedy's COC list to include these contaminants and any other site-related contaminants that present unacceptable risks. A vapor intrusion screening indicated that the vapor intrusion exposure pathway requires further evaluation using multiple lines of evidence to determine if additional response action is warranted.

### 8.0 Issues, Recommendations and Follow-up Actions

Table 11: Issues and Recommendations Identified in the Five-Year Review

OU(s): 1 & 2	Issue Category: Remedy Performance					
	<b>Issue:</b> The OU1 remedy has not been fully implemented and the EPA has declared a remedy failure of the groundwater extraction and treatment system for OU2.					
		n: Evaluate cleanup sitewide remedy the				
Affect Current Protectiveness	Affect Future Implementing Oversight Milestone Date Protectiveness Party					
Yes	Yes	EPA	EPA	09/30/2017		

OU(s): 2	Issue Category: Remedy Performance  Issue: The screening-level vapor intrusion evaluation indicates additional information is needed to determine if this exposure pathway is complete.					
Affect Current Protectiveness						
Yes	Yes	EPA	EPA	09/30/2017		

#### 9.0 Protectiveness Statements

**Table 12: Protectiveness Statements** 

#### **Protectiveness Statements**

Operable Unit: Protectiveness Determination:
1 Partially Protective

#### Protectiveness Statement:

The remedy at OU1 is expected to be protective of human health and the environment upon completion. In the interim, remedial activities completed to date have adequately addressed all exposure pathways that could result in unacceptable risks in these areas. The former facility area is fenced, and warning signage is in place. The EPA remediated the PYC Ditch and returned it to unrestricted use. The OU1 off-facility soil confirmation samples indicate that there are still exceedances of COCs; these are on vacant, non-residential areas and are expected to be addressed in the final sitewide ROD. A screening-level risk evaluation also indicated that several soil cleanup goals exceeded acceptable risks, and there are currently no OU1 land use restrictions; however, it is expected that the EPA will address these outstanding issues in the final sitewide ROD.

Operable Unit: Protectiveness Determination: Addendum Due Date: 09/30/2017

#### Protectiveness Statement:

The remedy at OU2 is currently not protective, but it is expected to be protective of human health and the environment upon completion of the final sitewide ROD. In the interim, remedial activities completed to date have addressed all exposure pathways that could result in unacceptable risks in these areas. The amount of free product was reduced by the groundwater treatment system and there are ICs in place to prevent anyone from installing a drinking water well in the area. OU2 will be protective after evaluating the vapor intrusion pathway using multiple lines of evidence and implementing a new remedy to address the remaining groundwater contamination. It is expected that the EPA will address these outstanding issues in the final sitewide ROD.

#### 10.0 Next Review

The next FYR will be due within five years of the signature/approval date of this FYR.

# Appendix A: List of Documents Reviewed

Amended Record of Decision, Operable Unit 1. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by the U.S. Environmental Protection Agency, Region 4, Atlanta, Georgia. May 21, 1999.

American Creosote Works Presentation. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by the U.S. Environmental Protection Agency, Region 4, Atlanta, Georgia. March 28, 2016.

Baseline Risk Assessment Report. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by B&V Waste Science and Technology Corp. for the U.S. Environmental Protection Agency, Region 4, Atlanta, Georgia. August 12, 1993.

Close-out Report for Waste Consolidation Activities Conducted at American Creosote Works Superfund Site. Pensacola, Escambia County, Florida. Prepared by BEM Systems, Inc., Orlando, Florida. January 2004.

Explanation of Significant Differences Fact Sheet. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by the U.S. Environmental Protection Agency, Region 4, Atlanta, Georgia. August, 1990.

Final Report for American Creosote Works Groundwater Sampling Event. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by U.S. Environmental Protection Agency, Region 4, Science and Ecosystem Support Division, Athens, Georgia. June 3, 2015.

Final Report January/February 2014 ACW Groundwater Sampling Event. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by U.S. Environmental Protection Agency, Region 4, Science and Ecosystem Support Division, Athens, Georgia. April 24, 2014.

Five-Year Review Report. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by the U.S. Environmental Protection Agency, Region 4, Atlanta, Georgia. September 19, 2011.

Groundwater Sampling Investigation Report. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by U.S. Environmental Protection Agency, Region 4, Science and Ecosystem Support Division, Athens, Georgia. August 28, 2013.

Operation and Maintenance Report. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by J2 Engineering, Inc., Pensacola, Florida. April 2012.

Pensacola Yacht Club Ditch Investigation and Well Inventory. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by Seneca J2 Environmental Joint Venture, Irving, New York. June 2013.

Record of Decision, Operable Unit 1. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by the U.S. Environmental Protection Agency, Region 4, Atlanta, Georgia. September 28, 1989.

Record of Decision, Operable Unit 2. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by the U.S. Environmental Protection Agency, Region 4, Atlanta, Georgia. February 3, 1994.

Sampling Investigation Final Report. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by U.S. Environmental Protection Agency, Region 4, Science and Ecosystem Support Division, Athens, Georgia. April 30, 2012.

Site-wide Feasibility Study Report. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by Black & Veatch Special Projects Corp., Alpharetta, Georgia. November 2012.

Stormwater Line Installation Related Activities Completion Report. American Creosote Works, Inc. (Pensacola Plant) Superfund Site. Pensacola, Escambia County, Florida. Prepared by Seneca J2 Environmental Joint Venture, Irving, New York. September 2012.

# **Appendix B: Press Notice**

The U.S. Environmental Protection Agency, Region 4 Announces the Fourth Five-Year Review for The American Creosote Works (Pensacola Plant) Superfund Site, Pensacola, Escambia County, Florida

Purpose/Objective: EPA is conducting a five-Year Review of the remedy for the American Creosote Works (Pensacola Plant) Superfund site (the Site) in Pensacola, Florida. The purpose of the five-Year Review is to make sure the selected cleanup actions effectively protect human health and the environment.

Site Background: The 18-acre area is located about a quarter-mile north of the confluence of Bayou Chico and Pensacola Bay. A wood-treating facility operated at the Site from 1902 until 1982. Facility operations and waste disposal practices contaminated soil, sediment and ground water. Primary contaminants of contern include volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), pentachlorophenol (PCP) and dioxin. EPA listed the Site on the Superfund program's National Priorities List (NPL) in 1983.

Cleanup Actions: EPA performed several early cleanup actions, or removal actions, at the Site between 1983 and 1986 to address immediate threats to human health and the environment. EPA latter dixided the Site into three areas, or operable units (CUs), to manage the long-term cleanup. CUI Isoil and sediment), OUZ Igroundwater) and OUJ (off-site dioxin-impacted soil). EPA selected the OUI remedy in the Site's 1985 and 1998 Records of Decision (RODs) and updated the remedy in a 1999 ROD Amendment. The final OUI remedy included excavation and on-site consolidation of contaminated soil and sediment; placement of a cap over the contaminated soil and sediment; placement of a logosal of site infrastructure and debris; and institutional controls. OUI remedial actions started in 1990 and are ongoing.

EPA selected the OU2 remedy in the Site's 1994 Record of Decisions (ROD). The two-phase groundwater remedy included the operation of a derive non-aqueous phase liquid (DMAPL) recovery system (phase 1), and extraction and treatment of contaminated groundwater (phase 2). The groundwater remedy also included state-imposed well permit restrictions and groundwater monitoring. Groundwater cleanup and monitoring began in 1999. They are ongoing. EPA is currently evaluating options to improve the efficiency of groundwater deanup efforts.

EPA established OU3 in 2006 to address residual off-site soil dioxin contamination from former site operations. EPA anticipates combining OU3 and expanded cleanup for OU1 into one OU in the future. EPA will issue a new OU1/OU3 ROD to establish additional site remedies.

Five-Year Review Schedule: The National Contingency Flat requires review of remedial actions that result in any hazardous substances, pollutants or contaminants remaining at the Site above levels that allow for unlimited use and unrestricted exposure every five years to ensure the protection of human health and the environment. The fourth of the Five-Year Reviews for the Site will be completed by September 2016.

EPA invites Community Participation in the Five-Year Review Process: EPA is conducting this Five-Year Review to evaluate the effectiveness of the Site's remedy and to ensure that the remedy remains protective of human health and the environment. As part of the Five-Year Review process, EPA staff is available to answer any questions about the Site. Community members who have questions about the Site or the Five-Year Review process, or who would like to participate in a community interview, are asked to contact:

Peter Thorpe, EPA Remedial Project Manager Plione: (404) 562-9688 Email: thorpe.peter@epa.gov

E'Tonya Spencer, EPA Community Involvement Coordinator Phone: (404) 562-8463 | (877) 718-3752 (toll-free) Smail: spencer.latonya@epa.gov

Mailing Address: U.S. EPA Region 4, 61 Forsyth Street, S.W., 11th Floor, Atlanta, GA 30303-8960

Additional information is available at the Site's local document repository, located at West Floods Regional Library, 200 W. Gregory Street, Pensacola, Florida 32501, and online at:

http://cumulis.epa.gow/supercpad/cursites/csitinfo.cfm?id=0409572. Legal 1563833 17 September 9, 2016

# **Appendix C: Interview Forms**

American Creosote Works, Inc. (Pensacola

**Five-Year Review Interview** 

Form

Plant) Superfund Site

American Creosote Works, Inc.

EPA ID No.: FLD008161994

(Pensacola Plant)

Interviewer Name: M

Melissa Oakley Affiliation:

Skeo

Subject Name:

Peter Thorpe

Affiliation:

EPA RPM

**Subject Contact Information:** 

Thorpe.Peter@epa.gov

Time: NA

Site Name:

Date: 04/18/2016

Interview Location: NA

Interview Format (circle one):

In Person

Phone

Mail

Other: Email

**Interview Category:** 

**EPA Remedial Project Manager** 

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?

ACW is moving along. We will be cleaning up the PYC Ditch shortly. We are working with FDEP on Probabilistic Risk Assessment for the off-site dioxin cleanup number. We should have a sitewide ROD before the calendar year is over. The Corps contractor, Seneca, does a great job of cleaning the site. The City of Pensacola is very interested in redeveloping the Site.

2. What have been the effects of this Site on the surrounding community, if any?

I believe the community would like to see the site redeveloped into a park. They would like to see that done.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities since the implementation of the cleanup?

I do here a few comments about the wooded area on the far eastern side of the property. Our contractor clears out that area on an annual basis. It looks better and better every year they performed their cleanup.

4. What is your assessment of the current performance of the remedy in place at the Site?

OUI is almost complete with the PYC Ditch. It was very successful for the ROD that was written. OU2 remedy needs to be redone and it will be addressed in the sitewide ROD.

5. Are you comfortable with the status of the institutional controls at the Site? If not, what are the associated outstanding issues?

There will need to be more IC put in place with the land, but we can't implement them until we know what the remedy and the Site's final conditions will be.

6. Are you aware of any community concerns regarding the Site or the operation and management of its remedy? If so, please provide details.

Overall, the community is more focused on the pace of the cleanup than the cleanup itself. They would like the site to be cleaned up soon.

7. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?

None.

American Creosote Works, Inc.

Five-Year Review Interview Form

(Pensacola Plant) Superfund Site

Site Name: American Creosote Works, Inc. EPA ID No.: FLD008161994

(Pensacola Plant)

**Interviewer Name:** 

Subject Name:

L'Tonya Spencer

Affiliation: **EPA** 

**Public Meeting** 

Affiliation:

**Community and Local** 

**Participants** 

Government

Subject Contact Information: Available in Public Meeting Sign-In Sheet

Time: 6:00 pm - 8:00 pmInterview Location:

03/28/2016 Date:

Sanders Beach-Corinne Jones Community Center

**Interview Format (circle one):** 

Phone

Mail

Other:

**Interview Category:** 

Residents & Local Government

In Person

1. Are you aware of the former environmental issues at the Site and the cleanup activities that have taken place to date?

Yes.

2. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)? What have been the effects of this Site on the surrounding community, if any?

The process has been very slow.

3. Have there been any problems with unusual or unexpected activities at the Site, such as emergency response, vandalism or trespassing?

There has been some homeless activity on the north side of the site, between the site and lumber company. It is unclear whether these individuals are accessing the site or just camping in the dense brush outside the boundary fence. Some community members noted vagrant activity along the eastern site boundary as well. There has been dense brush growth following brush removal a few years ago.

4. Has EPA kept involved parties and surrounding neighbors informed of activities at the Site? How can EPA best provide site-related information in the future?

The community feel well informed but would like to have more frequent updates, even in the form of a mailing or email. Especially given the slow nature of the cleanup, periodic contact from EPA helps the community know they have not been forgotten.

5. Do you own a private well in addition to or instead of accessing city/municipal water supplies? If so, for what purpose(s) is your private well used?

Several area residents do have private wells on their property but have a municipal water supply connection and do not use the well. Some residents expressed interest in being able to use the wells for irrigation.

6. Are you aware of any changes in projected land use(s) at the Site?

The community raised several concerns about zoning and future use of the site property. Residents have participated in reuse planning activities over the years and are in favor of a recreational use of the Site once reuse is appropriate. However, current property zoning is industrial and the community is concerned that the zoning would impede their desired use for the land. The community has also heard that the City may try to extend I Street through the site to facilitate access to the Sanders Beach-Corinne Jones Community Center and that the City has expressed interest in developing the property as a truck parking area, which is an end use not desired by area residents.

7. Do you have any comments, suggestions or recommendations regarding any aspects of the project?

Complete the cleanup as soon as possible.

American Creosote Works, Inc. (Pensacola

**Five-Year Review Interview** 

Form

Plant) Superfund Site

American Creosote Works, Inc.

EPA ID No.:

FLD008161994

(Pensacola Plant)

N/A

Affiliation:

N/A

Subject Name:

**Interviewer Name:** 

Site Name:

**Jeff Day** 

Affiliation:

Seneca SCMC, LLC

**Subject Contact Information:** 

Interview Format (circle one):

JDay@Seneca-SCMCLLC.com

Date: 5/11/16

Time: N/A **Interview Location:** 

N/A

In Person

Phone

Mail

Other: Email

**Interview Category:** 

**Remedial Contractor** 

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?

Good – the site is well maintained. EPA is responsive to the surrounding community. The proposed cleanup activities seem appropriate.

2. What is your assessment of the current performance of the remedy in place at the Site?

It is my understanding that the site upkeep task maintains the site security and integrity of the cap until the final remedy can be put in place.

3. What have been the effects of this Site on the surrounding community, if any?

None, that I know of.

4. Are you aware of any complaints or inquiries regarding environmental issues or the remedial action from residents since implementation of the cleanup?

No.

5. What are the findings from the monitoring data? What are the key trends in contaminant levels that are being documented over time at the Site?

I don't know.

6. Is there a continuous on-site contractor presence? If so, please describe staff responsibilities and activities. Alternatively, please describe staff responsibilities and the frequency of site inspections and activities if there is not a continuous on-site contractor presence.

Yes, there is a frequent (weekly) on-site contractor presence. The Site is well maintained (site and right of ways are mowed, trimming, brush clearing, fence maintenance, sign replacement etc.).

7. Have there been any significant changes in site upkeep requirements, maintenance schedules or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.

The remedial DNAPL system was shut down at the end of 2011. Since then the Site has been maintained by mowing, erosion control, perimeter trimming, inspections, brush clearing, debris pickup/disposal, fence repairs, and sign replacement.

8. Have there been unexpected site upkeep difficulties or costs at the Site since start-up or in the last five years? If so, please provide details.

Occasionally cars run through the perimeter fence. The fence must be repaired in a timely manner to maintain site security.

9. Have there been opportunities to optimize site upkeep activities or sampling efforts? Please describe changes and any resulting or desired cost savings or improved efficiencies.

No.

10. Do you have any comments, suggestions or recommendations regarding site upkeep activities and schedules at the Site?

No.

# Appendix D: Site Inspection Checklist

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST				
I. SITE INF	ORMATION			
Site Name: American Creosote Works, Inc. (Pensacola Plant)	Date of Inspection: 03/29/2016			
Location and Region: Pensacola, Florida - EPA Region 4	<b>EPA ID:</b> FLD008161994			
Agency, Office or Company Leading the Five-Year Review: EPA Region 4	Weather/Temperature: Sunny and 70 degrees			
Remedy Includes: (Check all that apply)    Landfill cover/containment     Access controls     Institutional controls     Ground water pump and treatment     Surface water collection and treatment     Other:	☐ Monitored natural attenuation ☐ Ground water containment ☐ Vertical barrier walls			
Attachments:	Site map attached			
II. INTERVIEWS	(check all that apply)			
1. O&M Site Manager  Name  Interviewed  at site at office by phone Pl Problems, suggestions Report attached:	Title Date			
2. O&M Staff  Name  Interviewed  at site  at office  by phone P Problems/suggestions  Report attached:	Title Date			
	Agencies (i.e., state and tribal offices, emergency blic health or environmental health, zoning office, es). Fill in all that apply.			
Agency <u>EPA</u> Contact <u>Peter Thorpe</u> <u>RP</u> Name Tit  Problems/suggestions ☐ Report attached:	le Date Phone No.			
Agency <u>FDEP</u> Contact <u>Kelsey Helton</u> Name Tit Problems/suggestions ☐ Report attached:				
Agency Contact Name Tit Problems/suggestions \[ \Boxed{\text{Report attached:}}				
Agency Contact Name Tit Problems/suggestions \[ \begin{array}{c} Report attached:	le Date Phone No.			

	Agency Contact Name	Title	-	Date	Phone No.	
4.	Problems/suggestions ☐ Report attace  Other Interviews (optional) ☒ Rep				<del></del>	
	ve interview of residents and local gov			participated in	the March 28, 20	16 EPA
						_ <del>_</del> _
<u> </u>	III. ON-SITE DOCUMENTS	AND RECO	RDS VE	RIFIED (chec	k all that apply)	
1.	O&M Documents					
	O&M manual Read	lily available		Up to date	⊠ n	N/A
	☐ As-built drawings ☐ Read	lily available		Up to date		J/A
	Maintenance logs	lily available		Up to date		N/A
	Remarks: No current Site O&M. EP.	A contractor,	Seneca, p	erforms routine	site upkeep acti	vitie <u>s.</u>
2.	Site-Specific Health and Safety Pla	an	Read	ily available	Up to date	□ N/A
	Contingency plan/emergency resplan	ponse	⊠ Read	ily available	☑ Up to date	□ N/A
	Remarks: <u>Seneca maintains hard corresponse plan in the on-site office transports</u>		-specific	health and safe	ty plan and emer	gency
3.	O&M and OSHA Training Record	ds	⊠ Read	ily available	Up to date	□ N/A
	Remarks: All training records are ma	intained elec	tronically.	<u>.                                   </u>		
4.	Permits and Service Agreements					
	☐ Air discharge permit		☐ Read	ily available	Up to date	⊠ N/A
	☐ Effluent discharge		☐ Read	ily available	Up to date	N/A
	☐ Waste disposal, POTW		☐ Read	ily available	Up to date	⊠ N/A
)	Other permits:		☐ Read	ily available	Up to date	⊠ N/A
	Remarks:				····	<u> </u>
5.	Gas Generation Records		Read	ily available	Up to date	⊠ N/A
	Remarks:					
6.	Settlement Monument Records		Read	ily available	Up to date	⊠ N/A
	Remarks:		<u></u>		<del></del>	
7.	Ground Water Monitoring Record	ds	□ Read	lily available	Up to date	□ N/A
	Remarks: Annual groundwater monincluded efforts to update groundwater				-date. Recent rep	orts have
8.	Leachate Extraction Records		Read	ily available	Up to date	⊠ N/A
	Remarks:					
9.	Discharge Compliance Records					
	☐ Air ☐ Read	lily available		Up to date	<u> </u>	J/A

	☐ Water (effluent)	Readily available	☐ Up 1	to date N/A		
	Remarks:					
10.	Daily Access/Security Log	gs	Readily avail	able 🛛 Up to date 🔲 N/A		
				e repairs and general upkeep progress reports to the EPA.		
	IV. O&M COSTS					
1.	O&M Organization					
	State in-house		Contractor for s	state		
	☐ PRP in-house		Contractor for I	PRP		
	Federal facility in-house	• [	Contractor for I	Federal facility		
				nanage site activities. The U.S.		
2.	O&M Cost Records					
	Readily available	۵	☑ Up to date			
	☐ Funding mechanism/agr	reement in place	Unavailable			
	Original O&M cost estimate	e: Breakdov	wn attached			
	Tota	al annual cost by year f	for review period	if available		
		12/31/2011	<u>\$237,000</u>	☐ Breakdown attached		
	Date	Date	Total cost			
		12/31/2012	\$287,000	☐ Breakdown attached		
	Date	Date	Total cost	_		
		12/31/2013	\$72,000	☐ Breakdown attached		
	Date .	Date	Total cost			
	From: <u>1/1/2014</u> To:	12/31/2014 Date	\$76,000 Total cost	☐ Breakdown attached		
				D David James Marked		
	From: <u>1/1/2015</u> To: Date	12/31/2015 Date	\$94,000 Total cost	☐ Breakdown attached		
2			<del></del> .			
3.	Unanticipated or Unusually  Describe costs and reasons: T	•	•	riod higher than in other years because in		
	2011, the EPA conducted qua	rterly groundwater san	npling and decom	missioned the DNAPL extraction		
	cleared and sampled the PYC	Ditch, conducted a we	ell survey, and cor	e maintenance and upkeep, the EPA inducted activities in support of the		
	stormwater line relocation sucremoved and disposed of the l			ir and stockpiling soil. In 2015, they		
		INSTITUTIONAL CO				
A. Fer				<u> </u>		
1.		Location shown on s	site map 🛛 Ga	ates secured N/A		
	_			. The fence has been damaged by		

	······································			
B.	Other Access Restrictions			_
1.	Signs and Other Security Measures	nown on site	e map	□ N/A
	Remarks: Warning signage is clearly posted at regular intervals along secured with locks.	g the perim	eter fence.	All gates are
C.	Institutional Controls (ICs)			
1.	Implementation and Enforcement			
	Site conditions imply ICs not properly implemented	⊠ Yes	☐ No	□ N/A
	Site conditions imply ICs not being fully enforced	⊠ Yes	☐ No	□ N/A
	Type of monitoring (e.g., self-reporting, drive by):			
}	Frequency:			
	Responsible party/agency: EPA	•		
	Contact			
	Name Title	Date	P	hone no.
	Reporting is up to date	☐ Yes	☐ No	⊠N/A
	Reports are verified by the lead agency	☐ Yes	☐ No	⊠ N/A
ŀ	Specific requirements in deed or decision documents have been met	☐ Yes	⊠ No	□ N/A
	Violations have been reported	☐ Yes	☐ No	⊠ N/A
}	Other problems or suggestions: Report attached			
			•	
2.	Adequacy	at could dis emedy imp d. The Site are connect of several	lementation is located to the	<u>n and</u> in a Florida city water
D.	General			
1.	Vandalism/Trespassing    Location shown on site map    N Remarks: Neither vandalism nor trespassing has taken place at the Site 2016). People sometimes throw trash over the fence. Seneca removes found within the fence during routine upkeep activities.		last five	
2.	Land Use Changes On Site N/A			
	Remarks: Since the 2011 FYR, a new business opened immediately no manufacturing business now operates there.	orth of the	Site. A ligh	nting
3.	Land Use Changes Off Site  N/A  Remarks:			
	VI. GENERAL SITE CONDITIONS			
Α.	Roads Applicable N/A			
1.	<del></del>	oads adequa	nte	
	Remarks: On-site roads and parking areas are in good condition.			
B.	Other Site Conditions			

	Remarks:		
	VII. LAN	NDFILL COVERS Applicab	ole N/A
A. La	ndfill Surface		
1.	Settlement (low spots)	Location shown on site map	Settlement not evident
	Arial extent:		Depth:
	Remarks:		
2.	Cracks	Location shown on site map	☐ Cracking not evident
	Lengths:	Widths:	Depths:
	Remarks:		
3.	Erosion	Location shown on site map	Erosion not evident
	Arial extent:		Depth:
	Remarks:		
4.	Holes	Location shown on site map	
	Arial extent:		Depth:
	Remarks:		
5.	Vegetative Cover	<b>⊠</b> Grass	Cover properly established
	No signs of stress	☐ Trees/shrubs (indicate size and lo	ecations on a diagram)
	Remarks: The grass growing	ng on the clay cap is well-established, w	vell-maintained and healthy.
6.	Alternative Cover (e.g., a	armored rock, concrete)	□ N/A
		ner covers the soil excavated from the S, and a plant growing in the middle of the	
	good condition. The plant a routine site upkeep activitie	and small hole in the liner have been not ies.	ted and will be addressed during
7.	Bulges	Location shown on site map	Bulges not evident     ■ Bulges not e
	Arial extent:		Height:
	Remarks:		
8.	Wet Areas/Water		vident
Dama	age ☐ Wet areas	Location shown on site map	Arial extent:
		Location shown on site map	Arial extent:
		Location shown on site map	Arial extent:
	Soft subgrade	Location shown on site map	Arial extent:
	Remarks:	Doodton Shown on Siteap	All di Catoliti.
9.	Slope Instability	Slides	Location shown on site map
	No evidence of slope in	<del>_</del>	
	Arial extent:	istaomity	
	Remarks:		
	Noman Ko.		

B. Be		<del>_</del>	
		ity of surface runoff and intercept and	dfill side slope to interrupt the slope in convey the runoff to a lined channel.)
1.	Flows Bypass Bench	Location shown on site map	□ N/A or okay
	Remarks:		
2.	Bench Breached	Location shown on site map	□ N/A or okay
	Remarks:		· · · · · · · · · · · · · · · · · · ·
3.	Bench Overtopped	Location shown on site map	☐ N/A or okay
	Remarks:		
C. Le	tdown Channels [	Applicable N/A	
		control mats, riprap, grout bags or gabiolow the runoff water collected by the bin gullies.)	
1.	Settlement (Low spots)	Location shown on site map	☐ No evidence of settlement
	Arial extent:		Depth:
	Remarks:		
2.	<b>Material Degradation</b>	Location shown on site map	☐ No evidence of degradation
	Material type:		Arial extent:
	Remarks:		
3.	Erosion	Location shown on site map	☐ No evidence of erosion
	Arial extent:		Depth:
	Remarks:		
4.	Undercutting	Location shown on site map	☐ No evidence of undercutting
	Arial extent:		Depth:
	Remarks:	·	
5.	Obstructions	Type:	☐ No obstructions
	☐ Location shown on site	map Arial extent:	
	Size:		
	Remarks:		
6.	Excessive Vegetative Gro	wth Type:	
	☐ No evidence of excessive	ve growth	
	☐ Vegetation in channels	does not obstruct flow	
	Location shown on site	map Arial extent:	-
	Remarks:		
D. Co	over Penetrations [	Applicable N/A	
1.	Gas Vents	Active	Passive

	Properly secured/locked	☐ Functioning	☐ Routinely sampled	Good condition
	Evidence of leakage at pe	enetration	☐ Needs maintenance	□ N/A
	Remarks:			
2.	Gas Monitoring Probes			
	Properly secured/locked	☐ Functioning	Routinely sampled	Good condition
	Evidence of leakage at pe	enetration	☐ Needs maintenance	□ N/A
	Remarks:			
3.	Monitoring Wells (within su	rface area of landfill	)	
	Properly secured/locked	☐ Functioning	Routinely sampled	Good condition
	Evidence of leakage at pe	enetration	☐ Needs maintenance	□ N/A
	Remarks:			
4.	Extraction Wells Leachate			
	Properly secured/locked	☐ Functioning	☐ Routinely sampled	Good condition
	Evidence of leakage at pe	enetration	☐ Needs maintenance	□ N/A
	Remarks:			
5.	Settlement Monuments	Located	☐ Routinely surveyed	□ N/A
	Remarks:			
F. Ga	s Collection and Treatment	Applicable	⊠ N/A	
1				
1.	Gas Treatment Facilities			
	Gas Treatment Facilities  ☐ Flaring	☐ Thermal destru	ction	Collection for reuse
		☐ Thermal destru		Collection for reuse
	☐ Flaring	<del></del>		Collection for reuse
	☐ Flaring ☐ Good condition	Needs maintena		Collection for reuse
1.	☐ Flaring ☐ Good condition Remarks:	Needs maintena	ance	Collection for reuse
1.	☐ Flaring ☐ Good condition Remarks:  Gas Collection Wells, Manif	Needs maintena	ance	Collection for reuse
1.	☐ Flaring ☐ Good condition Remarks:  Gas Collection Wells, Manif	Needs maintena	ance	
2.	☐ Flaring ☐ Good condition Remarks:  Gas Collection Wells, Manif ☐ Good condition Remarks:	Needs maintena	ance f adjacent homes or buildin	
2.	☐ Flaring ☐ Good condition Remarks:  Gas Collection Wells, Manif ☐ Good condition Remarks:  Gas Monitoring Facilities (e	Needs maintena	ance f adjacent homes or buildin	
2.	☐ Flaring ☐ Good condition Remarks:  Gas Collection Wells, Manif ☐ Good condition Remarks:  Gas Monitoring Facilities (e	Needs maintena	ance f adjacent homes or building	
2.	☐ Flaring ☐ Good condition Remarks:  Gas Collection Wells, Manif ☐ Good condition Remarks:  Gas Monitoring Facilities (e ☐ Good condition Remarks:	Needs maintend  Folds and Piping  Needs maintend  Needs maintend  Needs maintend	ance f adjacent homes or building	
1. 2. 3. F. Co	☐ Flaring ☐ Good condition Remarks:  Gas Collection Wells, Manif ☐ Good condition Remarks:  Gas Monitoring Facilities (e ☐ Good condition Remarks:  ver Drainage Layer	Needs maintend  Folds and Piping  Needs maintend  .g., gas monitoring o	ance  f adjacent homes or building ance	
1. 2. 3. F. Co	☐ Flaring ☐ Good condition Remarks:  Gas Collection Wells, Manif ☐ Good condition Remarks:  Gas Monitoring Facilities (e ☐ Good condition Remarks:  ver Drainage Layer  Outlet Pipes Inspected	Needs maintend  Folds and Piping  Needs maintend  .g., gas monitoring o	ance  f adjacent homes or building ance	
1. 2. 3. F. Co	☐ Flaring ☐ Good condition Remarks:  Gas Collection Wells, Manif ☐ Good condition Remarks:  Gas Monitoring Facilities (e ☐ Good condition Remarks:  ver Drainage Layer  Outlet Pipes Inspected Remarks:	Needs maintenated Needs mainte	ance  f adjacent homes or buildin ance N/A  N/A	
1. 2. 3. F. Co	☐ Flaring ☐ Good condition Remarks:  Gas Collection Wells, Manif ☐ Good condition Remarks:  Gas Monitoring Facilities (e ☐ Good condition Remarks:  ver Drainage Layer  Outlet Pipes Inspected Remarks:  Outlet Rock Inspected	Needs maintenated Needs mainte	ance  f adjacent homes or building ance  N/A  N/A  N/A	
1. 2. 3. F. Co	☐ Flaring ☐ Good condition Remarks:  Gas Collection Wells, Manif ☐ Good condition Remarks:  Gas Monitoring Facilities (e ☐ Good condition Remarks:  ver Drainage Layer  Outlet Pipes Inspected Remarks:  Outlet Rock Inspected Remarks:  etention/Sedimentation Ponds	Needs maintend  Folds and Piping  Needs maintend  .g., gas monitoring of  Needs maintend  Applicable  Functioning  Applicable	ance  f adjacent homes or building ance  N/A  N/A  N/A	

	Remarks:		
2.		rea extent: Depth:	<del>-</del>
	Erosion not evident		
	Remarks:		
3.	Outlet Works	Functioning	□ N/A
	Remarks:		
4.	Dam	] Functioning	□ N/A
	Remarks:		
H. R	etaining Walls	☐ Applicable      N/A	
1.	Deformations	Location shown on site map	Deformation not evident
]	Horizontal displacement	:: Vertical d	isplacement:
	Rotational displacement	: <u></u>	
	Remarks:		
2.	Degradation	Location shown on site map	Degradation not evident
	Remarks:		
I. Pe	rimeter Ditches/Off-Site	Discharge	⊠ N/A
1.	Siltation	Location shown on site map	Siltation not evident
	Area extent:		Depth:
	Remarks:		
2.	Vegetative Growth	Location shown on site map	□ N/A
	☐ Vegetation does not	impede flow	
	Area extent:		Туре:
	Remarks:		
3.	Erosion	☐ Location shown on site map	☐ Erosion not evident
	Area extent:		Depth:
	Remarks:		
4.	Discharge Structure	☐ Functioning	□ N/A
	Remarks:	<del></del>	
VIII.	VERTICAL BARRIER		⊠ N/A
1.	Settlement	Location shown on site map	Settlement not evident
	Area extent:		Depth:
	Remarks:		
2.	Performance Monitori	ng Type of monitoring:	
	Performance not mor	nitored	
	Frequency:		☐ Evidence of breaching
	Head differential:		

	Remarks:				
IX. G	IX. GROUND WATER/SURFACE WATER REMEDIES   Applicable   N/A				
A. Gı	round Water Extraction Wells, Pumps and Pipelines   Applicable   N/A				
1.	Pumps, Wellhead Plumbing and Electrical				
	☐ Good condition ☐ All required wells properly operating ☐ Needs maintenance ☒ N/A				
	Remarks: The groundwater treatment system is no longer operational.				
2.	Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances				
	Good condition Needs maintenance				
	Remarks: The groundwater treatment system is no longer operational.				
3.	Spare Parts and Equipment				
	☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided				
	Remarks: The groundwater treatment system is no longer operational.				
B. Su	rface Water Collection Structures, Pumps and Pipelines				
1.	Collection Structures, Pumps and Electrical				
	Good condition Needs maintenance				
_	Remarks:				
2.	Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances				
	Good condition Needs maintenance				
	Remarks:				
3.	Spare Parts and Equipment				
	☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided				
	Remarks:				
C. Tr	reatment System				
1.	Treatment Train (check components that apply)				
	☐ Metals removal ☐ Oil/water separation ☐ Bioremediation				
	☐ Air stripping ☐ Carbon adsorbers				
	☐ Filters:				
	Additive (e.g., chelation agent, flocculent):				
	Others:				
	Good condition Needs maintenance				
	Sampling ports properly marked and functional				
	Sampling/maintenance log displayed and up to date				
	Equipment properly identified				
	Quantity of ground water treated annually:				
	Quantity of surface water treated annually:				
	Remarks: The groundwater treatment system is no longer in operation.				

2.	Electrical Enclosures and Panels (properly rated and functional)
	N/A ☐ Good condition ☐ Needs maintenance
	Remarks:
3.	Tanks, Vaults, Storage Vessels
5.	<ul> <li>N/A ☐ Good condition ☐ Proper secondary containment ☐ Needs maintenance</li> </ul>
	Remarks: The groundwater treatment system is no longer in operation.
<del></del>	
4.	Discharge Structure and Appurtenances
	N/A ☐ Good condition ☐ Needs maintenance
	Remarks:
5.	Treatment Building(s)
	□ N/A
	Chemicals and equipment properly stored
	Remarks: The groundwater treatment system is no longer in operation.
6.	Monitoring Wells (pump and treatment remedy)
0.	
ļ	☐ All required wells located ☐ Needs maintenance ☐ N/A
	Remarks:
D. Monitoring Data	
1.	Monitoring Data
	☑ Is routinely submitted on time ☑ Is of acceptable quality
2.	Monitoring Data Suggests:
	Ground water plume is effectively Contaminant concentrations are declining contained
E. M	onitored Natural Attenuation
1.	Monitoring Wells (natural attenuation remedy)
	□ Properly secured/locked    □ Functioning    □ Routinely sampled    □ Good condition
	☐ All required wells located ☐ Needs maintenance ☐ N/A
	Remarks: The EPA contractor, Seneca, performs annual groundwater monitoring. All wells observed
	during the site inspection appeared to be in good condition and were secured with either locks or bolts.
I C 4 h a a	X. OTHER REMEDIES
	re are remedies applied at the site and not covered above, attach an inspection sheet describing the physical and condition of any facility associated with the remedy. An example would be soil vapor extraction.
	XI. OVERALL OBSERVATIONS
<u>A.</u>	Implementation of the Remedy
	Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is designed to accomplish (e.g., to contain contaminant
	Desili with a price statement of what the remedy is designed to accombine te.s., to contain containment
	plume, minimize infiltration and gas emissions).
	plume, minimize infiltration and gas emissions).  The OU1 remedy has been partially implemented and will be completed following the sitewide ROD. The
	plume, minimize infiltration and gas emissions).  The OU1 remedy has been partially implemented and will be completed following the sitewide ROD. The PYC Ditch underwent remediation in summer 2016. There are currently no soil ICs in place for OU1, but
	plume, minimize infiltration and gas emissions).  The OU1 remedy has been partially implemented and will be completed following the sitewide ROD. The

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy. Seneca performs routine site upkeep activities including mowing, bush-hogging, fence repair and trash/litter removal. Site upkeep activities are adequate.

#### C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.

Due to its inability to adequately address groundwater contamination, the EPA took the groundwater treatment system out of operation in December 2011. The EPA is in the process of investigating alternative remedial strategies to address residual site contamination. In addition, some of the groundwater institutional controls appear to be ineffective in preventing well installation.

#### D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy. The EPA declared the DNAPL recovery remedy a failure and is currently worked on a new sitewide remedy to optimize the cleanup.

# Appendix E: Photographs from Site Inspection Visit



Locked gate with clearly-displayed warning signage along the southern site perimeter



Aboveground storage tanks for holding extracted DNAPL and groundwater treatment area, at the western end of the Site, are no longer in use



The on-site office trailer, located on the western end of the Site



Pumps have been removed from all DNAPL extraction wells on the western part of the Site



View of the western end of the Site – the previous location of several DNAPL extraction wells



View of the Site, looking east



A large pile of demolition debris generated during early cleanup activities



Temporary cover over contaminated Southeast Ditch soil.



Small holes observed in the liner covering the Southeast Ditch materials



Vegetation covering the large clay cap at the center of the Site, view looking toward the east



View looking toward the west of the area between the clay cap and the southern perimeter fence



View of the former rail bed, looking west



A small fig tree and bamboo plant have been planted near two monitoring wells between Pine Street and the Site's southern perimeter fence line



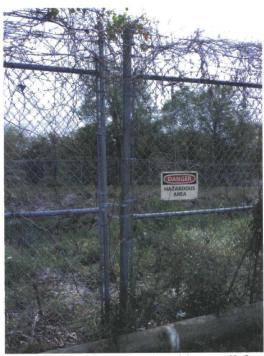
A discarded mattress inside the Site's southern perimeter fence line



Well MW 3, south of the clay cap, was secured with bolts

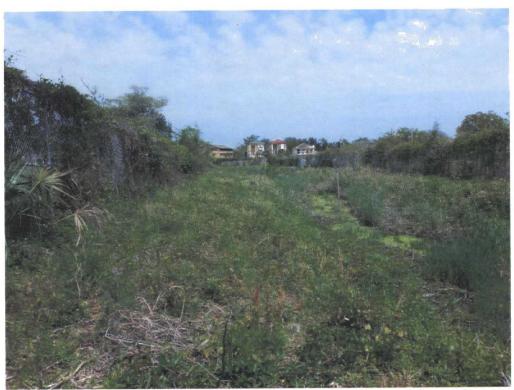


Fence along the southern perimeter of the Site

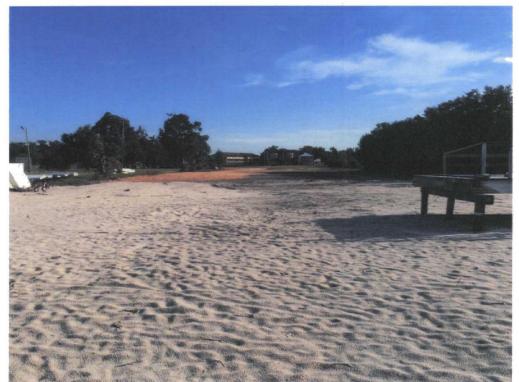


Prior to cleanup, access to the PYC Ditch was restricted by a tall fence, topped with barbed wire.

Warning signage was clearly displayed on the PYC Ditch fence.



View of the PYC Ditch, looking north toward Cypress Street, prior to cleanup.



View of the PYC Ditch, looking north toward Cypress Street, after cleanup completion.



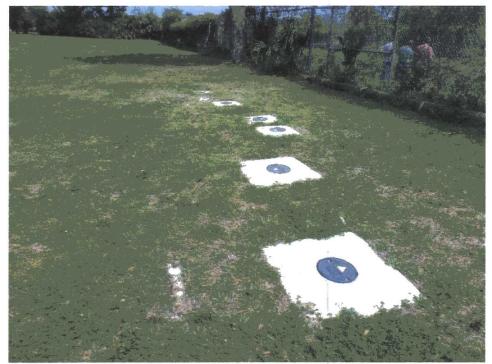
Point where the former PYC Ditch had discharged into Bayou Chico; the PYC is pictured in the background.



Fence at the southern end of the PYC Ditch, prior to cleanup.



After PYC Ditch cleanup completion, the bridgeway that had previously allowed pedestrian crossing of the PYC Ditch is now used as an observation bridge for races.



New concrete well pads immediately west of the PYC Ditch fence



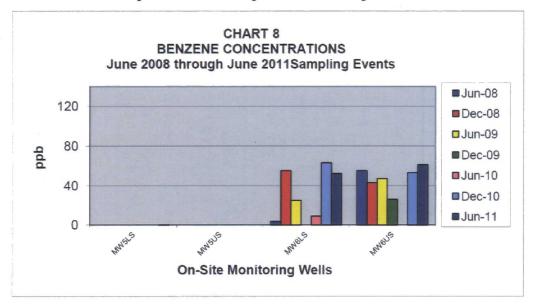
View of the Southeast Ditch area

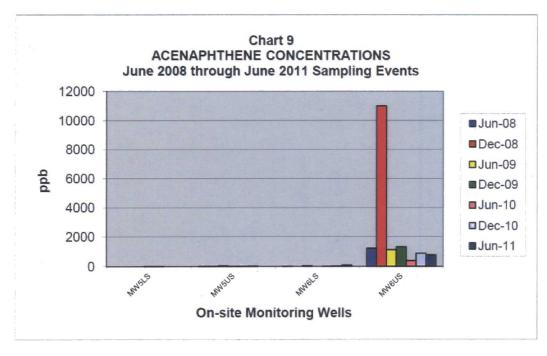
Appendix F: 2013 Well Survey Results

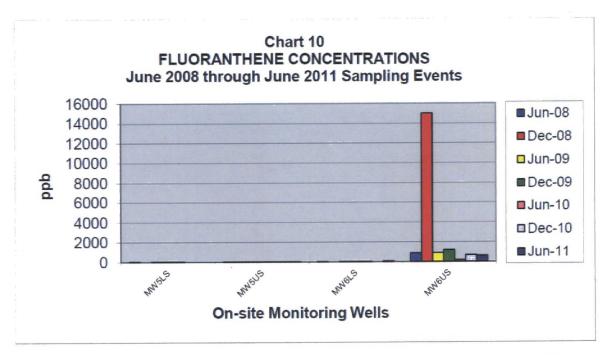


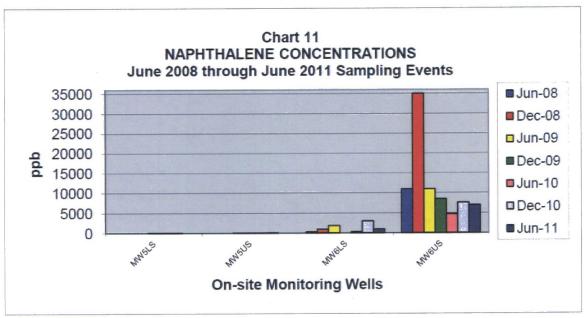
Appendix G: Detailed Data Review

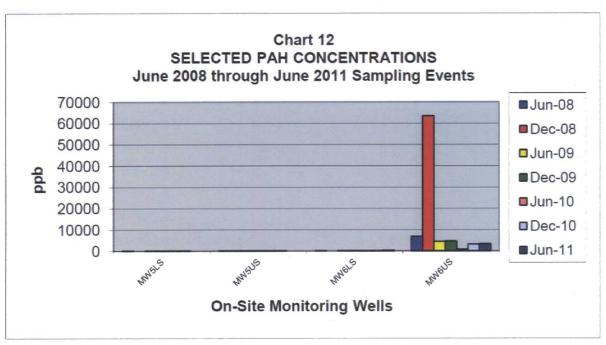
### Charts from the September 2010-September 2011 Operation and Maintenance Report

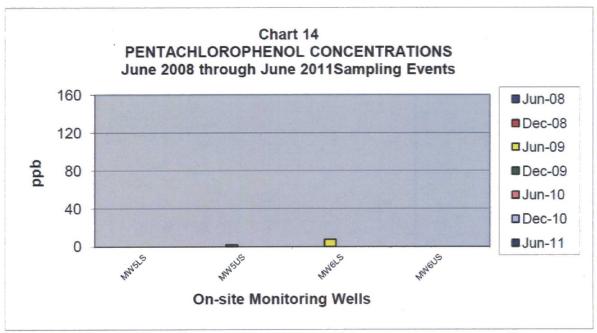












## Tables from the Groundwater Sampling Investigation Reports, 2012-2015

# Table 3 American Creosote VOC Results 2014 and 2015

																	-	
		Station ID	220	220	281	281	282	282	283	283	285	285	420	420	440	440	480	480
		Sample ID	220-0114	220-0115	281-0114	281-0315	282-0114	282-0315	283-0114	283-0115	285-0114	285-0115	420-0114	420-0115	440-0114	440-0115	480-0134	400-0115
		Sample Date	2/4/14 11:20	1/29/15 15:15	2/1/34 14:20	1/28/15 9:40	2/1/14 15:25	1/28/15 10:03	2/1/14 15:35	1/27/15 15:45	2/1/14 14:45	1/28/15 10:15	2/4/14 10:40	1/91/15 10:20	2/4/14 12:35	1/31/15 9:40	2/4/14 16:25	1/31/15 12:05
Analyte	Units	FL Marine SWCTL (2005)																-
(m- and/or p-)xylene	ug/L	n/a	0.601.0	0.251,0	67	52	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	5.0	1.6	5.0	2.6	0.473,0	0,47 J,0	29	21
Acetone	ug/L	1700 ug/l	< 4.0 U	< 4,0 U	< 4.0 U	< 4.D U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0.U	< 4.0 U	< 4.0 U	< 4.0 U	<4.0 U
Benzene	ug/L	71.28 ug/l	0.451,0	0.201,0	59	.64	< 0.50 U	0.141,0	< 0.50 U	< 0.50 U	30	18	3.1	0.52	0.311,0	0.26 J.O	38	31
Chiorobenzene	ug/L	17 ug/l	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	<0.50U	< 0.50 U	< 0.50 U
Ethyl Benzene	ug/L	61D ug/1	0.73	0.233,0	50	58	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	10	3.4	1.3	0.37 J,O	1.1	0.80	19	18
Methane	ug/L	n/a	580	560	8900	19000	930	240	170	55	3000	2300	4700	8500	2000	510	710	1800
Methyl Ethyl Ketone	ug/L	120000 ug/l	< 4.0 U	< 4.0 U	<4.0 U	<4.DU	< 4.0 U	< 4.0 U	< 4.0.U	<4.0 U	<4.0 U	< 4.0 U						
Styrene	ug/L	460 ug/l	< 0.50 U	< 0.50 U	<1.1 U,0	< 1.3 U,O	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	<.0.50 U	<.0.50 U	0,080,0	< 0.50 U	3.6	< 0.71 U,0
Toluene	ug/L	.480 ug/l	0.253.0	0.181,0	57	7.A	< 0.50 U	< 0.50 U	< 0.50 U	<.0,50 U	0.79	0.373,0	0.253,0	< 0.50 LJ	0.191,0	0.26 J.O	31	4.7
o-xylene	HE/L	n/a	0.93	0.33 /, D	33	35	< 0.50 U	< 0.50 U	< 0.50 U	< 0,50 U	2.2	0.61	0.63	0,25 1,0	0.291,0	0.34 J,O	13	9.3
		2015						•	•									

		Station ID	700	700	720	720	ACWMW1	ACWMW1	C1005	C1005	C103	C103	C104	C104	C105	C105
		Sample ID	700-0114	700-0115	720-0114	720-0115	ACWWW3-0134	ACWMW1-0115	C1005-0114	C1005-0115	C105-0114	C103-0115	C104-0114	C104-0115	C105-0114	C105-0115
		Sample Date		1/27/15 15:50	2/1/14 14:50	1/27/15 16:00	2/4/14 15:30	2/2/15 14-43	1/31/14 9:20	1/30/15 9:35	2/2/34 11:45	1/22/15 12:65	2/1/14 10:40	1/31/15 \$1:35	2/1/14 9:40	1/31/15 14:40
Analyte	Units	FL Marine SWCTL (2005)														
(m- and/or p-)xylene	ug/L	n/a	< 1.0 U	< 1.0 U	<1.0U	<10U	68	65	<1.0U	<10U	94	68	0.991,0	0.951,0	<1.0U	<10U
Acetone	ug/L	1700 ug/i	< 4.0 U	< 4.0 U	< 4.0 U	<4.0 U	< 4.0 U	30	<4.0 U	< 4.0 U	< 20 U	< 20 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
benzene	18/1	71.28 ug/l	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	37	56	< 0.50 U	< 0,50 U	60.	47	5.1	14	< 0.50 U	< 0.50 U
Chlorobenzene	ug/L	17 ug/l	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	<0.50U	< 0.50 U	< 0.50.U	<25U	<25 U	0,113,0	0.213,0	< 0.50 U	< 0.50 U
Ethyl Benzene	ME/L	610 ug/l	< 0.50.U	< 0.50 U	< 0.50 U	< 0.50 U	36	35	< 0.50 U	< 0.50 U	48	40	0,0903,0	0.57	< 0.50 U	< 0.50 U
Methane	Mg/L	n/a	1170	160	250	1200	5200	5700	59	18	290	390	2600	1200	1400	2200
Methyl Ethyl Ketone	ug/L	120000 ug/1	< 4.0 U	<4.0 U	< 4.0 U	<4.0 U	< 4.0 U	6.0	< 4.0 U	< 4.0 U	< 20 U	< 20 ∪	< 4.0 U	< 4.0 U	<4.0 U	<4.0 U
Styrene	ug/L	460 ug/l	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.5 U,O	< 1.4 U,0	< 0.50 U	< 0.50 U	20	21	< 0.50 U	· < 0.50 U	< 0.50 U	< 0.50 U
Toluene	ug/L	480 ug/l	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	33	44	< 0.50 U	< 0.50 U	93	65	0.173,0	0.461,0	< 0.50 U	< 0.50 U
p-xylene	ME/L	n/a	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	33	31	< 0,50 U	< 0.50 U	44	23	1.0	. 1.4	< 0.50 U	< 0.50 U

# Table 3 American Creosote VOC Results 2014 and 2015

		Station ID	C205	C205	C206	C206	C406	C406	C504	C504	C505	€505	C506	C506	C604	C604	C605	C605
		Sample ID		C205-0115	C206-0114	C206-0115	C406-0114	C408-0115	C504-0114	CS04-0115	C505-0114	C505-0115	C506-0114	C506-0115	C604-0114	C604-0115	C805-0114	C605-0115
		Sample Date		1/31/15 14:20	2/1/14 9:50	1/91/15 14:50	2/3/14 9.35	1/29/15 10:15	2/4/14 12 35	2/3/15 11:30	Z/4/14 13-35	2/3/15 10:00	2/4/14 13:55	2/3/15 9:45	1/31/14 14:50	1/10/15-9-25	1/91/14 14:05	1/29/15 15.15
			8747 BH 2.2.00	2/32/23 2-20	27272-0-50	2,35,15,1-15			-									
Analyte	Units	FL Marine SWCTL (2005)											_		2225			<1.00
(m- and/or p-)xylene	ug/L	n/a	0.601,0	0.52 J,O	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	<1.00	< 1.0 U	40	34	97	98	< 1.0 U	< 1.0.U	<1.0 U	
Acetone	ug/L	1700 ug/l	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.D U	< 4.0 U	4.0	< 4.0 U	120	98	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Benzene	ug/L	71.28 ug/l	0.0903,0	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	43	32	160 ^	140 ^	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Chlorobenzene	ug/L	17 ug/l	0.201.0	0.221.0	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	<0.50 U	< 1.0 U	<1.0U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Ethyl Benzene	ug/L	610 ug/l	0.161.0	0.09010	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	24	20	49	49	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Ethili peutesie	ug/L	ero ogi.	A Company of the Comp	School Salvering			_			THE RESERVE OF THE PERSON NAMED IN	2000	10000	11000		450		910	1000
Methane	ug/L	n/a	410	390	2300	3600	21	57	15	18	9400	20000	-		Name and Address of the Owner, where the Owner, which is the Owner, where the Owner, which is the Owner, where the Owner, which is the Owner, which i			The second second
Methyl Ethyl Ketone	ME/L	120000 ug/l	< 4.0 U	< 4.0 U	< 4,0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	<4.0U	0,182.0	< 4.0 U	43	34	< 4.0 U	< 4.0 U	<4.0.0	< 4.0 U
Styrene	ug/L	460 ug/1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.3 U,O	< 0,68 U,O	26	21	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Toluene	UE/L	480 ug/l	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	<0.50 U	< 0.50 U	< 0.50 U	38	29	140	130	< 0.50 U	< 0.50 U	< 0.50 U	<.0.50·U
	-	n/a	0.64	0.463.0	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	19	16	48	47	0.141,0	0.27 3,0	< 0.50 U	< 0.50 U
o-Xylene	ME/L	14/10	THE REAL PROPERTY.			2.09.9												

		Station ID	C704	C704	C902	C902	C903	C903	C904	C904	C905	.C905	MW3	MW3	OW09	OW09
		Sample ID		C704-0115	C802-0114	C902-0115	C903-0114	C909-0115	C904-0114	C904-0115	C905-0114	C905-0115	1/3	MW3-0115	OW09-0114	OW09-0115
		Sample Date	1/31/14 16:15	2/2/15 14:40	2/3/14 14:45	1/31/15 9:45	2/3/14 15:45	1/31/15 9:38	2/3/34 14:55	1/30/15 15:40	2/3/14 14:00	1/30/15 14:40	2014	2/2/15 11:50	2/4/14 12:00	1/90/15 19:57
Analyte	Units	FL Marine SWCTL (2005)														
m- and/or p-)Xylene	ug/L	n/a	< 1.0 U	<1.0 U	33	37	31	5.0	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	n/s	<1.0 U	4.5	1.6
cetone	HE/L	1700 ug/l	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	n/s	< 4.0 U	< 4,0 U	< 4.0 U
enzene	UE/L	71.28 ug/)	< 0.50 U	< 0.50 U	3.9	2.3	7.0	2.5	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	n/s	< 0.50 U	< 0.50 U	< 0.50 U
Chlorobenzene	ug/L	17 ug/l	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	n/s	< 0.50 U	< 0.50 U	< 0.50 U
Sthyl Benzene	ug/L	610 ug/l	< 0.50 U	< 0.50 U	15	16	20	8.0	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	n/s	< 0.50 U	1.3	0.62
Vethane	ug/L	n/a	1.7	1.7	85	29	24	14	4.5	2.8	1400	1900	n/s	8.3	110	90
Methyl Ethyl Ketone	ug/L	120000 ug/l	< 4.0 U	< 4,0 U	< 4.0 U	<4.0 U	<4.0 U	< 4.0 U	< 4.0 U	<4.0U	< 4.0 U	<4.0 U	n/s	<4.0 U	<4.0 U	< 4.0 U
tyrene	ug/L	460 ug/l	< 0.50 U	< 0.50 U	5.9	7.3	4.2	0.68	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	n/s	< 0.50 U	< 0.50 U	< 0.50 U
Toluene	ug/L	480 ug/l	< 0.50 U	< 0.50 U	14	16	13	0.271,0	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	n/s	< 0.50 U	0.191,0	0.111,0
p-Xylene	ug/L	n/a	< 0.50 U	< 0.50 U	14	17	15	2.0	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	n/s	< 0.50 U	4.4	1.7

- Analytical Data Qualifilers

  U The analyte was not detected at or above the reporting limit.

  J The identification of the analyte is acceptable, the reporting limit.

  O Other qualifiers have been assigned providing additional information. These explinits

  N/s Not campled

Legend	
Detection, Result Shown	5.0
Non-detect, MRL shown	5.0 U
Result exceeds standard, Result shown	5.0 4

### Table 4 American Creosote SVOC Results 2014 and 2015

			***	200												
		Station ID	220	220	281	281	282	282	285	285	420	420	440	440	480	480
		Sample ID	220-0114	220-0115	281-0114	201-0115	282-0114	282-0115	285-0114	285-0125	420-0114	420-0115	440-0114	440-0115	480-0114	480-0115
Analyte	Units	Sample Date/Time FL Marine SWCTL (2005)	2/4/14 11:20	1/29/15 15:15	2/1/16 14:20	1/28/15 9:40	2/1/14 15:25	1/28/15 10:03	2/1/14 14:45	1/28/15 10:15	2/4/14 10:40	1/31/15 10:20	2/4/14 12:35	1/31/15 9:40	2/4/14 16:25	1/31/15 12:05
(3-and/or 4-)Methylphenol		n/a	< 10 U	< 9.9 U	< 9.9 U	< 10 U	< 9.9 U	< 10 U	< 10 U	< 9.9 U	< 10 U	< 11 U	< 10 U	< 10 U	180	< 9.7 U
	ug/L		<2.00		29^	36^						-				
1,1-Biphenyl	ug/L	18 ug/l	<100	< 2.0 U	221,0	43 J.O	< 2.0 U	< 2.0 U	1.1 J,O	< 2.0 U	1.01,0	<2.10	2.2	1,7 1,0	32 ^	6.1
2,4-Dimethylphenol	ug/L ug/L			-		Married Advanced in the			_		< 10 U	<110	< 10 U	< 10 U	420 ^	150
2-Methylphenol Acenaphthene	$\overline{}$	250 ug/t	< 10 U	< 9.9 U	< 9.9 U .	< 10 U	< 9.9 U	< 10 U	<100	< 9.9 U	< 10 U	<110	< 10 U	< 10 U	130	931,0
	ug/t	3 ug/l .3 ug/l	26 <sup>∧</sup> < 2.0 U	16* <2.0 U	4.0 A	5.1 ^	5.2 A < 2.0 U	1.1.J.O < 2.0 U	161.0^	151.0^	20 ^ < 2.0 U .	12. <sup>4</sup>	3.6^	46 ^ 5.9 ^	140 ^	59 A
Anthracene	ug/L			12	200^	260 ^			Temporary.	1.53,0 **	₹2.00.	<2.10	3.6"		× 20 U	5.4 ^
	ug/t	47 ug/l	26				< 2.0 U	< 2.0 U	73 ^	3000 000 000 000 000 000 000 000 000 00		CULTURE DAY NOT THE		52 ^	250 ^	290 ^
Dibenzofuran Fluoranthene	tig/L	67 ug/l	9.2	4.7	51	72.^	< 2.0 U	< 2.0 U	17	5.6	5.1	2.8	13	16	130 ^	51
	ug/L	.3 ug/l	< 2,0 U	<2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	1.03,0 ^	< 2.0 U	<2.10	< 2.0 U	2.01,0^	< 20 U	6.3 ^
Fluorene	ug/L	90 ug/t	15 63 ^	12		5000^	151,0			36^	7,3	4.4	18	28	130 A	34 ^
Naphthaiene	ug/L	26 ug/t			1500 ^	2440	< 2.0 U	< 2.0 U	550^	280 ^	29^	6.1	89 ^	48 ^	1000 ^	1000 ^
Pentachlorophenoi	ug/L	7.9 ug/l	<100	< 9.9 U	< 9.9 U	< 10 0	< 9.9 U	< 10 U	<10 U	< 9.9-U	<10 U	<110	<10 U	<100	< 100 U	< 9.7 U
Phenanthrene	ug/L	.031 ug/i	6.6 ^	1.71,0^	38 ^	52^	< 2.0 U	< 2.0 U	23^	22.4	4.5 ^	3.5 ^	18^	20 ^	140 ^	160 ^
Phenol	ug/L	6.5 ug/1	< 10 U	< 9.9 U	< 9.9 U	< 10 U	< 9,9 U	< 10 U	< 10 U	< 9.9 U	<10 U	< 11 U	< 10 U	< 10 U	< 100 U	< 9.7 U
Pyrene	ug/L	.3 ug/l	< 2.0 U	1.61,0^	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 20 U	2.9 ^
		Stanton 10	700	200	4.000.000	4.0040.0044	0403	6403	CARA	0404	0105	2225	are.	2525		
		Station ID	720	720	ACWMW1	ACWMW1	C103	C103	C104	C104	C205	C205	CSOS	CS0S	C506	C506
		Station ID Sample ID	720 720-0114	720 720-0113	ACWMW1-0114	ACWMW1 ACWMW1-0115	C103 C103-0114	C103 C103-0115	C104 C104-0114	C104 C104-0115	C205	C205 C205-0115	C505 C505-0114	CS05 CS05-0115	C506 C506-0114	CS06 CS06-0115
		100000000000000000000000000000000000000														
Analyte	Units	Sample ID	720-0114	720-0113	ACWMW1-0114	ACWMW1-0115	C103-0114	C103-Q115	C104-0114	C104-0115	C305-0114	C205-0115	C505-0114	C505-0115	C506-0114	C506-0115
Analyte (3-anti/or 4-ja/sethy/phenoi	Units	Sample ID Sample Date/Time	720-0114	720-0113	ACWMW1-0114	ACWMW1-0115	C103-0114	C103-Q115	C104-0114	C104-0115	C305-0114	C205-0115	C505-0114	C505-0115	C506-0114	C506-0115
	-	Sample ID Sample Date/Time FL Marine SWCTL (2005)	720-0114 2/1/14 14:50	720-0115 1/27/15 16:00	ACWMW1-0114 2/4/14 15:36	ACWMW1-0115 2/2/15 14:43	C103-0114 2/1/14 11:45	C103-0115 1/51/15 12-05	C104-0114 2/1/14 10:40	C104-0115 1/11/15 11:35	C305-0114 2/1/14 11-05	C205-01.15 1/91/15 14:20	C505-0114 2/4/14 15:35	C505-0115 2/3/15 10:00	C506-0114 2/4/14 13:55	C506-0115 2/3/15 9:45
(3-and/or 4-)Methylphenol	ug/L	Sample ID Sample Date/Time FL Marine SWCTL (2005) n/a	720-0114 2/1/14 14:50 < 10 U	720-0115 1/27/15 16:00 < 10 U	ACWMW1-0114 2/4/14 15:36 410	ACWMW1-0115 2/2/15 14:43	C103-0114 2/1/14 11:45 47 1,0	C103-0115 1/31/15 12-05	C104-0114 2/1/14 10:40 < 10 U	C104-0115 1/11/15 11:35	C305-0114 2/1/14 11:05 < 10 U	C205-0115 1/31/15 14:20 < 11 U	C505-0114 2/4/14 13:35	C\$05-0115 2/3/15 10:00	C506-0114 2/4/14 13:55	C\$06-0115 2/3/15 9:45 11000
(3-and/or 4-)Methylphenol 1,1-Biphenyl	ug/L ug/L	Sample ID Sample Date/Time FL Marine SWCTL (2005) n/a 18 ug/t	720-01.14 2/1/14 14:50 < 10 U < 2.0 U	720-0113 1/27/15 16:00 < 10 U < 2.1 U	ACWMW1-0114 2/4/14 15:36 410 80 ^	ACWMW1-0115 2/2/15 34:43 910 69 ^	C103-0114 2/1/14 11:45 47 1,0 84 ^	C103-0115 1/11/15 12-05 25 J <sub>1</sub> O 70 ^	<10 U < 2.0 U	C104-0115 1/11/15 11:35 < 10 U 1.61,0	<10 U < 2.0 U	C205-0115 1/31/15 14:20 < 11 U < 2.3 U	C\$05-0114 2/4/14 13:35 91 1,0	CS05-0115 2/3/15 10:00 4.4 J,O 14	C506-0114 2/4/14 13:55 11000 110 ^	C506-0119 2/3/15 9:45 11000 110 ^
(3-and/or 4-)Methylphenol 1,I-Biphenyl 2,4-Dimethylphenol	ug/L ug/L ug/L	Sample ID Sample Date/Time FL Marine SWCTL (2005) n/a 18 ug/l 160 ug/l	720-0114 2/1/14 14:50 < 10 U < 2.0 U < 10 U	720-0113 1/27/15 16:00 < 10 U < 2.1 U < 10 U	ACWMW1-0114 2/4/14 15:36 410 80 ^ 400 ^	ACWMW1-8115 2/2/15 14:43 910 69 ^ 880 ^	C103-0114 2/1/14 11:45 47 3,0 84 ^ 200 ^	C103-0115 1/31/15 12-05 26 J <sub>1</sub> O 70 ^ 180 ^	<10 U < 2.0 U < 10 U	< 10 U  1.6 J.O  < 10 U	<10 U < 10 U < 10 U	C205-0115 1/31/15 14:20 < 11 U < 2.3 U < 11 U	2/4/14 13:35 91 1,0 20 ^ 1700 ^	C505-0115 2/3/15 10:00 4.4 J.O 14 950 ^	(506-0114 2/4/14 13:55 11000 110 ^ 7700 ^	2/3/15 9-45 11000 110 ^ 7700 ^
(3-and/or 4-)Methylphenol 1,1-Bighenyl 2,4-Dimethylphenol 2-Methylphenol	ug/L ug/L ug/L ug/L	Sample ID Sample Date/Time FL Marine SWCTL (2005) n/a 18 ug/l 160 ug/l 250 ug/l	720-0114 2/1/14 14:50 < 10 U < 2.0 U < 10 U < 10 U	720-0113 1/27/15 18:00 < 10 U < 2.1 U < 10 U < 10 U	410 80 ^ 400 ^ 230	ACWMW1-8115 2/2/15 14:43 910 65 ^ 880 ^ 440 ^	C103-0114 2/1/14 11:45 47 1,0 84 ^ 200 ^ 38 1,0	C103-0115 1/31/15 12-05 26 J,O 70 ^ 180 ^ 25 J,O	< 10 U < 2.0 U < 10 U < 10 U	< 10 U  1.61,0  < 10 U  1.61,0  < 10 U  < 10 U	<10 U < 2.0 U < 10 U < 10 U < 10 U	<pre>C205-0115 1/31/15 14:20  &lt; 11 U     &lt; 2.3 U     &lt; 11 U     &lt; 11 U</pre>	2/4/14 13:35 91 1,0 20.0 1700.0 700.0	C505-0115 2/3/15 10:00 4.4 J,O 14 950 ^	C506-0114 2/4/14 13:55 11000 110 ^ 7700 ^ 5200 ^	2/3/15 9:45 2/3/15 9:45 11000 110 ^ 7700 ^ 4900 ^
(5-anti/or 4-)Methylphenoi 1,1-Biphenyi 2,4-Dimethylphenoi 2-Methylphenoi Acenaphthene	UE/L UE/L UE/L UE/L UE/L	Sample ID Sample Date/Time FL Marine SWCTL (2005)  r/a 18 ug/l 150 ug/l 250 ug/l 3 ug/l	720-0114 2/1/14 14:50 < 10 U < 2.0 U < 10 U < 10 U	720-0115 1/27/15 18:00 < 10 U < 2.1 U < 10 U < 10 U	#10 80 ^ 400 * 230 300 ^	ACWAW1-0115 2/2/15 14:43 510 69 ^ 880 ^ 440 ^ 290 ^	2/1/14 11:45 47 1,0 84 ^ 200 ^ 36 1,0 330 ^	C103-0115 1/31/15 12-05 26 1/0 70 ^ 180 ^ 25 1/0 340 ^	<10 U < 2.0 U < 10 U <	< 10 U 1.61,0 < 10 U 2.60,0 < 10 U 3.60,0 < 10 U 3.60,0 < 10 U 4.60,0 < 10 U 4.60,0 < 10 U 4.60,0 < 10 U 4.60,0 < 10 U	<10 U < 10 U < 10 U < 2.0 U < 10 U < 2.0 U < 10 U < 2.0 U < 10 U	<11 U < 2.3 U < 11 U <	2/4/14 13:35 \$1.1,0 20^ 1700^ 700^ 79^	C505-0115 2/3/15 10:00 4.4 J.O 14 950 ^ 130 55 ^	C508-0114 2/4/14 13:55 11000 110 ^ 7700 ^ 5200 ^ 450 ^	2/3/15 9:45 11000 110 ^ 7700 ^ 4900 ^
(3-and/or 4-latethy/phenol 1,1-biphenyl 2,4-Dimethy/phenol 2-Methy/phenol Acenaphthene Anthracene	ug/L ug/L ug/L ug/L ug/L ug/L	Sample ID Sample Date/Time FL Marine SWCTL (2005) n/a 18 ug/l 160 ug/l 250 ug/l 3 ug/l 3 ug/l 3 ug/l 3 ug/l	720-0114 2/1/14 18:50 < 10 U < 2.0 U < 10 U < 10 U < 10 U < 2.0 U	720-0115 1/27/15 18:00  <10 U <2.1 U <10 U <10 U <10 U <2.1 U <10 U <10 U <3.4^	ACWMW1-011A 2/4/14 15:30 410 80 ^ 400 ^ 230 300 ^ < 20 U	ACWAWN1-0115 2/2/15 14:43 510 69 ^ 880 ^ 440 ^ 290 ^ 11 ^	C103-0114 2/1/14 11-45 47 1/0 84 ^ 200 ^ 36 1/0 330 ^ 10 1/0 ^	C103-0115 1/31/15 12-05 26 1,0 70 ^ 180 ^ 25 1,0 340 ^ < 20 1,0	<10 U < 2.0 U < 10 U < 10 U < 2.0 U < 10	<10 U 1.6 J, Q <10 U 1.6 J, Q <10 U 1.6 J, Q <10 U 76 ^ 1.1 J, O ^	C305-0114 2/1/14 11-05 < 10 U < 2.0 U < 10 U < 10 U < 2.0 U < 2.0 U < 2.0 U < 2.0 U	<pre>C305-0115 1/31/15 14:20  &lt;111 U   &lt;2.3 U   &lt;11 U   &lt;11 U   &lt;2.3 U   &lt;11 U   &lt;2.3 U   &lt;11 U   &lt;1.5 U   &lt;2.3 U </pre>	2/4/14 13:35  91.1.0  20 ^ 1700 ^ 700 ^ 79 ^ < 20 U	C505-0115 2/3/15 10:00 4.4 J/O 14 950 ^ 130 55 ^ < 2.0 U	(506-0114 2/4/14/13-95 11000 110 ^ 7700 ^ 5200 ^ 450 ^ 15 J,O ^	11000 110 ^ 7700 ^ 4900 ^ 16J,0 ^
(3-and/or 4-livethylphenol 1,1-bliphenyl 2,4-Dimethylphenol 2-Methylphenol Acenaphthene Anthracene Carbazole	ug/L ug/L ug/L ug/L ug/L ug/L ug/L	Sample ID Sample Date/Time FL Marine SWCTL (2005)  "\( t^2 \)  18 \( v_0 t')  250 \( v_0 t')  3 \( v_0 t')  47 \( v_0 t')  47 \( v_0 t')	720-0114 2/1/14 14:50 < 10 U < 2.0 U < 10 U < 10 U < 2.0 U < 2.0 U < 2.0 U	720-0115 1/27/15 18:00  <10 U <2.1 U <10 U <10 U <3.4^ <2.1 U <2.1 U <2.1 U	ACWMW1-0114 2/4/14 15:36 410 80 ^ 400 ^ 230 300 ^ < 20 U 290 ^	ACWANVI-0115 2/2/15 14:43 \$10 65 ^ 880 ^ 440 ^ 290 ^ 11 ^ 240 ^	C103-0114 2/1/14 11-45 47 1/0 84 ^ 200 ^ 36 1/0 330 ^ 10 1/0 ^ 560 ^	C103-0115 1/31/15 12-05 26 1,0 70 ^ 180 ^ 25 1,0 340 ^ . < 20 10	C104-0114 2/J/14 10:40  <10 U <2.0 U <10 U <10 U <20 U <10 U <20 U <20 U <20 U	<10 U 1.6 J,Q <10 U 1.6 J,Q <10 U <10 U 76 ^ 1.1 J,O ^ 8.3	C305-0314 27/1/14 11 05	C105-0115 1/31/15 14:20 <11 U <2.3 U <11 U <11 U <11 U <23 U <23 U <23 U <23 U	2/4/14 13:35 91 1,0 20 ^ 1700 ^ 700 ^ 79 ^ < 20 U	CS05-0115 2/3/15 10:00 4.4 J,Q 14 950 ^ 130 55 ^ < 2.0 U	C506-0114 2/4/14-13-55 11006 110 ^ 7700 ^ 5200 ^ 450 ^ 15 J,O ^ 450 J,O ^	11000 110 ^ 7700 ^ 4900 ^ 161,0 ^ 340 ^
(3-and/or 4-)Methy(phenol 2,1-bighenyi 2,4-Dimethyiphenol 2-Methyiphenol Acenaphthana Anthracana Carbazolie Dibenzofuran	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	Sample ID Sample Date/Time FL Marine SWCTL (2005)  "\fa 18 ug/l 160 ug/l 250 ug/l 3 ug/l 3 ug/l 47 ug/l 67 ug/l	720-0114 2/1/14 14:50 < 10 U < 2.0 U < 10 U < 10 U < 2.0 U < 2.0 U < 2.0 U < 2.0 U < 2.0 U	720-0115 1/27/15 18:00 <10 U <2.1 U <10 U <10 U <10 U <2.1 U <2.1 U <2.1 U <2.1 U <2.1 U	ACWMW1-611A 2/4/14 15:36 410 80 ^ 400 ^ 230 300 ^ < 20 U 290 ^	ACWAWI-0115 2/2/15 14:43 \$10 69 ^ 880 ^ 440 ^ 290 ^ 11 ^ 240 ^ 150 ^	C103-0114 2/1/14 11:45 47.1,0 84^ 200^ 38.1,0 330^ 10.1,0^ 560^ 210^	C103-0215 1/91/15 12-05 26 1/0 70 * 180 * 25 1/0 340 * < 20 U 350 * 190 *	C104-0114 2/J/14 10:40  <10 U <2.0 U <10 U <10 U <20 U <20 U <20 U <20 U <20 U	C104-0115  L/31/15 11:35  < 10 U  1.6.1,0  < 10 U  < 10 U  76 ^  1.11,0 ^  8.3  < 2.0 U	<pre></pre>	C205-0115 1/31/15 14:20 <11 U <2.3 U <11 U <11 U <11 U <2.3 U <11 U <2.3 U <2.3 U <2.3 U	2/4/14 13:35 91 1,0 20 ^ 1700 ^ 700 ^ 79 ^ - 20 U 84 ^ 39	CS05-0115 2/3/15 10:00  4.4.1,0 14 950^ 130 55^ < 2.0.0 56^ 26	C506-0114 2/4/14-13-55 11006 110 ^ 7700 ^ 5200 ^ 450 ^ 15 J,O ^ 450 J,O ^ 240 ^	11000 110^ 7700^ 4900^ 4400^ 340^ 230^
(3-and/or 4-)Methy(phenol 1,1-biphenyl 2,4-Dimethy(phenol 2-Methy(phenol Acenaphthene Anthracene Carbazole Dibenzofuran Fluoranthene	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	Sample ID Sample Date/Time FL Marine SWCTL (2005) n/a 18 vg/l 160 vg/l 250 vg/l 3 vg/l 3 vg/l 4 vg/l 47 vg/l 3 vg/l 3 vg/l 47 vg/l 3 vg/l	720-0114 2/1/14 14:50 < 10 U < 2.0 U < 10 U < 10 U < 3.5 ^ < 2.0 U < 2.0 U < 2.0 U < 2.0 U	720-0115 1/27/15 18:00 <10 U <2.1 U <10 U <10 U <10 U <2.1 U <2.1 U <2.1 U <2.1 U <2.1 U <2.1 U	ACWMW1-011A 2/4/14 15:36 410 80 ^ 400 ^ 230 300 ^ <20 U 290 ^ 170 ^ <20 U	ACWARWI-0115 2/2/15 14-43 910 65 ^ 880 ^ 440 ^ 290 ^ 11 ^ 240 ^ 150 ^ 6.6 ^	C193-0114 2/1/14 11:45 47 1/0 84 ^ 200 ^ 38 1/0 330 ^ 10 1/0 ^ \$60 ^ 210 ^	25 J,O 70 ^ 180 ^ 25 J,O 70 ^ 180 ^ 25 J,O 340 ^ < 20 JJ 350 ^ 29 J	<pre>&lt;10 U &lt;10 U &lt;</pre>	<pre></pre>	C105-0114 2-10-10 < 10-10 < 2.0-0 < 10-0 < 10-0 < 2.0-0 < 2.0-0 < 2.0-0 < 2.0-0 < 2.0-0 < 2.0-0 < 2.0-0	<pre></pre>	2/4/14 13:35  91 1,0 20 ^ 1700 ^ 700 ^ 79 ^ < 20 U 84 ^ 39 < 20 U	C505-0115 2/3/15 10:00  4.4 J,O 14 950 ^ 130 55 ^ < 2.0 U 56 ^ 26 < 2.0 U	(508-0114 2/4/14 13:95 11000 110 ^ 7700 ^ 5200 ^ 450 ^ 15 J,O ^ 450 J,O ^ 240 ^ < 20 U	11000 110^ 7700^ 4900^ 340^ 230^ 143,0^
3-and/or 4- Meethylphenol 1_1-Sighenyl 2_4-Dimethylphenol 2_4-Dimethylphenol Acenaphthane Anthracene Carbasole Dibenorhura Huoranthane Huoranthane	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	Sample ID Sample Date/Time FL Marine SWCTL (2005)  18 vg/l  18 vg/l  250 vg/l  3 vg/l  3 vg/l  47 vg/l  67 vg/l  30 vg/l  30 vg/l	720-0114 2/1/14 14:50 < 10 U < 2.0 U < 10 U < 10 U < 10 U < 2.0 U < 2.0 U < 2.0 U < 2.0 U < 2.0 U	720-0113 L/27/15 18:00 < 10 U < 2.1 U < 10 U < 10 U 3.4 ^ < 2.1 U < 2.1 U < 2.1 U < 2.1 U < 2.1 U < 2.1 U	ACWMW1-011A 2/4/14 15:36 410 80 ^ 400 ^ 230 300 ^ < 20 U 290 ^ 170 ^ < 20 U 160 ^	ACWAW1-0115 2/2/15 14:43  \$10 65 ^ 830 ^ 440 ^ 290 ^ 11 ^ 240 ^ 150 ^ 6,6 ^ 150 ^ 150 ^ 1	C193-0114 2/1/14 11:45 47 1/0 84 ^ 200 ^ 36 1/0 330 ^ 10 1/0 ^ 560 ^ 210 ^ <21 U 190 ^	C103-0115 1/31/15 12-05 26 1,0 70 ^ 180 ^ 25 1,0 340 ^ < 20 1/ 190 ^ < 20 U 170 ^	<pre>&lt;10 U &lt;10 U &lt;</pre>	C104-0115 L/3L/15 11:35  < 10 U	C105-0114 2/1/14 11-05  <10 U <2.0 U <10 U <10 U <2.0 U <10 U <2.0 U	<pre></pre>	2/4/14 13:93 91.1.0 20^ 700^ 700^ 79^ <20 U 84^ 35 <20 U 42^	2/3/15 10:00  4.4 J,0  14  950 ^  130  55 ^  < 2.0 U  56 ^  26  < 2.0 U  29	C506-0114 2/4/14 13:95 11006 110 ^ 7700 ^ 5200 ^ 450 ^ 15 J,O ^ 240 ^ < 20 U 230 ^	11000 110 ^ 7700 ^ 4900 ^ 4900 ^ 340 ^ 230 ^ 14 J,0 ^ 240 ^
(3-and/or 4-)Methylphenol 1,1-diphenyl 2,4-Dimethylphenol 2,4-Dimethylphenol Acanaphthane Ansthracene Carbazole Dibenzofuran Fluorantene Haphthalene	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	Sample ID Sample Date/Time FL Marine SWCTL (2005)  "\( f \)  18 \( \text{uc} \)  18 \( \text{uc} \)  18 \( \text{uc} \)  18 \( \text{uc} \)  3 \( \text{uc} \)  3 \( \text{uc} \)  47 \( \text{uc} \)  67 \( \text{uc} \)  3 \( \text{uc} \)  3 \( \text{uc} \)  47 \( \text{uc} \)  3 \( \text{uc} \)  47 \( \text{uc} \)  3 \( \text{uc} \)  47 \( \text{uc} \)  48 \( \text{uc} \)  49 \( \text{uc} \)  40 \( \text{uc} \)	720-0114 2/1/14 14:50  < 10 U < 2.0 U < 10 U < 10 U < 2.0 U	720-0113 1/27/15 18:00 <10 U <2.1 U <10 U <10 U <2.1 U <2.1 U <2.1 U <2.1 U <2.1 U <2.1 U <2.1 U <2.1 U	ACWMW1-011A 2/4/14 15:30 410 80^ 400 ^ 230 300 ^ < 20 U 290 ^ 170 ^ < 20 U 160 ^ 5700 ^	ACWANVI-0115 2/2/15 14:43  \$10 65 ^ 650 ^ 440 ^ 290 ^ 11 ^ 240 ^ 150 ^ 150 ^ 3700 ^	2/1/4 11:45 47 1/0 84 ^ 200 ^ 38 1/0 330 ^ 10 1/0 ^ 560 ^ 210 ^ <21 U 190 ^ 5000 ^	C103-0115 1/31/15 12-05 26 1,0 70 ^ 180 ^ 25 1,0 340 ^ < 20 10 350 ^ 190 ^ < 20 0 170 ^	<pre>&lt;104-0114 2/1/14 10:40 &lt;10 U &lt;2.0 U &lt;10 U &lt;10 U &lt;10 U &lt;2.0 U &lt;10 U &lt;2.0 U</pre>	<pre></pre>	<pre></pre>	<pre></pre>	2/4/14 13:95  91 1,0 20 ^ 1700 ^ 79 ^ < 20 U 84 ^ 39  < 20 U 42 ^ 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < > < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400 ^ < 2400	CS05-0115 2/3/15 10-00 4.4 J, C 14 950 130 55-6 < 2.0 U 56-6 26 < 2.0 U 29 1700-6	C506-0114 2/4/14 13-35 11006 110 ^ 7700 ^ 5200 ^ 450 ^ 15 J,O ^ 450 J,O ^ 240 ^ < 20 U 230 ^ 6000 ^	11000 110 ^ 1100 4900 ^ 4900 ^ 340 ^ 230 ^ 14 J,O ^ 240 ^ 7100 ^ 240 ^ 7100 ^ 240 ^ 7100 ^ 340
3-and/or 4- iliterthylphenol 1_1-sighenyl 2_4-Dimethylphenol 2_4-Dimethylphenol Acenaphthene Acthracene Carbazole Dibensofuran Fluorane Huorene Haphthalene Pentachlorophenol	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	Sample ID Sample Date/Time FL Marine SWCTL (2005)  rda  18 vg/l  150 vg/l  3 vg/l  3 vg/l  47 vg/l  67 vg/l  30 vg/l  26 vg/l  7.5 vg/l  7.5 vg/l	720-0114 2/1/14 14:50  < 10 U < 2.0 U < 10 U < 3.5 ^ < 2.0 U < 3.5 ^ < 3.5 U < 4.0 U < 4.0 U < 4.0 U < 4.0 U < 5.0 U	720-0115 1/27/15 18-00 <10 U <2.1 U <10 U <10 U <10 U <3.4^ <2.1 U <3.4 U <4.4	ACWMWN-011A 2/4/14 15:30 410 80 ^ 400 ^ 230 300 ^ < 20 U 290 ^ 170 ^ < 20 U 160 ^ 5700 ^ < 100 U	ACWARW1-0115 2/2/15 14:43 910 65° 880° 440° 290° 110° 240° 150° 6.6° 3700° < 99 U	C103-0114 271/13 1145 473,0 84^ 200^ 384,0 101,0^ \$60^ 210^ <210^ \$190^ \$500^ 153,0^	C101-0115 1/31/15 12-05 26 1,0 70 ^ 180 ^ 25 1,0 340 ^ 25 1,0 350 ^ 190 ^ < 20 U 170 ^ 170 ^	C104-0114 2/1/14 16:40 < 10 U < 2.0 U < 10 U < 10 U < 2.0 U < 3.0 U < 3.0 U	C104-0115 L/3L/15-11:35 <10 U 1.6.1,G <10 U <10 U 76^ 1.1,J,O^ 6.3 <2.0 U <2.0 U 2.6 U 2.6 U 2.6 U 3.6 C 3.7	C305-0114 2/1/14 11-05  <10 U <10 U <10 U <10 U <2.0 U <10 U <2.0 U <2.0 U <2.0 U <2.0 U <2.0 U <2.0 U	C205-0115 1/31/15 14:20 <11 U <13 U <11 U <11 U <11 U <13 U <11 U <13 U <13 U <13 U <13 U <2.3 U <2.3 U <2.3 U 3.3 U <2.3 U 3.3 U <2.3 U 3.3 U <2.3 U 3.3 U <3.3 U 3.3 U	2/4/14 13:35  \$11,0 20 ^ 1700 ^ 700 ^ 79 ^ < 20 U 84 ^ 35  <20 U 84 ^ 24 00 ^ < 99 U	(500-0115 2/3/15 10:00 4.4 1,0 134 950 ^ 130 555 ^ < 2.0 U 56 ^ 26 < 2.0 U 29 1700 ^ < 9.9 U	(506-0114 2/4/14 13:95 11000 110 ^ 7700 ^ 5200 ^ 450 ^ 15 J,O ^ 450 J,O ^ 240 ^ < 20 U 230 ^ 6000 ^ 250 ^ 250 ^ 6	C506-0119 2/3/15-9-45 11000 110-^ 7700-^ 4900-^ 400-^ 16.J,O-^ 340-^ 230-^ 14.J,O-^ 340-^ 7100-^ 340-^
13-anst/or 4-likethylphanol 1,1-alphanyl 1,1-alphanyl 2,4-Dimethylphanol 2-diethylphanol Acanaphthane Anthracane Carbazole Dibenochuran Fluoranthane Fluorane Naphthalene Peritachlorophanol Phenanthrane	08/L 08/L 08/L 08/L 08/L 08/L 08/L 08/L	Sample ID Sample Date/Time FL Marine SWCTL (2005)  18 vg/l  18 vg/l  250 vg/l  3 vg/l  3 vg/l  47 vg/l  67 vg/l  30 vg/l  26 vg/l  7.9 vg/l  0.031 vg/l	720-0114 2/1/14 14:50 < 10 U < 2.0 U < 10 U < 10 U < 10 U < 2.0 U	720-0115 1/27/15 18-00 <10 U <2.1 U <10 U <10 U <10 U <10 U <2.1 U <10 U <2.1 U	ACWAWI-011A 2/4/14 15:30 410 80^ 400^ 230 300^ 420 U 170^ 420 U 160^ 500 U 110^ 410 U	ACWARWI-0115 2/2/15 14:41 310 69 ^ 880 ^ 440 ^ 2:90 ^ 110 ^ 6.6 ^ 150 ^ 3700 ^ 499 U 110 ^	C103-0114 27/74 1145 47 7,0 84^- 200^- 38 7,0 33.0^- 10 1,0^- 210^- <21 U 190^- 500^- 18 1,0^- 140^-	C101-0113 L/31/15 12-05 26 J,O 70 ^ 180 ^ 25 J,O 340 ^ -< 20 JJ 350 ^ -< 20 U 170 ^ 5500 ^ 12 J,O 140 ^	C104-0114 27/1/14 16:40 < 10 U < 2.0 U < 10 U < 10 U < 2.0 U	C104-0115 L/11/15 11:35  < 10 U L.6.1,0 < 10 U < 10 U < 10 U < 10 U < 2.0 U < 2.0 U < 2.0 U < 3.0 U	CADI-0114 2/1/4 \$1 05 < 10 U < 2.0 U < 10 U < 2.0 U 13 S < 2.0 U L2 JQ 110 A < 2.0 U	C205-0115 1/31/15 14:20  <11 U  <2.3 U  <11 U  <11 U  <11 U  <12.3 U  <11 U  <12.3 U  <2.3 U	C905-011a 2/41a 13-35 91.10 20^ 1700^ 700^ 79^ <20 U 84^ 38 <20 U 42^ 2400^ 499 U 14.1,0^	(\$05-0115 2/3/15 1000 4.4 1,0 14 130 55.6 < 2.0 U 25 < 2.0 U 25 < 2.0 U 25 < 2.0 U 25 < 2.0 U 25 < 2.0 U 26 < 2.0 U	(\$06-0114 2/4/1413-95 11000 11004 7700 ^ \$200 ^ 450 ^ 15 J,0 ^ 240 ^ <20 U 230 ^ 6000 ^ 160 ^	23/15 9-45  11000  110 ^ 7700 ^ 4300 ^ 400 ^ 16 J,0 ^ 340 ^ 240 ^ 240 ^ 7100 ^ 140 ^ 160 ^

# American Creosote SVOC Results 2014 and 2015

		Station ID	0604	C604	C605	C605	C902	C902	C903	C903	C904	C904	OW09	OW09
		Sample ID	C604-0114	C604-0115	C805-0114	C605-0115	C902-0114	C902-0115	C903-0114	C903-0115	C904-0114	C904-0115	OW09-0114	OW09-0115
		Sample Date/Time	1/31/14 14:50	1/30/15 9:25	1/31/14 14:05	1/29/15 15:15	2/3/14 14:45	1/31/15 9:45	2/3/14 15:45	1/31/15 9:38	2/3/14 14:55	1/30/15 15:40	2/4/14 12:00	1/30/15 13:37
Analyte	Units	FL Marine SWCTL (2005)												
(3-and/or 4-)Methylphenol	ug/L	n/a	< 9.7 U	< 10 U	< 9.8 U	< 10 U	< 10 U	< 10 U	< 10 U	< 9.9 U	< 10 U	< 10 U	< 100 U	< 100 U
1,1-Biphenyl	ug/L	18 ug/1	< 1.9 U	< 2.0 U	< 2.0 U	< 2.1 U	32 ^	43.4	27 ^	< 2.0 U	< 2.1 U	< 2.1 U	< 20 U	< 20 U
2,4-Dimethylphenol	ug/L	160 ug/l	< 9.7 U	< 10 0	< 9.8 U	< 10 U	< 10 U	1.61,0	< 10 U	< 9.9 U	< 10 U	< 10 U	< 100 U	< 100 U
2-Methylphenol	ug/L	250 ug/1	< 9.7 U	< 10 U	< 9.8 ∪	< 10 U	< 10 U	< 10 U	< 10 U	< 9.9 U	< 10 U	< 10 U	< 100 U	< 100 U
Acenaphthene	ug/L	3 ug/1	1.9	1410	5.8^	7.5^	200 ^	210 ^	210 ^	66 ^	141,0	< 2.1 U	< 20 U	< 20 U
Anthracene	ug/L	.3 ug/l	< 1.9 U	< 2.0 U	<2.0 U	< 2.1 U	3.6 A	5.3 ^	6.1 A	2.9 ^	< 2.1 U	<2.10	< 20 U	< 20 U
Carbazole	ug/L	47 ug/t	<1.9U	< 2.0 U	< 2.0 U	< 2.1 U,1,0	190 ^	220^	240 ^	90 ^	< 2.1 U	< 2.1 U	< 20 U	< 20 U
Dibenzofuran	ug/L	67 ug/1	1.61,0	2.01,0	1.01,0	< 2.1 U	100^	95^	110^	41	< 2.1 U	< 2.1 U	< 20 U	< 20 U
Ruoranthene	ug/L	.3 ug/l	< 1.9 U	< 2.0 U	< 2.0 U	< 2.1 U	1.8 J, O ^	1.83,0^	2.9 ^	2.3^	< 2.1 U	< 2.1 U	< 20 U	< 20 U
Ruorene	Ug/L	30 ug/l	1.33,0	< 2.0 U	2.6	2.8	85 ^	89 ^	110^	41^	< 2.1 U	< 2.1 U	< 20 U	< 20 U
Naphthalene	ug/L	26 ug/l	1.13,0	2.3	< 2.0 ∪	< 2.1 U	2000 ^	3300 ^	2300^	270 ^	< 2.1 U	< 2.1 U	< 20 U	< 20 U
Pentachiorophenol	ug/L	7.9 ug/1	98^	190 ^	< 9.8 U	< 10 U	8.1 J,O ^	14^	< 10 U	< 9.9 U	6.83,0	9.23,0 ^	700.^	180 ^
Phenanthrene	ug/L	.031 ug/l	< 1.9 U	< 2.0 U	< 2.0.U	< 2.1 U	45 ^	54^	72.4	25 ^	< 2.1 U	< 2.1 U	< 20 U	< 20 U
Phenol	ug/L	6.5 ug/l	< 9.7 U	< 10 U	< 9.8 U	< 10 U	< 10 U	< 10 U	<10 U	< 9.9 U	< 10 U	< 1.0 U	< 100 U	< 100 U
Pyrene	ug/L	.3 ug/l	< 1.9 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	1.6 ),0 ^	111,0*	< 2.1 U	< 2.1 U	< 20 U	< 20 U

- Analytical Data Qualifiers

  U The analyte was not detected at or above the reporting limit.

  J The identification of the analyte is acceptable; the reported value is an estimate

  O other qualifiers have been assigned providing additional information. These explanatory qualifiers are included in the printable pdf report and in other columns in the export files

  SWCTL Surface Water Cleanup Target Levels

Legend	
Detection, Result Shown	5.0
Non-detect, MRL shown	5.0 U
Result exceeds standard, Result shown	5.0 ^

Table 3 VOC Results

		Station ID	200	220	260	281	282	283	285	420	440	480	700	720	ACWMW1
		Sample ID		220-0114	260-0114	281-0114	282-0114	283-0114	285-0114	420-0114	440-0114	480-0114	700-0114	720-0114	ACWMW1-0114
		Sample Date	_	2/4/2014 11:20	2/4/2014 10:50	2/1/2014 14:20	2/1/2014 15:25	2/1/2014 15:35	2/1/2014 14:45	2/4/2014 10:40	2/4/2014 12:35	2/4/2014 16:25	2/3/2014 14:20	2/1/2014 14:50	2/4/2014 15:30
Analyte	Units	Comparison Standard													
m- and/or p-)Xylene	ug/L	nje	< 1.0 U	0.60 3.0	< 1.0 U	67	< 1.0 U	< 1.0 U	5.0	5.0	0.47 3,0	29	< 1.0 U	< 1.0 U	65
Acetone	ug/L	FL MARINE SWCTL (2005): 1700 ug/l	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4,0 U	< 4.0 U	< 4.0 U	< 4.0 €	< 4.0 U				
Benzene		FL MARINE SWCTL (2005): 71.28 ug/l	< 0.50 €	0.45 3,0	< 0.50 U	59	< 0.50 U	< 0.50 U	30	3.1	0.31 3,0	38	< 0.50 U	< 0.50 U	37
Chlorobenzene	_	FL MARINE SWCTL (2005): 17 up/l	~ 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	≠ 0.50 U	~ 0.50 U
Ethyl Benzene		FL MARINE SWCTL (2005): 610 ug/1	< 0.50 U	0.73	< 0.50 €	50	< 0.50 U	< 0.50 U	10	1.3	1.1	19	< 0.50 U	< 0.50 U	36
Methane	-	D/a	350	580	- 51	8800	330	170	3000	4700	2000	710	170	850	5200
4ethyl Ethyl Ketone		FL MARINE SWCTL (2005): 120000 ug/l	< 4.0 U	< 4.0 ∪	< 4.0 U	< 4.0 U	< 4,0 U	< 4.0 U	< 4.0.U						
tyrene		FL MARINE SWCTL (2005): 460 ug/l	< 0.50 U	< 0.50 U	< 0.50 U	< 1.1 0.0	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	0.080 3,0	3.6	< 0,50 U	- 0.50 U	< 1.5 0.0
oluene	-	FL MARINE SWCTL (2005): 480 ug/l	~ 0.50 U	0.26 3.0	< 0.50 U	5.7	< 0.50 U	< 0.50 U	0.79	0.25 3,0	0.19 J,D	31	< 0,50 U	< 0.50 U	33
-Xylene	ug/L		< 0.50 U	0.93	< 0.50 U	33	→ 0.50 U	< 0.50 U	2.2	0.63	0,29 3,0	13	< 0.50 U	< 0.50 U	33

		Station ID	C1005	C103	C103	C104	C105	C203	C205	C206	C405	C406	C504	C505
		Sample ID	C100S-0114	C103-0114	C103D-0114	C104-0114	C105-0114	C203-0114	C205-0114	C206-0114	C405-0114	C406-0114	C504-0114	C505-0114
				2/1/2014 11:45	2/1/2014 11:45	2/1/2014 10:40	2/1/2014 9:40	2/1/2014 12:50	2/1/2014 11:05	2/1/2014 9:50	2/3/2014 10:20	2/3/2014 9:35	2/4/2014 12:35	2/4/2014 13:35
Analyte	Units	Comparison Standard												
(m- and/or p-)Xylene	ug/L	n/a	< 1.0 U	94	90	0.99 3,0	< 1.0 U	< 1.0 U	0.60 J.O	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	40
Acetone	ug/L	FL MARINE SWCTL (2005): 1700 ug/l	< 4,0 U	< 20 U	< 40 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4,0 U	< 4.0 U	< 4,0.0	4.0
Benzene	ug/L	FL MARINE SWCTL (2005): 71.28 ug/l	< 0.50 U	60	58	5.1	< 0.50 U	< 0.50 U	0.090 J.O	< 0.50 U	< 0,50 U	< 0.50 U	< 0.50 €	43
Chlorobenzene	ug/L	FL MARINE SWCTL (2005): 17 ug/l	< 0.50 U	< 2.5 U	< 5.0 U	0.11 3,0	< 0.50 U	< 0.50 U	0.20 3,0	< 0.50 ∪	< 0,50 U	~ 0.50 U	< 0.50 U	× 0.50 U
Ethyl Benzene	ug/L	FL MARINE SWCTL (2005): 610 ug/l	< 0.50 U	48	46	0.090 3.0	< 0.50 U	< 0.50 U	0.16 3,0	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 ม	24
Methane	ug/L	n/a	59	290	290	2600	1400	1.6	410	2300	20	21	15	9400
Methyl Ethyl Ketone	ug/L	FL MARINE SWCTL (2005): 120000 ug/l	< 4.0 U	< 20 U	< 40 U	< 4,0 U	< 4.0 U	< 4,0 U	< 4.0 U	< 4.0 U	< 4,0 U	< 4.0 U	< 4.0 U	0,88 3,0
Styrene	ug/L	FL MARINE SWCTL (2005): 460 ug/l	< 0.50 U	20	- 18	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0,50 U	< 0.50 U	< 1.3 U,O
Toluene	ug/L	-FL MARINE SWCTL (2005): 480 ug/l	< 0.50 U	93	90	0.17 3,0	< 0.50 U	< 0.50 U	< 0.50 U	< 0,50 U	< 0.50 U	< 0.50 €	< 0.50 U	38
o-Xylene	-	n/a	< 0.50 U	44	42	1.0	< 0.50 U	< 0.50 U	0.64	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	19

		Station ID	C506	C506	C604	C605	C704	C902	C903	C903	C904	C905	OW09
		Sample ID		C506D-0114	C604-0114	C605-0114	C704-0114	C902-0114	C903-0114	C903D-0114	C904-0114	C905-0114	OW09-0114
		Sample Date		2/4/2014 13:55	1/31/2014 14:50	1/31/2014 14:05	1/31/2014 16:15	2/3/2014 14:45	2/3/2014 15:45	2/3/2014 15:50	2/3/2014 14:55	2/3/2014 14:00	2/4/2014 12:00
Analyte	Units	Comparison Standard											
(m- and/or p-)Xylene	ug/L	n/a	97	92	< 1.0 U	< 1.0 U	< 1.0 U	33	31	30	< 1.0 U	< 1.0 U	4.5
Acetone	ug/L	FL MARINE SWCTL (2005): 1700 ug/i	120	130	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Benzene	ug/L	FL MARINE SWCTL (2005): 71.28 ug/l	160 ^	160 ^	< 0.50 U	< 0.50 U	< 0.50 U	3.9	7.0	6.8	< 0.50 U	< 0.50 U	< 0.50 U
Chlorobenzene	ug/L	FL MARINE SWCTL (2005): 17 ug/l	1.0 U	< 1.0 U	< 0.50 U	× 0.50 U	→ 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Ethyl Benzene	ug/L	FL MARINE SWCTL (2005): 610 ug/l	49	47	< 0.50 U	~ 0.50 U	< 0.50 U	15	20	20	< 0.50 ∪	< 0.50 U	1.3
Methane	ug/L	n/a	11000	13000	450	910	1.7	85	24	23	4.5	1400	110
Methyl Ethyl Ketone	ug/L	FL MARINE SWCTL (2005): 120000 ug/l	43	43	< 4.0 U	< 4.0 U	< 4.0 U	- 4.0 U	< 4.0 U				
Styrene	_	FL MARINE SWCTL (2005): 460 ug/l	26	23	< 0.50 U	< 0.50 U	< 0.50 U	5.9	4.2	4.1	< 0.50.0	< 0.50 U	< 0,50 U
Toluene	ug/L	FL MARINE SWCTL (2005): 480 ug/l	140	130	< 0.50 U	< 0.50 U	< 0.50 U	14	13	13	< 0.50 U	< 0.50 U	0.19 3,0
o-Xylene	ug/L	nie	48	46	0.14 3,0	< 0.50 €	- 0.50 U	14	15	15	< 0.50 U	< 0.50 U	4.4

Table 3 VOC Results

The analyte was not detected at or above the reporting limit. U

The identification of the analyte is acceptable; the reported value is an estimate.

Other qualifiers have been assigned providing additional information. These explanatory qualifiers are included in the printable pdf report and in other columns in the export files.

0

Detection, Result Shown 5.1
Non-detect, MRL shown 5.0

		Station ID	220	260	281	282	285	420	440	480	720	ACWMW1	C103	C103	C104
		Sample ID	220-0114	260-0114	281-0114	282-0114	285-0114	420-0114	440-0114	480-0114	720-0114	ACWMW1-0114	C103-0114	C103D-0114	C104-0114
		Sample Date	2/4/2014 11:20	2/4/2014 10:50	2/1/2014 14:20	2/1/2014 15:25	2/1/2014 14:45	2/4/2014 10:40	2/4/2014 12:35	2/4/2014 16:25	2/1/2014 14:50	2/4/2014 15:30	2/1/2014 11:45	2/1/2014 11:45	2/1/2014 10:40
Analyte	Units	Comparison Standard													
(3-and/or 4-)Methylphenol	ug/t	nio	< 10 U	< 10 U	< 9.9 U	- 9.9 U	< 10 U	-: 10 U	< 10 U	189	< 10 U	410	47 3.0	47 1.0	< 10 U
1.1-Biphenyi	ug/L	FL MARINE SWCTL (2005): 18 ug/l	< 2.0 U	< 2.1 U	29 ^	< 2.0 U	1.1 3,0	1.0 3,0	2.2	32 ^	< 2.0 U	80 ^	84 ^	88 ^	< 2.0 U
2,4-Dimethylphenol	ug/L	FL MARINE SWCTL (2005): 160 ug/l	< 10 U	< 10 U	223,0	< 9.9 U	15	< 10 U	< 10 U	420 ^	< 10 U >	400 ^	200 ^	210 ^	+: 10 U
2-Methylphenol	ug/L	FL MARINE SWCTL (2005): 250 ug/l	< 10 U	< 10 U	< 9.9 U	< 9.9 U	< 10 U	< 10 U	< 10 U	130	< 10 ∪	230	38 1,0	38 3.0	< 10 U
Acenaphthene	ug/L	FL MARINE SWCTL (2005): 3 ug/l	26 ^	2.03,0	94 ^	5.2 ^	59 ^	20 ^	49 ^	140 ^	3.5 ^	300 ^	330 ^	350 ^	30 ^
Anthracene -	ug/L	FL MARINE SWCTL (2005): .3 ug/i	< 2.0 U	× 2.1 U	4.0 ^	< 2.0 U	1.6 3,0 ^	× 2.0 U	3.6 ^	< 20 U	< 2.0 U	< 20 U	10 3,0 ^	113,0 ^	< 2.0 U
Carbazole	ug/L	FL MARINE SWCTL (2005): 47 ug/l	26	× 2.1 U	200 ^	< 2.0 U	73 ^	14	30	290 ^	< 2.0 ∪	290 ^	560 ^	570 ^	< 2.0 U
Dibenzofuran	ug/L	FL MARINE SWCTL (2005): 67 ug/l	9.2	× 2.1 U	SI	< 2.0 U	17	5.1	13	130 ^	× 2.0 U	170 ^	210 ^	210 ^	< 2.0 U
Fluoranthene	ug/L	FL MARINE SWCTL (2005): .3 ug/l	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 20 ∪	< 2.0 U	< 20 U	< 21 U	< 20 U	< 2.0 U
Fluorene	ug/L	FL MARINE SWCTL (2005): 30 ug/l	15	× 2.1 U	60 ^	1.51,0	37 ^	7.3	15	130 ^	1,1 2,0	160 ^	190 ^	200 ^	8.0
Naphthalene	ug/L	FL MARINE SWCTL (2005): 26 ug/l	63 ^	< 2.1 U	1500 ^	< 2.0 U	550 ^	29 ^	89 ^	1000 ^	< 2.0 U	5700 ^	5000 ^	S100 ^	5.8
Pentachiorophenol	ug/L	FL MARINE SWCTL (2005): 7.9 ug/l	< 10 U	-: 10 U	< 9.9 €	< 9.9 U	< 10 U	< 10 U	< 10 U	< 100 U	< 10 U	× 100 U	18 3,0 ^	18 3.0 ^	4 10 U
Phenanthrene	ug/L	FL MARINE SWCTL (2005): .031 ug/l	6.6 ^	- 2.1 U	38 ^	< 2.0 U	23 ^	4.5 ^	18 ^	140 ^	< 2.0 U	110 ^	140 ^	150 ^	< 2.0 U
Phenol	ug/L	FL MARINE SWCTL (2005): 6.5 ug/l	< 10 U	< 10 U	< 9.9 U	< 9.9 U	< 10 U	< 10 U	< 10 U	- 100 U	< 10 U	24 3,0 ^	< 100 U	< 100 U	< 10 U
Pyrene	ug/L	FL MARINE SWCTL (2005): .3 ug/l	< 2.0 U	× 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	× 2.0 U	< 2.0 U	< 20 U	+ 2.0 U	< 20 U	< 21 U	≺ 20 U	< 2.0 U
		Station ID	C205	C505	C506	C506	C684	C685	C902	C903	C903	C904	OW09		
		Sample ID	C205-0114	CS0S-0114	C\$06-0114	C\$06D-0114	C604-0114	C60S-0114	C902-0114	C903-0114	C903D-0114	C904-0114	OW09-0114	1	
variable and the second		Sample Date	2/1/2014 11:05	2/4/2014 13:35	2/4/2014 13:55	2/4/2014 13:55	1/31/2014 14:50	1/31/2014 14:05	2/3/2014 14:45	2/3/2014 15:45	2/3/2014 15:50	2/3/2014 14:55	2/4/2014 12:00	1	
Analyte	Units	Comparison Standard													
(3-and/or 4-)Methylphenol	ug/L	n/a	< 10 U	91.7.0	11000	12000	< 9.7 U	< 9.8 U	< 10 U	< 10 U	< 10 U	< 10 U	< 100 U	]	
1,1-Biphenyl	ug/L	FL MARINE SWCTL (2005): 18 ug/l	< 2.0 U	20 ^	110 ^	110 ^	< 1.9 U	< 2.0 U	32 ^	27 ^	27 ^	< 2.1 U	< 20 U		
2,4-Dimethylphenol	ug/L	FL MARINE SWCTL (2005): 160 ug/l	< 10 U	1700 ^	7700 ^	7900 ^	< 9,7 U	- 9.8 U	< 10 U	< 10 U	< 10 U	< 10 U	< 100 ∪		
2-Methylphenol	ug/L	FL MARINE SWCTL (2005): 250 ug/l	< 10 U	700 ^	5200 ^	5300 ^	< 9.7 U	-× 9.8 U	< 10 U	< 10 U	< 10 U	< 10 U	- 100 U		
Acenephthene	ug/L	FL MARINE SWCTL (2005): 3 ug/l	< 2.00	79 ^	450 ^	470 ^	1.9	5.8 ^	200 ^	210 ^	210 ^	1.43.0	< 20 U		
Anthrecene	ug/L	FL MARINE SWCTL (2005): .3 ug/l	< 2.0 U	× 20 U -	15 1.0 ^	15 3,0 ^	× 1.9 U	- 2.0 U	3.6 ^	6.1 ^	6.2 ^	< 2.1 U	< 20 U	l	
Carbazole	ug/L	FL MARINE SWCTL (2005): 47 ug/l	< 2.0 U	84 ^	450 3,0 ^	490 3,0 ^	v 2.9 U	→ 2.0 U	190 ^	240 ^	240 ^	< 2.1 U	< 20 U		
Dibenzofuran	ug/L	FL MARINE SWCTL (2005): 67 ug/l	3.9	39	240 ^	250 ^	1.6 1,0	1,0 7,0	100 ^	110 ^	110 ^	< 2.1 U	< 20 U	1	
Fluoranthene	ug/L	FL MARINE SWCTL (2005): .3 ug/l	< 2.0 U	× 20 U	< 20 U	- 20 U	< 1.9 U	< 2.0 U	1.8 1,0 ^	2.9 ^	2.9 ^	< 2.1 U	< 20 U		
Fluorene	ug/L	FL MARINE SWCTL (2005): 30 ug/l	1.21,0	42 ^	230 ^	250 ^	1.3 3.0	2.6	85 ^	110 ^	110 ^	< 2.1 U	< 20 U		

ug/L FL MARINE SWCTL (2005): .3 ug/l < 2.0 U ANALYTICAL DATA QUALIFIERS

110 ^ < 2.0 U

2400 ^ < 99 U

< 20 U

ug/L FL MARINE SWCTL (2005): 30 ug/l

ug/L FL MARINE SWCTL (2005): 26 ug/i

ug/L FL MARINE SWCTL (2005): 7.9 ug/l
ug/L FL MARINE SWCTL (2005): .031 ug/l
ug/L FL MARINE SWCTL (2005): 6.5 ug/l

U The analyte was not detected at or above the reporting limit.

J The identification of the analyte is acceptable; the reported value is an estimate.

O Other qualifiers have been assigned providing additional information. These explanatory qualifiers are included in the printable pdf report and in other columns in the export files

6000 ^ 250 ^ 160 ^

< 20 U

6300 ^ 250 ^ 180 ^

- 20 U

98 ^ < 1.9 U

< 9.7 U

< 1.9 U

Legend	
Detection, Result Shown	5.0
Non-detect, MRL shown	5.0 U
Result exceeds standard, Result shown	5.0 ^

< 20 U

< 20 U

< 20 U

< 20 U

- 210

2300 ^ < 10 U

< 2.0 U

< 9.8 U × 2.0 U

< 9.8 U

«: 2.0 U

8.1 1,0 ^ 45 ^ < 10 U

### Table 3 ACW VOC Results

Naphthalene Pentachlorophenol

		Station ID	200	220	260	281	282	283	285	420	440	480	700	720	ACWMW1	C1001	C1002	C1003	C1004
		Sample ID	200-0313	220-0313	260-0313	281-0313	282-0313	263-0313	285-0313	420-0313	440-0313	480-0313	700-0311	720-0313	ACWMW1 0853	C1001-0313	C1002-0313	C1003-0313	C1004-0313
		Sample Date	1/20/2011 (7.12	3/30/9013 18-13	3/30/2013 10/00	3/27/9813 15:00	3/36/9613 15:10	\$/36/381J 13-30	PARQUES 78-73	V7070843 13-25	1/27/2013 LB M	1/27/3043 13:50	9/26/2013 11-00	8/96/2013 12-21	3/39/2013 14:44	3/20/2014 11:30	3/39/3013 10-49	3/25/2063 11:36	6/25/5013 10/00
Analyte	Units	Comparison Standard																	
m- and/or p-)Xylene	ug/L		1.0 U	1.4	1.0 U	82	1.0 U	1.0 U	3.1	6.6	1.7	140	1.0 U	1.0 U	50	1.0 U	1.0 U	1.0 U	1.0 U
L2,4-Trichlorobenzene	ug/L	<pl (2005):="" 1="" 23="" marine="" swctl="" ug=""></pl>	0.50 U	0.50 U	0.50 U	0.50 U	2.5 U	0.50 U	0.50 U	2.5 U	0.50 U	0.50 U	0.50 U	0.50 U					
Acetone	ug/L	-PL MARINE SWCTL (2005): 1700 ug/: -	4.0 U	4.0 U	4.0 U	4.0 U	20 U	4.0 U	4.0 U	20 U	4.0 U	4.0 U	4.0 U	4.0 U					
Benzene	ug/L	<pl (2005):="" 71.28="" l="" marine="" swctl="" ug=""></pl>	0.50 U	0.98	0.50 U	60	0.50 U	0.50 U	16	4	0.55	130 A	0.50 U	0.50 U	20	0.50 U	0.50 บ	0.50 U	0.50 U
Chlorobenzene	ug/L	«FL MARINE SWCTL (2005): 17 чg/1 >	0.50 U	0.50 U	0.50 U	.0.50 U	2.5 U	0.50 U	0.50 U	2.5 U	0.50 U	0.50 บ	0.50 U	0.50 U					
thyi Bensane	ug/L	FL MARINE SWCTL (2005): 610 ug/1 -	0.50 U	18	0.50 U	58	0.50 U	0.50 U	4.1	22	2.8	70	0.50 U	0.50 U	31	0.50 U	0.50 U	0.50 U	0.50 U
Mathyl Ethyl Ketone	ug/L	«PL MARINE SWCTL (2005): 120000 ug/l >	4.0 U	4.0 U	4.0 U	4.0 U	20 U	4.0 U	4.0 U	20 U	4.0 U	4.0 U	4.0 U	4.0 U					
ityrene	ug/L	«FL MARINE SWCTL (2005): 460 ug/1 >	0.50 U	0.50 U	0.50 U	1.6 U,O	0.50 U	0.50 U	0.50 U	0.50 0	0.121,0	18	0.50 U	0.50 U	2.5 U	0.50 U	0.50 U	0.50 U	0.50 U
oluene	ug/L	-PL MARINE SWCTL (2005): 480 ug/1::	0.S0 U	0.481,0	0.50 U	6.9	0.50 U	0.50 U	0.63	0.25 J,O	0.76	150	0.50 U	0.50 U	27	0.50 U	0.50 U	0.50 U	0.50 U
finyt chloride	ug/L	-PL MARINE SWCTL (2005) 2 4 ug/	0.50 U	0.50 U	0.50 U	0.50 U	25.0 *	0.50 U	0.50 U	2.5UA	0.50 U	0.50 U	0.50 U	0.50 U					
nliviene	ug/L	(2)	0.07010	1.7	0.50 U	44	0.50 U	0.50 U	2.2	0.76	1,2	65	0,50 U	0.50 U	28	0.50 U	0.50 U	0.50 U	0.50 U

		Station (O	C1005	C101	C105	C103	C104	C105	C105	C201	C202	C203	C204	C205	C206	C301	C301	C302	C303
		Sample 10	C1005-0313	C101-0313	C102-0313	C103-0313	C104-0313	C105-0313	C105D-03013	C201-0313	C202-0313	C203-0313	C204-0313	C205-0313	C206-0313	C301-0313	C301D-0313	C3G2-G313	C303-0313
		Sample Date	3725/2013/3-40	1/29/2013 (6/12	734730137347	3/35/3805 1702	V75/5613 (7-12	1/29/3811 14:05	3/32/3017 14 64	3/38/3963 9-5*	1/78/2017 LINES	3/28/2003 11-05	1/19/3013 12-111	3/77/2013 19:29	S/20/2015 13:50:	1/91/3043 (1:96	3/21/2013 11:06	1/21/9619 (140)	1/31/3013 1940
Analyte	Units	Comparison Standard																	
m- and/or p-)Xylene	ug/L		1.0 U	1.0 U	1.0 U	78	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.69 J,O	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
,2,4-Trichierobensene	vg/L	of MARINE SWCTE (2005): 23 ug/l >	0.50 U	0.50 U	0.50 U	5.0 U	0.50 U	0.50 U	0.50 U	0.50 ม	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50.U	0.50 U
icetore	ug/L	-PL MARINE SWCTL (2005): 1700 ug/l :	4.0 U	4.0 U	4.0 U	40 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
lenzene	ug/L	PL MARINE SWCTL (2005). 71.28 ug/1 >	0.50 U	0.50 U	0.50 U	51	2.8	0.50 U	0.50 U	0.50 U	0.50 U	0.151,0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Pilorobenzene	ug/L	-FL MARINE SWCTL (2005): 17 ug/t>	0.50 U	0.50 U	0.50 U	5.0 U	0.221,0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.17 J,O	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
thyl Benzene	ug/L	«FL MARINE SWCTL (2005): 610 ug/1»	0.50 U	0.50 U	0.50 U	47	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.23 1,0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Aethyl Ethyl Eetone	ug/L	<pl (2005):="" -<="" 120000="" marine="" s="" swctl="" td="" ug=""><td>4.0 U</td><td>4.0 U</td><td>4.0 U</td><td>40 U</td><td>4.0 U</td></pl>	4.0 U	4.0 U	4.0 U	40 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
tyrene	ug/L	<pre><pl (2005):="" 460="" l="" marine="" swctl="" ug=""></pl></pre>	0.50 U	0.50 U	0.50 U	11	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
sluene	ug/L	<pl (="" (2005):="" 480="" marine="" swctl="" ug=""></pl>	0.50 U	0.50 U	0.50 U	79	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
linyi chloride	ug/L	<pl (2005):="" -<="" 2="" 4="" l="" marine="" swctl="" td="" ug=""><td>0.50 U</td><td>0.50 U</td><td>0.50 U</td><td>5.0 U A</td><td>0.50 U</td><td>0.50 U</td><td>0:50 U</td><td>0.50 U</td></pl>	0.50 U	0.50 U	0.50 U	5.0 U A	0.50 U	0.50 U	0:50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
-Xylene	ug/L	100	0.50 U	0.50 U	0.50 U	33	0.29 1,0	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.73	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U

O Other qualifiers have been assigned providing additional information. See stata sheets.

5.0 U 5.0 ^ 5.0 U A

Table 3 ACW VOC Results

	-	Station ID	-CA01	C402	C483	C404	C405	C406	C503.	C502	C569	C504	C505	C586	C596	C801	C602	C605	.0604
		Sample ID	C401-0313	C402-0313	C403-0313	C404-0313	C405-0313	C406-0313	C501-0313	C502-0313	C503-0313	CS04-0313	C505-0313	C506-0313	C506D-0313	0601-0315	C602-0313	C603-0313	C604-0313
		Sample Date	SORGERY (COM	6/96/2013 12:4E	0/20/2012/17/06	MOMPHES 15/09	5/28/2003/8/58	NAMES	3/25/2753 MARK	indepensions	9230WEDD	NO MARITY MECE	N25/2015/12/00	6222802745	5/98/98333-99	\$45,000,000,000	100000000000000000000000000000000000000	5000000000	ROMERTERS
Analyte	Literatus	Comparison Standard		-													,		
m- and/ar p-lifylene	ug/L		1.00	1.00	100	1.00	0.35 1,0	1.0 U	100	1.00	100	1.0 U	80	100	100	1.00	1.00	1.00	1.00
2.4-Trichipropensene	ue/E	FL MARINE SWCTL (2005): 25 ag/.	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0:50 U	1.00	2.50	2.5.0	0.50 U	0.50 U	0.50 U	0500
Acetone	va/L	#1 MARINE SWC71 (2005): 1700 up/l	4.0 U	4.0 U	40U	4.0 U	4.D.U	4.0.0	4.0 U	4.00	400	4.0 U	63	140	130	4.00	4.00	4.0 U	4.00
lensene	we/L	FL MARINE SWCTL (2005): 75, 28 up/1 -	0.50 U	0.50 U	0.50.0	0.50 U	2.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	95 n	170 ^	160 ^	0.50 U	0.50.0	0.50 U	0.50 U
Niprobenzene	Lap.T	PL MARINE SWCTI (2005): 17 JEGO	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.00	250	2.5 U	0.50 U	0.50 U	0.50 U	0.50 U
Tohul Bensene	we/L	FL MARINE SWCTL (2005); 610 og/(-)	0.50 U	0.50 U	0.50 U	0.50 U	0.33 1.0	0.50 U	0.50 U	0.500	0.50 U	0.50 U	43	52	50	0.50 0	0.50 U	0.50 U	0.50 U
Metnyi čtnyi kesane	ug/L	-H. MARINE SWCTL (2005): 120000 upl)	4.0 U	4.0 U	400	400	4.0 U	4.0 U	4.00	4.0U	40U	40U	18	38	39	4.0 U	4,0 U	4.0 U	4.0 U
ltyrene	ug/L	FL MARINE SWCTL (2005) 460 Jg/	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.500	0.50 U	0.50 U	0.50 U	0.50 0	6.2	25	25	0.50 U	0.50 U	0.50 U	0.50 U
		-PLIMARINE SWCTL (2005): 480 ug/ii-	0.50 U	0.50 U	0.500	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	82	140	140	0.50 U	0.50 U	0.50 U	0.50 U
foluene	ug/L			-	0,50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50:0	0.50 8	0.50 U	1.00	2.5 U A	2.5 U *	0.50 U	0.50 U	0.50 U	0.50 U
riny: chlorida	ug/L	oft Marine SWCTL (2005): 2.4 vg//	0.50 U	0.50 U	-		_				0.50 U	0.50 U	39	50	49	0.50 U	0.50 U	0.50 U	0.18 J, 0
-Xylene	ug/L		0.50 U	0.50 U	0.50 U	0.50 U	0.151,0	0.50 U	0.50 U	0.50 U	0.300	V.30 U	-33	30	The last broken and	0.200	2.20.0		- Control of the

	West Transfer	Station ID	C685	C701	£702	C703	C704	C801	C802	C303	C804	£305	C901	C902	C903	C904	£905	OW09
		Sample ID	C605-0313	C701-0313	C792-0313	C705-0313	C704-0513	CS01-0313	C802-0313	C805-0315	CE 04-0313	0805-0313	6901-0315	C902-0315	C903-0313	C904-0313	C905-0313	OW09-0315
		Sample Date	\$12,0463.0000	3/25/2003-34/40	2020013-1230	S9170033-7612	5/29/2802/2/5/2	\$730763312365	1/22/2011 1646	2/22/2012 x646	3/23/2663/16 UP	5/23/20/2 8/25	3/01/09/11 (8/30)	9012987-1255	3972/3925/5569	633/88333440	301/3807 56-08	9/20/90(18646)
Analyte	Units	Comparison Standard																
m-and/or p-likylene	ug/L	~	1.00	1.00	100	1.00	100	1.00	1.00	1.00	1.00	100	1.00	26		1.0 U	1.00	1.7
3 4-7 r-chiaranensene	uz/L	-ft scanne swc71 (2005): 25 as/1 -	0.50 U	0.50 U	0 50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0:50 U	0.50 U	0.50 U	0.50 U	0.50 U
ketone	-	FL MARINE SWCTL (2005): 1700 ug/1	400	4.0 U	40U	4.00	4.00	4.0 U	4.00	4.0U	4.0 U	4.0 U	4.0 U	4.0 U	4.00	4.0 U	4.0 U	400
Senzene		«PL MARINE SWCTL (2005): 71.28 og//>	0.50 U	9.50 U	0.50 U	0.50.U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	4.2	6	0.50 U	0.50 U	0.50 U
Chierobenzene	-	AL MARINE SWCTL (2005): 17 Je/l >	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
thui Benzene	ue/t	-PL MARINE SWCTL (2005): 610 UE/F-	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	11	13	0.50 U	0.50 U	0.473,0
Mesnyi Esty i Katone	-	-FL MARINE SWCTL (2005): 120000 ug/l -	400	4.00	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	400	4.0 U	4.0.U	4.0 U	4.0 U	40U	4.0 U	4.00	4.0 U
ityrana	1	PL MARINE SWETE (2005): 460 up?	0.50 U	0.50 U	0.50 U	0.50:U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	4.2	4.2	0.50 U	0.50 U	0.50 U
Toisene	ue/l	PL MARINE SWCTL (2005): 480 UE/(>	0.50 U	0.50 U	0.50.0	0.50 U	0.50 U	0,50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	9.9	6.8	0.50 U	0.50 U	0.50 U
/inv. chloride	-	FL MARINE SWCTL (2005): Z.4 ug/	0.50 U	0.50 U	0.50·U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 0	0.50 U	0.50 U	0 50 U	0.50 U
-Xviene	ug/L	The same of the sa	0.50 U	0.50 U	0.50·U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	10	11	0.50 U	0.50 0	1.9

Legend	
Detection, Result Shown	5.0
Non-detect, MRI shown	5.00
Result exceeds standard, Result shown	5.0 ^
Non-sletect, MRL exceeds standard MRL shown	5.0 U A

## Table 5 ACW SVOC Results

		Station ID	200	220	260	281	3112	283	285	470	440	490	700	720	ACWMW1	C1001	C1002
		Sample (D)	700-0919	220-0923	260-0515	281-0513	282-0919	785-0313	285-0513	420-0313	440-0313	450-0313	700-0515	720-0515	ACWMW1-0319	51001-0919	C1002-0313
				5/20/2015 18:15	5/20/2015 18:08	3/27/2013 15:20	5/26/2015 12:10	3/26/2015 15:20	5/26/2015 15 17	5/27/2015 12:25	3/27/2013 10 35	3/27/2013:13:50	5/26/2013 31:55	5/26/2013 12/2	9/19/2013 14:55	3/25/2015 11:30	3/25/2019 10
Analyte	Units	Comparison Standard			-												
3-and/or 4-iMethylphenol	vg/L		9.78	9.9 U	9.80	9.9 U	10 U	10 U	9.7 U	100	9.8 U	1200	10 U	9.70	220	10 U	9.9 U
1-Biphenyl	Ug/E	FE MARINE SWCTL (2005): 18 ug/l -	1.9 U	2.0.0	2.0 U	39 ^	2:0/0	2.0 U	1.03,0	141,0	4.4	120 A	200	1.90	94 ^	2.00	200
4-Dimethylphenol	ug/1	PL MARINE SWCTL (2005): 160 up.	9.7 U	9.9 U	980	85	10 U	10 U	14	1.21,0	1.5 J.O	2300 ^	100	9.7.0	200 ^	100	9.9 U
Methylphenol	ug/L	-FL MARINE SWCTL (2005): 250 og/( >	9.7.0	990	9.80	9.9 U	10 U	10 U	9.7 U	1013	9.8 U	580 J,O ^	100	9.70	110	100	9.9 U
cenaphthene	ug/L	- 91 MARINE SWICTL (2005): \$ ug.* -	1.9 U	32 ^	4.9 ^	190 ^	2.00	2.00	44 ^	19 ^	76 A	520 ^	200	1.61,0	400 ^	2.0 U	2.0.0
les tris rapaner	og/L	FL MARINE SWCTL (2005): 5 Lg/10	1,9 U*	2.0 U *	2.0.04	2.0U*	2.0 U *	2.0 U A	190*	2.0 U *	3.1 *	4.1 U n	2.0 U ^	1.9 U *	3.9 U *	2.0 U A	2.0 U *
lenso(s)sothracene	ug't	- FL KAARINE SWCTL (2005): 051 ug/i -	1.9 U *	2.0U^	2.0 U 4	2.0 U *	2.0 U ^	200^	19U*	2,0 U ^	2.0U^	4.1 U A	2.0 U *	190*	3.9 U *	2.0 0 4	2.0 U A
lenzocajpytene	ug/L	FI MARINE SWETL (2005). DSI ug/I	1.9Ua	2.0 U *	2.0 U ^	2.004	2.0 U *	2.0 U *	1.9 U *	2.0 U ^	2.0 U ^	41 0 4	2.0 U A	1.9 U *	3.9 U A	2.0 U *	2.0 U *
lenzaj Diffueranthene	ug/L	- PL MARINE SWITE (2005): 031 og/1 -	1.9 U *	2.0 U *	2.0 U ^	2.0 U *	2.0 U A	2.0 U *	1.9 U *	2.0 U 4	2.0 U A	4.1 U *	2.0 U n	1.9U*	3.9 U ^	2.0 U *	2.0 U 4
Sensolg tribperyiene	ug/L	-PL MARINE SWCTL (2005): 031 ug/l >	1.904	2.0 U *	2.0 U ^	2.0U*	2.00*	2.00 *	1.9 U A	2.0 U *	2.0U M	4.1 U *	2.0 U ^	1.9 U N	3.90*	2.0 U ^	2.00
Sensorik Huaranthene	ug/L	FL MARINE SWCTL (2005): 051 ug/s	1904	2.0 U *	2.0 0 ^	2.00 %	2.00^	20U*	1.90 *	2.0 U *	2.004	4.1 U *	2.0 U *	1.9 U A	3.9 ⊍ ^	2.0 U *	2.0UA
arbasois	ve/L	FL MARINE SWCTL (2005): 47 og/l -	1.9 U	32	200	230 ^	200	2.00	28	13	54 A	530 A	2.00	1.90	290 ^	2.0 U	2.0.0
hrysene	ug/t	-71 MARINE SWCTL (2005): .031 ug/l -	1.9U*	2.0 U A	2.0 U *	2.0U*	2.8U^	2.01/4	1.9 U ^	2,004	2.0 U ^	4100	2.0 U A	1.9 U *	3.9 U A	2.0 U *	2.0 U 4
Dibens(a/hienthracena	ue/L	- PL MARINE SWCTL (2005): 051 ug/s	1904	2.0U^	2.0 U *	2.0 U *	2.004	200^	1.9 U *	2.0 U 4	2.0 U A	410^	2004	190	3.9 U ^	2.0 U *	2.0 0 4
Dibenspfurar	vert.	-FL MARINE SWCTL (2005): 67 ug/l-	1.9 U	12	2.0 U	75 ^	2.00	2.0 U	4.4	5.7	50	310 ^	2.0 U	1.90	190 ^	2.00	2.00
(uaranthène	-g/L	PL MARINE SWCTL (2005): 3 ug/()	1.9.0 *	2.0 U *	2.0 U A	2.0 U *	2.0 U 4	20U^	1.90 *	2.0 U ^	2.0 U A	2.83,0 ^	2.0 U *	1.90	5.1 ^	20U*	2004
luatene	ug/L	-71 MARINE SWCTL (2005): 30 ug/1::	1.9 U	16	2.0 U	84 A	2.0.0	2.00	26	7.8	31 ^	280 ^	2.0 U	1.9 U	190 ^	2.00	2.00
ndeno (1.2.3-od) pyrene	og/L	FE MARINE SWETE (2005): 091 ugil	1.9 U ^	2.0U^	2.0 U *	2.0 U ^	2.0 U *	2.0 U *	1.9 0 ^	2.0 U *	2.0 U A	4.1 U *	2.0 U ^	1.9 U *	3.9 U *	200"	2.0 U *
Vapinthaiene	ve/L	FE MARINE SWCTL (2005): 26 ug/l :	190	200 ^	2.00	4700 ^	2.0 U	2.0 U	250 ^	38 A	270 ^	9200 ^	2.00	190	5400 ^	2.00	2.00
Pentach grophene	ug/L	PL MARINE SWCTL (2005): 7.9 ug/ >	9.7UA	9.9 U ^	9.8U A	9.9 U 4	10 U A	100*	9.7 U*	10 U *	9.8U*	2.7 1,0	10 U N	9.7UA	20 U *	10 0 *	9.9 U 4
Phenanthrene	ug/L	FL MARINE SWCTL (2005): D31 ug/l	1.90*	96*	2.0 U A	52 A	2.0 U A	2.00 4	13 ^	4.0 ^	24 ^	170 A	2.0.0 ^	1.9 U *	110^	2.0 U *	2.00 *
Phenal	J/gu	-PL MARINE SWCTL (2005): 6.5 ug/ >	9.7U^	9.9U^	9.8 U *	9.9 U ^	10 U *	10.UA	970*	10 U A	9.8U^	70 ^	10 U A	9.7UA	17 J,O ^	10 0 ^	9.9 U A
Pyrene	-	FL WARINE SWCTL (2005): 3 sec	19U^	2.0 U *	2.0 U A	2.0 U A	2.0 U *	2.00	1.9 0 *	2.0 U *	2.0UA	2,43,0 ^	2.0 U A	1.9 U A	3.23,0 ^	2.0 U A	2.0 U *

ANALYTICAL DATA QUALIFIERS

U. The analyse was not setected at or above the reporting limit

Legend	
Detection Result Shown	5.0
Non-detect MRL shown	5.0 U
Result exceeds standard, Result shown	5.0 ^
Non-petert, SRL exceeds	5.0 U A

Table 5 ACW SVOC Results

		Station ID	C1003	C1004	C1005	C101	C102	C103	C104	C102	C105	C201	C505	C263	C204	C205	C206
		Sample ID	C1003-0313	C1004-0513	C1005-0313	C101-0313	C102-0313	0103-0313	C104-0313	C105-0313	C105D-03013	C201-0313	C202-0315	C203-0313	C204-0313	C205-0313	C206-0313
		Sample Date	3/25/2013 11-36	3/25/2013 10:20	3/25/2013 9:45	1/25/2013 16:52	3/25/2013 15:47	5/25/2013 17:22	3/25/2015 17:12	3/25/2013 16:05	3/25/2015 16:05	3/28/2013 9:57	3/28/2013 10:05	3/28/2013 11:02	3/28/2013 17:55	3/27/2013 15:25	3/28/2013 13:3
Analyte	Units	Comparison Standard		0.000	10.000				200 0000								
(3-and/or 4-liMeshylphenol	ug/t	-	9.9 U	10 U	10 U	9.9 U	10 U	62	10 U	10 U	10 0	9.9 U	9.7 U	9.9 U	9.7 U	9.8 U	10 U
E,1-Biphenyi	ug/L	-FL MARINE SWCTL (2005): 18 ug/l -	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	90^	2.1 U	2.0 1/2	2.1 U	2.0 U	1.9 U	2.0 U	1.9 U	2.0 U	2.1.0
2,4-Dimethylphenol	ug/L	<pl (2005),="" 160="" marine="" swctl="" t="" ug=""></pl>	9.9 U	10 U	10 U	9.9 U	10 U	440 ^	100	10 U	10 U	9.9 U	9.7 U	9.9 U	9.7 U	9.8 U	10 U
2-Methylphenol	ug/L	-FL MARINE SWCTL (2005): 250 og/. >	9.9 U	10.0	10 U	9.9 U	10 U	5.2	10 0	10 U	10 0	9.9 U	9.7U	9.90	9.7 U	9.8 U	10 U
Acenaghthene	ug/L	-PL MARINE SWCTL (2005): 3 og/l -	2.0:U	2.0 U	2.0 U	2.0 U	2.0 Li	410^	67 A	2.0 U	2.10	2.0 U	1.9 U	2.0U	190	2.0 U	2.1 U
Anthracene	ug/L	of L MARINE SWCTL (2005): 3 ug/t >	2.0 U A	2.0 U A	2.0 U *	2.0 U 1	2.0 U/A	11 ^	2.104	2.0 U ^	2.1 U A	2.0 U A	1.9 U 1	2.0 U.A	1.9 U A	2.0 U A	2.1 U 4
Benze(ayanthracene	ug/L	-FL MARINE SWCTL (2005) .031 ug/l>	2.0 U A	2.0 U A	2.0 U *	2.0 U A	2.0 U A	3.9 U A	2.1 U A	2.0 U A	2.1 U A	2.0 0 4	1.9 U *	2.0 U 4	1.9 U 5	2.0 U *	2.1 U *
Benzo(ajpyrene	vg/L	FL MARINE SWCTL (2005) .031 ug/l -	2.0 U 4	2.0 U A	2.0 U A	2.0 U *	2.0 U A	3.9 U A	2.1 UA	2.0 U ^	2.1 U *	2.0 U A	1.9 U *	2.0 U *	1.9 U ^	2.0 U A	2.1 U A
Benzo(b)fluoranthene	ug/L	-FL MARINE SWCTL (2005): .052 ug/l >	2.0 U A	2.0 U A	2.0 U n	2.0UA	2.0 U A	3.9 U ^	2.104	2.00 4	2.10*	2.0 U 4	1.9 U *	2.0 U A	1.9 U A	2.0 U*	2.1 U A
Benzo(g.h.i)perysene	wg/L	(PL MARINE SWCTL (2005): .031 ug// >	2.0 U *	2.0 U A	2.00	2.0 U *	2.0 U *	3.9 U A	2.1 U A	2.0 U ^	2.1 U *	2.0 UA	1.9 8 4	2.0 U ^	1.9 U A	2.0 U A	2.1 U *
Benzo(k)fluoranthene	ugit	oFL MARINE SWCTL (2005): .051 ug/t >	2.0 U A	2.0 U A	2.0 U ^	2.0 U A	2.0 U A	3.9 U ^	2.1 U ^	2.0 U ^	2.1 U ^	2.0 U *	1.9 U.A	2.0 U A	1.9 U A	2.0 U A	2.1 U ^
Carbarole	ug/L	APL MARINE SWCTL (2005): 47 ug/1 ×	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	470 ^	2.1 U	2.0 U	2.1 U	2.0 U	1.9 U	2.0 U	1.90	2.0 U	2.1 U
Chrysene	4g/L	of L MARINE SWCTL (2005): .031 ug# ×	2.0 U A	2.0 U A	2.0 U A	2.0U*	2.0 U *	3.9 U ^	2.1 U A	2.0 U A	2.1 U A	2.0 U *	1.9 U *	2.0 U ^	1.9 U *	2.0 U A	2.1 U A
Dibenz(a,h)anthracene	ugit	-FL MARINE SWCTL (2005); .031 ug// -	2.0 U A	2.0 U A	2.0 U 4	2.0 U A	2.0 U 4	3.9 U ^	2.1 U *	2.0 U A	2.1 U A	2.0 U *	1.9 U *	2.0 U A	1.9 U 4	2.0 U *	2.1 U *
Dibensofuran	ug/L	«PL MARINE SWCTL (2005): 67 ug/l »	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	230 ^	2.1 U	2.0 U	2,1 U	2.0 4	1.9 U	2.0 U	1,9 U	3.1	2.1 U
Fluoranthene	ug/L	-PL MARINE SWCTL (2005): .5 Ng/II >	2.0 U*	2.0 U *	2.0 U A	2.0 U *	2.0 U ^	5.7.^	2.10*	2.0 U 4	2.1 U A	2.0 U A	1.9 U *	2.0 U *	1.9 U *	2.0 U *	2.1 U A
Fluorene	ME/L	FL MARINE SWCTL (2005): 30 ug/1 .	2.0 U	2.0 U	2.0 U	2.0 U	2.00	220 ^	15	2.00	2.1 U	2.0 U	190	2.0 U	1.90	2.0 U	2.1 U
indens (1,2,3-cd) pyrene	ugit	«PL MARINE SWCTL (2005): .021 ug//>	2.0 UA	2.0 U A	2.0 U A	2.0UA	2.0 U A	3944	2.1 U *	2.0 U A	2.1 U A	2.0 U A	1.9 U *	2.0 U A	1.9 0 ^	2.0 U A	2.1 U ^
Naghthalene	wg/L	FL MARINE SWCTL (2005): 26 ug/i =	2.0 U	2.00	2.0 U	2.0 U	2.0 U	6500 ^	2.1	2.0 U	2.1 U	2.0 U	19U	2.0 U	1.9.0		2.1 U
Pentachiorogheno.	WE/L	JPL MARINE SWCTL (2005): 7:8 vg//.o	9.9 U º	10 U A	10 U *	9.90 *	10 U A	9.31,0 ^	10 U A	10 U *	10 U *	9,9 U 4	9.7 U *	9.9 U A	9.7 U 4	100 ^	10U^ .
Phenanthrens	MB/L	of LMARINE SWCTL (2005): .031 ug/t ::	2.0 U A	2.0 U *	2.0 U A	2.0 U A	2.0 U A	140 ^	2.1 U *	2.0 U *	2.1 U A	2.0 U ^	1,9 0 4	2.0 U 6	1.9 U 4	2.0 U *	2.1 U A
Phenei	ug/L	PL MARINE SWCTL (2005): 5.5 ug/t >	9.9 U 4	10 U 4	10 U A	9.9 U ^	10 U A	5,41,0	100	10 U *	10 U A	9.9 U A	9.7 U 4	9.9 U A	9.7 U *	9.8 U A	10 U *
Pyrene	ig/L	-PL MARINE SWCTL (2005): :3 ug/t >	2.0 U *	2.0 U A	2.0 U A	2.0 U *	2.0 U A	4.0 4	2.1 U A	2.0 U A	2104	2.0 U *	1.9 U #	2.0 U A	1.9 U 5	2.0 U *	2.1 U A

3 The reported value is an estimate.

O Other qualifiers have been assigned providing additional information. See data sheets.

Logend	
Detection, Result Shown	5.0
Non-satect. MRL thown	5.0 U
Result exceeds standard, Result shown	5.0 ^
Non-detect, MRL exceeds standard - MRL shown	5.0 U <sup>4</sup>

Table 5 ACW SVOC Results

		Station ID	C301	C301	C302	C303	C401	C402	C403	C404	C405	C406	C501	(302	C503	C\$04	C505
		Sample ID	C301-0313	C301D-0313	0302-0313	C303-0313	C401-0313	C402-0313	C403-0313	C404-0313	C405-0313	C406-0313	C501-0313	0502-0315	C503-0313	0504-0913	C505-0313
		Sample Date	3/21/2013 11:35	3/21/2013 11:36	1/21/2011 11:00	3/21/2013 10:53	3/20/2013 11:00	3/20/2013 12:45	3/20/2013 12:06	3/20/2013 11:20	3/20/2013 9:54	3/19/2013 17:2	3/23/2013 10:00	3/23/2013 10:56	3/23/2013 12:22	5/25/2013 12:02	5/23/2013 11:1
Analyte.	Units	Comparison Standard															Accessed to the second
3-ans/or 4-tMethylphenol	ug/L		10 U	100	9.9 U	10 U	9.9 U,LO	10 U	9.8 U	100	9.9 U	9.9 U	100	9.90	10 U	100	3700
1,2-Biphenyl	ug/L	«FL MARINE SWCTL (2005): 18 ug/l »	2.0 U	2.0.0	2.0 U	2.00	2.0 U	2.0 U	2.0 U	2.00	50 ^						
2,4-Dimethylphenol	ug/L	of L MARINE SWITE (2005): 160 ug/l >	10 U	100	9.9 U	10 U	9.9 U	10 U	9.8 U	10 U	9.9 U	9.91)	10 U	9.9 U	10 U	10-0	4300 ^
l-Methylphenol	ug/I	<pl (2005):="" 1="&lt;/td" 250-ug="" marine="" swctl=""><td>10 U</td><td>10 U</td><td>9.9 U</td><td>10 U</td><td>9.9 U,I,O</td><td>10 U</td><td>9.8 U</td><td>100</td><td>9.9 U</td><td>9.9 U</td><td>100</td><td>9.9 U</td><td>10 U</td><td>10 U</td><td>2100 ^</td></pl>	10 U	10 U	9.9 U	10 U	9.9 U,I,O	10 U	9.8 U	100	9.9 U	9.9 U	100	9.9 U	10 U	10 U	2100 ^
Acenaphthene	ug/L	FL MARINE SWITT (2005) 3 ug/ .	2.0 U	2.8 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0.0	2.0 U	7.3 ^	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	180 ^
Anthracene	ug/L	FL MARINE SWCTL (2005): 3 vg//>	2.0 U A	2.0 U A	2.0UA	2.0 U *	2.0 U A	2.0 U *	2.0 U A	2.0 U A	2.004	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U A	3.9 U A
lenzo(a)anthracerie	ug/L	«FL MARINE SWCTL (2005): -031 ug/1 >	2.0 U A	2.0.0 ^	2.0 U ^	2.0 U ^	2.004	2.0 U ^	2.0 U A	2.0 U ^	2.000	2.0 U A	2.0 U ^	2.0 U A	2.004	2.0 U A	3.9 U A
Benzo(a)pyrene	ug/L	-PL MARINE SWCTL (2005)032 ug/l >	2,0 U A	2.0 U A	2.0 U 4	2.0 U.	2.0.0 ^	2.0 U.A	2.0 U A	2.0 U ^	2.0UA	2.0 U A	2.0 U A	2.0 U 4	2.0 U ^	2.0 U A	3.9 U A
leisa(b)flupranthens	ug/L	FL MARINE SWCTL (2005): .031 ug/t -	2.0 U A	2.0 U A	2.0UA	2.0 U ^	2.0 U *	2.0 U A	2.0 U 4	2.0 U ^	2.0 U A	2.0 U A	2.0 U 4	2.0 UA	2.0 U ^	2.0 U A	3.9 U A
lenso(g.h.)perylene	WIL	FL MARINE SWCTL (2005): .031 ug/l	2.0 U A	2.0 U A	2.0 U *	2.0 U *	2.0 UA	2.004	2.0 U A	2.0 U A	2.0.0 6	2.0 U A	2.0 U #	2.0 U A	2.0 U ^	2.0 U *	3.9 U A
Senzalkifluoranthene	ug/L	-FL MARINE SWCTL (2005): .031 ug/l	2.0 U 4	2.0 U *	2.0UA	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U *	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U M	3.9 U A
arbasole	ug/L	-FL MARINE SWICTL (2005): 47 ug/l >-	200	2.0 U	2.0 U	2.0'U	2.0 U	2.0 U	2.0 U	200	2.0 U	200	2.0 U	2.0 U	2.0 U	2.00	150 ^
brysene	ug/L	-FL MARINE SWCTL (2005): .031 ug/l >	2.0 U A	2.0 U A	2.0 U *	2.0 U A	2.0 U ^	2.0 U *	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U *	3.9 U A
libens(a, hjanthracene	ug/L	of L MARINE SWCTL (2005): .031 ug/l >	2.0 U *	2.0 U A	2.0 U *	2.0 0 1	2.0U^	2.0 U A	2.0 U A	2.0 U ^	2.004	2.0 U A	2.0 U 6	2.0 U 1	2.0 U A	2.0 U A	3.9 U A
Dibenzefuran	ug/L	«FL MARINE SWCTL (2005): 67 ug/1>	2.0 U	2.0.0	2.0 U	2.4	2.0 U	2.0-U	2.0 U	2.0 U	2.0 U	94 ^					
luoranthene	ug/L	CPL MARINE SWCTL (2005): .3 ug/t >	2.0 U A	2.0 U A	2.0 U *	2.0 U *	2.0 U A	2.0 U A	2.000	2.0 U ^	2.0U*	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U A	3.9 U A
luorene	werk.	FL MARINE SWCTL (2005): 30 ug/l >	2.0 U	2.0 U	200	2.0-0	2.0 U	2.0 U	2.0 U	2,013	2.4	2.00	2.0 U	2.0.0	2.04	2.0 U	97 4
ndena (1,2,3-cd) pyrene	ug/L	-FE MARINE SWCTL (2005): .031 ug/f >	2.0 0 4	2.0 U A	2.0 U ^	2.0 U A	2.0 U A	2.0 U 4	2.0 U 4	2.0 U *	2.0UA	2.0 U *	2.0 U A	2.0 U 4	2.0 U A	2.004	3.9 U *
Eaphthalene	UE/L	-PL MARINE SWCTL (2005): 26 ug/i >	2.0 U	2.00	2.0.0	2.0 U	2.0 U	2.0 U	2.0.0	2.00	1.61,0	2.0 U	2.0'U	2.0 0	2.0 U	2.00	5200 A
rentachiorophenoi	ug/L	<fl (2005):="" 7:9="" l="" marine="" swctl="" ug=""></fl>	10 U *	10 U *	9.9 U *	10 U A	9.9 U *	10 0 ^	9.8 U *	10 U A	9.9 U A	9.9 U A	10 U A	9.9 U.A	10 U A	10 U A	20 U A
thenanthrene	ug/L	of L MARINE SWCTL (2005): .032 ug/l >	2.0 UA	2.0 U *	2.0 U A	2.0 U A	2.0 U *	2.0 U A	2.0 U *	2.0 U A	2.0UA	2.0 U A	2.0 U ^	2.0 U *	2.0 U A	2.0 U 4	27 ^
thenal	ug/L	<pl (2005):="" 6.5="" marine="" swctl="" vg=""></pl>	10 U f	10 U A	9.9 U *	10 U A	9.9 U,J,O 4	10 U 4	9.80 *	10 U A	9.9 U A	9.9 U A	10 U A	9.9 U A	10 U A	10 U ^	940 ^
yrene	ug/L	of L MARINE SWCTL (2005): .3 up/10	2.0 U A	2.0 U ^	2.00	2.0 U 4	2.0 U *	2.0 U 4	2.0 U A	2.0 U *	2.0 U ^	2.0 U A	2.0 U A	2.0 U ^	2.0 U A	2.0 U 4	3.9 U ^

### ANALYTICAL DATA QUALIFIERS

The reported value is an estimate.
 Other qualifiers have been easigned providing additional information. See data sneets:

Legend	
Detection, Result Shown	5.0
Non-detect. MRL shown	5.0 U
Result exceeds standard, Result shown	5.0 ^
Non-detect, MRL exceeds standard, MRL shown	5.0 U ^

Table 5 ACW SVOC Results

	-	Station ID	C506	C506	C601	C602	C603	2504	C605	C701	C702	C703	C704	C901	CBOZ	C803	C804
			C506-0313	C506D-0313	C601-0313	C602-0513	C603-0313	C604-0315	C605-0313	C701-0313	C702-0513	C703-0513	C704-0313	C801-0313	C802-0313	CE03-0515	CS04-0515
		Sample ID											5/23/2015 17:15	3/22/2013 11:05	5/22/2013 10:40	5/22/2013 10:40	5/22/2013 10:11
	units	Sample Date Comparison Standard	3/23/2013 6:30	3/23/2013 8:35	317574012 54:17	2/22/2013 13/00	9/24/20/5 25/10	3,22,2003,20.03	3/20/2007 24 25	7,000							
Analyte		Cottibus acts Statemen	9000	8700	10 U	10 U	9.9.0	10 U	9.9 U	980	9.90	10 U	10 U	10 U	10 U	9.9 U	10 U
(3-and/or 4-thlethylphenol	ug/L	-71 MARINE SWCTL (2005): 18 ug/l	100 ^	94 A	2.10	2.0 U	2.0 U	2.00	2.0 U	2.0 U	200	2.0 U	2.0 U	2.0 U	2.0 U	2.00	2.1 U
1, 1-Biphenyl	-	-FL MARINE SWCTL (2005): 180 ug/s >	6900 ^	6600 A	10 U	10 U	9.9 U	10 U	9.9 U	9.8 U	9.9 U	10 U	10 U	10 U	10 U	9.9 U	10 U
2,4-Dimethylphenal		-PL MARINE SWCTL (2005): 250 ug/1 >	3800 A	3700 A	10.0	10.0	9.9 U	10 U	9.9 U	9.8 U	9.9 U	10 U	10 U	10 U	10 U	9.9 U	10 U
2-Methylphenol	-		520 A	450 ^	2.1 U	2.0 U	2.0 U	1810	7.7.4	2.0 U	2.00	201	2.0 U	2.0 U	2.0 U	2.0 U	2.10
Acenaphthene	-	of E MARINE SWICTE (2005); 5 ug/l	4.0 U A	4.0 U.0	2.10	2.0UA	2.0 U 4	2.0 U ^	2.0 U A	2.01/4	2.0 U A	2.0 U A	2.0 U n	2.000	2.000	2.0 U n	2.1 U A
Anthracene	-	-PL MARINE SWCTL (2005): 3 ug/l >	4.00*	4.0 U.A	2.10*	2.00	2.0 U ^	2.0 U ^	2.0 U A	2.0 U A	2.0 U A	2.0 U ^	2.0 U A	2.0 U *	2.0 U *	2.0 U A	2.1U^
Benzo(a)anthracene	-	<p1 (2005):="" .031="" 1="" marine="" swctl="" ug=""></p1>	4004	4.0 U n	2.1UA	2.00	2.0 U A	2.0 U *	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U ^	2.0 U A	2.1 U *
Senzo(a)pyrene	-	<pl (2005):="" .051="" l="" marine="" swctl="" ug=""></pl>	4.00*	4.0U^	210	2.0UA	2.00^	2.0 U A	2004	2.0 U A	2.0 U A	2.0 U A	2.0 U *	2.0 U#	2.0 U A	2.0 U A	2.1 U 6
Benzo(b)/lubranchene	-	-PL MARINE SWETL (2005): .031 ug/1>		4.0 UJ.O ^	2.1 U *	2.00*	2.0 U A	2.0 U *	2.0 U *	2.0 U ^	2.0 U A	2.0 U A	2.0 U n	2.0 U 4	2.0U^	2.0 U A	2.1 U A
Benzo(E, h, )perylene	-	-PL MARINE SWCTL (2005): .031 ug/l >	4.0 U A	The state of the s	2.10**	2.00	2.0 U ^	2004	2004	2.0 U A	2004	2.0 U A	2.0 U *	2.0 U n	2004	2.0 U A	2.1 U ^
Benzelk)fluoranthene.	-	-PL MARINE SWCTL (2005): .081 ug/1 -	4.0 U n	4.0 U A	2.10	2.0 U	2.0 U	2.00	2.00	2.0.0	2.0 U	2011	2.0 U	200	2.00	2.0-0	2.1 U
Carqazore	-	.PL MARINE SWCTL (2005): 47 ug/l >	410 ^	350 ^		2.0 U A	2.0 U A	2.004	2000	2.0 U A	2.004	2.0 U A	2.0 U A	2.000	2.0 U ^	2.0 U 4	2.1 UA
Chrysene	-	<pl (2005):="" .031="" l="" marine="" swctl="" ug=""></pl>	4.0 U ^	4.0 U ^	2.1 U ^	2.004	2.00	2.0 U A	2.0 U ^	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 U 4	2.0 U A	2.1 U A
Dibenzia hisothracene	-	-PL MARINE SWCTL (2005): -081 ug/1 >	4.0 U ^	4.0 U 1	2.1 U *	2.0 U	2.0 U	1.61.0	2,0 0 **	2.00	2.00	2.00	2.00	2.00	2.01	2.00	210
Dibenzofuran	-	-PL MARINE SWCTL (2005): 67 ug/l >	150 ^	140 ^	2.10	2.00	2.00	2004	2.0.U.A	2.0 U A	200	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 UA	2104
Plugranthene.	-	-FL MARINE SWETE (2005): 3 ug/l >	5.5 ^	5.0 ^			2.0 U	1410	2.00	2.0 U	2.00	200	200	2.01	2.0 U	2.00	2.10
Pluorene	-	<pl (2005):="" 30="" l="" marine="" swcte="" ug=""></pl>	200 ^	180 ^	2.1.0	2.0 U		2004	2.0 U A	2.0 U *	2.00	2.0 U A	2.0 U A	2.0 U.A	2.0 U ^	20U^	21114
Indens (1,2,3-cd) pyrene	-	Ft MARINE SWCTE (2005): .031 ug/l >	4.0 U A	4.0 U ^	2.1 U ^	2.0 U A	2.0 U A		2.00	2.0 U	2.00	2.0U	2.0 U	2.0 U	2.0 U	2.0 U	2.10
Naphthalene	ug/L	of L MARINE SWCTL (2005): 26 ug/l >	8000 ^	7500 ^	2.10	2,0 U	2.0 U	1.41,0	9.9UA	9.8UA	9944	10114	10 U A	10 U A	10 U A	9.9 U *	10 U.
Pentachioroghenoi	ug/t	<fl (2005)="" 7.5="" l="" marine="" swctl="" th="" ug="" »<=""><th>290 ^</th><th>260 ^</th><th>10 U A</th><th>10 U ^</th><th>9.9 U ^</th><th>120 A</th><th>2.0 U A</th><th>2.0 U ^</th><th>2.0 U A</th><th>2.0 U ^</th><th>2.0 U A</th><th>2.0 U A</th><th>2.0 U A</th><th>2.0 U A</th><th>2104</th></fl>	290 ^	260 ^	10 U A	10 U ^	9.9 U ^	120 A	2.0 U A	2.0 U ^	2.0 U A	2.0 U ^	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2104
Phenanthrene	ug/L		110 ^	95 ^	2.1 U ^	2.0 U ^	2.0 U ^	2.0U^	200	9.8 U ^	9.9 U A	10 U 4	10 U A	10 U A	10 U A	9.9 U.n	10 U *
Phendi	-	-PL MARINE SWCTL (2005): 6.5 ug/ >	2700 ^	2600 A	10 U ^	10 U *	9.9 U *	10 U A	9.9 U A			2.0 U A	2.004	2004	2.0 U A	2.0 U A	2.1 UA
Pyrene	ug/L	-FL MARINE SWCTL (2005): .3 ug/i >	3.5 J,O ^	3.13,0 ^	2.1 U A	2.0 U ^	2.0 U A	2.0 U A	2.0 U A	2.0 U A	2.0 0 4	2.00 4	2.00	2.00	2.00	200	474.0

U The analyte was not detected at or above the reporting limit

J The reported value is an estimate.

O Other quarifiers have seen assigned providing additional information. See data

Legend
Denection, Result Shown 5.0
Non-desect, MRL shown 5.0 U
Result exceeds standard, Result
Shown
Non-detect, MRL exceeds
standard, MRL exceeds
standard, MRL exceeds

Table 5
ACW SVOC Results

		Station ID	C805	C901	C902	C903	C904	C905	OW09
		Station is	COVS	CSVI	CSUZ	(30)	1,504	C903	Owos
		Sample ID	C805-0313	C901-0313	C902-0313	C903-0313	C904-0313	C905-0313	OW09-0313
		Sample Date	3/22/2013 9:25	3/21/2013 16:20	3/21/2013 15:23	3/21/2013 17:00	3/21/2013 14:50	3/21/2013 16:15	3/22/2013 16:45
Analyte	Units	Comparison Standard							
(3-and/or 4-)Methylphenol	ug/L	-	9.9 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Biphenyl	ug/L	«FL MARINE SWCTL (2005): 18 ug/l >	2.0 U	2.0 U	23 ^	15	2.0 U	2.0 U	2.0 U
2,4-Dimethylphenol	ug/L	«FL MARINE SWCTL (2005): 160 ug/l >	9.9 U	100	10 U				
2-Methylphenol	ug/L	-FL MARINE SWCTL (2005): 250 ug/l =	9.9 U	10 U	10 U	10 U	100	10 U	10 U
Acenaphthene	ug/L	«FL MARINE SWCTL (2005): 3 ug/l →	2.0 U	2.0 U	160 ^	200 ^	2.0 U	2.0 U	2.0 U
Anthracene	ug/L	<fl (2005):="" 3="" l="" marine="" swctl="" ug=""></fl>	2.0 U A	2.0 U A	2.0 U A	6.5 ^	2.0 U A	2.0 U A	2.0 U ^
Benzo(a)anthracene	ug/L	«FL MARINE SWCTL (2005): .031 ug/l »	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^
Benzo(a)pyrene	ug/L	<fl (2005)="" .031="" l="" marine="" swctl="" ug=""></fl>	2.0 U A	2.0 U ^	2.0 U *	2.0 U ^	2.0 U ^	2.0 U A	2.0 U ^
Benzo(b)fluoranthene	ug/L	<fl (2005):="" .031="" l="" marine="" swctl="" ug=""></fl>	2.0 U A	2.0 U ^	2.0 U A	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^
Benzo(g,h,i)perylene	ug/L	«FL MARINE SWCTL (2005): .031 ug/l>	2.0 U A	2.0 U A	2.0 U ^	2.0 U ^	2.0 U A	2.0 U A	2.0 U ^
Benzo(k)fluoranthene	ug/L	<fl (2005):="" .031="" l="" marine="" swctl="" ug=""></fl>	2.0 U ^	2.0 U A	2.0 U ^	2.0 U A	2.0 U ^	2.0 U ^	2.0 U ^
Carbazole	ug/L	«FL MARINE SWCTL (2005): 47 чgЛ »	2.0 U	2.0 U	150 ^	230 ^	2.0 U	2.0 U	2.0 U
Chrysene	ug/L	FL MARINE SWCTL (2005): .031 ug/l:-	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^
Dibenz(a,h)anthracene	ug/L	FL MARINE SWCTL (2005): .031 ug/l >	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U A	2.0 U ^	2.0 U ^
Dibenzofuran	ug/L	-FL MARINE SWCTL (2005): 67 ug/l >	2.0 U	2.0 U	71^	100 ^	2.0 U	2.0 U	2.0 U
Fluoranthene	ug/L	-FL MARINE SWCTL (2005): 3 og/1 -	2.0 U ^	2.0 U ^	2.1 ^	2.3 ^	2.0 U A	2.0 U ^	2.0 U ^
Fluorene	ug/L	-FL MARINE SWCTL (2005): 30 ug/l >	2.0 U	2.0 U	58^	100 ^	2.0 U	2.0 U	2.0 U
Indeno (1,2,3-cd) pyrene	ug/L	«FL MARINE SWCTL (2005): .031 ug/1:»	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^	2.0 U ^
Naphthalene	ug/L	«FL MARINE SWCTL (2005): 26 ug/li>	2.0 U	2.0 U	1700 ^	3100 ^	2.0 U	2.00	1.9 J,O
Pentachioropheno!	ug/L	of L MARINE SWCTL (2005): 7.9 ag/l >	9.9 U ^	10 U ^	4.7 1,0	10 U A	1.4 J,O	10 U A	110 ^
Phenanthrene	ug/L	×FL MARINE SWCTL (2005): .031 ug/l>	2.0 U ^	2.0 U A	25 ^	68 ^	2.0 U A	2.0 U ^	2.0 U ^
Phenal	ug/L	«FL MARINE SWCTL (2005): 6.5 ug/l >	9.9 U ^	10 U ^	10 U A	10 U ^	10 U ^	10 U A	10 U ^
Pyrene	ug/L	«FL MARINE SWCTL (2005): .3 ug/l »	2.0 U A	2.0 U A	1.2 J,0 ^	1.2 J,0 ^	2.0 U ^	2.0 U ^	2.0 U ^

- U The analyte was not detected at or above the reporting limit.
- J The reported value is an estimate.
- O Other qualifiers have been assigned providing additional information. See data sheets.

Legend	
Detection, Result Shown	5.0
Non-detect, MRL shown	5.0 U
Result exceeds standard, Result shown	5.0 ^
Non-detect, MRL exceeds standard , MRL shown	5.0 U ^

Table 4 Remediation Goal Results

		Station ID	200	220	260	281	282	283	285	286	400	420	440	480	700	720	760	ACW4	ACW5	ACWMW1
		Sample ID	200-0112	220-0112	260-0112	281-0112	282-0112	283-0112	285-0112	286-0112	400-0112	420-0112	440-0112	480-0112	700-0112	720-0112	760-0112	ACW4-0112	ACW5-0112	ACWMW1-0112
		Date		02/07/2012	02/07/2012	02/06/2012	02/06/2012	02/06/2012	02/06/2012	02/06/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	02/06/2012	02/06/2012	02/06/2012	02/05/2012	02/05/2012	02/07/2012
		Time	09:10	09:17	11:10	12:36	09:45	11:10	10:30	13:05	15:30	13140	14:00	14:30	15:15	16:35	15:50	11:40	14:09	15:50
		Remediation																		
Analyte	Units	Goal			200				_									F 111	F.01	
Acenaphthene	ug/l	9000	5 U	75	5 U	170	5 U	5.0	75	SU	7.1	4.2 3,0	76	350	5 U	5 U	290	5 8	5.0	440
Benzene	ug/l	91	5 U	6,6	5.0	58	5 U	5 U	23	5 U	5 U	3 3,0	0.91 3,0	120	5.0	5 0	75	5 10	5 U	8,1
Benzo(a)anthracene	ug/l	1100	5 U	50 U	5 U	50 U	SU	5 U	5.0	5 U	5 U	5 U	50 U	250 U	5 U	5 U	250 U	5 U	5.0	250 U
Dibenzofuran	ug/l	44	5.0	35 1.0	5 U	83	5 U	5 U	12	5 U	5.3	5.U	46 1,0	230 J.O	s u	5 U	160 3,0	5 U	5.U	270
Fluoranthene	ug/l	1500	SU	50 U	5 U	50 U	5.07	5 U	5 U	5 0	SU	5 U	50 U	250 U	5 U	2 11	250 U	5 U	5.0	250 U
Naphthaiene	ug/i	21900	SU	1700	5 U	4000	S.U	5 U	790	5 0	5 U	14	330	6600	5 U	5 U	8000	5 0	5 U	7200
	700	296000	10 U	100 U	10 U.J.O	100 U	10 U	10 U	10 U	10 U	10 U	10 U	100 U.J.O	500 U	10 U	10 U	500 U.J.O	10 U	10 U	500 U,J,O
Pentachlorophenol	149/1	296000	10 0	100 U	10 0,5,0	100.0	10.0	10.0	20.0	10 0	10 0	20.0	200 0000	200 0						

		Station ID	ACWMW2	ACWMW3	C1001	C1002	C1003	C1004	C1005	C101	C102	C103	C104	C105	C201	C202	C203	C204	C205	C206
				CWMW3-011	C1001-0112	C1002-0112	C1003-0112	C1004-0112	C1005-0112	C101-0112	C102-0112	C103-0112	C104-0112	C105-0112	C201-0112	C202-0112	C203-0112	C204-0112	C205-0112	C206-0112
		Date		02/07/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	02/07/2012	02/07/2012	02/07/2012	02/07/2012	02/07/2012	02/07/2012
		Time		15:30	11:25	09:20	11:08	10:50	09:15	11:28	14:25	16:10	15:00	15:50	11:10	11:15	13:45	14:15	14:00	10:58
		Remediation																		
Analyte	Units	Goal															5 U	5.0	10 U	10 U
Acenaphthene	ug/l	9000	64 3.0	S U	5.0	S U	5 U	5 U	5.0	S U	.5 U	300 J,O	67	5 11	5 U	5 U				
Benzene	ug/l	91	0.73 1,0	5 U	5.0	5 U	5 U	5.0	5 U	5 U	5 U	45	2.2 1.0	5 11	5 U	5 U	SU	5.0	5.0	5.0
Benzo(a)anthracene	ug/l	1100	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 0	500 U	10.0	5 U	5 U	5 U	5 U	5 U	10 U	10 U
	ug/l	44	100 U	5 U	5 U	5 0	5 U	5 U	5 U	5 U	5 U	140 3,0	10 U	5 U	5 U	5 U	5 U	\$ U	4.1 3,0	10 U
	ug/l	1500	100 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	500 U	10 U	5 U	5 U	5 U	5 U	5 U	10 U	10 U
	ug/l	21900	610	5.6	5 U	5 U	5 U	5 U	5 U	5 U	5 U	4800	10 U	5 U	5 U	5 U	5 U	5 U	4,3 3,0	10 U
Pentachlorophenoi	un/l	296000	200 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U,3,0	10 U,J,O	1000 U	20 U	10 U,J,O	10 U,J,O	10 U	10 U	10 U.J.O	150	20 U

		Station ID	C301	C302	C303	C401	C402	C403	C404	C405	C406	C406	C501	C502	C502	C503	C504	C505	C506	C601
		Sample ID	C301-0112	C302-0112	C303-0112	C401-0112	C402-0112	C403-0112	C404-0112	C405-0112	C406-0112	C406T-0112	C501-0112	C502-0112	CS02D-0112	CS03-0112	C504-0112	C505-0112	C506-0112	C601-0112
		Date	02/08/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/03/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012	02/04/2012
		Time	14:15	14:48	13:55	11:25	11:00	09:35	09:35	09:24	11:15	12:01	16:00	09:18	09:25	10:30	09:00	10:45	09:15	14:00
		Remediation																		
Analyte	Units	Goal															(210	500 U	410 1,0	5 U
Acenuphthene	ug/l	9000	50	5.0	5 U	5 U	5 U	5 U	5 U	18	5 U	5 U	5 U	5 U	5 U	5 U	1.2 1.0		-	
Benzene	un/l	91	S U	5 U	5 U	5 U	5 U	5 U	5 U	5.3	5 U	5 U	5 U	5 U	5.0	5 U	5 U	75	170	5 0
Benzo(a)anthracene	un/l	1100	5 U	5.0	5 U	5 U	5 U	5 U	5 U	5 0	5 U	5 U	5 0	5 U	5 U	5 U	5 U	500 U	1000 U	5 U
	ug/i	44	5 U	5 U	5 U	5 U	5 U	5 0	5 U	13	5 U	5 U	5 U	5 U	5 U	5 U	50	500 U	1000 U	5 U
	ug/i	1500	5.0	5.0	5 U	5.0	5 0	5 U	5 U	5 U	5 U	5 U	50	5 U	5 U	5 U	5 U	500 U	1000 U	5 U
	ug/l	21900	SU	5.0	5 U	SU	S D	. 5 U	5 U	15	5 U	5.0	5 U	5 U	5 U	5 U	1.3 3.0	4800	9300	5 U
Pentachlorophenol	ug/l	296000	10 U	10 0	10 U.J.O	10 U	10 U,J,O	10 U.J.O	10 U.J.O	10 U	10 U,J,O	10 03.0	10 U	1000 N	2000 U	10 U				

Table 4 Remediation Goal Results

		Station ID	C602	C603	C604	C605	C701	C702	C703	C704	C801	C802	C803	C804	C805	C901	C902	C903	C904	C905
		Sample ID	C602-0112	C603-0112	C604-0112	C605-0112	C701-0112	C702-0112	C703-0112	C704-0112	C801-0112	C802-0112	C803-0112	C804-0112	C805-0112	C901-0112	C902-0112	C903-0112	C904-0112	C905-0112
			02/04/2012	02/04/2012	02/04/2012	02/04/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012
		Time	15:25	14:10	14:40	13:36	16:00	16:00	13:30	15:05	09:35	10:24	10:30	09:15	08:49	10:55	10:45	11:52	11:55	14:55
		Remediation																		
Analyte	Units	Goal															320 3,0	32	5.0	5 U
Acenaphthene	ug/l	9000	5 U	Su	10 U	7.1	5 U	5.4 U.J.O	5 0	5 U	5 0,1,0	5 U	SU	5 U	5 U	5 0		100	10000	
Benzene	ug/l	91	5 ti	SU	5 U	5 U	5 U	5 U	5 U	5 0	5 U	5.0	S U	5 U	5 U	5 U	4.1 1.0	1.3 3.0	5 0	5 U
Benzo(a)anthracene		1100	5 U	Su	10 U	SU	5.0	5.4 U.J.O	5 U	5 U	5 11,1,0	5 U	SU	5.U	5 U	5 U	500 U	5 D	5 U	5 U
Dibenzofur <i>a</i> n	ug/i	44	S U	5 U	10 U	5 U	5.U	5.4 U.J.O	5 U	5.0	5 U	5.0	5 U	5 U	- 5 U	5.0	150 3,0	16	SU	5 U
	-	4500	5 U	5 U	10 U	5 U	5.0	5.4 U.J.O	5 U	5 U	5 U.J.O	5 U	5 U	S U	S U	5.0	500 U	5 U	5.0	5 U
Fluoranthene	ug/î	1500														9,6	4000	5 U	5 U	5 0
Naphthalene	ug/l	21900	SU	1.2 1.0	10 U	5 U	5 U	5.4 U.J.O	5 U	5 U	5 4,3,0	5 U	5 U	5 U	5 U				-	
Pentachiorophenol	ug/l	296000	10 U	10 U.),0	83	3.43	10 U	11 U.J.O	10 U	1000 U	10 U.J.O	8.1 3.0	10 U,J,O							

		Station ID	MWI	MW1A	MW2	MW3	MW3	MW4	MW5	MW6	OW09	OW10	PYCDSM	PYCDSN	PYCDSS	PYCWCB
		Sample ID	MW1-0112	MW1A-0112	MW2-0112	MW3-0112	MW3D-0112	MW4-0112	MWS-0112	MW6-0112	OW9-0112	OW10-0112	PYCD5M-0112	PYCD5N-0112	PYCDS5-0112	PYCWCB-0112
		Date	02/03/2012	02/01/2012	02/01/2012	02/01/2012	02/01/2012	02/01/2012	02/01/2012	02/01/2012	02/04/2012	02/06/2012	02/02/2012	02/02/2012	02/02/2012	02/06/2012
		Time	11:30	11:55	15:25	12:20	12:30	10:20	09:35	16:21	15:50	17:15	15:55	16:35	16:20	11:40
		Remediation														
Analyte	Units	Goal														
Acenaphthene	ug/l	9000	5 U	5 U	5 U	5 U	5 U	4.3 3.0	5 U	1 7.0	50	2.1 3,0	5 U.J.O	7.5	5 U	5 0
Benzene	ug/l	91	SU	0.94 1.0	5 U	5 U	5 U	3.3 3,0	5 U	2.1 3.0	5 U	5 U	5 0	5.2	5 U	5 U
Benzo(a)anthracene	ug/l	1100	5 U	50	5 0,0,0	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 0,3,0	5 U	5 U	5 U
Dibenzofuran	ug/l	44	5.0	5.0	5 U	5 U	5 U	1.8 3,0	5 U	50	5 U	5 U	5 U	5 0	5 U	5 U
Fluoranthene	ug/l	1500	5 U	5 U	5 U.J.O	5.0	S U	5 U	5 U	5 U	5 U	5 U	5 0,0,0	5.0	5.0	5 U
Naphthalene	ug/l	21900	5 U	5 U	5 U	5 U	5 U	39	5 U	27	3.5 3.0	3 3,0	5 0,1,0	51	5 U	5 U
Pentachlorophenol	ug/l	296000	10 U	10 U,J,O	10 U	10 U.J.O	10 0,3,0	10 U,J.O	10 U.J.O	10 U	470	10 U	10 U	10 U	10 U	10 U

Note: Groundwater sampling in 2012 involved a broader analysis; this included contaminants that are not related to the Site. Any applicable contaminants related to the Site will be addressed for cleanup under the forthcoming sitewide ROD.

U = analyte was not detected at or above the reporting limit.

J = the identification of the analyte is acceptable; the reported value is an estimate.

R = The presence or absence of the analyte cannot be determined from the data due to severe quality control pro

O = See affached data sheets for information on additional qualiflers.

Table 6 VOC Results

				,							,				,		
		Station ID		220	260	281	282	283	285	286	400	420	440	480	700	720	760
		Sample ID	200-0112	220-0112	260-0112	281-0112	282-0112	283-0112	285-0112	286-0112	400-0112	420-0112	440-0112	480-0112	700-0112	720-0112	760-0112
		Date	02/07/2012	02/07/2012	02/07/2012	02/06/2012	02/06/2012	02/06/2012	02/06/2012	02/06/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	02/06/2012	02/06/2012	02/06/20:
		Time	09:10	09:17	11:10	12:35	09:45	11:10	10:30	13:05	15:30	13140	14:00	14:30	15:15	16:35	15:50
Analyte	Units	Goal															
(m- and/or p-)Xylene	ug/1		5 U	55	s u	72	S U	SU	7.10	5 U	5 U	4.50 ),0	2.70 3,0	110	5 U	5 U	110
1,1,1-Trichloroethane	ug/l	-	2 0,110	5 U	5 U	5 U,J,O -	5 U	5 U.J.O	SU	5 U	5 U	5 U	5 U	SU	5 U.J.O	5 0,1,0	5 U.J.O
1.1,2,2-Tetrachloroethane	ug/l	-	2 n'1'0	5 U	5 U	5 U,J,O	5 U	5 4.1,0	รบ	5 U	5 U	5 U	5 U	5 U	5 U.J.O	5 U.J.O	2 n'mo
1,1,2-Trichloro-1,2,2-Triffuoroethane (Freon 113)	ug/l	~	5 U,1,0	s u	5 U	5 U.J.O	5 U	5 U.1,0	SU	S U	5 U	S U	5 U	SU	5 0,1,0	5 U.J,O	5 U,J,O
1,1,2-Trichloroethane	ug/l	~	5 U,1,0	5 U	S U	5 U	s u	SU	S U	5 U	5 U	50	5 U	5 U	5 U	5 U.J.O	5 U
1,1-Dichloroethane	ug/l	-	5 U	5 U	5 U	5 U	SU	sυ	s u	SU	5 U	5 U	5 U	5 U	S U	5 U.	5 U
1,1-Dichloroethene (1,1-Dichloroethylene)	ug/1		5 U	sυ	5 U	5 U	0.70 J.O	5.U	s u	5 U	5 U	5 U	5 U	5 U	5 U	5 U	S U
,2,3-Trichlorobenzene	ug/l		S U	5 U	5 U	5 U	5 U	5 U	SU	5 U	ร บ	5 U	5 U	SU	S U	5 U	5 U
1,2,4-Trichlorobenzene	ug/l	-	Sυ	SU	5 U	5 U	SU	s u	S U	s u	5 U	5 U	5 U	5 U	5 U	5 U	5 N
1,2-Dibromo-3-Chloropropane (DBCP)	ug/l		5 U,J,O	5 0,10	S U.J.O	5 U,3.0	5 U.J.O	S U,),O	5 U.1.O	5 U.J.O	5 U	5 U	5 U	5 U	5 U.J.O	5 U.J.O	5 U.J.O
1,2-Dibromoethane (EDB)	ug/l		5 0,1,0	S U	5 U	5 U.J.O	S U	S U.J.O	S U	5 U	5 U	5 U	5 U	S U	5 U.J.O	5 U.J.O	5 U.J.O
1.2-Dichlorobenzene	ug/l		5 U	5 U	SU	5 U	S U	s u	5 U	s u	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/l		5 U.J,O	5 U	5 U	5 U.J.O	5 U	5 U,J,O	5 U	S U	5 U	5.U	SU	S U	5 0.1.0	5 U.J.O	5 0.3.0
1,2-Dichloropropane	ug/l		5 U	5 U	5 U	5 U	5 U.J.O	5 U	5 U	S U	5 U	5.U	5 U	S U	S U	5 U	5 U
1,3-Dichlorobenzene	ug/l		5 U	5 U	5 U	5 U	SU	5 U	SU	SU	5 0	5 U	5 U	5 U	5 U	5 U	5 U
L.4-Dichlorobenzene	urg/I		5.0	5 U	5 U	5 U	S U	SU	5 U	รบ	5 U	5 U	50	5 U	5 U	5 U	50
1,4-Dioxane	ug/1		100 U.R.O	100 U.R.O	100 U,R,O	100 U.R.O	100 U.R.O										
Acetone	ug/I	-	11 J.O	10 U	10 U.R.O	10 U.R.O	10 U	10 U,R,O	10 U.R.O	10 U.R.O	10 U.R.O	15 U.R.O	10 U.R.O				
Benzene	ug/I	91	5 U	6.60	5 U	58	5 U	50	23	5 0	5 U	3 1.0	0.91 1,0	120	5 U	5 U	75
Bromochloromethane	ug/I		5 U	SU	SU	5 U	SU	S U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/I	-	5 U	5 U	5 U	5 U	5 U.J.O	SU	5 0	SU	5 U	5 U	5 U	SU	s u	5 U	5 U
Bramaform	ug/l	-	5 U	S U.3.0	S U	SU	5 U.2.0	s u	5 U	S U	5 U	5 U	5 U	5 U	SU	5 U	5 U
Bromomethane	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50
Carbon disulfide	ug/l	*	5 u	5 U	5 U	5 U.J.O	5.0	SU	5 U	SU	S U	5 U	5 U	5 U	5 U	5. U	5 U
Carbon Tetrachloride	ug/l		ס,נ,ט פ	5 U	SU	S U,J,O	5 U	\$ U.J.O	5 U	5 U	5 U	5 U	5 U	SU	5 U.J.O	5 U.J.O	5 U.3,O
Chlorobenzene	ug/l	-	5 U	SU	5 U	5 U	5 U	s u	5 U	5 U	5 U	5 U	s u	S U	5 U	5 U	5 U
Chloroethane	ug/I		S U	50	5 U	5 U	5 U	S U	5 U	5 U	S U	5 U	SU	SU	5 U	5 U	S U
Chloroform	ug/l	*	s u	5 U	5 U	5 U	5 U	s u	5 0	S U	S U	5 U	5 U	5 U	5 U	5 U	SU
Chloromethane	ug/I	120	5 U	5 U	5 U	5 U	SU	S U	50	5 U	S U	5 U	5 U	s u	5 U	5 U	SU
cis-1,2-Dichloroethene	ug/l	Tal .	5 U	5 U	5 U	SU	s u	5 U	5 U	5 U	Sυ	5 U	5 U	1.50 J.O	5 U	5 U	5 0
cie-1,3-Dichloropropene	ug/l		5 U.J.O	5 U	S U	SU	5 U	S U	5 U	5 U	SU	S U	S U	รบ	5 U	5 U,J.O	5 U
Cyclohesiane	ug/l	7.	5 U	5 U	S ti	S U	0,1,U	5 U	5 U	5 U	5 U	5 U	s u	5 U	5 U	5 U	5 U
Dibromochioromethane	ug/l	2.53	5 U	5 U.J,O	5 U	5 U	5 U,J,O	SU	5 U	5 U	5 U	S U	S U	5 U	5 U	S U	S U
Dichlorodifluoromethane	ug/l		S U.	5 U, J,O	5 U	5 U,J,O	S U,J,O	s u	5 U	5 U	S U	5 U	SU	SU	5 U	s u	5 U
Ethyl Benzene	ug/l	*	S U	19	5 U	53	5 U	5 U	10	S U	5 U	2 1,0	3.50 J,O	63	5 U	SU	74
sopropylbenzene	ug/l		5 U	4 3,0	ริย	6.50	Sü	5 U	5 U	S U	5 U	5 U	S U.R.O	8.80	5 U	5 U	9.50
Nethyl Acetute	ug/l		5 U.J,O	5 U	5 U,J,O	5 U.J,O	5 U	5 U.J.O	5 U.J.O	5 U.J.O	5 U	SU	5 U	su	S U.J.O	5 U,1.0	5 U,J,O
Nethyl Butyl Ketone	ug/l		10 U,J,O	10 U.J.O	10 U.I.O	10 U,J,O	10 U,J,O	10 U.J.O	10 U.J.O	10 U.LO	10 U	10 U	10 U	10 U	10 U.J.O	10 U.J.O	10 U.J.O
Nethyl Ethyl Ketone	ug/l		10 U.J.O	10 U	10 U.J.O	10 U.J.O	10 U	10 U.J.O	10 U.J.O	10 U,J,O	10 U.J.O	10 U	10 U,J,O	10 U,3,0	10 U.J.O	10 U.J.O	10 U,J,O
łethył Isobutył Ketone	ug/l		18 U.J.O	10 D	10 U,1,0	10 U,J,O	10 U	10 U,J,O	10 11,3,0	10 U,1,0	10 ft	10 U	10 U	1.50 J,O	10 U,1,0	10 U,J,O	10 U.J.O
Nethyl T-Butyl Ether (MTBE)	ug/l		5 U.J.O	5 U	5 U	5 U.J.O	S U	5 U,J,O	5 U	5 U	S U	5 U	5 U	5 U	5 4,3,0	5 U.J.O	5 U.J.O
-lethylcyclohexane	ug/1	190	5 U	S U	5 U	5 U	5 U.3,0	S U	5 U	5 U	5 U	5 U	S U	5 U	5 U	5 U	5 U
fethylene Chlonde	ug/l			5 U	SU			5 U.J.O	S U	5 U		1000	5 U	5 U			5 U.J.O
-Xylene	ug/l		50			40			3.90 3	5 U			2 3.0	52			49

		Station ID	200	220	260	281	282	283	285	286	400	420	440	480	700	720	760
		Sample ID	200-0112	220-0112	260-01:12	281-0112	282-0112	283-0112	285-0112	286-0112	400-0112	420-0112	440-0112	480-0112	700-0112	720-0112	760-0112
		Date	02/07/2012	02/07/2012	02/07/2012	02/06/2012	02/06/2012	02/06/2012	02/06/2012	02/06/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	02/06/2012	02/06/2012	02/06/201
		Time	09:10	09:17	11:10	12:35	09:45	11:10	10:30	13:05	15:30	13:40	14:00	14:30	15:15	16:35	15:50
Analyte	Units	Remediation Goal															
Styrene	ug/l	.91	5 U	5·U	5 U	1.20 J.O	S U	5 U	5 U	5 U	5 U	5 W	5 U.R.O	5 U	5 U	5 U	1.50 J,O
Tetrachloroethene (Tetrachloroethylene)	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	S U	5 U	5 U	5 U	5 U.R.O	5 U	5 U	5 U	5 U
Toluene	ug/l	-	5 U	2.30 J.O	5 U	6.60	5 U	5 U	1.10 J.O	5 U	5 U	5 U	1 2.0	120	5 U	5 U	25
trans-1/2-Dichloroethene	ug/l	-	SU	5 U	5 U	5 U	5 U	5 U	5 U	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	ug/l	12 "	5 U,J,O	SU	5 U	5 U	50	5 U	5 U	SU	5 U	5 U	5 U	5 U	5 U	5 U,I,O	50
Trichloroethene (Trichloroethylene)	ug/l	-	SU	S U	5 U	5 U	5 U	5 U	SU	SU	5 U	5 U	5 U.R.O	5 U	5 U	5 U	5 U
Inchlorofluoromethane (Freon 11)	ug/l		5 U.J,O	5 U	5 U	5 U,J,O	5 U	5 U.J.D	5 U	5 U	5 U	5 U	5 U	5 U	5 U.3,O	5 U.J.O	5 0,1,0
Vinyi chloride	ug/l	18	S U	5 U	SU	S U	5 U	SU	SU	SU	s u	5 U	5 U	5 U	5 U	5 U	5 U

- Result at or above the remediation goal

  U = analyte was not detected at or above the reporting limit.

  10 = presumptive evidence that analyte is present; reported as a bentative identification with an estimated value.

  J = the determination of the analyte is acceptable; the reported value is an estimate.

  F = The presence or absence of the analyte across the determined from the data due to severe quality control problems: the data are rejected and considered unusuable.

  O = See attached data sheets for information on additional qualifiers.

  Tentatively, Identified Compounds (TTCs) are not shown on this table, but are included in the analytical data sheets:

Table 6 VOC Results

							VO	C Results	5								
		Station ID	ACW4	ACW5	ACWMW1	ACWMW2	ACWMW3	C1001	C1002	C1003	C1004	C1005	C101	C102	C103	C104	C105
		Sample ID	ACW4-0112	ACW5-0112	ACMMW1-0112	ACWMW2-0112	ACWMW3-0112	C1001-0112	C1002-0112	C1003-0112	C1004-0112	C1005-0112	C101-0112	C102-0112	C103-0112	C104-0112	C105-01
		Date	02/05/2012	02/05/2012	02/07/2012	02/07/2012	02/07/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	01/31/2012	01/31/2012	.01/31/2012	01/31/2012	01/31/20
		Time	11:40	14:09	15:50	15:25	15:30	11:25	09:20	11:08	10:50	.09:15	11:28	14:25	16:10	15:00	15:50
		Remediation	22.40	2-1103	22.00												
Analyte	Units	Goal			***	7.20	Sυ	50	5 U	5 U	5 U	5 U	5 U	SU	59	50	5 U
m- and/or p-)Xylene	ug/l		5 U	5 U	61 5 U		50		5 U	5 U	5 U	SU	5 U	5 U	5 U	5 U	50
1,1-Trichloroethane	ug/l		5 U	5 U	5.0		5 U		SU	5 U	5 U.J.O	5 U	5 U	SU	5 U	5 U	5 U
1,2,2-Tetrachloroethane	ug/l		5 u	-					5 U	5 U	5 U	5 U	SU	5 U	5 II	5 U	50
,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l		5 U	5 LI	5 U	The state of the s			SU	5 U	5 U	5 U	5 U	5.0	5 U	5 U	5 U
,1,2-Trichloroethane	ug/l		50	5 U		-			5 U	5 U	5 U	5 U	50	5 U	5 U	SU	50
,1-Dichloroethene	ug/l	-	SU	5 U	5 U				50	5 U	50	5 U		5 U	0.78 1,0	5 U	SU
,1-Dichloroethene (1,1-Dichloroethylene)	ug/l		50	5 U	5 U	5 U	5 U		-,-	5 U	5 U	50	5 U	5 U	S U	5 U	5 U
,2,3-Trichlorobenzene	ug/l		SU	5 U	5 U	5 U	5 U	5 U	5 U		5 U	5 U		5 U	5 U	5 U	5 U
,2,4-Trichlorobenzene	ug/l		S U	5 U	5 U	50	5 U	SU	5 U	5 U	50,0			5 U	5 U	50	5 U
,2-Dibromo-3-Chloropropane (DBCP)	ug/l	,	5 U	5 U	5 0,1,0	5 U,J,O		5 U	5 U	5 11,1,0		5 U,J,O		5 U	5 U	5 U	5 U
.,2-Dibromoethane (EDB)	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	5 U	S U	5 U	7. 7.		5 U	5 U	5 U	5 U
,2-Dichlorobenzene	ug/ī		5 U	5 U	5 U	5 U	5 U	5 U	5 8	5 0	5 U	-				50	5.0
,2-Dichloroethane	ug/l	-	5 U	5 U	5 U	5 U		5 U	5 U	5 U	5.0	5 U	50	5 U	5 U		5 U
,2-Dichloropropune	ug/l	-	5 U	5 U	5 U	5.U	5 U	5 U	5 U	50	5 U	50	5 U	5 IJ	5 U	5 U	
1,3-Dichlorobenzene	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.0	5 U
,4-Dichlorobenzene	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	50	5 U	5 U	5 U	5 U	S U	5 U	5 U	50
,4-Dioxane	ug/I	-	100 U.R.O	100 U,R,O	100 U,R,O	100 U.R.O	100 U,R,O	100 U.R.O	100 U.R.O	100 U,R,O	100 U,R,O	100 U,R,O	100 U.R.O	100 U.R.O	100 U.R.O	100 U,R,O	100 U.R.C
Acetone	ug/l		10 U,R,O	10 U.R.O	10 U.R.O	10 U,R,O	10 U.R.O	10 U.R.O	10 U,R,O	10 U	10 U.R.O	10 U	10 U	10 U	10 U	10 0	10 U
Benzene	ug/l	91	5 U	SU	8.10	0.73 1.0	5 U	5 U	5 U	50	5 U	5 U	5 U	5 U	45	2.20 3.0	5 U
Bromochioromethane	ug/l	-	5 U	5 U	5 U	5 U	5 U	50	SU	5 U	5 U	5 U	5 U	5 U	5 U	50	5 U
Promodichloromethune	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/l	1	5 U	50	5 U	5 U	5 U	5 U	5 U	5 0,3,0	S U	5 U,J,O	5 0.1.0	5 0,3,0	5 0,3,0	5 0,0,0	5 U,3.0
Bromomethane	ug/l	-	50	5 U	5 U	5 U	5 U	50	5 U	5 U	5 U	5 U	5 U.J.O	5 U.J.O	5 0,3.0	5 U,J,O	5 U,3,0
Carbon disulfide	ug/l		50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50	SU	5 U	5 U
Carbon Tetrachloride	ug/t		5 U	SU	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50	50	5 U	5 U	5 U
Chlorobenzene	ug/l	-	5 U	50	5 U	5 U	5 U	50	5 U	5 U	50	5.0	5.U	5 U	5 U	50	5 U
Chloroethane	ug/l		5 U	50	5 U	5 U	5 U	5 U	5 U	511	5 U	5 U	5.0	5 U	SU	5 U	5 U
Chloroform	ug/l		50	SU	SU	5 U	5.0	50	5 U	5 U	SU	5 U	50	50	50	SU	5.0
Chloromethane	ug/f		5 U	5 U	50	5 U	5 U	50	50	SU	5 U	5 U	5 U	50	50	5 U	5 U
	-		50	5 U	50	5 U	50	50	5 U	5 U	SU	5 U	5 U	50	5 U	5.0	5 U
cis-1,2-Dichloroethene	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U .	5 U	5 U	5 U	5.U
cis-1,3-Dichloropropene	_		50	5 U	5 U	50	5 U	5 U	50	S U	5 U	5 U	5 U	5 U	50	5 U	5 U
Cyclohexane	ug/i		50	5 U	5 U	5 U	5 U	5 U	5 U	5 0,3.0	5 U	5 U.J.O	5 0	5 U	5 U	50	5 U
Dibromochloromethane	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U.J.O	50	50	5 U	5 U	5 U	SU	5 U
Dichlorodifluoromethane	ug/l			5 U	30	11	5 U	50	5 U	5 0	5 U	5 U	5 U	50	43	5.U	5 U
Ethyl Benzene	ug/l		5 U	-	6.60	2.40 1.0	5 U	50	5 U	5 U	5 U	5 U	5 U	5 U	6.90	5.0	S U
Isopropylberzene	ug/l		5 U	5 U				50	50	50	50	5 U	s u	5 U	5 U	5 U	5 U
Methyl Acetate	ug/l		50	5 U	5 U,J,O	5 U,J,O	5 U,J,O	10 U	10 U	10 11.10	10 U	10 U.J.O	10 U	10 U	10 U	10 U	10 U
Methyl Butyl Ketone	ug/l		10 U	10 U	10 0,3,0	10 0,3,0	10 U.J.O	-		10 U	10 U.J.O	10 U.J.O	10 U	10 U	10 U	10 U	10 U
Methyl Ethyl Ketone	ug/l		10 U	10 U	10 U,3,0	10 U.J.O	10 U,J.O	10 U	10 U,J,O	-	10 U.J.O	10 U.J.U	10 U	10 U	10 U	10 U	10 U
Methyl Isobutyl Ketone	ug/l		10 U	10 U	10 U,J,O	10 U,J,O	10 U.J.O	10 U	10 U	10 U			50	5 U	5 U	5 U	5.0
Methyl T-Butyl Ether (MTBE)	.ug/l		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U		5 U	5 U	5 U	5 U
Methylcyclohexane	ug/l	:00	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1			5 U
Methylene Chloride	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.0	5 U	5 U	5 U	5.0	s u
o-Xylene	ug/l		5 U	5 U	32	3.80 3,0	รบ	50	5 U	5 U	5 U	s.U	5 U	5 U	29	50	Pu

								C recount	•								
		Station ID	ACW4	ACW5	ACWMW1	ACWMW2	ACWMW3	C1001	C1002	C1003	C1004	C1005	C101	C102	C103	C104	C105
		Sample ID	THE RESIDENCE OF THE PARTY OF T	ACW5-0112	ACWMW1-0112	ACWMW2-0112	ACWMW3-0112	C1001-0112	C1002-0112	C1003-0112	C1004-0112	C1005-0112	C101-0112	C102-0112	C103-0112	C104-0112	C105-011
		Date		02/05/2012	02/07/2012	02/07/2012	02/07/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	01/31/201
		Time	11:40	14:09	15:50	15:25	15:30	11:25	09:20	11:08	10:50	09:15	11:28	14:25	16:10	15:00	15:50
Analyte	Units	Remediation Goal															
Shriene	ug/l	-	S U	5 U	1.60 3.0	5 U	5 U	5 U	5 U	5 U	5 U	S U	5 U	5 U	1000000		50
Tetrachloroethene (Tetrachloroethylene)	ug/l	-	5 U	50	5 U	SU	5 U	5 U	SU	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	ug/l	-	5 U	5 U	21	2.40 3.0	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	45	50	SU
trans-1,2-Dichloroethene	ug/i	-	5 U	5 U	5 U	5 U	5 U	5 U	50	s u	5 U	5 U	5 U		SU	0.10	50
trans-1,3-Dichloropropene	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	S U	5 U	5 U	5 U	5 0	5 U			50
Trichloroethene (Trichloroethylene)	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U		5 U	5 U			50
Trichtorofluoromethane (Freori 21)	ug/l	-	5 U	SU.	5 U	50	5 U	5 U	5 U	5 U	5 U		5 U				SU
Vinyl chloride	ug/l	-	5 U	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50	50	5 U

Result at or above the remediation goal

U = analyte was not detected at or above the reporting limit
No = presumptive evidence that analyte is present; reported as a tentiative id
J = the identification of the analyte is acceptabler the reported value is an e
R = The presence or absence of the earlyte cannot be determined from the di
O = See attached data sheets for information on additional qualifiers
Tentatively Identified Compounds (TTICs) are not shown on this table, but are

Table 6 VOC Results

		Station ID	C201	C202	C203	C204	C205	C206	C301	C302	C303	€401	C402	C403	C404	C405	C406
		Sample ID		C202-0112	C203-0112	C204-0112	C205-0112	C206-0112	C301-0112	C302-0112	C303-0112	C401-0112	C402-0112	C403-0112	C404-0112	C405-0112	C406-011
		Date	02/07/2012	02/07/2012	02/07/2012	82/07/2012	02/07/2012	02/07/2012	02/08/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/20:
		Time	11:10	11:15	13:45	14:15	14:00	10:58	14:15	14:48	13:55	11:25	11:00	09:35	09:35	09:24	11:15
Analyte	Units	Remediation Goal													2		15
(m- and/or p-)Xylene	ug/l		SU	5 U	SU	SU	S U	5 U	5 U	su	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/l		SU	SU	5 U,J,O	su	5 U	รม	5 ILJ.O	su	5 U	SU	Sul	SU	50	SU	5 U
1,1,2,2-Tetrachloroethane	ug/l		5 U	50	5 U,1,0	SU	5 U	SU	5 U,J,O	S U	5 U	5 U	5 U	5 U,2,0	5 U	su	5 U
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l		S U	5 U	5 0,20	SU	5 U	SU	5 ULLO	5 U	5 U	s u	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/l		su	SU	5 U	S U	Sυ	รบ	su	s u	ร บ	s u	5 U	S U	5 U	5 U	5 U
1,1-Dichloroethane	ug/l	*	5 U	SU	5 U	s u	5 U	SU	SU	s u	5 U	s u	s u	SU	5 U	SU	5 U
1,1-Dichloroethene (1,1-Dichloroethylene)	ug/l	-	5 U	SU	S U	5 U	5 U	5 U	5 U	S U	5 U	S U	5 U	s u	5 U	5 U	5 U
1,2,3-Trichlorobenzene	ug/l		5 U		sυ	5 U	5 U	S U	5 U	s u	5 U		5 U	SU	5 U	5 U	5 U
1,2,4-Trichlarobenzene	ug/l		SU	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-Chloropropane (DBCP)	ug/l	- 5	S U,J,O		5 U,J,O	5 U.J.O	5 U,J,O	5 U.J.O	5 U,J,O	5 U	5 U		5 U	5 U,J,O	5 U	5 U	5 U
1,2-Dibromoethane (EDB)	ug/l		5 U		5 U.J.O	S U	50	5 U	5 U.J.O	s u	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	ug/l		5 U	5 U	5 U	5 U	2.70 3.0	5 U	5 U	5 U	5 U	5 U	5 U	S U	5 U	5 U	5 U
1,2-Dichloroethane	ug/f		5 U		5 U,J,O	5 U	5 U	5 U	5 U,J,O	S U	5 U		50	5 U	50		5 U
1,2-Dichloropropane	ug/l		5-0		5 U	5 U	5 0	5 U	5 U	5 U			50	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	ug/l		SU	SU	5 U	5 U	5 U	5 U	5 U	s u	50	5 U	5.U	SU	5 U	s u	5 U
1,4-Dichlorobenzene	ug/l	14	5 U		5 U	5.U	5 U	5 U	5 U	5 U			5 U	5 U	5 U	5 U	5 U
1,4-Dioxane	ug/l	-	100 U,R,O	100 U.R.O	100 U,R,O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O							
Acetone	ug/l		10 U,R,O	10 U	10 U.R.O	10 U,R,O	10 U.R.O	10 U.R.O	10 U,R,O	10 U.R.O		10 U	10 U	10 U	10 U	10 U.R.O	10 U
Benzene	ug/l	91	5 U		SU	5 U	5 U			SU				5 U	5 U	5.30	5 U
Bromochloromethane	ug/l	-	5 U		\$ U	5 U	5 U		T. T.	S U				5 U	5 U	5 U	5 U
Bromadichlaramethane	ug/l	-	50			5 U				5 U			5 U	5 U	S U		5 U
Bromaform	ug/l	1.51	5 U		5 U	S U	SU		marrie 1	5 U			5 U,J,O	5 0.3.0	5 U.J.O	5 U	5 U.J.O
Bromomethane	ug/l		su			SU				5 U				5 0,1,0	2 n'10		5 0,1,0
Carbon disulfide	ug/l	-	5 U				5 U			5 U				5 U	-	Towns and the same of the same	5 U
Carbon Tetrachloride	ug/l	-	SU							5 U				5 U	5 U		5 U
Chlorobenzene	ug/l	5.0	SU		5.5		5 U		200	5 U				5 U	5 U	Annual Control of the	5 U
Chloroethane	ug/l	-	5 U	1	5 U			7000		50				5 U	5 U		S U
Chloraform	ug/l	-	SU		5 U					5 U				5 U			5 U .
Chloromethane	ug/l		5 0		5 U	-	5 U	955E		5 U				5 บ			5 U
cis-1,2-Dichloroethene	ug/l		SU		S U		S U			5 U			5 U	5 U			5 บ
cis-1,3-Dichloropropene	ug/l		SU				S U			5 U		-	5 U	5 U		5 U	5 U
Cyclohexane	ug/l	950	5 U.		5 U		5 U			5 U			5 U	5 U			5 U
Dibromochloromethane	ug/l		S U.		S U	5 U	S U		S U	5 U			5 U	50			5 U
Dichlorodifluoromethane	ug/l		S U	-	2 n'1'0					50		3350	-	5 U	200		5 U
Ethyl Benzene	ug/l		SU		SU				200	5 U		S U	SU	รข		2000	5 U
tsopropylbenzene	ug/l						5 U			5 U			-				5 U
Rethyl Acetate	ug/l				0,L,U 2		O,C,U 2							5 U		5 U	5 U
Methyl Butyl Ketone	ug/l	*			10 U,3,0		10 U,J,O		10 U.J.O			10 U		10 U		10 U	10 U
Methyl Ethyl Ketone	ug/I		10 0,3,0		10 U.J.O		10 U.J.O		10 U.J.O			10 U		10 U			10 U
Methyl Isobutyl Ketone	ug/l	-	10 U.J.O		10 U.J,O	10 U,J,O	100	-	10 U,J,O	10 U		10 U		10 U			10 U
Methyl T-Butyl Ether (MTBE)	ug/l		5 U							5 U				5 U			5 U
Methylcyclohexane	ug/l		S U		SU	5 U				5.U	5 U			SU		-	S U
Methylene Chloride	ug/l			7.00						5 U		100	-				5 U
-Xylene	ug/i		5 U	5 U	S U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

							40	C INCOUNT	•								
		Station ID	C201	C202	C203	C204	C205	C206	C301	C302	C303	C401	C402	C403	C404	C405	C406
		Sample ID	C201-0112	C202-0112	C203-0112	C204-0112	C205-0112	C206-0112	C301-0112	C302-0112	C303-0112	C401-0112	C402-0112	C403-0112	C404-0112	C405-0112	C406-011
		Date	02/07/2012	02/07/2012	02/07/2012	02/07/2012	02/07/2012	02/07/2012	02/08/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/201
		Time	11:10	11:15	13:45	14:15	14:00	10:58	14:15	14:48	13:55	11:25	11:00	09:35	09:35	09:24	11:15
		Remediation															1- 22-12
Analyte	Units	Goal															
ityrene	ug/I		su	5 U	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene (Tetrachloroethylene)	ug/l	-	SU	SU	5 U	5 U	5 U	5 U	S U	5 U	5 U	5 U	5 U	SÜ	5 U	5 U	5 U
Coluene	ug/l		5 U	5 U	SU	5 U	5 U	5 U	5 U	5 U	S U	5 U	5 U	SU	5 U	5 U	5 U
rans-1,2-Dichloroethene	ug/l		SU	5 U	S.U	S U	SU	5 U	5.U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
rans-1,3-Dichloropropene	ug/l	-	SU	5 U	SU	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
richloroethene (Trichloroethylene)	ug/l	-	5 U	5 U	SU	s u	5 U	5 U	5 U	s u	5 U	5 U	5 U	S U	S U	5 U	5 U
richlorofluoromethane (Freon 11)	ug/t	-	5 U	5 U	5 U,J,O	5 U	5 U	5.0	5 4,1,0	s u	50	5 U	5 U	5 U	5 U	5 U	5.U
/inyl chloride	ug/l		S U	5 U	S U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Result at or above the remediation goal

U = analyte was not detected at or above the reporting limit

I/O = presumptive evidence that analyte is present; reported as a tentative id;

I= the identification of the analyte is acceptable; the reported value is an ex

R = The presence or absence of the analyte cannot be determined from the du

O = See attached data sheets for information on additional qualifiers

Tensatively Identified Compounds (TTGs) are not shown on this table, but are

							•0	C Result	•					_			
		Station ID	C406	C501	C502	C502	C503	C504	C505	C506	C601	C602	C603	C604	C605	C701	C702
		Sample ID	C406T-0112	CS01-0112	CS02-0112	CS02D-0112	C503-0112	C504-0112	C505-0112	C506-0112	C601-0112	O602-0112	C603-0112	C604-0112	C605-0112	C701-0112	C702-01
		Date	02/02/2012	02/03/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	02/05/2012	02/05/20
		Time	12:01	16:00	09:18	09:25	10:30	09:00	10:45	09:15	14:00	15:25	14:10	14:40	13:36	16:00	16:00
Analyte	Units	Remediation Goal															
m- and/or p-)Xylene	ug/l		SU ·	5 U	5 U	S U	5 ប	5 U	65	120		5 U	5 U	5 U	5 U	5 U	SU
1,1-Trichloroethane	ug/l	-	5 U	5 U	50	5 U	SU	5 U	5 U	SU	SU		5 U	5 U	5.0	5 U	50
1.2.2-Tetrachloroethane	ug/l		5 U.J,O	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
.1.2-Trichloro-1.2.2-Trifluoroethane (Freon 113)	ug/l	-	5 U	5 U	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50	5 U	5 U	5 U
.1.2-Trichloroethane	ug/l		Str	5 U	5 U	S U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
.1-Dichloroethane	ug/i	-	5 U	SU	5 U	S U	5 U	S U	5 U	5 U	50	5 U	s u	5 U	5 U	5 U	5 U
,1-Dichloroethene (1,1-Dichloroethylene)	ug/l	1.	5 U	5 U	5 U	S U	0.53 3,0	5 U	5 U	0.52 3,0	S U	5 U	0.50 J,O	5 U	S U	5.0	5 U
.2.3-Trichlorobenzene	ug/l		su ·	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50	5 U	5 U
.2.4-Trichlorobenzene	ug/l	-	Su	5 U	5 U	SU	SU	S U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
.2-Dibromo-3-Chloropropune (DBCP)	ug/l		5 U.J.O	su	5 U	5 U	5 U	5 U	5 U	5.U	5 U	5 U	5 U	S U	5 0	5 U	5.0
1.2-Dibromoethane (EDB)	ug/l	-	SU	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.0	5 U	5 U	5 U	5 U	5 8	5 U
.2-Dichlorobenzene	ug/l		SU	-1-1		5.0	5 U	S U	SU	5 U	5 U	5 U	50	5 U	5 U	5 U	5 U
.2-Dichloroethane	ug/l		s u			SU	5 U	50	5 U	5 U	5 U	5 U	5 U	SU	SU	5 U	5 U
	ug/i	-	5 U			5 U.J.O	5 U.J.O	50	50	5 U	5 U	5 U.J.O	5 U	5 U	SU	5 U	5 U
,2-Dichloropropune ,3-Dichlorobenzene	ug/l	-	50			5 U	5 U	5 U	SU	50	5 U	5 U	5 U	5 U	รบ	50	5 U
	ug/l	-	50			5 U	5 U	50	SU	5 U	5 U	50	5 U	SU	รม	50	50
,4-Dichlorobenzene	ug/l	-	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.							
4-Dioxane		-	10 U	10 U.R.O	46 1,0	110 3.0	10 U.R.O	10 U.R.O									
Acetone	ug/l				-	5 U	5 U	5 U	75	170			5 U	50	5 U	5 U	5 U
Benzene	·ug/l		5 U	5 U		5 U	5 U	5 U	5 U	5 U		50	50	5.0	SU	50	5 U
Bromochloromethurie	ug/l	-	-	5 U	5 U	5 U.J.O	5 0,3,0	50	50	5 U		5 U.J.O	5 U	S U	5 U	5 U	5 U
Bromodichloromethane	ug/l		5 U	5 U	50	5 0,3,0	5 U	5 U	5 U	5 U	-	5 U	5 U	s u	SU	5 U	S U
Bramafarm	ug/l	-	5 4,3,0				5.0	5 U	50	5 0,3,0	5 U	5 U	5 U	SU	S U	50	5 U
Bromomethane	ug/l	-	5 U.J.O	5 U	5 U	5 U	5 U	5 U	SU	0.51 3,0		5 U	5 U	SU	SU	5 U	5 U
Carbon disulfide	ug/l	-	5 U	50	5 U	5 U	5 U	50	50	5 U	-	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	ug/l	*	5 U	5 U	50	5 U				5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/l	7.5	5 U	5 U	5 U	5 U	5 U	5 U	50	-	-	5 U	5 U	SU	SU	5 U	5 U
Chloroethane	ug/t	-	5 U	5 U	5 U	5 U	5 U	5 U	50	5 U,J,O 5 U		50	5 U	5 U	SU.	5 U	50
Chloroform	ug/t	*	5 U	50	50	5 U	5 U	5 U	50			-	5 U	5 U	5 U	5 U	50
Chloromethane	ug/l		5 U	50	5 U	5 U	5 U	5 U	5 U	5 0,3,0		5 U			50	5 U	50
cis-1,2-Dichloroethene	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U		5 U	7.80	2.90 1,0		5 U	5.0
cis-1,3-Dichlaropropene	ug/i	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U		5 U	5 U	5 U	5 U	5 U	50
Cyclohexane	ug/l		5 U	5 U	5 U	5 11,10	5 U,1,0	5 U	5 U	5 U	-	5 U,1,0	5 U	5 U		50	5 U
Dibromochloromethane	ug/l	-	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U		5 U	5 U	5 U	5 U	50	5 U
Dichlorodifluoromethane	ug/i	-	50	5 U	50	5 U	5 U	5 U	5 U	5 0,00		5 U	5 U	50	50	50	50
Ethyl Benzene	ug/l		5 U	5 U	5 ช	5 U	5 U	5 U	36	58		5 U	5 U	5 U	5.U	- 1-	-
sopropylbenzene	ug/i		50	5 U	5 U	5 U	5 U	5 U	4.40 1,0	7		5 U	5 U	5 U	5 U	50	5 U
Methyl Acetate	ug/l	-	5 U	5 U	5 ប	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hethyl Butyl Ketone	ug/l	-	10 U	2.30 1,0	6.40 3.0	10 U	10 U										
Nethyl Ethyl Ketone	ug/l		10 U	10 U.J.O	10 U	27	10 U,3,0	10 U	10 U	10 U,J,O	10 U,J,O	10 U	10 U				
Methyl Isobutyl Ketone	ug/l		10 U	4.20 3,0	7.50 3,0	10 U	10 U										
Methyl T-Butyl Ether (MTBE)	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	5.0	5 U	5 U	5 U	5 U	50	5 U	5 U	5.0
Methylcyclohexane	ug/l		5 U	5 U	5 U	5 U,J,O	5 0,0,0	5 U	5 U	5 U	5 U	5 U,J,O	s u	5 U	5 U	5 U	5 8
Methylene Chloride	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	SU	5 U
o-Xylene	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	31	57	5.U	5 U	5 U	5 U	5 U	5 U	5 U

## Table 6 VOC Results

	Station ID C406 C501 C502 C502 C503 C504 C505 C506 C601 C602 C603 C604 C605 C701 C702 C702-0112 C503-0112																
		Station ID	C406	C501	C502	C502	C503	C504	C505	C506	C601	C602	C603	C604	C605	C701	C702
		Sample ID	C406T-0112	C501-0112	C502-0112	C502D-0112	C503-0112	C504-0112	C505-0112	C506-0112	C601-0112	C502-0112	C603-0112	C604-0112	C605-0112		
		Date	02/02/2012	02/03/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	02/05/2012	200
		Time	12:01	16:00	09:18	09:25	10:30	09:00	10:45	09:15	14:00	15:25	14:10	14:40	13:36	16:00	16:00
	Table																i
Analyte	Units	Goal													F44	F 11	F 11
Styrene	ug/l		50	5 U	50	50	5 U	5 U	5,70					5.5			
Tetrachloroethene (Tetrachloroethylene)	ug/l		5 U	5 U	5 U	50	S U	5 U	5 U				SU		50		50
Toluene	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	73		-		5 U		5 U	5 U	S U
trans-1,2-Dichloroethene	ug/l		50	5 U	5 U	5 U	5 U	5 U	5 U	50	5 U		5 U	5 U	5 U	5 U	50
trans-1,3-Dichloropropene	ug/l		5 U	5 U	5 U	5 U	1.30 3,0	5 U	50	2.0	5 U			-	5.0		5 U
Trichloroethene (Trichloroethylene)	ug/l		5 U	5 U	5.0	5 U	5 U	5 U	50			-			50		5 U
Trichlorofluoromethune (Freon 11)	ug/l	-	5 U	50	5 U	5 U	5 U	5 U	5 U	-	50				5 U	5 U	5 U
Vinyl chloride	ug/l		5 U	5 U	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50	5 U	5 U	50	5 U

Result, at or above the remediation goal

U = analyte was not detected at or above the reporting limit.

10 = presumptive evidence that analyte is present; reported as a tentative id.

3 = the identification of the analyte is acceptables the reported value is an ei.

R = The presence or absence of the analyte cannot be determined from the d.

O = See attached data sheets for information on additional qualifiers.

Tentatively Identified Compounds (TTGs) are not shown on this table, but are

Table 6 VOC Results

		Station ID	C703	C704	C801	C802	C803	C804	C805	C901	C902	C903	C904	C905	MW1	MW1A	MW2
		Sample ID	C703-0112	C704-0112	C801-0112	C802-0112	C803-0112	C804-0112	C805-0112	C901-0112	C902-0112	C903-0112	C904-0112	C905-0112	MW1-0112	MW1A-0112	MW2-0112
		Date	02/05/2012	02/05/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	02/03/2012	02/01/2012	02/01/2012
		Time	13:30	15:05	09:35	10:24	10:30	09:15	08:49	10:55	10:45	11:52	11:55	14:55	11:30	11:55	15:25
Analyte	Units	Remediation				N. A. H. C. T. S.						-					
(m- and/or p-)Xylene	ug/l		S U	s u	SU	SU	5 U	5 U	5 U	Su	38	0.89 3,0	5 U	รับ	5 U	5 U	5 U
1.1.1-Trichloroethane	ug/l		SU	SU		5 U	5 U	70.77	5 U.10	SU	SU		5 U	5 U	5 U	5 U	5 U
1.1.2.2-Tetrachloroethane	ug/l		SU	SU	SU		SU	200	5 0,3,0	su	su	200	5 U	5 U	S U	SU	5 0,1,0
1.1.2-Trichigro-1.2.2-Triffugroethane (Freon 113)	ug/l		SU	s u	-		5 U	Section .	5 4,3,0	SU	SU	3500	5 U	50	SU	5.0	50
1,1,2-Trichloroethane	ug/l		SU	5 U	100.00	200	5 U	111/00	5 U	su	Su	2017	5 U	SU	SU	SU	5 U
1,1-Dichloroethune	ug/l		SU	s u		75, 176	5 U	10.000	5 11.10	su	s u	75.10%	5 U	5 U	s u	SU	50
1,1-Dichloroethene (1,1-Dichloroethylene)	ug/I		0.55 1.0	SU	SU	su	5 U	50	SU	SU	SU		5 U	s u	su	su	5 U
1,2,3-Trichlorobenzene	ug/l		S U	5 U	5 U	su	5 U	5 U	5 4,1,0	SU	su	5 U	0.71 1.0	5 U	SU	5 U	5 U
1.2.4-Trichlorobenzene	ug/l		Su	Su	SU	s u	SU		5 0,1,0	SU	S U	Su	50	5 U	5 U	5 U	5 U
1.2-Dibromo-3-Chloropropane (DBCP)	ug/l		SU	SU	su	SU	5 U	s u	5 U.J.O	SU	su	s u	5 U	SU	su	SU	5 U.J.O
1,2-Dibromoethane (EDB)	ug/l		SU	su	National Control of the Control of t	SU	SU		5 U.J.O	SU		S U	5 U	SU	SU	SU	50
1,2-Dichlorobenzene	ug/l		5 U	5 U		The state of the s	5 U	-	5 4.1,0	5 U	5 U	5 U	0.93 3.0	5 U	5 U	5 U	5 U
1.2-Dichloroethane	ug/l		5 U	su	SU	SU	5 U	5 U	5 11,10	SU	SU	S U	5 U	SU	SU	su	5 U
1,2-Dichloropropane	ug/l	-	S U	5 U.J.O	SU	su	5 U	5 U	5 U.J.O	s u	5 U	S U	5 U	รบ	SU	s u	5 U
1.3-Dichlorobenzene	ug/l		S U	5 U	su	su	5 U	5 U	5 U.J.O	su	su	S U	รบ	SU	su	s u	5 U
1.4-Dichlorobenzene	ug/l		5 U	5 U	5 U	s u	5 U	5 U	5 4.3.0	su	Sυ	5 U	5 U	S U	SU.	5 U.	5 U
1,4-Dioxane	ug/l		100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U,R,O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O	100 U.R.O
Acetone	ug/l	1.2	10 U,R,O	10 U.R.O	10 U.R.O	10 U.R.O	10 U.R.O	10 U.R.O	10 U.R.O	10 U	10 U	10 U	10 U	10 U	10 U.R.O	10 U	10 U
Benzene	ug/l	91	SU	SU	su	su	5 U	5 U	5 U	5 U	4.10 1.0	1.30 ),0	5 U	5 U	5 U	0.94 J.O	5 U
Bromochloromethane	ug/l		SU	5 U	50	5 U	5 U	5 U	5 0.3.0	5 U	5 U	5 U	5 U	50	5 U	5 U	5.0
Bromodichloromethune	ug/l		SU	5 U,J,O	SU	5 U	5 U	5 U	5 U.J.O	5 U	S U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/l	*	SU	S U	5 U	5 U	5 U	5 U	5 U.J.O	5 U,J,O	5 U.J.O	5 U.J.O	5 U.J.O	5 U,J,O	5 U	5 U.J,O	5 U.J.O
Bromomethane	ug/l		5 U	su	5 U	5 U	5 U	5 U	5 U	5 U.J.O	5 U.1,O	5 U.J.O	5 U.LO	5 U.J.O	5 U	5 U.J.O	5 0.3.0
Carbon disulfide	ug/l		5 U	5 U	SU	S U	5 U	5 U	5 U	5 U	5 U.J.O	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	ug/i	-	5 U	5 U	SU	S U	5 U	5 U	5 U.J.O	SU	5 U	s u	5 U	su	5 U	5 U	5 U
Chiarabenzene	ug/l		SU	5 U	5 U	5. U	5 U	5 U	5 U.J.O	su	s u	5 U	5 U	5 U	S U	5 U	5 U
Chloroethane	ug/l		5 U	5 U	5 U				5 Ų	5 U			5 U	5 U	5 U	5 U	5 0
Chloroform	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	5 U, 1.0	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	ug/l		5 U	SU	SU	\$ U	5 U	SU	5 U	5 U	2 n'1'0	รบ	Sυ	su	5 U	SU	S U
cis-1,2-Dichloroethene	ug/l		5 U	SU					5 U	S U			5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	ug/l		5 U	5 U				5 U	5 U	5 U			5 U	su	5 U	5 U	5 U
Cyclohexane	ug/l		SU						5 U,J,O	S U			5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	ug/l	V	s u						5 U,1,0	5 U			5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	ug/l		5 0	5 U	2.0	1000			S U	SU			5 U	5 U	5 U	5 0	5 U
Ethyl Berzene	ug/l		S U		2.5350			-	SU	5 U		D. T.	5 U	5 U	5 U	5 U	5 U
Isopropyibenzene	ug/1		SU			70.77	THE STATE OF THE S		S U	SU		#20505-562FF	5 U	5 U	5 U	5 U	5 U
Methyl Acetate	ug/1		SU						5 0,3,0	S U			5 U	su	5 U	5 U	5 U
Methyl Butyl Ketone	ug/l		10 U	10 U	ee.e.	10 U			10 U	10 U			10 U				
Methyl Ethyl Ketone	ug/l		10 U	10 U		10 U			10 U	10 U			10 U	10 0	10 U	10 U	10 U
Methyl Isobutyl Ketone	ug/l		10 U	10 U					10 U	10 U			10 U				
Methyl T-Butyl Ether (MTBE)	ug/l		5 U	5 U		5 U	SU		S U.J.O	5 U	-		5 U	su	5U .	5 U	5 U
Methylcyclohexane	ug/l			5 U,J,O			-	-	5 U,3,0	5 U			5 U	SU	5 U	5 U	5 U
Methylene Chloride	ug/l				2.2.				5 U.J.O	5 U			5 U	SU	5 U	Sυ	5 U
a-Xylene	ug/l	*	S U	5 U	s u	5 U	5 U	5 U	5 U	SU	17	5 U	50	5 U	5 U	50	5 U

									-								
		Station ID	C703	C704	C801	C802	C803	C804	C805	C901	C902	C903	C904	C905	MW1	MW1A	MW2
		Sample ID	C703-0112	C704-0112	C801-0112	C802-0112	C803-0112	C804-0112	C805-0112	C901-0112	C902-0112	C903-0112	C904-0112	C905-0112	MW1-0112	MW1A-0112	MW2-01
		Date	02/05/2012	02/05/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	02/03/2012	02/01/2012	02/01/20
		Time	13:30	15:05	09:35	10:24	10:30	09:15	08:49	10:55	10:45	11:52	11:55	14:55	11:30	11:55	15:25
Analyte	Units	Remediation Goal											u.				
Styrene	ug/l		s u	SU	50	S U	S U	5 U	5 U	SU	4.80 1.0	50	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene (Tetrachloroethylene)	ug/l	-	0.54 3,0	SU	5.0	5 U	0.71 1,0	5 U	S U	\$ U	5 U	5 ប	5 U	5 U	5 U	5 U	5 U
Toluene	ug/l		SU	5 U	SU	5 U	5 U	5 U	5 U	SU	14	5 U	5 U	5 U	5 U	5 U	5 U
ans-1,2-Dichloroethene	ug/l		5 U	SU	5 U	5 U	5 U	5 U	5 U	SU	5 U	5 U	5 U	5 U	5 U	5 U	5.0
trans-1,3-Dichloropropene	ug/l	-	5 U	SU	SU	5 U	5 U	5 Ų	5 U	SU	SU	5 ប	5 U	SU	5 U	5 U	5 U
Frichloroethene (Trichloroethylene)	ug/l		5 U	SU	5 U	5 U	5 U	5 U	S U	s u	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Frichlorofluoromethane (Freon 11)	ug/l	- :	5 U	S U	SU	5 U	5 U	5 U	47 1,0	SU	5 U	5 U	5 U	S U	5 U	5 U	5 U
/inyl chloride	ug/l		5 U	5 U	S U	5 U	5 U	5 U	5 U	S U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Result at or above the remediation goal

I analyte was not detected at or above the reporting limit.

10 in presumptive evidence that analyte is present; reported as a tentutive of I in the identification of the analyte is acceptable; the reported value is an ex.

In The presence or absence of the analyte cannot be determined from the duty.

I have been a stached data sheets for information on additional qualifiers.

Tentatively Identified Compounds (TTCs) are not shown on this table, but are

Table 6 **VOC Results** 

		Station ID Sample ID		MW3 MW3D-0112	MW4-0112	MW5 MW5-0112	MW6 MW6-0112	OW09 OW9-0112	OW10 OW10-0112	PYCDSM-0112	PYCDSN-0112	PYCDSS-0112	PYCWCB-011
		Date		02/01/2012	02/01/2012	02/01/2012	02/01/2012	02/04/2012	02/06/2012	02/02/2012	02/02/2012	02/02/2012	02/06/201
		Time	12:20	12:30	10:20	09:35	16:21	15:50	17:15	15:55	16:35	16:20	11:40
	_	Remediation	12:20	12:30	10:20	09:35	10,21	23.30	17.123	23133	20.55		
Analyte	Units	Goal											
(m- and/or p-)Xylene	ug/l	-	5 U	5 U	2.80 3,0	5 U	1 3.0	2.30 3,0	5 U	5.0	1.80 J,O	5 U	5 U
1,1,1-Trichloroethane	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U,J,O	5 U	50	5 U	5 0,0,0
1,1,2,2-Tetrachloroethane	ug/l	-	50	5 U	5 U	5 U	5 U	5.0	5 U,J,O	5 U	5 U	5 U	5 U,J,O
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	08	5 U	5 U	5 U	5 U	5 U	5 U	5 U,J,O	5 U	5 U	5 U	5 0,3,0
1,1,2-Trichloroethane	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/i	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.0	5 U	5 U
1,1-Dichloroethene (1,1-Dichloroethylene)	ug/i		5 U	5 U	5 U	5 U	5 U	0.51 J,O	5 U	5 U	5 U	5 U	5 U
1.2.3-Trichlarobenzene	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5.0	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	ug/i	-	5 U.	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50	5.0
1,2-Dibromo-3-Chloropropane (DBCP)	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U.J.O	5 U	5 U	5 U	5 0.3.0
1.2-Dibromoethane (EDB)	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	5 0,3,0	5 U	50	5 U	5 U.J.O
1,2-Dichlorobenzene	ug/i	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1.2-Dichloroethane	ug/l		5 U	5 U	5 U	5 U	5 U	SU	5 U,J,O	5 U	5 U	5 U	5 U.J.O
1,2-Dichloropropane	ug/I	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	ug/l	-	5 U	5 U	5 U	5 U	5 U	50	5 U	5 U	5 U	5 U	5 U
1.4-Dichlorobenzene	ug/l	-	5 U	5 U	5 U	50	5 U	50	5 U	50	5 U	5 U	5 U
1.4-Dioxane	ug/l	-	100 U,R,O	100 U.R.O	100 U,R,O	100 U,R,O	100 U,R,O	100 U,R,O	100 U.R.O	100 U,R,O	100 U,R,O	100 U,R,O	100 U.R.O
Acetone	ug/l		10 U	10 U	10 U	10 U	10 U	10 U,R,O	10 U,R.O	10 U	10 U	10 U	10 U,R,O
Benzene	ug/l	91	5 U	5 U	3.30 3.0	5 U	2,10 3,0	SU	5 U	5 U	5.20	5 U	SU
Bromochloromethane	ug/l	-	5 U	5 U	5 U	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/l	(5)	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/l	-	5 U,J,O	5 U.J,O	5 U,J,O	5 U,J,O	5 U,3,O	5 U	5 U	5 U,J,O	5 U,J,O	5 U,J,O	5.0
Bromomethane	ug/l	-	5 U.J.O	5 U,J,O	5 U,J,O	5 U.J.O	5 U,J,O	5 U	5 U	5 U,J,O	5 U,J,O	5 U,J,O	50
Carbon disulfide	ug/l	-	5 U	5 U	5 U	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	ug/l	-	5 U	5 บ	5 U	5 U	5 U	5 U	5 U,J,O	5 U	5 U	5 U	5 U.J.O
Chlorobenzene	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	ug/l	-	5 U	SU	5 U	5 U	5 U	SU	5 U	5 U	5 U	5 U	5 U
Chloroform	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	ug/l	-	SU	S U	5 U	5 U	50	5 U	SU	5 U	5 U	5 U	5 U
cis-1.2-Dichloroethene	ug/l		S U	5 U	5 U	5 U	50	4.20 3,0	sυ	5 U	50	5 U	5 U
cis-1,3-Dichloropropene	ug/l	-	SU	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50
Cyclohexane	ug/l	-	5 U	SU	SU	5 U	50	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	ug/i	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50
Dichlorodifluoromethane	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethyl Benzene	ug/l	-	5 U	5 U	1.20 1.0	5 U	0.52 1.0	5 U	5 U	5 U	2 3,0	5 U	5 U
Isopropylbenzene	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.71 3,0	5 U	5 U
Methyl Acetate	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U,J,O	5 U	5 U	5 U	5 U,3,0
Methyl Butyl Ketone	ug/l		10 U	10 U	10 U	10 U	10 U	10 U	10 U.J.O	10 U	10 U	10 U	10 U.J.O
Methyl Ethyl Ketone	ug/l	-	10 U	10 U	10 U	10 U	10 U	10 U	10 U.J.O	10 U	10 U	10 U	10 U.J.O
Methyl Isobutyl Ketone	ug/l		10 U	10 U	10 U	10 U	10 U	10 U	10 U.J.O	10 U	10 U	10 U	10 U.J.O
Methyl T-Butyl Ether (MTBE)	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U.J.O	50	5 U	5 U	5 U,J,O
Methylcyclohexane	ug/l		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylcyclonexane Methylene Chloride	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 0,3,0	5 U	5 U	5 U	5 U,J,O
AL TOTAL PROPERTY OF THE PROPE	ug/i	-	50	50	1.20 1.0	5 U	5 U	2,40 3,0	5 U	50	0.80 J,O	5 U	5 U
o-Xylene	ug/I	1.5	30	20	and sold	100	1-0	210	1	1	1	T-	1

		Station ID	MW3	MW3	MW4	MW5	MW6	OW09	OW10	PVCDSM	PYCDSN	PYCDSS	PYCWCE
		Sample ID	MW3-0112	MW3D-0112	MW4-0112	MW5-0112	MW6-0112	OW9-0112	OW10-0112	PYCD5M-0112	PYCDSN-0112	PYCD55-0112	PYCWCB-01
		Date	02/01/2012	02/01/2012	02/01/2012	02/01/2012	02/01/2012	02/04/2012	02/06/2012	02/02/2012	02/02/2012	02/02/2012	02/06/20
		Time	12:20	12:30	10:20	09:35	16:21	15:50	17:15	15:55	16:35	16:20	11:40
		Remediation											
Analyte	Units	Goal											
Styrene	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U				50
Tetrachloroethene (Tetrachloroethylene)	ug/l	-	5 U	5 U	5 U	5 U	5.0	5 U	5 U	5 U		5 U	5 U
Toluene	ug/l		50	5 U	2.80 J,O	5 U	0.98 3,0	5 U	5 U	5 U		5 U	5 U
trans-1,2-Dichloroethene	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50	5 U	5 U
Trichloroethene (Trichloroethylene)	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane (Freon 11)	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U,J,O	5 U	5 U	5 U	5 U,J,O
Vinvl chloride	ug/l	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Result at or above the remediation goal  $U = \text{analyte was not detected at or above the reporting limit} \\ NJ = \text{presumptive evidence that analyte is present; reported as a tentutive idit} \\ J = \text{the identification of the analyte is acceptable; the reported value is an experiment of the presence or absence of the anityte cannot be determined from the dark of the acceptable of the contract of$ 

Table 7 SVOC Results

		Station ID	200	220	260	281	282	283	285	286	400	420	440	480	700	720	760
		Sample ID	200-0112	220-0112	260-0112	281-0112	282-0112	283-0112	285-0112	286-0112	400-0112	420-0112	440-0112	480-0112	700-0112	720-0112	760-0112
		Date	02/07/2012	02/07/2012	02/07/2012	02/06/2012	02/06/2012	02/06/2012	02/06/2012	02/06/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	02/06/2012	02/06/2012	02/06/201
		Time	09:10	09:17	11:10	12:35	09:45	11:10.	10:30	13:05	15:30	L3:40	14:00	14:30	15:15	16:35	15:50
Anulyte	Units	Remediation															
3-and/or 4-)Methylphenol	ug/?		SU	50 U	5 U	50 U	5 U	su	5 U	5 U	5 U	s u	50 U	820	5 U	5 U	250 U
,1-Biphenyl	ug/l		S U	50 U	S U	39 1,0	S.U.	5 U	1.30 3,0	5 U	5 U	SU	50 U	250 U	SU	SU	70 1,0
,2,4,5-Tetrachlorobenzene	ug/l		S U	50 U	5 11	50 U	Sυ	SU	5 U	SU	5 U	S U	50 U	250 U	5 U	5 U	250 U
,3,4,6-Tetrachlorophenol	'ug/l		5 U	50 U	S U	50 U	5 U	SU	5 U	S U	5 U	SU	50 U	250 U	5 U	5 U	250 U
4,5-Trichlorophenol	ug/l		5 U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	S U	50 U	250 U	5 U	5 U	250 U
A,6-Trichlorophenol	ug/l		SU	50 U	5 U	50 U	5 U	5 U	5 U	S U	รบ	5 U	50 U	250 U	5 U	5 U	250 U
,4-Dichlorophenol	ug/l	-	SU	50 U	S U	50 U	SU	SU	SU	SU	5 U	5 U	50 U	250 U	5 U	SU	250 U
,4-Dimethylphenol	ug/i		5 U	50 U	Sυ	72 .	SU	su	31	S U	5 U	S U	50 U	1900	5 U	S U	1300
4-Dinitrophenol	ug/l	-	10 U	100 U	10 U	100 U	10 U	10 U	10 U	10 U	10 U,J,O	10 U,J,O	100 U,J,O	500 U,J,O	10 U	10 U	500 U
,4-Dinitrotoluene	ug/1		SU	50 U	S U	50 U	S U	s u	S U	S U	5 U	S U	50 U	250 U	SU	SU	250 U
,6-Dinitrataluene	ug/l		SU	50 U	5 U	50 U	5 U	s u	5 U	S U	5 U	5 U .	50 U	250 U	5 U	5 U	250 U
-Chloronaphthalene	ug/f		SU	S0 U	SU	50 U	SU	s u	5 U	SU	5 ប	s u	50 U	250 U	5 0	5 U	250 U
-Chlorophenol	ug/i		5 U	50 U	SU	50 U	\$ U	su	S U	Su	su	SU	50 U	250 U	5 U	5 U	250 U
-Methyl-4,6-dinitrophenol	ug/l		10 U	100.U	10 U	100 U	10 U	10 U	10 U	10 U	10 U	10 U	100 U	500 U	10 U	10 U	500 U
-Methylnaphthalene	ug/l		su	48 3,0	SU	360	Su	5 U	61	Sυ	5 U	4.50 1,0	30 1,0	620	5 U	5 U	600
-Methylphenol	ug/t		SU	\$0 U	5 U	50 U	5 U	su	5 U	Sυ	50	5 U	50 U	450	5 U	50	250 U
-Nibpaniline	ug/l		10 U	100 U	10 U	100 U	10 U	10 U	10 U	10 0	10 U	10 N	100 U	500 Ú	10 U	10 U	500 U
-Nitrophenol	ug/l		S U	S0 U	5 ป	S0 U	5 U	5 U	SU	Sυ	SU	SU	50 U	250 U	5 U	5.0	250 U
,3'-Dichlorobenzidine	ug/l	- 4	5 U	50 U	5 0,3,0	50 U,J,O	S U.J.O	5 U.J.O	5 U.J.O	S U.R.O	5 U.LO	5 U.R.O	50 U	250 U	5.30 U.J.O	5 U	250 U.J.O
Nitroaniline	ug/3	197	10 U	100 U	10 U	100 U	10 U	10 U	10 U	10 U	10 U	10 U	100 U	500 U	10 U	10 U	500 U
-Bromophenyl phenyl ether	ug/l	-1	5 U	50 U	SU	50 U	5 U	5 U	S U	5 U	5 U	S U	50 U	250 U	50	5 U	250 U
-Chiara-3-methylphenol	ug/l		S U	50 U	5 U	50 U	5 U	5 U	S U	50	SU	5 U	50 U	250 U	5 U	5 U	250 U
-Chioroaniline	ug/l		5 U	50 U	5 U,J,O	50 U	5 83,0	5 U.J.O	5 U	5 U.R.O	5 U.J.O	5 U.R.O	50 U	250 U	5.30 U,J,O	5 U	250 U
-Chlorophenyl phenyl ether	ug/ī		SU	90 U	S·U	50 U	5 U	5 U	S U	50	5 U	5 U	90 U	250 U	5 U	5 U	250 U
-Nitrouniline	ug/l		10 U	100 U	10 U,J,O	100 U	10 U	10 U	10 U	10 U	10 U.J.O	10 U	100 U	500 U	10 U	10 U	500 U.J.O
-Niltrophenol	ug/l		10 U	100 U	10 U	100 U	10 U	10 U	10 U	10 U	10 U	10 U	100 U	500 U	10 U	10 U	500 U
ceruphthene	Ngu:	9000	su	75	s u	170	5 U	S U	75	S U	7.10	4.20 1.0	76	350	5 U	5 U	290
cenaphthylene	ug/l	-	s u	50 U	5 U	50 U	5 U	5 U	s u	5 U	5 U	5 U	50 U	250 U	5 U	5 U	250 U
cetophenone	ug/l		50	50 U	5 U	50 U	s u	s u	S Ü	50	5 U	5 U	50 U	59 1.0	3 3,0	5 U	250 U
nthrucene ::	ug/l		5 U	50 U	Sυ	50 U	5 U	s u	1.10 3,0	SU	50	SU	50 U	250 U	5 U	5 U	250 U
trazine	ug/l	-	50	50 U	5 U	50 U	su	s u	5 U	SU	su	SU	90 U	250 U	SU	5 U	250 U
enzuldehyde	ug/l	-	5 0.20	50 U.J.O	5 U,1,0	50 U.I.O.	5 U.J.O	5 U.J.O	S U,J,O	5 U,1,0	5 U,1,0	5 U,J,O	50 U,J,O	250 U,3,0	S U,J,O	5 U,J,O	250 U.J.O
enzo(a)anthracene	ug/l	1100	50	SO U	5 U	50 U	5 U	S U	S U	SU	5 U	SU.	50 U	250 U	s u	5 U	250 U
enzo(a)pyrene	ug/l			50 U	S U	50 U	5 0.3,0	s u	S U.J.O	s u	S U	SU	50 U.J.O	290 U	s u	5 U	250 U
enzo(b)fluoranthene	ug/l		5 U	50 U	SU	SO U	5 U.J.O	s u	S U,1,0	su	5 U	5 U	50 U,J,O	250 U	S U	SU	250 U
enzo(g.h.i)perylene	ug/l		5 U	50 U,J,O	S U	50 U	5 U	5 U,J,O	SU.	su	S U	50	S0 U	250 U	s u	5 U	250 U
erzo(k)fluoranthene	ug/l	-	SU	50 U	5 U	50 U	SU	SU	s u	su	su	5 U	50 U	250 U	s u	5 U	250 U
enzyl butyl phthalate	ug/l		5 U	50 U	SÜ	50 U	SU	su	SU	SU	SU	SU	50 U	250 U	S U	5 U	250 U
is(2-chloroethoxy)methane	ug/l	-	SU	50 U	5 U	50 U	5 U	s u	s u	su	S U	sυ	50 U	250 U	sυ	5 U	250 U
is(2-Chloroethyl) Ether	ug/l				5 U		50	SU	su	su	S U	SU	50 U	250 U	su	5 U	250 U
is(2-chloroisopropyl) ether	'ug/l	-	7.5		5 U	CONTRACTOR OF THE PARTY OF THE		SU	s u	SU	S U	SU	50 U	250 U	5 U	SU	250 U
is(2-ethylhexyl) phthalate	ug/l		SU	50 U	5 U		50	5 U	s u	SU		50	90 U	250 U	5 U	5 U	250 U
aprolactam	ug/l		5 U		SU	-	SU		S U	SU	5 U	2,80 3,0	90 U.J.O	250 U	SU	5 U	250 U
arbazole	ug/l		50		su		SU	SU	\$4	SU		2.40 1,0	72	450	S U	5 U	380

														,			
		Station ID	200	220	260	281	282	283	285	286	400	420	440	480	700	720	760
		Sample ID	200-0112	220-0112	260-0112	281-0112	282-0112	283-0112	285-0112	286-0112	400-0112	420-0112	440-0112	480-0112	700-0112	720-0112	760-0112
		Date	02/07/2012	02/07/2012	02/07/2012	02/06/2012	02/06/2012	02/06/2012	02/06/2012	02/06/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	02/06/2012	02/06/2012	02/06/2012
		Time	09:10	09:17	11:10	12:35	09:45	11:10	10:30	13:05	15:30	13:40	14:00	14:30	15:15	16:35	15:50
Analyte	Units	Remediation Goal															
Chrysene	ug/l	-	5 U				5 U		5 U		5 U		50 U			s u	250 U
Dibenzo(a,h)anthracene	ug/l	•	5 U	50 U			S U	1	5 U				50 U			5 U	250 U,J,O
Dibenzofuran	ug/l	44	5 U	35 3,0	S U	83	5 U	5 U	1.2	5 U	5.30	5 U	46 J,O	230 3,0	5 U	5 U	160 3,0
Diethyl phthalate	ug/l	7.0	SU	50 U		1	5 U	-	50		5 U		50 U	250 U	5 U	5 U	250 U
Dimethyl phthalate	ug/l		5 U	50 U	S U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	250 U	5 U	5 U	250 U
Di-n-butylphthalate	ug/l		SU	50 U	5 U	50 U	s u	5 U	50	5 U	5 U	5 U	50 U	250 U	5 U	5 U	250 U
Di-n-octylphthalate	ug/l		SU	S0 U	5 U	50 U	s u	S U	SU	5 U	SU	su	50 U	250 U	5 U	5 U	250 U
Fluoranthene	ug/l	1500	5 U	SDU	S U	50 U	5 U	SU	SU	5 U	5 U	5 U	50 U	250 U	5 U	5.0	250 U
Fluorene	ug/l	7.	SU	50 U	5 U	86	5 U	5 U	32	5 U	5.10	SU	48 3,0	190 J.O	5 U	5 U	250 U
Hexachlorobenzene (HCB)	ug/l		5 U	50 U	5 U		5 U	5 U	SU				50 U		5 U	5 U	250 U
Hexachlorobutadiene	ug/l	-	5 0	50 U	s u	S0 U	SU	SU	SU	5 U	5 U	SU	50 U	250 U	5 U	5 U	250 U
Hexachlorocyclopentadiene (HCCP)	ug/l		5 U	50 U	5 0,1,0	50 U	5 U.J.O	S U.J.O	ร บ	5 U.R.O	5 U	5 U.R.O	50 U.J.O	250 U	5.30 U.J.O	SU	250 U
Hexachloroethane	ug/l		5 U	50 U	5 u	50 U	SU	S U	5 U	5 U	5 U	s u	50 U	290 U	5 U	5 U	250 U
Indeno (1,2,3-cd) pyrene	ug/l	-	5 0	50 U	5 U	50 U	s u	S U	5 U	5 U	5 U	5 tf	50 U	250 U	5 U	5 U	250 U
Isophorone	ug/l	-	5 U	50 U	SU	50 U	5 U	5 U	SU	5 U	5 U	5 U	50 U	250 U	5 U	5 U	250 U
Naphthalene	ug/l	21900	5 0	1700	SU	4000	5 U	SU	790	S U	5 U	14	330	6600	5 U	50	8000
Nitrobenzene	ug/l		sυ				5 U	5 U	S U			505	50 U		5.05	E055	250 U
n-Nitroso di-n-Propylamine	ug/l		5 U	50 U	7.7	F-0-	5 U	5 U	5 U				50 U				250 U
n-Nitrosodiphenylamine/Diphenylamina	ug/l	-	Sυ	50 U	5 U	50 U	5 U	2 N	SU	5 U	5 U	SU	50 U	250 U	5 U	5 U	250 U
Pentachlorophenol	ug/l	296000	10 U	100 U	10 U,J,O	100 U	10 U	10 U	TO A	10 U	10 U	10 U	100 U.J.O	900 U	10 U		500 U.J.O
Phenanthrene	ug/l		SU	50 U	5 u	53	5 U	S U	17	S U	5 U	5 U	38 J,O	160 ),0	SU	50	250 U
Pyrene	ug/l		S U	50 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	250 U	5 U	5 U	250 U

- Result at or above the remediation goal

  U = analyte was not detected at or above the reporting limit.

  NO = presumptive evidence that analyte is present; reported as a tentative identification with an estimated value.

  J = the identification of the analyte is acceptability the reported value is an estimated.

  R = This presence or absence of the entity carroot to determined from the data due to severe quality control problems; the data are rejected and considered unusable.

  O × See attached data sheets for information on additional qualifiers.

Tentatively Identified Compounds (TICs) are not shown, but are included in the analytical data sheets

Table 7 SVOC Results

		Station ID	ACW4	ACWS	ACWMW1	ACWMW2	ACWMW3	C1001	C1002	C1003	C1004	C1005	C101	C102	C103	C104	C105
		Sample ID	ACW4-0112	ACW5-0112	ACWMW1-0112	ACWMW2-0112	ACWMW3-0112	C1001-0112	C1002-0112	C1003-0172	C1804-0112	C1005-0112	C1D1-0112	C102-0112	C103-0112	C104-0112	C105-0112
		Date	02/05/2012	02/05/2012	02/07/2012	02/07/2012	02/07/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012
		Turne	11:40	14:09	15:50	15:25	15:30	11:25	09:20	11:00	10:50	09:15	13:28	14125	16:10	15:00	15:50
Analyte	Units	Remediation Goal	F- 155 -		P.F.	100			4 mal (1)		7.3	17. 12	50 E				10 F 74
(3-and/or 4-)Methylphenol	ug/l		5 U	5.0	250 U	100 U	5 U	5 U	SU	5.0	5 U	5 U	SU	5 U	500 U	10 0	50
1,1-Biphenyl	ugit	- 80	Su	5 U	110 3,0	100 U	50	50	5.0	5.0	50	SU	5 13	50	500 U	10.0	50
1,2,4,5-Tetrachlorobenzene	ug/l	161	5 N	5 U	250 U	100 U		5 U	5 tl	5 U	SU	\$ U	50	5.0	500 U	10.0	5 U
2,3,4,6-Tetrachlorophenol	110/1		5 U	50	250 U	100 U	5 U	SU	5 U	5 U	SU	5.0	5 U	5 U	500 U	10.0	50
2,4,5-Trichlorophenol	ug/F	90	5 U	50	250 U	100 n	50	5 Lt	3 U	5 U	5 U	50	5 U	5.0	500 U		150
2,4,6 Trichlorophenol	rug/T	(90)	5 U	รบ	250 U	100 U	5 U	50	5 U	50	50	5.0	5 U	50	500 U	10-0	
2,4-Dichlorophenol	ug/i	130	5 U	5 D	250 U	100 U	50	50	5 U	50	5 U	50	5 U	5 U	500 U	10 11	50
2,4-Dimethylphenol	ug/l	187	5 U	50	250 U	100 U	50	50	50	5 U	5.0	5 U	S U	5 U	150 3.0	10 U	10 0,3.0
2,4-Dinitrophenol	ug/l	100	10 03.0	10 0,2,0	500 U	200 U	ID U	10 0.3.0	10 0.3.0	101/1/0	10 U.J.O	10 U.J.O	10 0.3,0	10 0,3.0	1000 U	Accessed to the last of the la	5.0
2,4-Dinitrotoluene	Ligur.	100	SU	5 U	250 U	100 U	5.0	รน	5 U	5 U	5.0	5.U	5 U	5 U	500 U	10 U	5 U
2.6-Dinitrotoluene	ug/1	(4)	SU	SU	250 U	100 U	50	SU	5 0	5 W	5.0	511	5-0	5 U	500 U	10 U	-
2-Chlororuphthulene	ug/l		5.0	50	250 U	100 U	5 U	50	5 8	5 U	50	5 0	50	5.0	500 U	10 U	5.0
2-Chlorophenol	ug/l	30	SU	50	250 U	100 U	5 U	5 U	50	50	5 12	5 U	5 U	50	500 U	10 0	5.0
2-Methyl-4,6-dinitrophenol	ug/I		10.0	10 U	500 U	200 U	10 U	100	10 U	10 U	10 U	10 N	10 0.3,0	10 03.0	1000 D	20 U	15 02.0
2-Methylruphthulene	rigi1		50	50	880	31 3.0	5 U	5 U	5 0	50	54	SU	50	5.0	250 3.0	10 U	SU
2-Methylphenol	Tigus	-	5.0	50	250 U	100 U	5 U	5 U	50	50	50	5.0	5.0	5.0	500 U	10 U	10 0
2-Nitrouniline	ug/l		10.0	10 U	500 U	200 U	10 U	10 U	15 U	10 U	10 0	20 0	100	10 U.J.O	1000 U	20 U	50
2-Nitrophenol	ug/l	4 7	5 U	s u	250 U	100 U	54	5 U	50	5 U	su	50	5 U	5.0	500 U	1000	
3,3'-Dichlorobercidine	ug/l	100	5.03.0	5 0,3,0	250 U.J.O	100 U	5 U	5 U.J.O	5 U,J.O	5 0,3.0	5 0,3,0	5 U.R.O	5 0,3,0	SU	500 U.J.O	10 8,3,0	5.0
3-Nitroarslave	ug/l	UR)	10 U	10 U	500 U	200 U	10 0	10 U	10 U	10 U	10 U	10.0	10 U	10 U.J.O	1000 U	20 U	10 U
4-Bromophenyl phenyl ether	:ug/1	-	50	5 U	250 U	100 U	5 U	5.0	5.0	5 U	5 U	su	5.0	5.0	500 U	10 U	SU
4-Chloro-3-methylphenol	ug/i	- 100	5 U	5 11	250 U	100 U	5 U	50	50	50	5 U	50	5.0	S U	500 U	101	5.0
4-Chloroupiline	Typu-	0 000	503.0	SU	250 U	100 U	5 U	5 0.1,0	2 mmg	5 0,3,0	5 0,3,0	5 U.R.O	5 0.3.0	50	500 U	10 U	5 U
4-Chlorophenyl phenyl ether	ug/l	- 1	50	50	250 U	100 U	5.0	54	50	5.0	5 U	50	5 U	5 U	500 U	10 N	50
4-Nitrounsine	ug/T	19	10 U.J.O	10 0,3.0	500 0,3,0	200 U	10 U	10 U,J.0	10 0,1,0	10 0.20	10 U.J.O	10 U.J,O	10 U	18 U,J,O	1000 U	20 U	100
4-Nitrophenol	ug/E		10 U.J.O	10 0,3.0	500 U	200 U	10 U	10 U	10 U	10 U.J.O	20 U	10 U	10 U	10 0.3.0	1000-0	20 U	10 U
Acenaphthene	ug/3	9000	50	5 0	440	64 3,0	5 11	5.0	5 U	5 U	50	5.0	50	5 U	300 1/0	67	50
Acenaphthylene	ug/I		50	50	250 U	100 U	5 11	50	5.0	S.U	5 U	5.0	5 U	5 ប	500 U	10 U	50
Acetophenone	14g/1		5 U	50	250 U	200 U	5.0	50	50	50	511	5.0	5.0	5 tf	500 U	10 U	50
Anthracene	ug/l	8	SU	SU	250 U	100 t/	5.0	50	5.0	50	su	SU	S U,3,0	5 U	500 U	10 U	SU
Atrazine	ug/l	-	5 U.J.O	5 0,3,0	250 U	100 U	5 U	SU	5.0	50	5 0	50	5 0,0,0	5 13	500 U	10 U	50
Benzaldehyde	ug/i	N N	5 0.3,0	5 U.J.O	250 U.J.O	100 U.J.O	5 0,2,0	5 0.1.0	5 0,3,0	5 0,1,0	5 0,3,0	5 U.J.O	5 0.5,0	5 U,3,0	500 U,J,O	10 0,3,0	5 0,3,0
Senzo(a)anthracene	ug/t	1100	5 U	5.0	250 bf	100 U	5 U	5 U	SU	50	su	50	50	5 U	500 U	10.0	50
Benzo(a)pyrene	ug/1		5.0	5.0	250 U	100 U	5 8	5 0.3.0	5 u	5 U.J.O	S U	5 0.3,0	5 U.R.O	S U,J,O	500 U.J.O	10 U,J.O	5 0.3.0
Benzo(b)fluoranthene	ug/I	8	50	5 D	250 U	100 U	5.0	5 0.1.0	5 U	5 U.J.G	5 U	5 U.J.O	5 U.R.C	5 U.J.O	500 U.J.O	10/0,3,0	5 U.J.O
Benzo(g.h,i)perylene	ug/l		5 0,3.0	0,LU 2	250 U	100 U.J.O	5 0,3,0	50,50	SU	2 67'0	5 U	5 U,J,O	5 U.R.O	511	500 U	10.0	5.0
Benzo(k)fluoranthene	Illge III	я	5 U	SU	250 U	200 U	SU	5 0.3.0	5 U	5 U.J.O	5 ប	5 0.3.0	SU.R.O	SU	500 U	10.0	50
Benzyl butyl phthalate	ngil	1	SU	5.0	250 U	200 U	50	5.0	5 U	SU	50	5 U	50	SU	500 U	10 U	50
Bis(2-chloroethoxy)methane	130/3		50	5 U	250 U	100 U	5 U	5.U	5 U	50	5 U	5 U	5 U	5 U	500 U	10 U	50
bs(2-Chloroethyl) Ether	ug/l	*	SU	5 U	250 U	100 U	50	5 U	50	su	5 tr	5 U	50	5 U	500 U	10 U	50
Bis(2-chloroisopropyl) ether	ug/I		5 U	5 U	250 U	100 U	50	5.0	50	5 U	5.0	5.0	50	5 U	500 U	10 U	50
Bis(2-ethylhexyl) phthalate	ug/I	*	5 U	5 U	250 U	100 fl	50	SU	SU	5 U	5 U	su	5 U	5.0	500.U	10 U	5 U
Caprolactam	ug/l		5 U	50	250 U	100 U	5 U	5.0	5 U	5 U	su	50	SU	15 U	500 U	10 U	5.0
Carbazole	ug/l		5 U	50	350	93 1.0	50	5.U	50	5 U	50	50	5 U	5 U	240 3.0	10 U	SU

Table 7 SVOC Results

		Station ID	ACW4	ACW5	ACWMW1.	ACWMW2-0112	EWMW3	C1001 C1001-0112	C1002 C1002-0112	C1003 C1003-0112	C1004 C1004-0112	C1005 C1005-0112	C101 C101-0112	C102 C102-0112	C103 C103-0112	C104 C104-0112	C105 C105-0112
		Sample ID Date	ACW4-0112 02/05/2012	ACW5-0112 02/05/2012	02/07/2012	02/07/2012	02/07/2012	02/04/2012	02/04/2012	02/04/2012	92/04/2012 10:50	02/04/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012
Analyte	Units	Remediation Goal	11:40	14:09	15:50	19129	1930		10.1.15			<u> </u>	, e	40			
Chrysene	ug/l	-	5 U	5 U	250 U	100 u	5 U	50	50	5 0	50		5 U	5 U	500 U	100	50
Oibenzo( a.h (anthracene	ug/i		5 U	50	250 U.J.O	100 U	50	5 U.J.O	su	5 U.), O	SU		5 U.R.O	50	500 U	10.0	50
Dibercofusan	199/1	44	5 U	S U	270	100 U	50	5 U	5.0	SU	5 U	5 U	SU	50	140 3,0	ton	5 U
Diethyl ohthalate	ug/1	100	5 U	5 U	250 U	100 U	50	5 U	5 U	50	S U		5 U	90	500 U	10 U	5U
Dimethyl phthalate	sug/il		50	5 U	250 U	100 U	50	5 U	5 U	5.0	5 U		50	50	500 U	10 U	50
Di-m-butylohthalate	ug/I	-	50	5 0	250 U	100 U	5 U	5.0	50	5 U	SU	50	5 U	5.0	500 U	10 U	30
Di-m-octylphthalate	ug/l.	-	50	50	250 U	100 U	5 U	5 U	5 U	50	50	5 U	5 U	5.0	500 U	1017	50
Noranthene	ug/1	1500	5 U	5.0	250 U	100 U	5 U	s u	5 U	5 U	SU	5 U	5 U	5.0	500 U -	100	5 U
Fluorene	um/3		50	5.0	220 3.0	100 U	š U	5 U	50	SU	50	5.0	5 U	5.0	120 J.O	13	50
Hexachiorobenzene (HCB)	ugil	-	50	5 U	250 U	100 U	5 U	54	50	5 U	50	3.0	5 U.J,O	5.0	500 U	10 U	su
Piexachiorobsitadiene	ug/l		Su	50	250 U	100 U	5 U	50	50	50	50	50	50	5 U	500 U	10 U	50
Hexachlorocyclopentadiene (HCCP)	ug/l	-	5 03.0	5 0.3.0	250 0	100 U	5.0	5 0.1.0	SU	5 0.0.0	5 U.J.O	SURO	5 U.J.O.	5.U	500 U	10.0	510
Hexichloroethune	Ngu.	-	50	50	350 U	100 U	5.0	su	5 U	50	50	50	50	5.0	500 U	10 U	5/4
Indeno (1,2,3°cd) pyrene	ug/i	-	SU	50	250 U	100 U	5 U	5 0.3.0	50	5 U.J.O	5.0	5 U.J.O	5 U.R.O	5.0	500 U	100	5.0
Isophorone	ug/I		5 u	5 U	250 U	200 U	511	50	50	SU	5.U	su	5.0	5.U	500 U	100	SU
Naphthalene	uq/	21900	50	50	7200	610	5.60	50	5 U	5 U	SU	SU	5 U	5.0	4800	10.0	su
Nitrobenzene	ug/L		50	SU	250 W	100·U	5 U	5 tr	5 U	50	5.U	50	50	50	500 U	10.0	50
n-Nitroso di-n-Propylamine	utti-T		P. C. P.	SU	250 U	100 U	5.0	50	5 0	5.0	5 U	50	5 U	9.01	500 U	10 U	50
n-Nitrosadiphenylamine/Diphenylamine	180/1		511	5.0	250 U	100 U	5 U	50	5.0	5.0	su	5 U	รบ	5 18	500 U	10 U	5 U
Pentachlorophenol	ug/t	296000	10 0	10 U	500 UJ.O	200 U	100	tou	10 U	10 U	10 U	10 U	20 U.J.O	10 0.2/0	1000 U	20 U	10 U.J.O
Phenanthrene	ug/i		50	5 U	170 3.0	100 U		5 U	5 U	50	SU	5 U	5 0,1.0	5 U	500 U	10.0	50
Pyrene	ug/f		511	50	250 U	100 0	5 U	5 8	5 U	5.0	5.0	5 U	5 U	5 U	500 U	10 U	50

Included as part of the total carcinogenic PArts' remediation goal

Result at or above the remediation goal

U = analyte was not detected at or above the reporting limit

NO = presumptive evidence that analyte is present; reported is a
3 = the identification of the analyte is acceptable; the reported is 6
6. The presence or absence of the anyte cannot be determined

O = See attached data sheets for information on additional qualif

Tentutively Identified Compounds (TICs) are not shown, but are i

Table 7 SVOC Results

		Station ID		C202	C203	C204	C205	C206	C301	C302	C303	C401	C402	C403	C404	C405	C406
		Sample ID	C201-0112	C202-0112	C203-0112	C204-0112	C205-0112	C206-0112	C301-0112	C302-0112	C303-0112	C401-0112	C402-0112	C403-0112	C404-0112	C405-0112	0406-0112
		Date	02/07/2012	02/07/2012	02/07/2012	02/07/2012	02/07/2012	02/07/2012	02/08/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012
		Time	11:10	11:15	13:45	14:15	14:00	10:58	14:15	14:48	13:55	11:25	11:00	09:35	09:35	09:24	11:15
Analyte	Units	Remediation Goal		F-7.1							*		46		a a		Tarin Tarin
(3-and/or 4-)Methylphenol	ug/l	-	s u	50	5 U	SU	10.0	10 U	5 U	50	5 U	5.0	5.0	su	5.U	S.U.	5.0
1,1-Biphenyl	ug/l	-	5 U	50	50	5.0	10 U	10 U	50	5 U	50	50	50	SU	50	5 U	50
1,2,4,5-Tetrachlorobenzene	ug/i		5 U	5 ប	5 0	รบ	10 U	100	5 U	5 U	50	5.0	SU	su	5 U	SU	58
2,3,4,6-Tetrachlorophenol	ug/i	-	5 0	SU	SU	รบ	15	10 U	SU	5 U	50	su	50	su	5 U	SU	50
2,4,S-Trichlorophenol	ug/l		SU	5 U	5 U	su	10 U	10 U	50	5 U	su	su	5.0	\$ U	5 U	50	S U
2,4,6-Trichlorophenol	ug/l	-	SU	5.0	5 U	SU	10-U	10 U	50	5 0	SU	su	5.0	5 U	5 U	50	50
2,4-Dichlorophenol	ug/f		50	SU	SU	รับ	10 U	10 U	SU	5 tj	54	รช	5 U	SU	5 U	50	5.0
2,4-Dimethylphenol	ug/l	-	SU	SU	5.0	SU	10 U	10 U	5 U	SU	su	SU	SU	5 U	50	SU	SU
2,4-Dinitrophenol	ug/i	-	10 U	10·U	100	10 U	20:U	20 U	10 0	10 U,1,0	10 U,1,0	10 U.J.O	10 U.J.O	10 U,2,0	10 U,J,O	10 U,2,0	10 U,3,0
2,4-Dinitrotoluene	ug/l	*	5 U	SU	5 U	50	10:U	10 U	SU	5 U	SU	SU	su	SU	5 U	su	5 U
2,6-Dinitrotoluene	ug/I	-	su	50	SU	SU	10.0	10 U	su	5 U	SU	5 U	s u	5.0	S U	S-U	5.0
2-Chloronaphthalene	119/1	-	su	SU	SU	5 U	10 U	10 U	su	S U	SU	50	5 U	SU	SU	5 U	5 U
2-Chlorophenol	ug/l		su	5 U	SU	su	10 U	10 U	5 U	S U	SU	SU	su	5 U	5 U	5.U	50
2-Methyl-4,6-dinitrophenol	ug/t	-	10 U	10 U	10 U	10 U	20 U	20 U	10 U	10 U	10 U,1,0	10 U	10 U,J,O	10 U	10 U,1,0	10 U	10 U
2-Methylnaphthalene	ug/l		su	su	SU	รบ	10 U	10.0	SU	su	5U	su	5 U	su	5 U	50	5.0
2-Methylphenol	ug/l	-	SU	รบ	50	50	10 U	10 U	su	su	su	SU	su	su	5 U	su	S·U
2-Nitrouniline	ug/l	-	10 U	13 U	10 0	10 U	20 U	20 U	10 U	10.0	10 U						
2-Nitrophenol	ug/l		su	SU	5 U	รบ	10.0	10 U	SU	SU	5.0	SU	50	SU	50	5 U	5.0
3,3'-Dichlorobenzidine	ug/l	-	5 0,3,0	6.30 U.J.O	5 U.J.O	5 11,3,0	10 U	10.0	5 U.J.O	5.30 U,J,O	50	5.60 U,J,O	5.0	5 U.J.O	SU	5 U,R,O	50
3-Nitroaniline	ug/t	-	10 U	10 U	10 0	10 U	20 U	20 U	10 U	10 U	10 U	10 U	10.0	10 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	ug/l	-	50	su	SU	รย	10 U	10:0	5 0	5 U	Sυ	5 U	5 U	5 U	50	SU	5 U
4-Chloro-3-methylphenol	ug/t		50	SU	SU	50	10 U	10 U	50	5 U	SU	50	su	5 U	50	S.U	5 U
4-Chloroaniline	ug/l	-	50	6.30 U,3,O	5.0,3,0	5 U	10 U	10 U	5 U,3,0	5.30 U,J,O	50	5.60 U,J,O	5U	5 U,J,O	5.0	5 U.R.O	5.0
4-Chlorophenyl phenyl ether	ug/l		50	su	5 U	50	10 U	10 U	SU	su	50	5 ป	SU	S U	50	5.U	5 U
4-Nitroaniline	ug/l	-	10 U,J,O	10 U	10 U	10 U,J,O	20 U	20 U	10 0								
4-Nitrophenol	ug/t	-	10 U	10 U	10 U	10 U	20 U	20 U	10 U	10 U	10 U	10 U	10:U	10 U	10 0	10.0	10 U
Acenaphthene	ug/l	9000	SU	SU	50	5 U	10 U	10 U	SU	5'U	50	50	SU	su	50	18	รบ
Acenaphthylene	ug/l	-	50	5.0	5 U	5 U	10 U	10 U	5 0	su	511	50	SU .	5 U -	SU	5.0	SU
Acetophenone	ug/l	-	SU	5 U	5 U	50	10 U	10 U	50	5 U	5 0	ទម	SU	5 U	5 U	5.0	5 U
Anthracene	ug/l		50	5 U	s u	5 U	10 U	10 U	5 U	5 U	5 U	50	5.0	SU	5 U	SU	su
Atrazine	ug/l		s u	S.U	50	SU	10 U	10 U	SU	SU	5 U	5 W	SU	SU	SU	5.0	5.0
Benzaldehyde	ug/l	-	S U,0,0	5 U,J,O	5 U,J,O	5 U,J,O	10 U.J,O	10 U,J,O	5 U.J.O	5 U.J.O	5 U.J.O	5 N.J.O	5 11,3,0	5 U,J,O	S U,J,O	5 U.J.O	5 0,3,0
Benzo(a)anthracene	ug/l	1100	SU	50	SU	รบ	10 U	10 U	5 U	50	s u	5 U	50	5.0	SU	SU	50
Benzo(a)pyrene	ug/l					5 U				50	5 U.J.O	50	5 0,1,0	5 U.J.O	5 U,J,O	5 U	5 U.J;O
Benzo(b)fluoranthene	ug/l		SU	50	5 U	5 0	10 U	10 U	5 U	5 U	5 0.3.0	SU	5U,00	5 U.J.O	5-0,3,0	5 U	5 0,3,0
Benzo(g,h,i)perylene	ug/l	-	SU	5'U,3,0	5 U	5 U	10 U,J,O	10 U,J,O	5 0,1,0	5 U	5 U	50	5 U	SU	s u	5 U	5 U
Benzo(k)fluoranthene	ug/l					5 U	10 U		S U	5 U	5 U	5 U		s u	5 U	SU	50
Benzyl butyl phthalate	ug/l								SU	su	5 U	SU	5 U	5.0	5.0	50	5.0
Bis(2-chloroethoxy)methane	-ug/l		SU	5 U	5 U	5 U	10 U		SU	5 U	S U	SU	SU	SU	5 U	50	50
bis(2-Chloroethyl) Ether	-ug/l	-				5 U	10 U		S.U	50	5 U	50	SU	50	SU	5 U	5 U
Bis(2-chloroisopropyl) ether	-ug/l	-	SU	SU	5 U	s u	18 U	10 U	SU	SU	SU	50	SU	50	sυ	5 U	50
Bis(2-ethylhexyl) phthalate	·ug/l	-	5 U	S U	รข	5 U	10 U	10 U	SU	S U	SU	5 U	5 U	50	su	s u	50
Caprolactam	ug/l	-	SU.	SU	su	5 U	10 U	10 U	50	50	SU	SU	5 U	5 0,3,0	su	SU	5 U,J,O
Carbazole	ug/l	-	SU	SU	5 U	SU	10 U	10 U	SU	5 U	5 U	5U .	5.0	SU	รช	4.10 J.O	5 U

	-	Station ID	C201	C202	C203	C204	C205	C206	C301	C302	C303	C401	C402	C403	C404	C405	C406
		Sample ID	C201-0112	C202-0112	C203-0112	C204-0112	C205-0112	G206-0112	C301-0112	C302-0112	C303-0112	C401-0112	C402-0112	C403-0112	C404-0112	C405-0112	C406-011
		Date	02/07/2012	02/07/2012	02/07/2012	02/07/2012	02/07/2012	02/07/2012	02/08/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2012	02/02/2013
		Time	11:10	11:15	13:45	14:15	14:00	10:58	14:15	14:48	13:55	11:25	11:00	09:35	09:35	09:24	11:15
Analyte	Units	Remediation Goal		Learn V	11.44E	制造	7 - 4	1447	*		Sign Wife A				, tr; , " ,		
Chrysene	ug/l	-	SU	SU	SU	SU	10:U	10 U	SU	SU	SU	SU	su	SU	su	SU	5 U
Dibenzo(a,h)anthracene	ug/l		5.0,1,0	5.0	s u	S U.J,O	10.0	10 U	SU	S.U	5.0	รบ	SU	5.0	5 U	SU	SU
Dibenzofuran	ug/l	44	S U	รับ	50	5 U	4.10.1,0	10 U	SU	5 U	5 U	5 U	S U	5 U	5 U	11	5 U
Diethyl phthalate	ug/l	-	5 0	SU	su	SU	TO: N	10 U	su	5.0	5 U	50	S U	5 U	5 U	5.0	5 U
Dimethyl phthalate	ug/l	-	SU	5 U	รบ	S.U.	10.U	10 U	5.0	5 U	5 U	50	5 U	50	50	50	50
Di-n-butylphthelate	'ug/l		SU	SU	s u	SU	10 U	10 U	SU	s u	SU	50	SU	Sυ	5.0	50	5 U
Di-n-octylphthalate	-ug/l	-	50	50	SU	50	10 U	10 U	50	5 U	su	50	S U	su	SU	SU	5 U
Fluoranthene	ug/l	1500	SU	50	SU	50	10 U	10 U	50	SU	5 U	SU	SU	50	S.U	50	5U
Fluorene	ug/l	-	SU	SU	SU	SU	10 U	10 U	SU	SU	SU	50	5. U.	5.0	5 U	5.60	511
Hexachlorobenzene (HCB)	ug/l	- '	5.0	SU	SU	SU	10.0	10 U	SU	SU	SU .	SU	50	50	SU	50	5 U
Hexachlorobutadiene	ug/l	-	SU	5.0	S-U	S.U	10 U	10 U	SU	5.U.	5.0	50	50	5 U	5.0	50	50
Hexachlorocyclopentadiene (HCCP)	ug/l	-	SU	6.30 U,J,O	5 4,3,0	SU	10.U	10 U	S U,1,0	5.30 U,1,O	su	S.60 U,J,Ö	50	5 U,1,0	5.0	5 U,R,O	5 U,J,O
Hexachloroethane	ug/l	-	SU	5 U	su	5.U	10 U	10 U	SU	S.U	5 U	5 U	SU	SÜ	5 U	5 U	su
Indeno (1,2,3-cd) pyrene	ug/t		5.0	5.0	su	sυ	10 U	10 U	S-U	su	5 U	SU	5.0	SU	5.0	50	5 U
Isophorane	ug/l	5 %	SU	รบ	su	sυ	10 U	10 U	S U	5.U	5 U	50	SU	50	5.0	50	5.0
Naphthalene	ug/l	21900	50	SU	5U -	sυ	4.30 ),0	10 U	S U	5.0	s u	SU	5.0	5.0	5.0	15	5.U
Nitrobenzene	ug/l		SU	50	5 U	50	10 U	10 U	\$ U	5 U	5 U	SU	5.0	50	5.0	50	s u
n-Nitroso di-n-Propylamine	ug/t	-	SU	5.0	su	s u	10 U	10 U	5 U	5.U	5 tt	S U	S-U	SU	5 U	50	5 U
n-Nitrosodiphenylamine/Diphenylamine.	ug/l	-	5.0	50	s u	5 U	10:U	10 U	S U	รบ	5 U	50	5.U	SU	5.U	50	5 U
Pentachlorophenol	ug/l	296000	10 U,3,0	10 U	10 U	10 U.J.O	150	20 U	10 U	10 U	10 U.J.O	10 U	10 U,3,0	10 U.J.O	10 U.J.O	10 U	10 U.J.O
Phenanthrene	ug/l	-	5.0	5.0	50	S U	100	10 U	50	5.0	5 U	5 U	5 U	5.0	5 U	5 U	SU
Pyrene	ug/l	-	5-U	511	5 U	s u	10 U	10 U	S.U	50	5 U	5 U	5 U	5 U	5.U	5.0	su

Included as part of the total carcinogenic PAHs' remediation goal

Result at or above the remediation goal

U = analyte was not detected at or above the reporting limit

M = presumptive evidence that analyte is present; reported as a

1 = the identification of the analyte is acceptable; the reported Y

R = The presence or absence of the analyte cannot be determined

O = See attached data sheets for information on additional qualif

Tentatively Identified Compounds (TICs) are not shown, but are  $\boldsymbol{i}$ 

Table 7 SVOC Results

							SVUC Kesi		-						-cme-r	-
	Station ID	C406	C501	C502	C502	C503	C504		( Company	0.0000000000000000000000000000000000000	100000000000000000000000000000000000000		The second secon			C702-0112
	Sample ID	C406T-0112	C501-0112	CS02-0112	C502D-0112	C503-0112										02/05/2011
	Date	02/02/2012	02/03/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012	02/05/2012								
	Time	12:01	16:00	09:18	09:25	10:30	09:00	10:45	09:15	14:00	15:25	14:10	14:40	13:36	16:00	16:00
Units	Remediation Goal															
ug/l	-	S U	5 U	5 U	5 U	5 U	5 U	4000	12000							5.40 U,J,O
ug/I		5 U	5 U	5 U	S U	5 U	5 U	500 U								5.40 U.J.O
ug/l		SU	5 U	5 U	5 U	5 U	5 U	500 U	1000 U	5 U	5 U	5 U.J.O		F-10-0		5.40 0.3,0
ug/l		S U	5 U	5 บ	5 U	5 U	5 U	500 U	1000 U	5 U	5.10 U,J,O	5 U,J,O				5.40 0,3,0
ug/l.	1.0	5 U	5 U	5 ม	5 U	5 U	5 U	500 U	1000 U	SU	5 U	5 U.J.O				5.40 U.J.O
ug/l	-	s u	5 U	5 U	5 U	5 U	5 U	500 U	1000 U	5 U	5 U	5 U.J.O		- 150		5.40 0.3,0
-		5 U	50	5 U	s u	5 U	5 U	500 U	1000 U	5 U	5 U	5 U.J.O	10 U	SU	200	5.40 U.J.O
	-	5 U	5 U	5 U	5 U	5 U	5 U	3900	7200	5 U	5 U	5 U	10 U			5.40 U.J.O
		10 U.3.0	10 U.J.O	10 U.J.O	10 0,7,0	10 U.J.O	10 U	1000 U	2000 U	10 U,3,0	10 U.J.O	10 U.J.O	20 U	10 U.J.O		11 0,2,0
		5.0	5 U	5 U	S U	5 U	5 U	500 U	1000 U	SU	5 U	5 U	10 U	50	50	5,40 0,3,0
			200	511	5 U	50	5 U	500 U	1000 U	5 U	5 U	5 U	10 U	5 U	5 U	5.40 U,J,O
			Andrew Street,				50	500 U	1000 U	50	50	5 U	10 U	5 U	5 U	5,40 0,3,0
				-		-		500 U	1000 U	50	5 U	5 U	10 U	5 U	5 U	5,40 U,3,0
		-							2000 (/	10 U	10 U	10 U	20 U	10 U	10 U	11 U.J.O
			-								5 U	50	10 U	5 U	SU	5.40 0,1,0
			-							-	5.11	s u	10 U	5.0	50	5.40 U,3,0
											10 U	10 U	20 U	10 U	10 U	11 U.J.O
									-		5.11	50	10 U	s u	5 U	5.40 U,3,0
_				-			-					5410	10 U.R.O	5 U.J.O	5 0,3,0	5.40 U.J.O
_		-							American Inc.					10 U	10 U	11 U.J.O
					-	(A.D. A.)							-		511	5.40 U.J.O
- 101					1000				*****				1		-	5.40 U.J.O
1/0/1	-										-	-				5.40 U.J.O
ug/f				in many c												5.40 U,J,O
ug/i	*			200												11 U.J.O
ug/l	7.1	10 U	10 U.J.O											TA		11 U.J.O
ug/l		10 U	10 U	10 U	10 U,J,O			A CONTRACTOR OF THE PARTY OF TH	-							5.40 U.J.O
ug/l	9000	50	50	5 U	5 U	5 U	1.20 3.0	500 U	410 3,0	1						
ug/l	-	5 U	5.0	5 U	S U	5 U	5 U	500 U	1000 U					-		5.40 U,J,O
ug/l	-	su	5 U	5 U	5 U	5 U	SU	500 U	420 3,0							5.40 U,J,O
ug/l	-	5 U	5 U	S U	5 U	5 U	5 U	500 U	1000 U					20,000		5.40 U,1,0
ug/l	-	5 U	SU	5 U	5 0,1,0	5 U	5 U	500 U	1000 U	S U						5,40 U,1,0
ug/l	-	0.00	S U,3,0	5 4,3,0	5 U.J.O	5 U,J,O	5 U,J,O	500 U.J.O	1000 U,J,O	5 0,3,0	5 U,J,O			-		5.40 U,1,0
ug/l	1100	5 U	5 U	50	50	5 U	5 U	500 U	1000 U	5 U	-			-		5,40 U,3,0
ug/I	'W	5 0,1,0	5 U	S U,3,0	5 U,J,O	5 U	S U,),O	500 U	1000 U	5 U	5 U	5 U				5.40 U,J,O
_		5 0,3,0	SU	5 U.J.O	5 U,J,O	5 U	5 U,J,O	500 U	1000 U	s u	SU	5 U				5,40 U,3,0
	-	5 U	5 U	5 U,3,0	5 U,J,O	5 U	5 U	500 U	1000 U	S U	2.50 3,0	5 U.J,O	10 U	50		5.40 U,3,0
-		SU	5 U	5 U.J,O	5 U,J,O	5 U	5 U	500 U	1000 U	5 U	5 U	5 U	10 U	50	5 U,J,O	5.40 U,3,0
		5 U	50	S U	S U	5 U	5 U	500 U	1000 U	5 U	5 U	5 U	10 U			5.40 0,3,0
		5 U	5 U	5 U	5 U	5 U	5 U	500 U	1000 U	5 U	5 U	5 U	10 U			5.40 U,J.O
_				5 U	5 U	SU	5 U	500 U	1000 U	SU	50	5 U	10 U	50	5 U	5.40 U,J,O
	-			5 U	50	50	50	500 U	1000 U	SU.	5 U	5.U	10 U	5 U	5.0	5.40 U.J.O
		-	-	-	50	50	50	500 U	1000 U	50	SU	5 U	10 U	50	5 U	5.40 0,3.0
									1000 U	5 U	5 U	5 U	10 U	SU	5 U	5.40 U.J.O
ug/i	_	5 0,1,0	50	5 U	50	5 U	50	150 3.0	390 J.O	5 U	50	50	10 U	5 U	5 U	5.40 U,J,O
	에 가는 아무슨	Sample ID Date Time  Remediation  up/1  up	Sample ID   GlosT 0112	Sample ID	Sample ID   Oxfort -0112   CS01-0112   CS02-0112   C	Sample ID   C4687-0112   C501-0112   C5020-0112   C5020	Sample ID	Company   Comp	Sample ID   Octor   Octor	Sample ID   C406T-0112   C801-0112   C802-0112   C802-0112   C800-0112   C806-0112   C9065/2012   C9065/201	Sample ID   Oxford 1012   CS01-0112   CS	Second   Company   Compa				Martine   Color   Co

Station ID Sample ID Date Time Remediation Goal	C406T-0112 02/02/2012 12:01	C501 C501-0112 02/03/2012 16:00	C502 C502-0112 02/05/2012 09:18	C502 C502D-0112 02/05/2012 09:25	C503 C503-0112 02/05/2012	C504 C504-0112 02/05/2012	C505 C505-0112	C506 C506-0112	C601 C601-0112	C602 C602-0112	C603 C603-0112	C604 C604-0112	C605 C605-0112	C701 C701-0112	C702 C702-0112
Date Time Remediation	02/02/2012 12:01	02/03/2012	02/05/2012	02/05/2012	02/05/2012		CS05-0112	C506-0112	C601-0112	C602-0112	C603-0117	C604-0112	C605-0117	C701-0117	C702-0112
Time	12:01					02/05/2012					PANAL ATTE	C00-0112			30.00.00.00
Time	12:01				40.00		02/05/2012	02/05/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	02/04/2012	02/05/2012	02/05/2012
	E 11				10:30	09:00	10:45	09:15	14:00	15:25	14:10	14:40	13:36	16:00	16:00
	5.11														
		5 U	5 U	S U	50		500 U					30.0		50	5.40 U.J.O 5.40 U.J.O
	5 U	5 U	5 U,J,O	5 U.J.O	5 U	5 U	500 U							5 U.J.O	
44	5 U	5 U	5 U	5 U	5 U	5 U	500 U		-					5 U	5.40 U.J.O
-	5 U	5 U	5 U	5 U	5 U	5 U	500 U					20.0	p. 4	SU	5.40 U.J.O
	5 U	5 U	5 U	su	5 U	5 U	500 U	1000 U				20.0	0.0		5.40 U.J.O
-	5 U	50	5 U	5 U	5 U	5 U	500 U					-		-	5.40 U.J.O
-	50	5 0	5 U	50	5 U	50	500 U	1000 U	SU	5 U		120.0			5.40 U,3,0
1500	5 U	50	5 U	5 U	5 U	5 U	500 U								5.40 U,J,O
-	5 U	5 U	5 U	5 U	50	5 U	500 U	1000 U	5 U	5 U			-100	5.6.	5,40 0,3,0
	5 U	5.U	5 U	5 U	5 U	50	500 U	1000 U	5 U						5.40 U,J,O
-	5.0	su	5 U	5 U	5 U	SU	500 U	1000 U	5 U			0.000		-	5.40 U,J,O
-	5 U.J.O	5 U,J,O	5 U,J,O	5 U,J,O	6.10 U,J,O	5 U	500 U	1000 U	5 U.J.O	5.10 U,J,O		20.0100		and the same of th	5.40 U,J,O
	SU	5 U	5 U	5 U	5.0	50	500 U	1000 U	5 U	5 U		20.0			5,40 U,J,O
-	5 U	5 U	5 U.J.O	5 U,1,0	5 U	5 U	500 U	1000 U	5 U	1.40 J.O	5 U	20.0			5,40 U,3,0
-	5 U	5 U	5 U	5 U	5 U	5 U	500 U	1000 U	5 U	5 U	5 U			-	5,40 U,3,0
21900	S U	5 U	5 U	5 U	5 U	1.30 J.O	4800	9300	5 U	5 U	1.20 3.0	20.0			5.40 U,3,0
	5 U	5 U	s u	5 U	5 U	5 U	500 U	1000 U	5 U	5 U	5 U				5.40 U,3,0
-	50	S U	5 U	5 U	5 U	5 U	500 U	1000 U	5 U	5 U	5 U	10 U	S U	5 U	5,40 U,3,0
	5.0	5 U	5 U	5 U	5 U	5 U	500 ป	1000 U	5.0	5 U	5 U	10 U	5 U	50	5.40 U,J,O
296000	10 0:3.0	10 U	10 U	10 U	10 U	10 U	1000 U	2000 U	10 U	10 U	10 U,J,O	83	3,40 J	10 U	11 U.J.O
				5 U	5 U	su	500 U	1000 U	5 U	5 ប	5 U	10 U	5.0	SU	5.40 U,J,O
-		-	5 U	5 U	50	5 U	500 U	1000 U	5 U	5 U	5 U	10 U	5 U	5.U	5.40 0,2,0
	1500	- 5 U - 5 U	- SU SU SU - SU SU	- 5U 5U 5U 5U	- 50 50 50 50 50 50 50 50 50 50 50 50 50	- SU SU SU SU SU SU - SU SU SU SU SU SU - SU SU SU SU SU SU - SU SU SU SU SU - SU SU SU SU SU SU SU - SU SU SU SU SU SU - SU SU SU SU SU SU SU - SU SU SU SU SU SU SU - SU SU SU SU SU SU SU SU - SU SU SU SU SU SU SU SU - SU SU SU SU SU SU SU SU SU - SU	- SU - SU	- SU SU SU SU SU SU SU SU SU SOU U - SU SU SU SU SU SU SU SU SOU U - SU SU SU SU SU SU SU SU SOU U - SU SU SU SU SU SU SU SU SOU U - SU SU SU SU SU SU SU SU SOU U - SU SU SU SU SU SU SU SU SOU U - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SOU SOU O - SU SU SU SU SU SU SU SOU SOU O - SU SU SU SU SU SU SU SU SOU SOU O - SU SU SU SU SU SU SU SU SOU SU SOU O - SU SU SU SU SU SU SU SU SU SOU O - SU SU SU SU SU SU SU SU SOU SU SOU O - SU SU SU SU SU SU SU SU SU SOU SU SOU O - SU SU SU SU SU SU SU SU SU SOU SU SOU O - SU SOU SU SOU O - SU SU SU SU SU SU SU SU SU SOU SU SOU O - SU SU SU SU SU SU SU SU SU SOU SU SOU U - SU SU SU SU SU SU SU SU SU SOU SU SOU U - SU SU SU SU SU SU SU SU SU SOU SU SOU U	- SU SU SU SU SU SU SU SOU 10000 U  - SU SU SU SU SU SU SU SU 1000 U  - SU SU SU SU SU SU SU SU 1000 U  - SU SU SU SU SU SU SU SU 1000 U  - SU SU SU SU SU SU SU SU 1000 U  - SU SU SU SU SU SU SU SU 1000 U  - SU SU SU SU SU SU SU 50 U 1000 U  - SU SU SU SU SU SU SU 50 U 1000 U  - SU SU SU SU SU SU SU 50 U 1000 U 1000 U  - SU SU SU SU SU SU SU SU 50 U 1000 U 1000 U  - SU SU SU SU SU SU SU SU 50 U 1000 U 1000 U  - SU SU SU SU SU SU SU SU 50 U 1000 U 1000 U  - SU SU SU SU SU SU SU SU 50 U 1000 U 1000 U  - SU SU SU SU SU SU SU SU 1000 U 1000 U 1000 U  - SU SU SU SU SU SU SU SU SU 1000 U 1000 U 1000 U  - SU SU SU SU SU SU SU SU 1000 U 1000 U 1000 U  - SU SU SU SU SU SU SU SU 1000 U 1000 U 1000 U  - SU SU SU SU SU SU SU SU 1000 U 1000	- SU	- 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5	- 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5	- 50 50 50 50 50 50 50 50 50 50 50 50 50	- 5U	- 50 50 50 50 50 50 50 50 50 50 50 50 50

Included as part of the total carcinogenic PAHs' remediation goal

Result at or above the remediation goal

U = analyte was not detected at or above the reporting limit

ND = presumptive evidence that analyte is present; reported as a

3 = the identification of the analyte is acceptables the reported >

R = The presence or absence of the anylec cannot be determined

O = See attached data sheets for information on additional qualif

Tentatively Identified Compounds (TICs) are not shown, but are i

Table 7 SVOC Results

		Station ID	C703	C704	C801	C802	C803	C804	C805	C901	C902	C903	C904	C905	IWM	MWIA	MW2
		Sample ID	C703-0112	C704-0112	C801-0112	C802-0112	C803-0112	C804-0112	C805-0112	C901-0112	C902-0112	C903-0112	C904-0112	C905-0112	MW1-0112	MW1A-0112	MW2-0112
		Date	02/05/2012	02/05/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	02/03/2012	02/01/2012	02/01/2012
		Time	13:30	15:05	09:35	10:24	10:30	09:15	08:49	10:55	10:45	11:52	11:55	14:55	11:30	11:55	15:25
		Remediation															
Analyte (3-and/or 4-\Methylphenol	Units ug/1	Goal	5 U	SU	5 U	Su	SU	SU	S U	5 U	500 U	SU	S U	5 U	5 U	S U	5 U
(3-and/or 4-)methylphenor 1,1-Biphenyl	ug/I		5 U	5 U	\$ 4.10	5 U	Su	SU	S U	SU		SU	SU	5 U	5 U	5 U	5 U
1,2,4,5-Tetrachlorobenzene	ug/l		5 U		5 U	Su	SU	SU	S U	5 U	Annana .	S U	SU	SU	s u	SU	5 U
2,3,4,6-Tetrachlorophenol	ug/l		5 D		5 U	SU	50	5 0	5 U	5 U		SU	su	SU	SU	5 U	5 U
2.4.5-Trichlorophenol	ug/l		50	SU	5 U	5 U	5 U	5 U	5 U	50		5 0	5 U	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	ug/I		50	5 U	5 U	5 U	50	5 U	5 U	5 U		5 U	5 U	5 U	5.0	50	5 U
2,4-Dichlorophenol	ug/i		SU	5 U	Sυ	SU	50	5 U	5 U	SU		50	su	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	ug/l		SU	SU	S U	S U.	SU	SU	su	5.0		su	su	5 U	5 U	5 U	5 U
2.4-Dinitrophenol	ug/l		100	10 U	10 U.J.O	10 U	10 n	10 U	10 U	10 U.LO		10 IL.J.O	10 U.J.O	10 U.J.O	10 U.J.O	10 U,J,O	10 U.J.O
2,4-Dinitrotoluene	ug/I		5 U	5 U	S U	EU	50	5 U	5 U	5 U		5 U	5 U	S U	5 U	5 U	5 U
2,6-Dinitrotoluene	ug/I		50	SU	SU	SU	SU	SÜ	50	SU		5 U	su	5 U	5 8	5 U	5.U
2-Chloronaphthalene	ug/l		50	ริบ		SU	SU	SU	SU	5 U		50	SU	50	5 U	5 U	5 U
2-Chlorophenol	ug/l		50	SU	SU	SU	SU	SU	SU	S U		SU	SU	SU	5 U	5 U	5 U
2-Methyl-4,6-dinitrophenol	ug/l	40.00	100	10 U		10 U	-	10 11.10	10 U	10 U.J.O	10 U	10 U.J.O	10 U				
2-Methylnaphthalene	ug/l		5.0	Su		SU	5 U	5 U	SU	5 U		S U	SU	5 13	50	5 U	5 U
2-Methylphenol	ug/l		SU	SU	-	SU	SU	SU	5 U	5 u		Sυ	SU	SU	Su	5 U	S U
2-Nitrouniline	ug/t		100	10 U	10 0	10 U		10 U	10 U	10 U	10.11	10 U	10.0				
2-Nitrophenol	ug/t		5 U	SU		SU	SU	SU	SU	Su	-	SU	SU	5 U	5 U	50	Su
3,3'-Dichlorobenzidine	ug/t		5 U,1,0	SULO		SU	SU	su	S.S0 U.J.O	5 U.1.O		50	50,10	5 U	S U.R.O	5 U.J.O	5 U.J.O
3-Nitroaniline	ug/l		10 U	10 U		10 U		10 U									
4-Bromophenyl phenyl ether	ug/i		SU	5.0		SU	5 U	5 U	SU	Su		Su	50	511	S II	5 U	5 U
4-Chloro-3-methylphenol	ug/l		5 U	5 U	Su	5 U	su	50	SU	5 U		5 U	5 U	s u	Su	SU	5 U
4-Chloro-s-methylphenol 4-Chlorosniline			5 U	5 U	S U.R.O	Su	SU	SU	5.50 U.J.O	5 U	The second second	5 U	SU	S U	5 U.R.O	50,00	5 IE3.O
4-Chlorophenyl phenyl ether	ug/l		50	SU		5 U	SU	SU	\$ U	5 U		SU	SU	5 U	5 U	5 U	5 U
4-Nitrouniline	ug/t		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		10 U					
4-Nibrophenol	ug/I		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	-	10 U					
Acenuphthene	ug/I		50	5 U		SU	SU	SU	5 U	su		32	SU	SU	5 U	5 U	5 U
Acenaphthylene	ug/l		50	5 U		5 U	SU	SU	SU	SU		50	SU	5 U	5 U	5 U	5 U
Acetophenone	ug/l			SU		SU	5 U	SU	5 U	5 U		5 U	SU	S U	5 U	5 U	5 U
Anthracene	ug/l			5 U	5 0,1,0	5 U	Sυ	SU	5 U	5 U		SU	5 U	s u	5 U	5 U	50
Abrazine	ug/i		50	SU	S U.J.O	S U	5 U	SU	S U	S U			SU	5 U	5 U	5 U	50
Benzaldehyde	ug/l			S U.J.O	S U.J.O	5 U,),O	5 0,3.0	5 U.J.O	5 U.J.O	5 U.1.0			5 11.1.0	5 U.J.O	S U.J.O	5 U.J.O	5 0,2.0
Benzo(a)anthracene			50.20	S U	S U.J.O	5 U	Su	SU	SU	5 U		S U	5 U	5 0	5 U	5 U	5 U.J.O
Benzo(a)pyrene	- ug/l		5 U.J.O	5 U.J.O	5 U.R.O	5 U.J.O	5 U.J.O	S U.J.O	5 U	5 U.J.O		2 N'TO	5 U.J.O	5 U.J.O	5 U	5 U.J.O	5 U
Benzo(b)fluoranthene	ug/l		5 U.J.O	5 U.J.O	S U.R.O	5 U.J.O	5 U.J.O	5 U.J.O	5 U	5 0.3.0		5 U.J.O	5 U.J.O	5 U.J.O	5 U	5 U.J.O	5 U
Benzo(g,h,i)perylene	ug/i			5 U	S U.R.O	5 U	5 U	SU	SU	S U		SU	5 U	5	5 U	5 U	50
Benzo(k)fluoranthene	nd\;		s u	5 U	5 U.R.O	5 U	S U	S U	5 U	S U	NAME OF TAXABLE PARTY.	S U	SU	s u	5 U	S U	5 U
Benzyl butyl phthalate	ug/i		5 U	5 U		5 U	5 U	5 U	5 U	SU		S U	SU	SU	5 U	5 U	5 U
Bis(2-chloroethoxy)methane	ug/3		AND DESCRIPTION OF THE PERSON	-		5 U	S U	Sυ	SU	SU	500 U	5 U	sυ	5 U	5 U	5 U	5.0
bis(2-Chloroethyl) Ether	ug/I				5 U	SU	5 U	S U	5 U	SU	500 U	50	5 U	5 0	5 U	5 U	รบ
Bis(2-chloroisopropyl) ether	ug/I				5.5	SU	5 U	S U	5 U	SU		SU	SU	-	SU	SU	5 U
Bis(2-ethylhexyl) phthalate	ug/I			-	5 U.J.O	SU	5 U	5 U	SU	su		5 U	SU		SU	5 U	SU
Caprolactam	ug/l				5 U.J.O	5 U	SU	5 U	5 U	Su		Sυ	SU		SU	5 U	5 U
Carbuzole	ug/l		SU		5 U	Su	50	SU	SU	5 U		16	5 U		5 U	5 U	50

		Station ID	C703	C704	C801	C802	C803	C804	C805	C901	C902	C903	C904	C905	MW1	MW1A	MW2
		Sample ID	C703-0112	C704-0112	C801-0112	C802-0112	C803-0112	C804-0112	C805-0112	C901-0112	C902-0112	C903-0112	C904-0112	C905-0112	MW1-0112	MW1A-0112	MW2-0112
		Date	02/05/2012	02/05/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	02/03/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	01/31/2012	02/03/2012	02/01/2012	02/01/201
		Time	13:30	15:05	09:35	10:24	10:30	09:15	08:49	10:55	10:45	11:52	11:55	14:55	11:30	11:55	15:25
Analyte	Units	Remediation Goal															
Chrysene	ug/l		SU	5 U									5 U		5 U	5 U	5 U,3,0
Dibenzo(a,h)anthracene	ug/l			s u		S U						2000	SU		S U	5 U	5 U
Dibenzofuran	ug/I	44	5 U	5 U		SU	S U			SU	150 3,0	Annual Control of the	su	S U	5 U	5 U	5 U
Diethyl phthalate	ug/l	4.7	S U	SU	S U.J.O	SU	\$ U	S U	SU	S U	500 U	SU	s u	5 U	SU	5 U	5 U
Dimethyl phthalate	ug/l		U 2	5 0	S U.J.O	SU	SU	SU	SU	SU	S00 U	SU	SU	5 U	5 U	s u	5 U
Di-n-butylphthalate	ug/l		Sυ	5 U	S U.J.O	5 U	s u	S U	SU	5 U	500 U	SU	S U	5 U	5 U	S U	SU
Di-n-octylphthalate	ug/l	-	SU	S u	5 U,3,0	5 U	S U	s u	SU	S U	500 U	5 U	5 U	5 U	s u	5 U	5 U
Fluoranthene	ug/l	1500	SU	5 U	5 0,2,0	s u	s u	\$ U	S U	5 U	\$00 U	SU	s u	5 U	5 U	SU	5 U,J,O
Fluorene	ug/l		SU	s u	\$ u	SU	SU	SU		5 U	120 J,O	14	SU	5 U	S U	5 U	S U
Hexachlorobenzene (HCB)	ug/l	•	5 U	5 U	S 0.3.0	5 U	5 U	5 U			500 U	5 U	S U	5 U	5 U	S U	5 U
Hexachlorobutadiene	ug/l	(he)	su	SU	s u	5 U	S U	su			500 U	SU	SU	5 U	S U	SU	รบ
Hexachlorocyclopentadiene (HCCP)	ug/l		Sυ	S U			S U	7.7				S U	SU	5 U	5 U.R.O	5 U,J,O	5 U.J.O
Hexachloroethane	ug/l		SU	5 U	s u	5 U	S U	5 U	5 U	S U	500 U	SU	5 U	5 U	S U	Sυ	5 U
Indeno (1,2,3-cd) pyrene	ug/l		S U	SU	S U,R,O	SU	S U	5 U	S U	5 U	S00 U	SU	5 U	5 U	S U	5 U	S U
Isophorone	ug/l		SU	5 U	5 U	5 U	SU	SU	F			S U	SU	5 U	5 U	5 U	5 U
Naphthalene	ug/l	21900	5 U	S U	סינית ג					9.60					SU	5 U	5 U
Nitrobenzene	ug/l	-	5 D	5 U			S U						SU		5 U	5 U	50
n-Nitroso di-n-Propylamine	ug/l	-	S U	5 U		5050	5 U	5.5					D351		5 U	5 U	5 U
n-Nitrosodiphenylamine/Diphenylamine	ug/l		5 U	S U	S U	5 U	s u	5 U	5 U	5 U	500 U	50 .	5 U	5 U	Sυ	5 U	5 U
Pentachlorophenol	ug/l	296000	10 U	10 U	10 0	10 U	1000 U	10 U,J,O	8.10 J,O	10 U,J,O	10 U	10 U,J,O	10 U				
Phenunthrene	ug/l		5 U	5 U	5 U,J,O	5 U	511	5 Ü	5 U	SU	\$00 U	5 U	S U	5 U	5 U	5 U	5 U
Pyrene	ug/I	-	s u	S U	5 4,1,0	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U	5 U	5 U	5 U	5 U.J.O

Included as part of the total carcinogenic PAHs' remediation goal

Result at or above the remediation goal  $U = \text{analyte wat not detected at or above the reporting limit} \\ U = \text{analyte wat not detected at or above the reported as } \\ J = \text{the identification of the analyte is acceptable; the reported } \\ R = \text{The presence or absence of the anilyte compt be determined } \\ O = \text{See attached data sheets for information on additional qualifies.} \\$ 

Tentatively Identified Compounds (TICs) are not shown, but are i

Table 7 SVOC Results

		2						SVUC NES		T =		micross	PAYCHACO.
		Station ID Sample ID Date Time	MW3-0112 02/01/2012 12:20	MW3 MW3D-0112 02/01/2012 12:30	MW4 MW4-0112 02/01/2012 10:20	MW5 MW5-0112 02/01/2012 09:35	MW6 MW6-0112 02/01/2012 16:21	OW09 OW9-0112 02/04/2012 15:50	OW10 OW10-0112 02/06/2012 17:15	PYCDSM PYCDSM-0112 02/02/2012 15:55	PYCD5N PYCD5N-0112 02/02/2012 16:35	PYCDSS-0112 02/02/2012 16:20	PYCWCB-011 02/06/2012 11:40
	Units	Remediation Goal	12:20	12:50	10.20	03.23		2.2	Ť.				
Analyte (3-and/or 4-)Methylphenol	ug/l	Goal	SU	50	210	5.0	74	5 U	5 U	SU'	5 U	50	5 U
3-and/or +- Imemyspheniol 1.1-Biphenyl	ug/i		50	5 U	50	50	50	5 U	5 U	SU	5 U	5 U	5 U
1,2,4,5-Tetrachlorobenzene			5 U	SU	50	50	5 U	s.u	50	50	5 U	5 U	5 U
2.3.4.6-Tetrachlorophenol	ug/l		SU	50	50	5.0	50	35	5 U	5 U	5.0	5 U	50
2.4.5-Trichlorophenol	ug/i	-	50	50	S U	50	SU	3.70 J.C	5 U	50	su	50	รบ
2.4.5-Trichlorophenol	ug/l	-	5 U	5 U	50	50	50	5 U	SU	SU	SU	5 U	5 U
	ug/I		5 U	50	50	5 U	su	SU	SU	SU	SU	50	5 U
2,4-Dichlorophenol	1.000	-	5 U	50	120	5'U	24	SU	5 U	SU	1.30 2.0	su	50
2,4-Dimethylphenol	ug/l	-	10 U.J.O	10 U.J.O	10 U.J.O	10 0.3.0	10 U.J.O	10 0.3.0	10 U	10 U.J.O	10 U.J.O	10 0.3.0	10 D
2,4-Dinitrophenol	ug/l		5 U	5 U	5.0	5 U	S U	SU	50	5 U	5 U	50	5 U
2.4-Dinitratoluene	ug/l	-	50	50	50	SU	5 U	5 U	50	50	50	5 U	5 U
2,6-Dinitrotoluene			SU	5U	SU	5 U	5 U	50	50	5 U.J.O	50	50	5 U
2-Chloronaphthalene	rug/l		5 U	50	SU	5 U	5.0	5 U	50	50	50	5 U	50
2-Chlorophenol	Tigur		10 U.J.O	10 U.J.O	10 0.3.0	10 0.3.0	10 U	10 U	10 U	10 0	10 U	100	10 U
2-Methyl-4, 6-dinitrophenol	ug/l	180	100 00000	5 U	5.30	50	1.30 3.0	5 U	5 U	5 0.3.0	13	5 U	50
2-Methylnaphthalene	ug/l		5 U		1			50	SU	50,0,0	50	50	50
2-Methylphenol	ug/l	*	SU	SU	99	5 U	18 10 U	10 U	10 U	10 U	100	10 U	10 U
2-Nitroaniline	ug/l	.*	10 U.J.O	10 U	10 U			5 U	5 U	50	50	5 U	5 U
2-Nitrophenol	ug/l	-	50	5 U	su	Su	5.0	5 U.J.O	5 03.0	5.20 U.J.O	5.10 U.J.O	SU.R.O	5 U
3,3'-Dichlorobenzidine	ug/l		50	5 U	5 U,),O	รบ	5 U.R.O		10 U	10.0	10 U	10.0	10 U
3-Nitroaniline	T <sub>i</sub> gu	100	10 U.3.0	10 U	10 U	10 U	10 U	10 U		5 U	5 U	511	5 U
4-Bromophenyl phenyl ether	ug/l		5 U	5 U	5 U	SU	5 U	50	5 U	1000	P 30	5 U	5.0
4-Chloro-3-methylphenol	ug/1	125	50	5.0	SU	su	5.0	5 U	50	5.0	50	5 U.R.O	50
4-Chloroaniline	ug/l		5 U	5 U	5 0.3.0	รข	5 U.R.O	5 U,J,O	5 U.J.O	5.20 U.J.O	5.10 U.J.O 5 U	5 U.K.O	50
4-Chlorophenyl phenyl ether	ug/I		50	5 U	5 U	50	58	5 U	50	5 U	F1.01	10 U	10.0
4-Nitroaniline	ug/l	7.	10 0.3,0	10.0	10 U	10 U	10.0	10 0,3,0	10 U	10 U	10 U		10 0
4-Nitrophenoi	ug/l		10 U.J.O	10 U	10 U -	10 U	10 0	10 U	10 U	10 U	10 U	10 0	
Acenaphthene	ug/l	9000	5 U	50	4.30 3,0	5 U	13,0	50	2.10 3.0	5 0,3,0	7.50	5 U	5 U
Acenaphthylene	ug/l		50	5 U	5 U	5 U	5 U	5 U	50	5 U.J.O	50	50	100
Acetophenone	ug/il	-	5 U	50	5 U	50	1.90 3.0	5 U	5 U	su	5 U	50	5 U
Anthracene	ug/l	*	5 U	50	5 U	5 U	su	5 U	5 0	5 U.J.O	50	50	50
Atrazine	ug/l	***	50	50	5 U	5 U	5 U	50	50	5 U.J.O	5 U	50	5 U
Benzaldehyde	ug/l	-	5 0,3,0	5 UJ.O	5 U.J.O	5 U.J.O	5 0,3.0	5 U,3.0	5 U.J.O	5 U,J,O	5 U.J.O	5 U.J.O	5 U, J, O
Benzo(a)anthracene	ug/l	1100	5 U.	5 U	50	5 U	5 U	50	5.0	50,1,0	50	5 U.	5 U
Benzo(a)pyrene	ug/l	- 4	5 U,J.O	5 0,0,0	5 U.J.O	5 U.J.O	50	50	50	5 0,3,0	5 U	5 U.J.O	5 U
Benzo(b)fluoranthene	ug/l	-	5 U.J.O	5 U,J,O	5 0,3,0	5 U.J.O	5.0	5 U	50	5 U.J.O	5 U	5 U.J.O	50
Benzo(g.h.i)perylene	ug/1		5.0	50	5.0	5 U	50	5 U	5 U	5 U.J.O	50	50,3.0	50
Benzo(k)fluoranthene	ug/l		50	50	SU	SU	50	50	50	5 0,1,0	50	5 0.3.0	รบ
Benzyl butyl phthalate	ug/l	-	50	50	50	5 U	5.0	50	5 U	SU	5.0	50	50
Bis(2-chloroethoxy)methane	ug/i	-	50	50	50	5 U	50	5 U	5.0	50	50	50	50
bis(2-Chloroethyl) Ether	ug/f	16	5 U	5 0	su	5 U	5 11	5 U	5 U	SU	5 U	50	50
Bis(2-dviororsopropyl) ether	ug/l	120	5 U	50	50	50	50	5 U	5 0	SU	5 U	5 U	5 U
Bis(2-ethylhexyl) phthalate	ug/l	OP.	5 U	50	SU	50	50	5.0	50	5 0	50	5 U	5 U
Caprolactam	ug/I	-	5 U	50	SU	5.0	50	5 U	50	5 U	5 0	5 U	5 U
Carbazole	ug/l	-	50	5.0	2.60 3.0	5 U	50	50	50	5 U	1.10 3.0	50	5 0

Table 7 **SVOC Results** 

		Station ID	MW3	MW3	MW4	MW5	MW6	OW09	OW10	PVCDSM	PYCDSN	PYCDSS	PYCWCB
		Sample ID	MW3-0112	MW3D-0112	MW4-0112	MW5-0112	MW6-0112	OW9-0112	OW10-0112	PYCDSM-0112	PYCDSN-0112	PYCD55-0112	PYCWCB-0113
		Date	02/01/2012	02/01/2012	02/01/2012	02/01/2012	02/01/2012	02/04/2012	02/06/2012	02/02/2012	02/02/2012	02/02/2012	02/06/2012
		Time	12:20	12:30	10:20	09:35	16:21	15:50	17:15	15:55	16:35	16:20	11:40
Analyte	Units	Remediation Goal	7		10		17.5	型之	₹	_ vm 27 * 10 *	46		1 1 1 2
Chrysene	ug/l	-	5 U	5 U	5 U	50	5 U	SU	50		5 U		5 U
Dibenzo(a,h)anthracene	ug/l		SU	5 U	5 U	50	5 U	50	50	5 U.J,O	50	5 0.3.0	50
Dibenzofuran	ug/l	44	5 U	50	1.80 J,O	50	5 U	5 U	50	50	5U .	5 U	5 U
Diethyl phthalate	ug/l	•	SU	5 U	SU	50	50	5 U	5 U	5.U	50	5 U	5 U
Dimethyl phthalate	ug/l	-	SU	50	5 U	50	5 U	5 U	5 U	5 U	5 U	50	5 U
Di-n-butylphthalate	ug/l	-	SU	50	5 U	50	50	5 U	5 0	50	50	5 U	5 U
Di-n-octylphthalate	ug/l	-	5 U	5 U	5 U	5 U	SU	5 U	50	5 U,J,O	5 U	5 U	5 U
Fluoranthene	ug/l	1500	s u	50	50	SU	50	5 U	5 U	5 U,3,0	5 U	5 U	50
Fluorene	ug/l	-	SU	5 U	5 U	SU	su	5 U	50	5 U	5 U	5 U	5 U
Hexachlorobenzene (HCB)	ug/l	-	SU	SU	S U	50	5 U	50	50	5 U,3,0	50	5 U	5 U
Hexachlorobutadiene	ug/l	-	50	5 U	5 U	5 U	SU	5 U	50	5 U	5 U	5 U	5 U
Hexachlorocyclopentadiene (HCCP)	ug/l	-	SU	SU	S U,J,O	50	S U,R,O	5 U,J,O	S U,J,O	5.20 U,J,O	5.10 U,J,O	S U,R,O	SU
Hexachloroethane	ug/l	-	5 U	SU	5 U	50	SU	5 U	50	5 U	50	5 U	5U .
Indeno (1,2,3-cd) pyrene	ug/l		50	SU	50	SU	SU	SU	5 U	5 U,J,O	5 U	5 U,J,O	s.u
Isophorone	ug/l	-	SU	50	SU	SU	50	50	50	5-U	50	5 U	5.U
Naphthalene	ug/l	21900	5 U	5 U	39	5 U	27	3.50 3,0	31,0	5 U,3,0	51	5 U	5 U
Nitrobenzene	ug/l	-	50	50	SU	5 U	5 U	SU	5.0	50	5 U	5 U	SU
n-Nitroso di-n-Propylamine	ug/l	-	50	SU	SU	SU	5.0	SU	5 U	SU	5 U	5 U	5.0
n-Nitrosodiphenylamine/Diphenylamine	ug/l	-	SU	SU	SU	SU	su	50	50	5 U	5 U	5 U	5 U
Pentachlorophenol	ug/l	296000	10 U,J,O	10 U.J.O	10 U,J,O	10 U,J,O	10 U	470	10 U	10 U	10 U	10 U	10 U
Phenanthrene	ug/l	-	50	5 U	s u	50	su	SU	5 U	5 U,J,O	5 U	5 U	5 U
Pyrene	ug/l	-	5 U	5 U	5 U	5 U	5 U	50	5.0	5 U.J.O	5 U	5 U	50

Included as part of the total carcinogenic PAHs' remediation goal

Result at or above the remediation goal

U = analyte was not detected at or above the reporting limit

NJ = presumptive evidence that analyte is present; reported as a

J = the identification of the analyte is accepatable; the reported v

R = The presence or absence of the analyte cannot be determined

O = See attached data sheets for information on additional qualif

Tentatively Identified Compounds (TICs) are not shown, but are  $\boldsymbol{i}$ 

## 2011 Treatment System Monitoring Results (September 2010- September 2011 Operation and Maintenance Report)

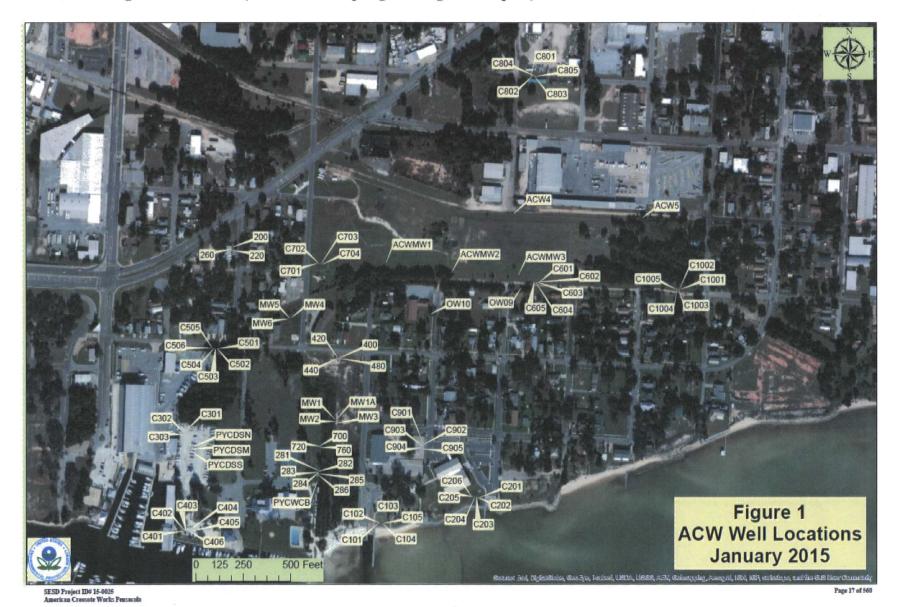
Table 4
Treatment System Monitoring Results Summary

June 2010 through September 2011

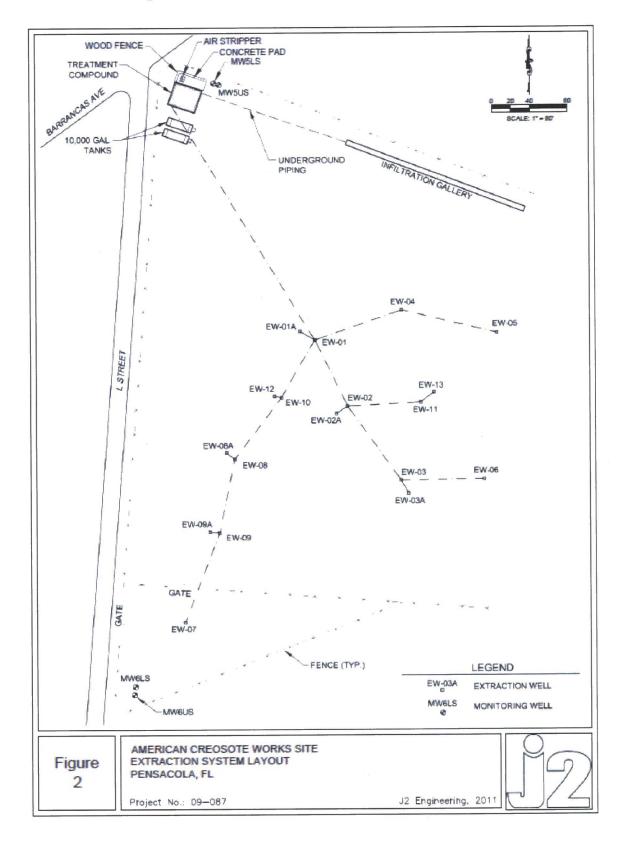
Analyte	Sample Location		Sample Co	oncentrations (	µg/L) and Sam	ple Date	
		June-10	September-10	December-10	March-11	June-11	September-11
Benzene	BTS	160	0	3.6	73	2.6	4
Remedial Goal = 91 µg/L	DTS	0	85	2.2	0	17	65
	ATS	0	87	0	0	0	77
Acenaphthene	BTS	800	6,500	3,800	14,000	9,600	7,900
Remedial Goal = 9,000 µg/L	DTS	46	2,900	8,700	19,000	750	9,700
	ATS	190	5,800	4,300	110	27	650
Fluoranthene	BTS	690	6,900	3,900	17,000	14,000	11,000
Remedial Goal = 1,500 µg/L	DTS	67	2,500	12,000	22,000	2,700	11,000
	ATS	200	7,100	21,000	45	16	640
Naphthalene	BTS	6,400	9,800	13,000	51,000	19,000	16,000
Remedial Goal = 21,900 μg/L	DTS	14	15,000	15,000	63,000	210	34,000
	ATS	11	27,000	250	360	0	3,900
Selected PAHs	BTS	3,179	33,190	16,800	71,800	50,419	52,490
Remedial Goal = 1,100 µg/L	DTS	572	12,450	45,370	91,200	8,020	51,340
	ATS	1,031	28,580	57,900	282.6	174	3,047
Dibenzofuran	BTS	560	3,800	2,000	9,600	7,000	5,800
Remedial Goal = 44 µg/L	DTS	20	1,600	4,300	13,000	410	5,800
	ATS	120	2,700	1,900	59	10	360
Pentachlorophenol	BTS	370	2,900	2,800	2,300	5,200	3,900
Remedial Goal = 296,000 μg/L	DTS	0	3,400	860	3,800	87	2,100
	ATS	82	1,000	33	0	0	110

BTS= Before Treatment System
DTS= During Treatment System
ATS= After Treatment System
Exceeds Remedial Goal

### 2015 Monitoring Well Locations (from 2015 Sampling Investigation Report)



On-site Monitoring Well Locations from 2012 O&M Report



### Appendix H: RSL Soil Screening Evaluation

Table H-1: Residential RSL Surface Soil and Sediment Screening

	ROD	Residential	RSLs (mg/kg) <sup>a</sup>		g-Level Risk uation <sup>b</sup>
COC	Cleanup Goal (mg/kg)	Risk-based (1 x 10 <sup>-6</sup> )	Non- carcinogenic HI <sup>c</sup>	Carcinogenic Risk	Non- carcinogenic HI
Surface soil (off-facility resi	dential)				
2,3,7,8-tetrachlorodibenzo- p-dioxin (TCDD) (TEQ)	0.001	0.0000048	0.000051	2.1E-04	19.6
Benzo(a)pyrene	0.33	0.016		2.1E-05	
Sediment					
Total Carcinogenic PAHs (Benzo(a)pyrene)	0.655	0.016		4.1E-05	

### Notes:

https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2015 (accessed 3/22/16).

Risk = (Cleanup criterion/RSL)(1 x  $10^{-6}$ )

HI = (Cleanup criterion/RSL)

c. EPA's dioxin reassessment has been developed and undergone review for many years, with the participation of scientific experts in EPA and other federal agencies, as well as scientific experts in the private sector and academia. The Agency followed current guidelines and incorporated the latest data and physiological/biochemical research into the reassessment. On February 17, 2012, EPA released the final human health non-cancer dioxin reassessment, publishing an oral non-cancer toxicity value, or reference dose (RfD), of  $7x10^{-10}$  mg/kg-day for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in EPA's Integrated Risk Information System (IRIS). The dioxin cancer reassessment will follow thereafter. The dioxin RfD was approved for immediate use at Superfund sites to ensure protection of human health.

-- = criterion not developed for this chemical.

Bolded: exceedance of acceptable risk

Table H-2: Residential RSL Sub-Surface Soil Screening

COC	ROD Cleanup	Residentia	l RSLs (mg/kg) <sup>a</sup>		g-Level Risk uation <sup>b</sup>
	Goal (mg/kg)	Risk-based (1 x 10 <sup>-6</sup> )	Non- carcinogenic HI	Carcinogenic Risk	Non- carcinogenic HI
Sub-surface soil					
Acenaphthene	876		3,600		0.2
Anthracene	145		18,000		0.008
Benzo(a)anthracene	740	0.16		4.6E-03	
Benzo(b)fluoranthene	153,065	0.16		9.6E-01	
Benzo(k)fluoranthene	153,065	1.6		9.6E-02	
Chrysene	2,090	16		1.3E-04	
Dibenzofuran	24		73		0.3
Fluoranthene	1,450		2,400		0.6
Fluorene	78		2,400		0.03
Naphthalene	235	3.8	130	6.2E-05	1.8
Pentachlorophenol (PCP)	138,000	1	250	1.4E-01	552
Phenanthrene	148				

a. Values are EPA's RSL for carcinogenic and non-carcinogenic effects available at:

b. Screening level risk evaluation:

coc	ROD Cleanup	Residentia	RSLs (mg/kg) <sup>a</sup>	Screening-Level Risk Evaluation <sup>b</sup>	
	Goal (mg/kg)	Risk-based (1 x 10 <sup>-6</sup> )	Non- carcinogenic HI	Carcinogenic Risk	Non- carcinogenic HI
Pyrene	1,070		1,800		0.6

Notes:

a. Values are EPA's RSL for carcinogenic and non-carcinogenic effects available at: https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2015 (accessed 3/22/16).

b. Screening level risk evaluation:

Risk = (Cleanup criterion/RSL)(1 x  $10^{-6}$ )

HI = (Cleanup criterion/RSL)

-- = criterion not developed for this chemical.

Bolded: exceedance of acceptable risk

Table H-3: Industrial RSL Surface Soil and Sediment Screening

COC	ROD Cleanup	Industrial	RSLs (mg/kg) <sup>a</sup>	Screening-Level Risk Evaluation <sup>b</sup>		
COC	Goal (mg/kg)	Risk-based Non- (1 x 10 <sup>-6</sup> ) carcinogenic H		Carcinogenic Risk	Non- carcinogenic HI	
Surface soil (on-facility)			-			
2,3,7,8-tetrachlorodibenzo- p-dioxin (TCDD) (TEQ)	0.0025	0.000022	0.00072	1.1E-04	3.5	
Pentachlorophenol (PCP)	30	4	2,800	7.5E-06	0.01	
Total Carcinogenic PAHs (Benzo(a)pyrene)	50	0.29		1.7E-04	<b></b> ,,, -	
Sediment						
Total Carcinogenic PAHs (Benzo(a)pyrene)	0.655	0.29		2.3E-06		

Notes:

- a. Values are EPA's RSL for carcinogenic and non-carcinogenic effects available at: <a href="https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2015">https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2015</a> (accessed 3/22/16).
- b. Screening level risk evaluation:

Risk = (Cleanup criterion/RSL)(1 x  $10^{-6}$ )

HI = (Cleanup criterion/RSL)

c. EPA's dioxin reassessment has been developed and undergone review for many years, with the participation of scientific experts in EPA and other federal agencies, as well as scientific experts in the private sector and academia. The Agency followed current guidelines and incorporated the latest data and physiological/biochemical research into the reassessment. On February 17, 2012, EPA released the final human health non-cancer dioxin reassessment, publishing an oral non-cancer toxicity value, or reference dose (RfD), of 7x10<sup>-10</sup> mg/kg-day for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in EPA's Integrated Risk Information System (IRIS). The dioxin cancer reassessment will follow thereafter. The dioxin RfD was approved for immediate use at Superfund sites to ensure protection of human health.

-- = criterion not developed for this chemical.

Bolded: exceedance of acceptable risk

Table H-4: Industrial RSL Sub-Surface Soil Screening

COC	ROD Cleanup	Industrial	RSLs (mg/kg) <sup>a</sup>	Screening-Level Risk Evaluation <sup>b</sup>		
coc	Goal (mg/kg)	Risk-based (1 x 10 <sup>-6</sup> )	Non- carcinogenic HI	Carcinogenic Risk	Non- carcinogenic HI	
Sub-surface soil			25			
Acenaphthene	876		45,000		0.02	
Anthracene	145		230,000		0.0006	
Benzo(a)anthracene	740	2.9		2.6E-04		
Benzo(b)fluoranthene	153,065	2.9		5.3E-02		
Benzo(k)fluoranthene	153,065	29		5.3E-03		
Chrysene	2,090	290		7.2E-06		
Dibenzofuran	24		1,000		0.02	
Fluoranthene	1,450		30,000		0.05	
Fluorene	78		30,000		0.003	
Naphthalene	235	17	590	1.38E-05	0.4	
Pentachlorophenol (PCP)	138,000	4	2,800	3.4E-02	49	
Phenanthrene	148					
Pyrene	1,070		23,000		0.05	

### Notes:

a. Values are EPA's RSL for carcinogenic and non-carcinogenic effects available at: <a href="https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2015">https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2015</a> (accessed 3/22/16).

b. Screening level risk evaluation:

Risk = (Cleanup criterion/RSL)(1 x  $10^{-6}$ )

HI = (Cleanup criterion/RSL)

-- = criterion not developed for this chemical.

Bolded: exceedance of acceptable risk

Table H-5: Residential and Industrial Soil Screening for OU1 Off-facility Remediation Areas based on 2004 Confirmation Sampling

	Off-facility surface soil	Confirmation sample concentration (mg/kg)	Residential RSLs (mg/kg) <sup>b</sup>		Screening-Level Risk Evaluation <sup>c</sup>	
Locationa	čoc		Risk-based (1 x 10 <sup>-6</sup> )	Non- carcinogenic HI	Risk-based (1 x 10 <sup>-6</sup> )	Non- carcinogenic HI
G2-CS01	2,3,7,8-tetrachlorodibenzo- p-dioxin (TCDD) (TEQ)	0.000176	4.8E-06	0.000051	3.6E-05	3.5
PA-CS105	2,3,7,8-tetrachlorodibenzo- p-dioxin (TCDD) (TEQ)	0.000107	4.8E-06	0.000051	2.2E-05	2.1
PA-CS105	Benzo(a)pyrene	479	0.016		3.0E-02	
PA-CS105	Total Carcinogenic PAHs (Benzo(a)pyrene)	5,720	0.016		3.6E-01	
Lastina	PYC Sediment COC	Confirmation sample	Industrial RSLs (mg/kg)		Screening-Level Risk Evaluation	
Location		concentration (mg/kg)	Risk-based (1 x 10 <sup>-6</sup> )	Non- carcinogenic HI	Risk-based (1 x 10 <sup>-6</sup> )	Non- carcinogenic HI
PA-CS105	Total Carcinogenic PAHs (Benzo(a)pyrene)	5,720	0.29		2.0E-02	

### Notes:

Source: January 2004 Close-out Report for Waste Consolidation Activities Conducted

- a. These are the highest samples of the 42 confirmation samples from the 5 excavated areas.
- b. Values are EPA's RSL for carcinogenic and non-carcinogenic effects available at: <a href="https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2015">https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2015</a> (accessed 3/22/16).
- c. Screening level risk evaluation:

Risk = (Concentration in soil sample/RSL)(1 x  $10^{-6}$ )

HI = (Concentration in soil sample/RSL)

Bolded: exceedance of acceptable risk

-- = criterion not developed for this chemical.

Figure from the January 2004 Close-out Report for Waste Consolidation Activities Conducted

