Third Five-Year Review Report
For

Escambia Wood Treating Company Superfund Site - Pensacola
FLD008168346

Pensacola
Escambia County, Florida

September 2012

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For:
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Approved by:

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Date: 9/27/12

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3910 N. Palafox Street
Pensacola
Escambia County, Florida

List of Acronyms

ACOE	United States Army Corp of Engineers
ARAR	Applicable or Relevant and Appropriate Requirement
bls	Below Land Surface
CATE	Citizens Against Toxic Exposure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CIC	Community Involvement Coordinator
CMC	CMC Environmental Services, Inc.
COC	Contaminant of Concern
ECC	Environmental Chemical Corporation
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
ETC	Escambia Treating Company
FDEP	Florida Department of Environmental Protection
FDER	Florida Department of Environmental Regulation
FYR	Five-Year Review
HDPE	High Density Polyethylene
IC	Institutional Control
MCL	Maximum Contaminant Level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PAH	Polycyclic Aromatic Hydrocarbons
PCP	Pentachlorophenol
PRG	Preliminary Remediation Goal
PRP	Potentially Responsible Party
RAO	Remedial Action Objective
RCRA	Resource Conservation and Recovery Act
RGO	Remedial Goal Objective
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
SCTL	Soil Cleanup Target Levels
TBC	To-Be-Considered

Executive Summary

Introduction

The Escambia Wood Treating Company Superfund Site - Pensacola (the Site) is located in Pensacola, Escambia County, Florida. The Escambia Wood Treating Company operated from 1942 to 1982. The use of creosote and pentachlorophenol (PCP) as part of the wood treating process resulted in contamination of soil and ground water with Polycyclic aromatic hydrocarbons (PAHs) from creosote and with dioxin, a common impurity in commercial-grade PCP. The soil contamination has affected about 96 acres of land, including the 26 acre former facility and about 70 acres of the surrounding neighborhoods. The contaminated ground water plume extends approximately 1.3 miles away from the former facility. In September 1987, sampling at the Escambia Wood Treating Company indicated site-related activities had contaminated soil and ground water. The company failed to address the contamination and declared bankruptcy in 1991. In October 1991, the United States Environmental Protection Agency (EPA) began a removal action to stabilize and secure the Site while evaluating long-term cleanup options. The EPA proposed the Site for placement on the National Priorities List (NPL) on August 23, 1994; the Site was finalized on the NPL on December 16, 1994. Primary contaminants of concern at the Site included creosote, PCP, PAHs and dioxins in soil and ground water. EPA divided the site into two operable units (OUs), with soil contamination as OU1 and ground water contamination as OU2.

The EPA addressed soil contamination in two remedial actions, an interim remedy, selected in 1997 and a final remedy, selected in 2006. This Five-Year Review (FYR) evaluates both the 1997 interim remedy and the 2006 final remedy for OU1. The triggering action for this FYR was the signing of the previous FYR on September 27, 2007, which evaluated only the 1997 interim remedy.

Remedial Components

The February 12, 1997 OU1 Interim Record of Decision (ROD) did not specify cleanup levels or remedial action objectives (RAOs) for the Site, because it focused on relocation as an interim action. The interim remedy consisted of permanent residential relocation for three neighborhoods and was carried out as part of the National Relocation Pilot Project. The criteria used as the basis for the recommended relocation included the interaction of the following eight factors:

- Health risks identified by EPA due to the presence of dioxin and benzo(a)pyrene in portions of the Relocation Area.
- The fear the Relocation Area residents felt stemming from uncertainty regarding the health impacts, loss of property values and psychological stress.
- Final remediation activities on the Site that are expected to further adversely affect the Relocation Area through operational issues such as truck traffic, noise, dust, equipment staging and other impacts.
- Greater flexibility for final remedy selection and lower project costs due to the relocation's ability to obviate the need for soil remediation to residential levels.
- Land use surrounding the Site, including discreet, well-defined residential areas within a commercial area and existing transportation infrastructure, strongly indicated industrial use as appropriate for the property. Relocation allowed redevelopment of the Site for

industrial/commercial purposes valuable to the community from an economic development perspective.
- The need to ensure that residents are not exposed to hazardous substances during remediation activities in the Relocation Area.
- Heavy construction equipment and construction traffic during the final remedy could pose a physical hazard to residents, especially curious children.
- The relocation will accommodate EPA's need for additional space for managing and implementing the construction of the final remedy for the site.

The factors listed above, combined with a concern for the overall welfare of the community, justified the relocation of the residents from the surrounding neighborhoods in furtherance of the objectives of the National Relocation Pilot Project. Components of the remedy selected in the 1997 Interim ROD include:

- Permanent relocation of 358 households (from the Rosewood Terrace, Oak Park, Escambia Arms and Goulding neighborhoods).
- Demolition of abandoned structures in the relocation neighborhoods.
- Implementation of institutional controls (restrictive covenants) prior to transfer of relocation properties from federal ownership.
- Maintenance of the soil stockpile until implementation of the final remedy.

The final OU1 remedial action was selected in a ROD issued on February 13, 2006. The 2006 ROD added a neighborhood to the permanent relocation remedy and selected a final remedy for contaminated soils. Cleanup actions selected in the OU1 ROD included excavation of contaminated soil from both on and off the former facility, containment of contaminated soil in a lined cell, installation of a multi-layer cap, solidification/stabilization of the contaminated waste, operation and maintenance activities for the cap and containment system, long-term monitoring, implementation of institutional controls and FYRs to ensure the protectiveness of the remedy. RAOs for OU1 include:

- Prevent ingestion, inhalation or direct contact with surface soil that contains concentrations of contaminants in excess of the remedial cleanup goals.
- Control migration and leaching of contaminants in surface and subsurface soil to ground water that could result in ground water contamination in excess of EPA drinking water standards (Maximum Contaminant Levels).
- Prevent ingestion or inhalation of soil particulates that contain contaminant concentrations in excess of remedial cleanup goals.
- Control future releases of contaminants to ensure protection of human health and the environment.

In 2012 EPA issued an Explanation of Significant Differences (ESD) to update the cleanup goals to reflect the appropriate level of protectiveness for the potential exposure pathways and to change modify certain construction requirements in the ROD that were over-specific, and were found to be impractical once the construction was underway.

Technical Assessment

The OU1 remedy is functioning as intended by the decision documents. The relocation of residents of the Rosewood Terrace, Oak Park, Escambia Arms Apartments and Goulding

subdivisions identified in the 1997 Interim ROD is complete. The relocation of residents of the Clarinda Triangle identified in the 2006 ROD is also complete. The former homes have been demolished and access to these areas is controlled. The main Site and three of the four former neighborhoods are well fenced and signage is posted throughout. The Goulding neighborhood is not fenced, but the roadways are barricaded to prevent vehicle access. Trespassing and illegal dumping has been greatly reduced by the access controls.

Both the interim and final OU1 soil remedies are functioning as intended. A subsurface containment cell contains about 550,000 cubic yards of contaminated soils collected from the former facility and the surrounding neighborhoods, preventing both direct exposure and ground water contamination. Current land use is commercial/industrial and consistent with the remedy. Physical access controls are in place for most of the site. Institutional controls are needed to ensure long-term protectiveness. Restrictive covenants to limit property use to commercial and industrial uses will be recorded at the time of the property transfer to the State. Zoning changes will be enacted by local governments once jurisdictional questions are settled. The exposure assumptions, toxicity data, cleanup levels and RAOs expressed in the RODs and in the 2012 ESD remain valid.

Conclusion

The OU1 remedy currently protects human health and the environment because direct exposure has been eliminated, contaminated soils are contained and exposure pathways have been mitigated through access controls. However, in order for the OU1 remedy to be protective in the long term, institutional controls (restrictive covenants and zoning changes) need to be implemented to protect the containment cell and restrict future land use.

Five-Year Review Summary Form

SITE IDENTIFICATION		
Site Name: Escambia Wood – Pensacola		
EPA ID: FLD008168346		
Region: 4	**State:** FL	**City/County:** Pensacola/Escambia County

SITE STATUS	
NPL Status: Final	
Multiple OUs? Yes	**Has the site achieved construction completion?** No

REVIEW STATUS
Lead agency: EPA **If "Other Federal Agency" selected above, enter Agency name:** Click here to enter text.
Author name: Ryan Burdge and Lynette Wysocki (Reviewed by EPA Remedial Project Manager)
Author affiliation: Skeo Solutions
Review period: October 2011 – 09/27/2012
Date of site inspection: 04/25/2012
Type of review: Statutory
Review number: 3
Triggering action date: 09/27/2007
Due date *(five years after triggering action date)*: 09/27/2012

Issues/Recommendations

OU(s) without Issues/Recommendations Identified in the Five-Year Review:
OU2

Issues and Recommendations Identified in the Five-Year Review:

OU(s): OU1	Issue Category: Institutional Controls			
	Issue: Institutional controls (restrictive covenants and zoning changes) are not in place			
	Recommendation: Complete property transfers and implement institutional controls			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Implementing Party**	**Oversight Party**	**Milestone Date**
No	Yes	EPA	EPA	09/27/2013

Protectiveness Statement(s)

Operable Unit:	*Protectiveness Determination:*	*Addendum Due Date (if applicable):*
OU1	Short-term Protective	Click here to enter date.

Protectiveness Statement:

The OU1 remedy currently protects human health and the environment because direct exposure has been eliminated, contaminated soils are contained and exposure pathways have been mitigated through access controls. However, in order for the OU1 remedy to be protective in the long term, institutional controls (restrictive covenants and zoning changes) need to be implemented to protect the containment cell and restrict future land use.

Five-Year Review Summary Form (continued)

Environmental Indicators
- Current human exposures at the Site are under control. *- Contaminated ground water migration is not under control*

Are Necessary Institutional Controls in Place?
☐ All ☒ Some ☐ None

Has EPA Designated the Site as Sitewide Ready for Anticipated Use?
☐ Yes ☒ No

Has the Site Been Put into Reuse?
☐ Yes ☒ No

Third Five-Year Review Report
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Escambia Wood Treating Company Superfund Site - Pensacola Florida

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. The methods, findings and conclusions of FYRs are documented in FYR reports. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The United States Environmental Protection Agency (EPA) 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 five 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."

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 actions no less often than every five years after the initiation of the selected remedial action."

Skeo Solutions, an EPA Region 4 contractor, conducted the FYR and prepared this report regarding the remedy implemented at the Escambia Wood Treating Company – Pensacola Superfund Site (the Site) in Pensacola, Escambia County, Florida. This FYR was conducted from October 2011 to September 2012. EPA is the lead agency for developing and implementing the remedy for the Superfund program-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 EPA during the FYR process.

This is the third FYR for the Site. The triggering action for this statutory review is the previous FYR, completed in 2007. The FYR is required due to the fact that hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and

unrestricted exposure. The Site consists of two Operable Units (OUs). OU1 consists of residential relocation and soil remediation and OU2 consists of ground water remediation. This FYR evaluates remedial actions for OU1 only. The 2008 Record of Decision (ROD) selected the final remedy for OU2, but remedial action for OU2 has not yet begun.

2.0 Site Chronology

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

Table 1: Chronology of Site Events

Event	Date
Escambia Treating Company (ETC) began creosote wood treating operations	1942
ETC began use of pentachlorophenol (PCP)	1963
ETC began exclusive use of PCP	1970
ETC filed for a Resource Conservation and Recovery Act (RCRA) Part A permit application	November 18, 1980
EPA conducted sampling	April 1982
ETC ceased operations	October 1982
ETC removed 168 cubic yards of sludge from three impoundments	September 1985
FDER identified backfilled impoundment as an unpermitted disposal area	1986
FDER conducted sampling for PCP found in monitoring wells	September 1987
ETC removed contaminated wood sidewalls from two small impoundments	1988
EPA conducted a RCRA Facility Assessment conducted	1990
ETC filed for bankruptcy and abandoned the Site	1991
EPA began soil removal and creation of soil stockpile	October 1991
EPA completed removal action (excavation of estimated 225,000 cubic yards)	October 1992
EPA proposed the Site for the National Priorities List (NPL)	August 23, 1994
EPA finalized the Site on the NPL	December 16, 1994
EPA began sitewide remedial investigation/feasibility study (RI/FS)	1995
EPA nominated ETC site for National Relocation Evaluation Pilot	June 1995
EPA sampled residential soils	July 1995
EPA issued proposed plan to relocate 66 families in Rosewood Terrace	April 1996
EPA issued addendum to proposed plan, adding 35 homes from Oak Park to relocation list	August 1996
EPA issued Interim ROD for OU1, which selected an interim remedy to relocate 358 households	February 12, 1997
EPA and FDER signed a State Superfund Contract for implementation of the interim remedy	May 5, 1997
EPA sent first offer letters sent to home owners	August 30, 1997
EPA issued revised draft RI/FS for OU1	February 9, 1998
EPA issued Explanation of Significant Differences (ESD) for maintenance of soil stockpile	April 30, 1998
EPA issued first FYR	September 2002
First houses demolished	2004
EPA initiated additional soil investigation	2004

Event	Date
EPA issued ESD to allow for the excavation and on-site stockpiling of contaminated soil from surrounding residential properties	June 2004
EPA completed Baseline Risk Assessment for OU1	May 25, 2005
EPA completed revised FS for OU1	June 2005
EPA issued Proposed Plan for OU1	August 17, 2005
Demolition of all homes for which the United States had clear title was completed	August 2005
EPA issued ROD for OU1	February 2006
Relocation of Clarinda Triangle neighborhood began	December 2006
EPA began construction on the final remedial action	August 24, 2007
EPA issued second FYR	September 2007
Relocation of Clarinda Triangle neighborhood complete	August 2008
EPA issued ROD for OU2	September 29, 2008
EPA issued notice letters to potentially responsible parties	September 30, 2008
EPA began excavation of existing soil stockpile (Mt. Dioxin)	October 2008
EPA discovers extensive contamination in groundwater and begins an RI/FS focused on the newly discovered OU2 source area	Early 2009
EPA completed excavation of existing stockpile (Mt. Dioxin)	July 8, 2009
EPA completed a draft focused RI/FS for the source area of OU2	February 18, 2010
EPA completed major components of OU1 soil work, leaving only minor closeout items and administrative steps.	July 31, 2010
EPA issued ESD to update the cleanup goals to reflect the appropriate level of protectiveness for the potential exposure pathways and to change modify certain construction requirements in the ROD that were over-specific, and were found to be impractical once the construction was underway.	March 5, 2012

3.0 Background

3.1 Physical Characteristics

The former Escambia Wood Treating Company facility is located at 3910 North Palafox Street in the City of Pensacola, Escambia County, Florida (Figure 1). Bordering the former facility to the north are former residential neighborhoods, to the west is Palafox Street, to the east is the CSX Railroad Switchyard, and to the south is an abandoned concrete plant and small industrial park.

OU1 of the Site includes 96 acres of land, including the 26-acre former Escambia Wood-Treating Company (ETC) facility and about 70 acres of former residential areas (Figure 2). Table 2 describes the former ETC facility parcels and current ownership. Former residential areas include the Rosewood Terrace, Oak Park, Escambia Arms, Goulding and Clarinda Triangle neighborhoods. Parcel IDs for the former residential properties are included in Appendix F.

Table 2: Site Parcels

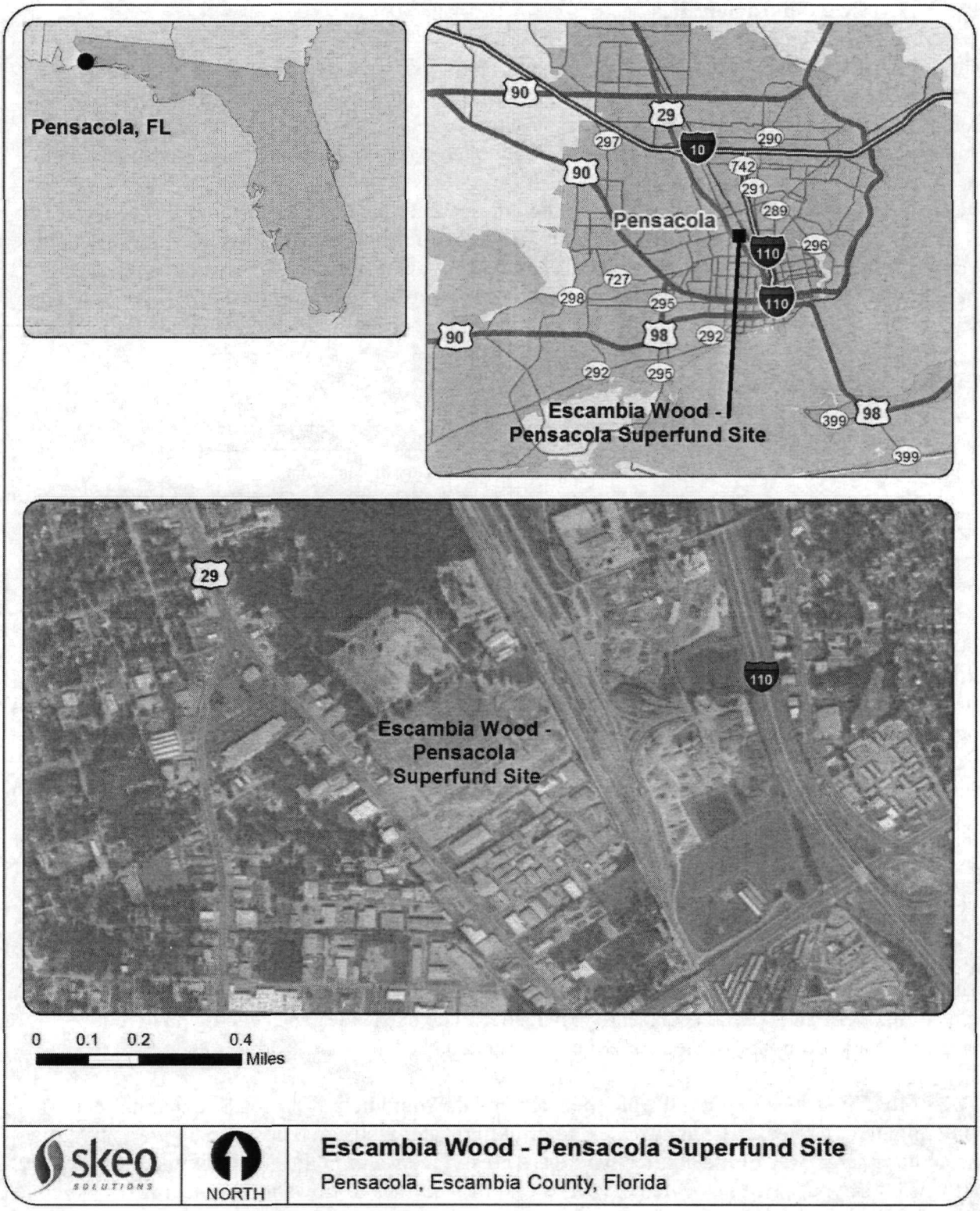
Parcel ID	Owner
05-2S-30-1001-002-017	City of Pensacola
05-2S-30-1001-001-019	Alvin W. Boston (in tax default)
05-2S-30-1001-001-017	SCS Florida Investments, LLC (in tax default)

ETC manufactured pressure treated wood products, primarily utility poles and foundation pilings. The primary wastes managed at the facility were process wastewater and contaminated runoff from the former treatment area. The primary source of contamination was an unlined pond located in the northeastern part of the former ETC property.

The former ETC property is no longer in use and all structures associated with past operations have been demolished. The former residents of several neighborhoods surrounding the Site, including Rosewood Terrace, Oak Park, Escambia Arms Apartments, Goulding and Clarinda Triangle, have been permanently relocated under the interim remedial action. After the relocation, houses in the neighborhoods were demolished. The former ETC property and most former residential areas have been fenced to prevent unauthorized access. The residents in the Goulding neighborhood on Pearl Avenue and Herman Avenue have been permanently relocated, with the exception of one resident at the southeast end of Pearl Avenue who opted out of the relocation. Herman Avenue is currently barricaded. The barricades and fencing have reduced trespassing and dumping in the former neighborhoods.

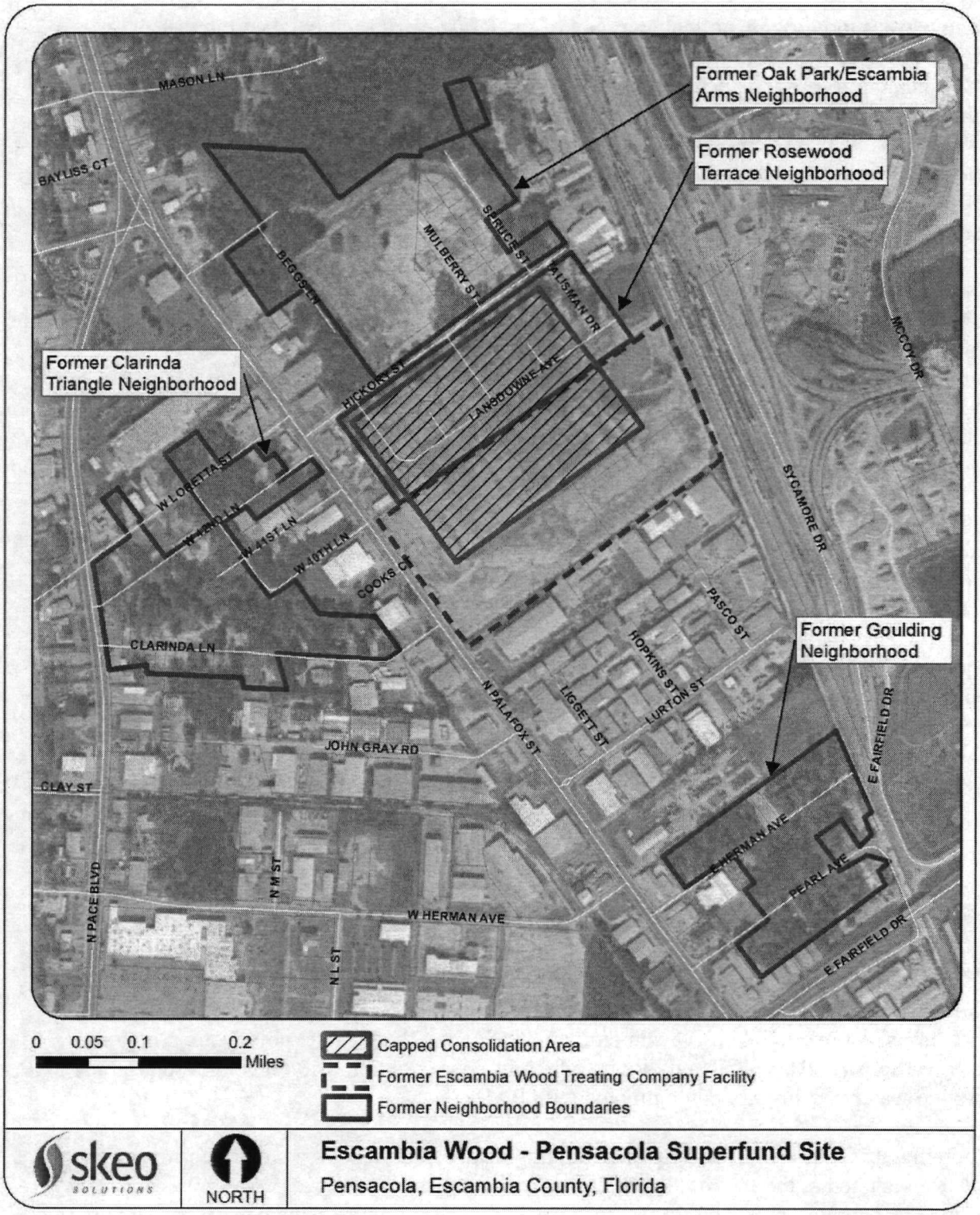
OU2 of the Site refers to ground water beneath and downgradient from the Site that has been contaminated by releases from the Site. No drinking water wells are known to be present within the contaminated area of the aquifer. There are no surface water bodies in the immediate vicinity of the Site. Bayou Texar is located 1.5 miles east of the Site and flows to Pensacola Bay which is 3.5 miles south of the Site.

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 EPA's response actions at the Site, and is not intended for any other purpose.

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 EPA's response actions at the Site, and is not intended for any other purpose.

3.2 Land and Resource Use

Land use around the Site at the beginning of the OU1 interim remedial action in 1997 was a mixture of commercial properties and residential neighborhoods. As a result of the interim remedial action for OU1, permanent residential relocation, the former residents of Rosewood Terrace, Oak Park and Escambia Arms have been permanently relocated, and their former dwellings have been demolished. The Goulding neighborhood residents have been permanently relocated, with the exception of one resident, who opted out of the relocation. Nearly all residential properties are vacant and the current land use is almost entirely vacant, industrial or commercial. Most of the neighborhoods have been fenced to prevent unauthorized access.

The OU1 portion of the Site consists of about 70 acres of vacant federally-owned property, the vacant 26-acre former facility property and portions of other properties where soil contamination was found. Properties to the east, west and south of the Site are zoned for a variety of commercial and industrial uses. More than 100 commercial and light industrial enterprises are located within one mile of the Site. The former Goulding residential neighborhood is south of the former facility. West of Palafox Street, the Clarinda Triangle neighborhood is currently a mix of vacant properties and commercial businesses.

The planned future use of the Site is commercial or industrial use. The City of Pensacola and Escambia County have developed a plan to reuse the Site as an eco-industrial park. The plan is for the Site's reuse to be coordinated with adjacent development to yield 100 acres of land for industrial development.

The ground water beneath the Site is not currently used for drinking water, but is part of an aquifer that is used for municipal supply elsewhere. There are no known private drinking water wells within the contaminated parts of the aquifer.

There are no surface water bodies in the immediate vicinity of the Site. Bayou Texar is located approximately 1.5 miles east of the Site and is a discharge point for ground water. Bayou Texar flows to Pensacola Bay, which is 3.5 miles south of the Site.

3.3 History of Contamination

The ETC operated as a wood treating facility from 1942 to 1982. The facility treated utility poles, foundation pilings and lumber with creosote and pentachlorophenol (PCP). Facility operations resulted in extensive contamination of soil with creosote, polycyclic aromatic hydrocarbons (PAHs), PCP and dioxin, which is a common impurity in commercial-grade PCP. Ground water is primarily contaminated with PAHs.

Contaminated wastewater and runoff from the former treatment area were the primary chemical wastes managed at the facility. In the early years of operation, all wastewater was sent to an unlined impoundment located in the northeastern part of the Site. This natural earthen unit was used from the mid-1940s through the mid-1950s. After the mid-1950s, process wastewater and contaminated runoff were managed by two separate systems. Process wastewater was initially

managed by an oil/water separator to recover treating chemicals and process water for reuse. A second part of the process wastewater system consisted of two impoundments that were used until 1982. Water from these ponds was discharged to the Pensacola sanitary sewer system or pumped back into the wood-treating process vacuum line. The contaminated runoff from the treatment area was directed into a runoff collection/separation system that consisted of an impoundment with a holding capacity of 225,000 gallons. Wastewater in the impoundment was allowed to evaporate and the remaining content was discharged to the Pensacola sanitary sewer system.

In 1986 the Florida Department of Environmental Regulation (FDER, the predecessor of FDEP) determined that the backfilled surface impoundment was an unpermitted disposal area. EPA and FDER collected and analyzed soil and ground water samples from the Site, confirming that soil and ground water were contaminated from site-related activities. From 1982 to 1992, the regulatory agencies cited the owner for various violations, including ground water contamination and inadequate financial assurance under the Resource Conservation and Recovery Act (RCRA). In 1991, the ETC filed for bankruptcy and abandoned the Site.

3.4 Initial Response

In October 1991, EPA began a removal action to address immediate risks of exposure and to stabilize the Site. EPA excavated about 225,000 cubic yards of contaminated material and stored it under a 60-mil (1.5 millimeters), High Density Polyethylene (HDPE) liner treated to be resistant to ultraviolet light. The former process area and a former wastewater pond/landfill were excavated to approximately 40 feet deep. The removal action was completed in 1992.

The Site was proposed for the National Priorities List (NPL) on August 23, 1994, and listed on the NPL on December 16, 1994. In 1995, EPA Region 4 nominated the Site for the National Relocation Pilot Project, and an Interim ROD that included relocation was signed in 1997.

3.5 Basis for Taking Action

The basis of the interim remedial action was described in the 1997 Interim ROD. In June 1995, the ETC site was selected for the EPA's National Relocation Evaluation Pilot to explore the extent of the Agency's authority under CERCLA and to evaluate the range of EPA's decision-making and implementation processes when conducting permanent relocations under Superfund. The pilot would also help determine when relocation should be used in addressing the health threats posed by Superfund sites in a way that reflects community interests, while at the same time making cost-effective and technically sound remedial decisions. The remedy was developed in close consultation with the community and was adapted in response to the community's concerns.

The basis of the final remedial action is based on a series of remedial investigations. Based on the RI results, a Baseline Human Health Risk Assessment was performed in 1998. The Baseline Risk Assessment estimated the risks the Site posed if no action were taken, but did not consider the risk posed by the soil in the contaminated soil stockpile. A risk assessment addendum was

prepared in 2005 to consider the risk posed by these stockpiled soils if the temporary cover were to fail or be removed.

The 1998 Baseline Human Health Risk Assessment identified and evaluated contaminants of concern (COCs) in surface soil, subsurface soil and air. Four potentially exposed populations were evaluated in the 1998 Baseline Risk Assessment and the 2005 Risk Assessment Addendum. The exposure pathway scenarios evaluated included current visitors, current residents, future workers and future residents. The residential scenario was selected as the basis for evaluation due to uncertainty regarding future land use at the time of the risk assessment, and to provide comparison for an unrestricted use/unlimited exposure endpoint.

The COCs identified in the 1998 risk assessment did not require amendment based on the results of the 2004 Feasibility Study (FS) Supplemental Investigation or the 2005 Risk Assessment Addendum. The 2005 Risk Assessment Addendum: Exposure to Soil in Stockpile states, "Direct contact exposure to this soil, even on an infrequent basis (i.e., visitor scenario) results in an unacceptable excess cancer risk. As noted previously, the dioxin concentration used in the calculations may not be representative of the entire stockpile and may therefore overstate the excess cancer risk. However, the soil is so heavily contaminated with PAHs and PCP that the calculated risks are still above EPA's acceptable target range." (p. 3)

Table 3: COCs for OU1 in On-site and Off-site Soils

COCs	Media			
	ETC Property Soil		Neighborhood Soil	
	Surface	Subsurface	Surface	Subsurface
PAHs	X	X	X	
Dioxins (2,3,7,8 TCDD TEQ)	X	X	X	
Naphthalene		X		X
Acenaphthene		X		X
Fluorene		X		X
Phenanthrene		X		X
2-Methylnaphthalene		X		X
Dibenzofuran		X		X
Carbazole		X		X
Pentachlorophenol		X		X

Based on the results of the 1998 RI and the 2004 FS Supplemental Investigation, soil contaminated by site-related constituents was present both at the former facility and in the surrounding neighborhoods. Subsurface soil contamination at unacceptable concentrations for potential leaching to ground water were primarily found in the vicinity of the former process area, which was also the location of the prior removal action. Widespread surface soil contamination, found at concentrations exceeding the relevant commercial or residential cleanup standards on site, was present in the Rosewood Terrace, Oak Park and Escambia Arms neighborhoods, in a portion of the adjacent industrial park, in the Goulding neighborhood, and in the Clarinda Triangle neighborhood. The principal contaminants found in surface soils were dioxin and carcinogenic PAHs (e.g., benzo(a)pyrene).

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 include:

1. Overall Protectiveness of Human Health and the Environment
2. Compliance with ARARs
3. Long-Term Effectiveness and Permanence
4. Reduction of Toxicity, Mobility or Volume of Contaminants through Treatment
5. Short-term Effectiveness
6. Implementability
7. Cost
8. State Acceptance
9. Community Acceptance

4.1 Remedy Selection

The Site has two OUs: OU1 addresses soil contamination and OU2 addresses contaminated ground water. The OU1 remedy for soil contamination is the focus of this FYR report. The 2008 ROD selected the final remedy for OU2, but remedial action for OU2 has not yet begun. The OU2 remedy will be discussed in the next FYR.

There are five site documents that relate to remedy selection and implementation for OU1: the 1997 Interim ROD, the 1998 Explanation of Significant Differences (ESD), the 2004 ESD, the 2006 ROD, and the 2012 ESD.

4.1.1 1997 Interim ROD

In 1995, EPA Region 4 nominated the Site for the National Relocation Pilot Project, and in 1997 an Interim ROD for OU1 was signed selecting permanent residential relocation as part of the interim remedial action for the Site. A number of interim remedial alternatives were considered for the Site. The criteria used as the basis for the recommended relocation included the interaction of the following eight factors:

- Health risks identified by EPA due to the presence of dioxin and benzo(a)pyrene in portions of the Relocation Area.
- The fear the Relocation Area residents felt stemming from uncertainty regarding the health impacts, loss of property values and psychological stress.
- Final remediation activities on the Site that are expected to further adversely affect the Relocation Area through operational issues such as truck traffic, noise, dust, equipment staging and other impacts.

- Greater flexibility for final remedy selection and lower project costs due to the relocation's ability to obviate the need for soil remediation to residential levels.
- Land use surrounding the Site, including discreet, well-defined residential areas within a commercial area and existing transportation infrastructure, strongly indicated industrial use as appropriate for the property. Relocation allowed redevelopment of the Site for industrial/commercial purposes valuable to the community from an economic development perspective.
- The need to ensure that residents are not exposed to hazardous substances during remediation activities in the Relocation Area.
- Heavy construction equipment and construction traffic during the final remedy could pose a physical hazard to residents, especially curious children.
- The relocation will accommodate EPA's need for additional space for managing and implementing the construction of the final remedy for the site.

The factors listed above, combined with a concern for the overall welfare of the community, justified the relocation of the residents from the surrounding neighborhoods in furtherance of the objectives of the National Relocation Pilot Project. Components of the remedy selected in the 1997 Interim ROD include:

- Permanent relocation of 358 households (from the Rosewood Terrace, Oak Park, Escambia Arms and Goulding neighborhoods).
- Demolition of abandoned structures in the relocation neighborhoods.
- Implementation of institutional controls prior to transfer of relocation properties from federal ownership.
- Maintenance of the soil stockpile until implementation of the final remedy.

Institutional controls are required as part of the interim action include land use controls to prohibit residential use and to restrict any future use other than commercial or industrial activities. Permanence of land use restrictions will be achieved through zoning changes and restrictive covenants, which will be put in place when property titles are transferred from the federal government. It is anticipated that the state will in turn transfer the site property to one or both local jurisdictions (both the city and county governments have jurisdiction in different neighborhoods surrounding the Site). No remedial action objectives (RAOs) or cleanup goals were established in the 1997 Interim ROD because of the nature of the interim action.

4.1.2 1998 ESD

On April 30, 1998, EPA issued an ESD, which added maintenance of the soil stockpile to the interim remedial action. The purpose of this maintenance was to ensure the integrity of the HDPE cover on the stockpile of contaminated soils, thus preventing direct human exposure to the contaminants or migration of the contaminated soils from the Site.

4.1.3 2004 ESD

A second ESD was issued in 2004 to modify the 1997 Interim ROD and allow for the excavation and on-site stockpiling of contaminated soil from surrounding residential properties encountered

during demolition. The ESD stated that any soil in the residential areas impacted by site-related contaminants above FDEP soil cleanup target levels for residential and/or commercial use would be excavated. The soil would be transported to the on-site stockpile, and placed under the existing engineered HDPE cover. The volume of off-site soil included in this change was expected to be relatively small, and no significant modification to the engineered cover was anticipated. This action was necessary in order to complete demolition of the remaining residential dwellings and to protect human health and the environment.

4.1.4 2006 Final OU1 ROD

The EPA and FDEP began discussing the selection of appropriate final cleanup standards for soil in 1998. In 2005, another FS was conducted to incorporate the results of the 2004 soil investigation and to update the estimated extent and volume of contaminated soil, the remedial alternatives and the cost estimates from the 1998 FS. The 2005 FS was the basis for the final ROD for OU1, issued in February 2006. The RAOs for OU1 include:

- Prevent ingestion, inhalation or direct contact with surface soil that contains concentrations of contaminants in excess of the remedial cleanup goals.
- Control migration and leaching of contaminants in surface and subsurface soil to ground water that could result in ground water contamination in excess of EPA drinking water standards.
- Prevent ingestion or inhalation of soil particulates that contain contaminant concentrations in excess of remedial cleanup goals.
- Control future releases of contaminants to ensure protection of human health and the environment.

The major components for the selected remedy include:

- Excavation of contaminated soil both on and off facility, including permanent relocation of residents in the Clarinda Triangle neighborhood as an extension of the National Relocation Evaluation Pilot project.
- Containment of the contaminated soil in a lined cell followed by installation of a multi-layer cap over the containment area that is compatible, to the extent possible, with the intended future commercial use of the property.
- Solidification/stabilization of identified principal threat waste to form a sub-cap (3 to 4 feet in thickness) beneath the multi-layer cap.
- Operation and maintenance (O&M) of the cap and containment system.
- Long-term monitoring of the containment system.
- Institutional controls to restrict the Site's future use to commercial uses compatible with the remedy.
- FYRs of the remedy to ensure protectiveness is maintained.

The OU1 ROD remedy extended the National Relocation Evaluation Pilot to the Clarinda Triangle neighborhood. Relocation of Clarinda Triangle residents was added to the Interim ROD's activities after evaluation of the 2004 Additional Soil Investigation results. The additional soil investigation defined the extent of site-related contamination using the more

stringent FDEP cleanup standards. Elevated concentrations of PAHs and dioxin were identified within the Clarinda Triangle and EPA determined that this contamination was attributable to the Site.

Soil cleanup goals were derived from the human health risk assessment, calculation of soil remedial goal objectives (RGOs) using the Summers model, and from ARARs. Soil RGOs for the protection of ground water were determined using the Summers Model to address the possibility of contaminants leaching to ground water at concentrations exceeding probable ground water remediation levels. However, the soil RGOs were determined only for those COCs found in ground water and for which an identified source existed on site.

4.1.5 2012 OU1 ESD

The 2012 ESD was issued to update two parts of the 2006 Final OU1 ROD. The first change adds and updates the cleanup goals to reflect the appropriate level of protectiveness for the potential exposure pathways at the site. The new cleanup goals are protective of human health and the environment and achieve the remedial action objectives of the ROD (Table 4). The new cleanup goals for OU1 are based on a future commercial/industrial land use for the Site and on achieving a residual excess cancer risk of less than $1x10^{-6}$ (one in one million) with a hazard quotient less than 1. The ARAR-based direct exposure cleanup goal for dioxin TEQ (2,3,7,8 TCDD) is unchanged from the 2006 ROD and is based on Florida Statute Section 376.30701 requiring cleanups to attain an incremental lifetime cancer risk of $< 1 \times 10^{-6}$ (less than one in one million) and a hazard index of <1 (less than one) for non-carcinogens. Cleanup goals were applied to different areas on the site based on the extent of contamination in the area (Table 5).

The second change modified certain construction requirements in the ROD that were over-specific, and were found to be impractical once the construction was underway. The 2006 ROD specified "The principal threat wastes will be mixed with cement to form a sub-cap three- to four-feet in thickness above the compacted soil to at or near to existing grade." The thickness of the solidified/stabilized sub-cap was based on the estimated volume of principal threat waste and the anticipated area of the containment cell. Once construction began, two factors affected the thickness of the sub-cap; the dimensions of the cell changed, and less principal threat waste was found. The layout of the cell increased to about 18 acres from about 15 acres because the volume of the containment cell increased from 399,010 cubic yards to 557,000 cubic yards. Further, less principal threat waste was encountered during the excavations than originally estimated. The east half of the sub-cap thickness was reduced after this became apparent. The sub-cap thickness was reduced to two feet, but the compressive strength was increased, allowing the eastern sub-cap to maintain the equivalent shear resistance as the rest of the cap. To assure the strength of the entire sub-cap, the final lift of material contained a cement content of eight percent across the entire sub-cap.

Table 4: Contaminated Soil Remedial Cleanup Goals for OU1

Contaminant of Concern	Direct Exposure Pathway	Leaching-Based Ground water Exposure Pathway
	Revised Cleanup Goal (µg/kg) Source (FAC 62-777 Table II) Direct Exposure Commercial/ Industrial Soil Cleanup Target Levels (SCTL)	**Revised Cleanup Goal (µg/kg) Source (FAC 62-777 Table II)** Leachability Based on Ground water Criteria SCTL
Benzo(a)pyrene EQ (cPAHs)	700	8,000
Dioxin TEQ (2,3,7,8-TCDD)	0.030	3,000
Naphthalene	300,000	1,200
Acenaphthene	20,000,000	2,100
Fluorene	33,000,000	160,000
Phenanthrene	36,000,000	250,000
2-Methylnaphthalene	2,100,000	8,500
Carbazole	240,000	200
Pentachlorophenol	28,000	30

Table 5. Application of Cleanup Goals

Portion of Site	Cleanup Goals Applied
Former neighborhoods -- Surface soil contamination only	Direct exposure cleanup goals only.
Former Facility --Surface soils (0-6 feet)	The more conservative of the direct exposure or leaching-based cleanup goals.
Former Facility --Subsurface soils (deeper than 6 feet)	Leaching-based cleanup goals only.

4.2 Remedy Implementation

4.2.1 1997 Interim Remedial Action

Construction of the interim remedy began in November 1997, when the government purchased the first two single-family homes as part of the National Relocation Evaluation Pilot project. Phase I of this project included residential relocation and demolition for 170 property tracts. Tracts included single-family homes, both owner-occupied and rental, as well as a large apartment complex. The 170 tracts included in the interim action relocation project represented 358 households. One household, which represents two residents and two tracts of land, was not acquired because the homeowner was not willing to sell and opted out of the relocation.

Following completion of the relocation activities, but prior to the start of demolition, EPA performed an environmental assessment of the abandoned structures. Removal of asbestos (in insulation and siding), polychlorinated biphenyl compounds (in light ballasts), and mercury (in thermostats) was completed, and utility clearance or abandonment was performed. By August 2005, demolition activities were complete on all houses for which the United States had obtained clear title. During demolition, over 16,000 cubic yards of waste materials were collected and disposed of properly off site. In addition, as part of the interim action, fencing was established or re-established around impacted areas, staged waste was contained on site, and inspection of the stockpiled soil cover was conducted.

The institutional controls required by the interim remedy are land use controls to limit use to commercial or industrial uses. Restrictive covenants will be recorded at the time of the property transfer to the State. Current land use is non-residential and access controls such as fencing provides current protectiveness.

4.2.2 1998 ESD – Maintenance of the stockpile

The 1998 ESD provided for soil stockpile maintenance. ACOE contracted with the Environmental Chemical Corporation (ECC) to perform monthly site inspections including inspection of the fence, the cover, drainage structures and vegetation on site. Each month ECC performed inspections, maintenance activities, and any necessary corrective measures identified during the previous month's inspection.

After expiration of the ACOE's contract with ECC at the end of 2002, ACOE took over site inspection and maintenance. The Task Order issued by EPA to ACOE for inspection and maintenance of the Site included the following tasks in its Scope of Work:

- Inspect the site fence and make repairs as necessary.
- Inspect drainage channels and make repairs as necessary.
- Inspect the soil stockpile's cover and make repairs as necessary.
- Perform vegetation control as necessary.
- Provide Site Inspection Reports.
- Attend briefings as scheduled/required.

4.2.3 2004 ESD

The 2004 ESD allowed EPA the flexibility to remove additional contaminated soils, should any be encountered during implementation of the interim remedy. However, this did not turn out to be necessary.

4.2.4 2006 OU1 ROD Final Soil Remedy

The implementation of the final OU1 Remedy began in 2007 with the clearing of vegetation at the site. The construction involved clearing the site, excavating contaminated soil, excavating an 18-acre containment cell, filling the cell with contaminated soil, sealing the cell and covering the cell with clean soil. The major earthwork portion of the project was completed in January 2010. More than 550,000 cubic yards of contaminated soil were buried in a lined containment cell on site.

Almost all buildings on the ETC property and in the Rosewood Terrace, Oak Park, and Escambia Arms neighborhoods had been demolished prior to the start of construction; however, house slabs, foundations, driveways, utility poles and septic tanks remained. Many foundations and slabs contained floor tiles that were suspected as "asbestos containing material." EPA's contractor, CMC Environmental Services, Inc. (CMC), removed the floor tiles while wetting the surface with water to eliminate airborne contamination. The floor tiles were double bagged, stockpiled, and eventually placed in the containment cell.

The concrete slabs, footings, driveways and curbs were placed on a concrete rubble stockpile. Septic tanks in non-contaminated areas of the Site were abandoned according to local regulations; they were pumped out, the bottoms were broken, and the tanks were backfilled with clean soil. Septic tanks in contaminated areas of the Site were pumped out, crushed, removed and placed into the on-site concrete rubble stockpile. The concrete rubble was later placed in the containment cell.

One vacant house remained on the corner of Lansdowne Avenue and Tynsdale Drive. CMC demolished this structure in January 2008 utilizing an excavator and a water truck (spraying water to suppress any dust, possible airborne contaminants, and bees). The rubble from this activity was placed into a general debris stockpile that was later disposed of off site.

CMC inspected and repaired the site perimeter fencing and provided new locks for all gates. Signage was installed at the main entrance identifying the Site and warning signs were posted prohibiting unauthorized access. CMC personnel regularly inspected and maintained the perimeter fencing during the construction period.

Only the main entrance gate at the site support area off of Talisman Drive remained open during the work day. Only authorized personnel were allow to enter the Site. Visitors and subcontractors reporting to the Site were required to check in with the respective site manager (either Black & Veatch or CMC) depending on their reason to be on the Site. A site visitor log was kept in the office trailers and visitors were required to sign in when entering the Site and sign out when leaving the Site.

Construction operations required crossing Hickory Street, which ran through the Site, so Hickory Street was closed. An alternate access road was built to connect Beggs Lane and Spruce Street to provide access to the businesses at the east end of Hickory Street and the Site's construction entrance. The road was built in a non-contaminated area north of the Site. The road layout was reviewed and approved by Escambia County and local business owners prior to construction. The access road was designed and constructed in accordance with the requirements of Escambia County.

The main construction operation at the Site was the excavation, stockpiling, and placement of soil. A clean soil stockpile and two contaminated soil stockpiles were used to store soil that was moved so the containment cell could be built on the north side of Hickory Street. The contaminated soil was stockpiled on a lined and bermed area with controlled drainage. The clean soil was stockpiled on the ground surface. The Site was divided into grids to guide the excavations. As contaminated soil was excavated, any clean soil remaining in the footprint of the future containment cell was excavated and stockpiled in the clean soil stockpile.

The construction of the containment cell consisted of excavating, preparing and lining the subgrade, followed by filling the cell with about 20 feet of compacted soil and two to three feet of cement-stabilized soil. Contaminated soil was excavated from either the temporary stockpiles or directly from the excavations and transported to the containment cell. Once filled, the cell was capped with a composite liner, overlain by a drainage system, and covered with at least six feet of clean fill soil.

The 2006 ROD added the Clarinda Triangle neighborhood to the 1997 Interim Remedy. Phase II of the relocation project included residential relocation for the 38 affected tracts in the Clarinda Triangle neighborhood. The ROD estimated 55 properties as potentially needing relocation, but once the remedial action began, seven properties were removed from consideration, leaving 48. Ten of these tracks were deferred as not needing relocation assistance, leaving 38 properties to be relocated. In total, over 500 people were successfully relocated to comparable replacement housing in Pensacola and the surrounding area as part of the two phases of the interim action.

4.3 Operation and Maintenance (O&M)

O&M activities for OU1 are primarily for the final remedy, described in the 2006 ROD. The 1997 ROD did not specify any O&M requirements for the Site due to the nature of the selected remedy. A combination of O&M, institutional controls and periodic monitoring is required to prevent future releases of contaminants and to ensure the final remedy protects human health and the environment over the long term. The final joint inspection of the remedial actions was conducted on February 28, 2012. This date marks the completion of physical construction of most of the OU1 remedy, and therefore O&M for most of the OU1 remedy will begin no later than March 1, 2013.

5.0 Progress Since the Last Five-Year Review

The protectiveness statement from the 2007 FYR for the Site stated the following:

> *"The interim remedy currently protects human health and the environment in the short term because of the successful relocation of nearly all residents, the presence of an aging but functional soil stockpile cover, and access restrictions that discourage inappropriate use. However, continued unauthorized access to the Site may damage the interim remedy. In order for the interim remedy to be protective in the long-term, access needs to be more tightly controlled, regular site inspections conducted, and coordination with local government increased. Implementation of institutional controls and demolition of the remaining houses should be completed as soon as possible. Construction of the final remedy for the Site is also necessary for long-term protectiveness. The permanent remedy for operable unit (OU) 1 of the Escambia Treating Company (ETC) Site was selected in 2006 and remedial action began in August 2007."*

The 2007 FYR included ten issues and recommendations. Each recommendation and its current status is discussed below.

Table 6: Progress on Recommendations from the 2007 FYR

Section	Recommendations	Party Responsible	Milestone Date	Action Taken and Outcome	Date of Action
5.1	Because of the age of the cover, implement the final selected remedy for the Site within the next five years or pursue an alternative for the current stockpile cover, such as replacement.	EPA	12/30/07	The stockpile and cover were removed as part of the final OU1 soil remedy, initiated on August 24, 2007. The Interim Remedial Action Report for the final OU1 remedy was signed on September 30, 2010.	09/30/10
5.2	Conduct more regular inspection and maintenance of access controls; request increased police vigilance of the site area.	EPA/ACOE	Complete	Since September 2007, EPA has kept a presence on site and has conducted regular perimeter inspections. Additional fencing was added during the OU1 construction.	09/14/07
5.3	Post additional and updated warning signs to prevent recreational use on the stockpile.	EPA/ACOE	12/31/07	EPA posted additional signage along site fencing in 2007. The stockpile was removed during the final OU1 soil remedy, documented in the September 30, 2010 Interim Remedial Action Report.	09/14/07

Section	Recommendations	Party Responsible	Milestone Date	Action Taken and Outcome	Date of Action
5.4	Have local police promptly evict vagrants from the abandoned houses. Demolish remaining houses as soon as possible.	EPA/ACOE	12/30/07	Evictions were carried out as needed. EPA hired security patrols from 2007 to 2010. Houses were demolished by Escambia County during the OU1 remedial action.	8/24/2007
5.5	Expedite resolution of condemnation proceedings as much as possible to obtain clear title and permit demolition of remaining residences.	EPA/ACOE	2008	Houses were demolished by Escambia County during the OU1 remedial action.	7/1/2010
5.6	Finish planning and implementation of zoning codes and Florida Restrictive Covenants for the Site.	EPA, State, County, City	2008	Institutional controls (restrictive covenants) were drafted in 2007 and will become final upon property transfer.	Ongoing
5.7	Perform monthly inspections and maintenance and produce monthly reports.	EPA/ACOE	12/30/07	Starting in August 2007, EPA remedial action contractors have had continuous presence on site and formal monthly inspections are unnecessary. O&M inspections will begin upon property transfer to the State.	8/24/2007
5.8	ACOE should work with the local governments to address illegal dumping and debris removal in the former neighborhoods.	EPA/ACOE	12/31/07	Starting in August 2007, EPA remedial action contractors have been handling debris removal. Fences were installed in most areas. Illegal dumping is greatly reduced.	8/24/2007
5.9	Continue to implement the 2005 Community Involvement Plan; add relocated residents, the City's community calendar and the Chamber of Commerce to the Site's mailing list, to share with them letters and Fact Sheets on site-related topics of interest.	EPA	12/30/07	Community involvement activities are ongoing. With the completion of the OU1 remedial action, community involvement will continue as needed under the OU2 remedy and O&M.	12/30/07
5.10	Increase the frequency of visits to the Site's local repository at the West Florida Regional Library to ensure that site documents are available for public viewing.	EPA	9/30/07	EPA maintains all relevant site information in the local repository. With the completion of the OU1 remedial action, the repository will be updated as needed under the OU2 remedy and O&M.	9/27/07

5.1 Implement the final remedy or consider replacing cover within the next five years

The stockpile cover was removed when the stockpile removed during the final OU1 remedy. EPA started the final OU1 remedy on August 24, 2007 with stormwater management, site clearing and preparing the containment cell. Contractors began moving the existing contaminated soil stockpile into the containment cell on January 29, 2008. The containment cell was completed on July 8, 2009. The final joint inspection of the OU1 remedial actions was conducted on February 28, 2012 and marked the completion of physical construction of the containment cell.

5.2 Conduct more regular inspections of access controls and increase police vigilance

Beginning in September 2007 with the initiation of the final remedy, EPA's contractor CMC kept a regular presence on site. CMC personnel regularly inspected and maintained the perimeter fencing during the construction period. Only the main entrance gate at the Site support area off of Talisman Drive remained open during the work day. Only authorized personnel were allow to enter the Site.

CMC subcontracted Vice Securities, a local company, to provide security during non-working hours, weekends and holidays. The security personnel maintained a post at the site entrance gate and conducted patrols to prevent unauthorized access to the Site. Vice Securities also patrolled the former Clarinda Triangle and Herman-Pearl neighborhoods at night to discourage vandalism and illegal dumping in these areas.

In order to minimize unsafe situations and undesirable activities, ACOE and EPA contacted the Escambia County Sheriff Department to increase patrols in the area. In addition, EPA contractors secured vacant structures by boarding up residences to deter vagrants, cut grass, and performed any other work deemed necessary to maintain the safety and comfort of residents yet to be relocated and prior to the demolition of the homes.

5.3 Post additional and updated warning signs

CMC posted signage at the main entrance identifying the Site and posted warning and "no trespassing" signs on perimeter fences and on U.S.-owned houses in the neighborhoods.

5.4 Evict vagrants from remaining abandoned houses

Evictions were carried out as needed.

5.5 Condemn and demolish remaining houses

All remaining houses have been demolished, with the exception of the home on Pearl Avenue of the one resident who declined to move.

5.6 Implement rezoning and restrictive covenants

Restrictive covenants and zoning requirements have been drafted and will be implemented when the properties are transferred from the United States to the State of Florida.

5.7 Produce monthly inspection reports

Once the Final Remedial Action began in August 2007, the reporting for inspections and site maintenance were incorporated into the contractor's construction reports and formal monthly inspections have been unnecessary. O&M reporting will begin once the property is transferred to the State.

5.8 Address debris removal from former neighborhoods

Starting in August 2007, EPA remedial action contractors have been handling debris removal. Fences were installed in most of the former neighborhood areas.

5.9 Implement and expand Community Involvement Plan

Community involvement activities are ongoing. With the completion of the OU1 remedial action, community involvement will continue as needed under the OU2 remedy and O&M.

5.10 Maintain site information in local repository

EPA maintains all relevant site information in the local repository. The current repository has copies of all site-related documents.

6.0 Five-Year Review Process

6.1 Administrative Components

EPA Region 4 initiated the FYR in November 2011 and scheduled its completion for September 2012. The EPA site review team was led by EPA Remedial Project Manager (RPM) Erik Spalvins and also included EPA site attorney Stacey Haire, EPA Community Involvement Coordinator (CIC) L'Tonya Spencer, and contractor support provided to EPA by Skeo Solutions. In March 2012, 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. A review schedule was established that 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 Month 2012, a public notice was published in the Pensacola News Journal newspaper announcing the commencement of the FYR process for the Site, providing contact information for Erik Spalvins and L'Tonya Spencer, and inviting community participation. The press notice is available in Appendix B. Two people contacted EPA as a result of this advertisement and were interviewed as part of the FYR.

The FYR Report will be made available to the public once it has been finalized. Copies of this document will be placed in the designated site repository: West Florida Genealogy Library, located at 5740 North Ninth Avenue, Pensacola, Florida, 32504. Upon completion of the FYR, a public notice will be placed in the Pensacola News Journal newspaper to announce the availability of the final FYR Report in the Site's document repository.

6.3 Document Review

This FYR included a review of relevant, site-related documents including the ROD, ESDs, remedial action reports, and recent monitoring data. A complete list of the documents reviewed can be found in Appendix A.

ARARs Review

CERCLA Section 121(d)(1) requires that Superfund remedial actions attain "a degree of cleanup of hazardous substance, 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 that are more stringent than federal requirements may be applicable or relevant and appropriate. To-Be-Considered (TBC) criteria are non-promulgated advisories and guidance that are not legally binding, but should be considered in determining the necessary remedial action. For example, TBCs 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 maximum contaminant levels (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 ground water 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.

No cleanup standards or ARARs were included in the 1997 Interim ROD due to the interim nature of the remedy. The 2006 OU1 ROD identified the federal and state drinking water standards as ARARs, as well as the state's requirements to attain risk-based cleanup levels for carcinogens of 1×10^{-6} and a hazard index of 1 or less for non-carcinogens. The 2012 ESD soil cleanup goals are based on the most recent Florida's SCTLs for either direct exposure under industrial land use, or leaching-based SCTLs. There have been no changes to the SCTLs that would affect OU1's cleanup goals.

6.4 Data Review

The OU2 ROD addresses ground water, which is monitored for contaminant concentrations. The remedial action for OU2 has not yet begun.

6.5 Site Inspection

On April 25, 2012, Erik Spalvins, Deb Cox, and L'Tonya Spencer from EPA and Ryan Burdge and Lynette Wysocki from Skeo Solutions met at the Site to perform an inspection. Site inspection participants walked the Site, observing the former wastewater pond, the soil containment cell and vegetative cover, and the leachate collection and treatment system. The containment cell and vegetative cover were found to be well maintained. The leachate collection and treatment system was functioning as intended. Fencing around the Site and the former neighborhood was found in good condition. All gates were properly locked and secured. Site participants also toured the former neighborhoods. Fencing surrounding the demolished properties was in good condition.

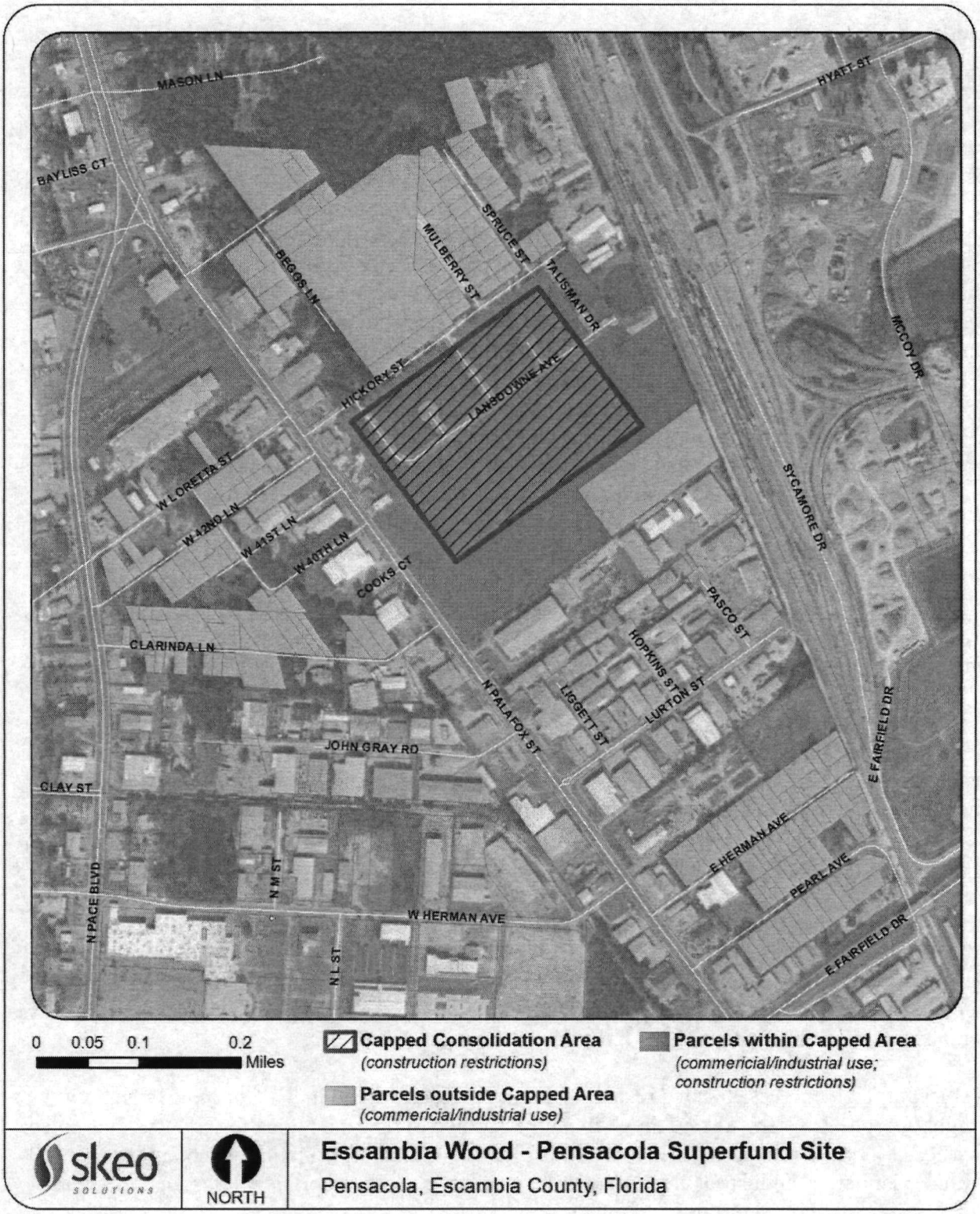
As part of the site inspection Skeo Solutions staff visited the designated local site repository for the Site at the Genealogy Branch Library, 5740 North Ninth Avenue, Pensacola, Florida, 32504. The site repository listed on the Region 4 site summary website, the West Florida Regional Library, is under construction and site-related materials have been permanently relocated to the Genealogy Branch Library. All site documents, including the 2007 FYR, were available in hard copy form or on compact disk. Skeo Solutions staff researched property records using the Escambia County online public records and reviewed parcel ownership information pertaining to the Site.

Table 7 lists the institutional controls associated with areas of interest at the Site. The area also lies within a Florida ground water delineated area, which restricts private well use.

Table 7: OU1 Institutional Control (IC) Summary Table

Media	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Instrument in Place	Notes
Soil	Yes	Yes (restrictive covenants and zoning changes)	Parcels where the containment cell is located.	Restrict construction to protect the capped area	None	Current land use is commercial/industrial and is consistent with the remedy. Most of these parcels are currently protected through physical access controls and government ownership. Long-term institutional controls are needed.
Soil	Yes	Yes (restrictive covenants and zoning changes)	Parcels with no subsurface remedy components.	Restrict future land use to commercial or industrial use	None	Current land use is consistent with the remedy. Most of these parcels are currently protected through physical access controls and government ownership. Long-term institutional controls are needed.

Figure 3: Institutional Control Base 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 EPA's response actions at the Site, and is not intended for any other purpose.

6.6 Interviews

During the FYR process, interviews were conducted with parties impacted by the Site, including the current landowners, and regulatory agencies involved in site activities or aware of the Site. The purpose of the interviews was to document the perceived status of the Site and any perceived problems or successes with the phases of the remedy that have been implemented to date. All of the interviews were conducted during the site inspection on April 25, 2012. Interviews are summarized below and complete interviews are included in Appendix C.

Marie Young, Escambia County Commissioner, and Keith Wilkins, Escambia County Environmental Manager: Commissioner Young believes EPA worked as quickly as possible and that everyone involved has learned many lessons through the process. Mr. Wilkins stated the most important lesson that was learned was that there needs to be better community understanding upfront. This was where the discontent in the community came from and the second relocation went a lot smoother because of changes that were made.

Glenn Griffith, Escambia County Brownfields Coordinator: Mr. Griffith is not aware of any problems with the Site. He stated he occasionally drives by the Site and has noticed it looks clean and well maintained and that illegal dumping and vagrants are no longer present. He believes EPA has done a good job with the remedy and is looking forward to redevelopment and commerce at the Site.

Keith Hadden and Michael Grove, ACOE: Mr. Hadden and Mr. Grove stated the last acquisition was in November 2008 and that the demolition was a seamless operation. They are not aware of any complaints that came from the activities.

Jeff Day, J2: Mr. Day is responsible for daily maintenance and operations. He believes EPA has done at a good job with the Site and that the contamination has been contained. He stated that the leachate contains high levels of PCP before it is treated, but that after treatment the leachate meets Florida levels and is discharged to an onsite infiltration gallery.

Relocated Resident 1: Relocated resident #1 had previously lived in the Rosewood Terrace neighborhood. She did not like the relocation and believes the Site has contributed to health problems among former residents.

Relocated Resident 2: Relocated resident #2 had previously lived in the Clarinda Triangle neighborhood. Resident #2 is not aware of current conditions or any problems related to the Site, but noted many relocated residents have health issues.

Relocated Resident 3: Relocated resident #3 had previously lived in the Clarinda Triangle neighborhood. Resident #3 said they felt well informed during the relocation process, but noted that for any future relocations EPA should provide additional information when homes are within commercial/industrial areas so that the properties are appropriately appraised. They are not aware of current conditions.

New Hope Baptist Church: The church spokesman says the Site appears to be better, but questions whether additional soil sampling would be done in the former neighborhoods. The church also restated its continued interest in acquiring the 2-acre parcel adjacent to the church, as had previously been agreed.

Citizens Against Toxic Exposure (CATE): CATE members were pleased that the contaminated soil pile has been addressed, but would have rather seen a cleanup that allowed for unrestricted use of the Site. CATE members voiced frustration about the completed relocation process, but that the second relocation went a lot smoother because of CATE and the lessons that the residents learned in the first relocation.

Clarinda Triangle Association: The Clarinda Triangle Association is a community organization that received a Technical Assistance Grant in relation to the Site. Members feel that EPA did a great job working with the community during the relocation and cleanup.

Sand Castle Academy: The Sand Castle Academy daycare center is located on Palafox Avenue, adjacent to the former ETC facility. The owner of the Sand Castle Academy daycare center was pleased with the cleanup and did not report any issues.

7.0 Technical Assessment

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

The interim OU1 relocation remedy is functioning as intended by the decision documents. The relocation of residents of the Rosewood Terrace, Oak Park, Escambia Arms Apartments and Goulding neighborhoods identified in the 1997 Interim ROD is complete and the relocation of residents of the Clarinda Triangle identified in the 2006 ROD is also complete. The former homes have been demolished and access to these areas is controlled. The relocation has achieved the objectives, including preventing the exposure of residents to contaminated soils. One resident refused to sell her property and continues to live on Pearl Street. The resident refused EPA access to sample her property, so EPA collected samples from the perimeter of her yard, found no unacceptable levels of contamination and judged that no further cleanup actions are needed.

The final OU1 soil remedy is functioning as intended. Contaminated soils are contained in a subsurface containment cell that prevents direct exposure and the capped area is well maintained. The containment cell top liner prevents water from entering the containment cell and leachate from the cell construction is being captured, treated and discharged to an onsite infiltration gallery. The stormwater system directs surface water away from the capped area. The main Site and three of the four former neighborhoods are well fenced and signage is posted throughout. The Goulding neighborhood is not fenced, but the existing roadways are barricaded to prevent vehicle access. Trespassing and illegal dumping are no longer problems at the Site.

Restrictive covenants for the affected parcels have been drafted and will be implemented for the 70 acres of federally-owned property when it is transferred to the State from the federal government. Privately owned parcels that require institutional controls are present and will be included in areas subject to commercial or industrial zoning. The owners will also be approached to discuss implementing restrictive covenants

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 1997 Interim ROD did not have specific cleanup levels or RAOs because it was an interim action that focused on relocation. The toxicity assumptions, used to determine that an unacceptable risk existed at the Site and that an interim action was necessary, remain the same.

The exposure assumptions, toxicity data, cleanup levels and RAOs remain valid. In the 2012 ESD EPA confirmed that the soil cleanup levels achieve a residual excess cancer risk of less than $1x10^{-6}$ with a hazard quotient less than 1. The 2012 ESD soil cleanup goals are based on the most recent Florida's SCTLs for either direct exposure under industrial land use for the top six feet of soil, or leaching-based SCTLs for soil deeper than six feet. There have been no changes to the SCTLs that would affect cleanup goals.

On February 17, 2012, EPA released the final non-cancer dioxin reassessment, publishing a non-cancer toxicity value, or reference dose, for 2,3,7,8- TCDD in EPA's Integrated Risk Information

System. At sites that have been previously investigated or cleaned up under Superfund and RCRA, EPA Regions will consult with EPA Headquarters and will coordinate with our state partners to identify, prioritize and evaluate sites to determine if additional response action is needed. EPA does not expect the dioxin reassessment to affect the cleanup levels at this Site and does not anticipate any further actions to confirm that the remedy for OU1 remains protective.

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

No other information has come to light that could call into question the protectiveness of the remedy.

7.4 Technical Assessment Summary

The OU1 remedy is functioning as intended by the decision documents. The relocation of residents of the Rosewood Terrace, Oak Park, Escambia Arms Apartments and Goulding subdivisions identified in the 1997 Interim ROD is complete. The relocation of residents of the Clarinda Triangle identified in the 2006 ROD is also complete. The former homes have been demolished and access to these areas is controlled. The main Site and three of the four former neighborhoods are well fenced and signage is posted throughout. The Goulding neighborhood is not fenced, but the roadways are barricaded to prevent vehicle access. Trespassing and illegal dumping has been greatly reduced by the access controls.

Both the interim and final OU1 soil remedies are functioning as intended. A subsurface containment cell contains about 550,000 cubic yards of contaminated soils collected from the former facility and the surrounding neighborhoods, preventing both direct exposure and ground water contamination. Current land use is commercial/industrial and consistent with the remedy. Physical access controls are in place for most of the site. Institutional controls are needed to ensure long-term protectiveness. Restrictive covenants to limit property use to commercial and industrial uses will be recorded at the time of the property transfer to the State. Zoning changes will be enacted by local governments once jurisdictional questions are settled. The exposure assumptions, toxicity data, cleanup levels and RAOs expressed in the RODs and in the 2012 ESD remain valid.

8.0 Issues

Table 8 summarizes the current site issues.

Table 8: Current Site Issues

Issue	Affects Current Protectiveness	Affects Future Protectiveness
Institutional controls (restrictive covenants and zoning changes) are not in place	No	Yes

9.0 Recommendations and Follow-up Actions

Table 9 provides recommendations to address the current site issues.

Table 9: Recommendations to Address Current Site Issues

Issue	Recommendations / Follow-Up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness? (Yes or No)	
					Current	Future
Institutional controls (restrictive covenants and zoning changes) are not in place	Implement institutional controls (restrictive covenants and zoning changes) and complete property transfers	EPA/FDEP	EPA	09/27/2013	No	Yes

10.0 Protectiveness Statement

The OU1 remedy currently protects human health and the environment because direct exposure has been eliminated, contaminated soils are contained and exposure pathways have been mitigated through access controls. However, in order for the OU1 remedy to be protective in the long term, institutional controls (restrictive covenants and zoning changes) need to be implemented to protect the containment cell and restrict future land use.

11.0 Next Review

The Site requires ongoing statutory FYRs as long as waste is left on site that does not allow for unrestricted use and unlimited exposure. The next FYR will be due within five years of the signature/approval date of this FYR.

Appendix A: List of Documents Reviewed

U.S. Environmental Protection Agency (USEPA). Interim Record of Decision: Escambia Wood - Pensacola OU1, prepared by EPA Region 4. EPA/ROD/R04-97/018. February 12, 1997.

USEPA. Explanation of Significant Differences: Escambia Wood - Pensacola OU1, prepared by EPA Region 4. EPA/ESD/R04-04/075. April 23, 2004.

USEPA. Explanation of Significant Differences: Ecambia Wood Treating Company Superfund Site, prepared by EPA Region 4. March 2012.

USEPA. Record of Decision: ESCAMBIA WOOD - PENSACOLA OU1, prepared by EPA Region 4. February 13, 2006.

USEPA. Record of Decision: ESCAMBIA WOOD - PENSACOLA OU1, prepared by EPA Region 4. September 29, 2008.

USEPA. Superfund Five-Year Review Report: Escambia Treating Company, Inc., Pensacola, Escambia County, Florida, prepared by US Army Corps of Engineers Jacksonville District. September 2002.

USEPA. Superfund Five-Year Review Report: Escambia Treating Company, Inc., Pensacola, Escambia County, Florida, prepared by E^2 Inc. September 2007.

USEPA. Interim Remedial Action Report Escambia Treating Company Site Operable Unit 1. Pensacola Escambia County, Florida. September 2009.

USEPA. Interim Remedial Action Report Escambia Treating Company Site Operable Unit 1 Soils. Pensacola Escambia County, Florida. September 2010.

Appendix B: Press Notice

The U. S. Environmental Protection Agency, Region 4
Announces the Third Five-Year Review for
the Escambia Wood – Pensacola Superfund Site,
Pensacola, Escambia County, Florida

Purpose/Objective: The U.S. Environmental Protection Agency (EPA) is conducting a Five-Year Review of the remedy for the Escambia Wood – Pensacola Superfund site (the Site) in Pensacola, Florida. The purpose of the Five-Year Review is to make sure selected cleanup actions effectively protect human health and the environment.

Site Background: An abandoned wood preserving facility is located at the 26-acre Site. From 1942 to 1982, the facility manufactured treated wood products at the Site. The use of creosote and pentachlorophenol (PCP) as part of the wood treating process resulted in contamination of soil and ground water. Polycyclic aromatic hydrocarbons (PAHs) and dioxin, the common impurities in commercial-grade PCP, also contaminated the soil. The contamination has affected 96 acres of land surrounding the Site and created a contaminated ground water plume that extends approximately 1.3 miles off site. During operations, the facility put spent creosote and PCP-laden waste in unlined holding ponds on site. In 1986, the Florida Department of Environmental Regulation (FDER, now the Florida Department of Environmental Protection, or FDEP) identified the backfilled holding ponds as an unpermitted disposal area. In September 1987, EPA and FDER sampling indicated site-related activities had contaminated soil and ground water. EPA proposed the Site for placement on the National Priorities List (NPL) on August 23, 1994; the Site was finalized on the NPL on December 16, 1994. Primary contaminants of concern at the Site included creosote, PCP, PAHs and dioxins in soil and ground water.

Cleanup Actions: In October 1991, EPA began a short-term cleanup, or removal action, to stabilize 225,000 cubic yards of contaminated material and secure the Site while evaluating long-term cleanup options. EPA also designated two operable units (OUs) to address the Site's soil (OU1) and ground water contamination (OU2). EPA issued an Interim Record of Decision for OU1 in 1997, which determined that residents near the Site would be permanently relocated. EPA issued the Record of Decision (ROD) for OU1 in 2006. The major cleanup actions selected in the OU1 ROD included excavation of contaminated soil both on and off site; containment of contaminated soil in a lined cell; installation of a multi-layer cap; solidification/stabilization of the contaminated waste; operation and maintenance activities for the cap and containment system; long-term monitoring; implementation of institutional controls; and Five-Year Reviews to ensure the protectiveness of the site's remedy. EPA selected a cleanup plan for the Site's OU2 in September 2008 ROD. Following the design of the OU2 remedy, technical planning is currently underway to move forward with cleanup activities.

Five-Year Review Schedule: The National Contingency Plan requires that 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 be reviewed every five years to ensure the protection of human health and the environment. EPA will complete the third of the Five-Year Reviews for the Site by September 2012.

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 make sure the remedy remains protective of human health and the environment. As part of the Five-Year Review process, EPA staff members are 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:

Erik Spalvins, EPA Remedial Project Manager
Phone: (404) 562-8938
(toll-free)
E-mail: spalvins.erik@epa.gov

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

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

Additional site information is available at the Site's local document repository, located at West Florida Regional Library, 200 West Gregory Street, Pensacola, Florida, and online at: http://www.epa.gov/region4/waste/npl/nplfln/escwodfl.htm.

Appendix C: Interview Forms

Escambia Wood-Pensacola Superfund Site — Five-Year Review Interview Form

Site Name:	Escambia Wood-Pensacola	**EPA ID No.:**	FLD008168346
Interviewer Name:	LaTonya Spencer	**Affiliation:**	EPA
Subject Name:	Relocated Resident 1	**Affiliation:**	
Time:	11:00 A.M.	**Date:**	04/25/2012
Interview Location:	Resident's Home		

Interview Format (circle one): In Person Phone Mail Other:

Interview Category: Residents

1. Are you aware of the former environmental issues at the Site and the cleanup activities that have taken place to date?
   Yes, our family moved to the Rosewood Terrace neighborhood on Hickory Street in the 1970s and built a new house around 1995.

2. What is your overall impression of the project; including cleanup, maintenance, and reuse activities (as appropriate)?
   I did not like the project or the relocation. We had a brand new house there in the neighborhood.

3. What have been the effects of this Site on the surrounding community, if any?
   All of the neighbors were separated during the relocation and people started getting sick. I have suffered health problems as well like swelling in my head and feet. Many of the residents had problems with their feet.

4. Have there been any problems with unusual or unexpected activities at the Site, such as emergency response, vandalism or trespassing?
   No.

5. 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?
   Yes, EPA let them know about the site. I have attended many meetings where we were given information and there were many people that stood up and talked about their health problems. I would still like to receive information about the site so that I can understand what is going on there.

6. 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?
   N/A

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

project?

A lot went on at the Site. I buy the newspaper to follow what is going on at the Site. I have concerns about my health issues and the other health problems people have. I am concerned about the daycare that was built because we all had to move from our homes but now there are children right next to the site all day long.

Site Name:	**Escambia Wood-Pensacola**	**EPA ID No.:**	**FLD008168346**
Interviewer Name:	**LaTonya Spencer**	**Affiliation:**	**EPA**
Subject Name:	**Member of New Hope Baptist Church**	**Affiliation:**	
Time:	**5:00 P.M.**	**Date:**	**04/25/2012**
Interview Location:	**New Hope Baptist Church**		

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Residents**

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)?
   From just driving passed the site, it looks to be fine. I do not know much about the cleanup that was done.

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

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

5. 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?
   We would like to continue to receive information.

6. 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?
   N/A

7. Do you have any comments, suggestions or recommendations regarding any aspects of the project?
   I am concerned about whether there will be additional sampling done for the soil and air. Also, the church continues to push to receive the two acres that we have been promised. I have attended a meeting with the county but there were no city representatives there. There have been a couple times when the church's request has not been part of the discussion but it is now recorded that the 2 acres were promised to us. We would like EPA to continue to remind the state that we still want that land for the church.

Site Name:	**Escambia Wood-Pensacola**	**EPA ID No.:**	**FLD008168346**
Interviewer Name:	**LaTonya Spencer**	**Affiliation:**	**EPA**
Subject Name:	**Members of CATE**	**Affiliation:**	
Time:	**5:00 P.M.**	**Date:**	**04/25/2012**
Interview Location:	**New Hope Baptist Church**		

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Residents**

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)?
   The subject's mother, a relocated resident and member of CATE, would be happy to see the contaminated soil pile gone but the cleanup was not what the subject and mother wanted. Mother wanted residential cleanup for the Site and battled with the EPA about the cleanup levels. Mother would be pleased that some cleanup has been done.
   The relocated residents were frustrated with the government's process of handling the relocation. They felt like they did not have a voice in the process and that there was no one to represent them.
   The cleanup was adequate but the ground water plume has not been cleaned up. There are still a lot of unresolved issues with the relocation.

3. What have been the effects of this Site on the surrounding community, if any?
   The relocation broke up the community and separated families. The contamination and cleanup was not treated as a community emergency and many people are suffering from the contamination. Several of my family members have died from cancer.
   The community was upset when they began putting together that their health issues and the contamination together.

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

5. 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?
   We would like to continue to receive information.

6. 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?
   N/A

7. Do you have any comments, suggestions or recommendations regarding any aspects of the project?
   The community is still frustrated with the relocation. The second relocation went a lot smoother because of CATE and the lessons that the residents in the first relocation learned. The community thinks that the Corps did not do the relocation right and that it was racially motivated. CATE believes that the Corps pushed people in the second relocation to not talk to the members of CATE or listen to their advice about the appraisal process. The first relocation community was satisfied to move but they were not given proper assessments of their homes. The Corps was not fair during the assessments and did not treat the people who were being relocation sensitively.

Site Name: Escambia Wood-Pensacola **EPA ID No.:** FLD008168346
Interviewer Name: LaTonya Spencer **Affiliation:** EPA
Subject Name: Kerri Kust **Affiliation:** Sand Castle Academy
Subject Contact Information: Kerry@sandcastle.gcoxmail.com
Time: 5:00 PM **Date:** 04/25/2012
Interview Location: Sand Castle Academy

Interview Format (circle one): In Person Phone Mail Other:

Interview Category: Nearby Business

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)?
   We have been very happy that it is finished. There have not been any problems and Erik and EPA are always available if we have problems.

3. What have been the effects of this Site on the surrounding community, if any?
   No, not that I am aware of.

4. Have there been any problems with unusual or unexpected activities at the Site, such as emergency response, vandalism or trespassing?
   No.

5. 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?
   Yes, EPA has kept us informed. And we would like to receive information via email or to the daycare's address.

6. 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?
   N/A

7. Do you have any comments, suggestions or recommendations regarding any aspects of the project?
   No. The septic work that EPA performed helped a lot in the building process of our new building. No families with children at the daycare have asked for information about the Site in a long time.

Site Name:	**Escambia Wood-Pensacola**	**EPA ID No.:**	**FLD008168346**
Interviewer Name:	**LaTonya Spencer**	**Affiliation:**	**EPA**
Subject Name:	**Glenn Griffith, Brownfields Coordinator**	**Affiliation:**	**Escambia County**

Subject Contact Information: **(850) 595-3538/** glenn_griffith@co.escambia.fl.us
Time: **2:00 P.M.** **Date:** **04/25/2012**
Interview Location: **Escambia County Building, 221 Palafox Place, Pensacola**

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Local Government**

1. Are you aware of the former environmental issues at the Site and the cleanup activities that have taken place to date?
   Yes. The County was contracted to put up some of the fences and perform some of the demolition.

2. Do you feel well-informed regarding the Site's activities and remedial progress? If not, how might EPA convey site-related information in the future?
   Absolutely, I visit the EPA's website about the Site which is useful and I am always able to contact Erik. Erik has given the County materials and maps.

3. Have there been any problems with unusual or unexpected activities at the Site, such as emergency response, vandalism or trespassing?
   No. I drive around the Site to make sure that there is no longer any dumping or homeless people living along Pearl Street.

4. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Site's remedy?
   No. The City is supposedly taking the Site which could have an effect.

5. Are you aware of any changes in projected land use(s) at the Site?
   No.

6. 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?
   (see #2)

7. Do you have any comments, suggestions or recommendations regarding the project?
   No, EPA has done well with the Site. The County is ready for redevelopment and commerce at the Site.

Site Name:	**Escambia Wood-Pensacola**	**EPA ID No.:**	**FLD008168346**
Interviewer Name:	**LaTonya Spencer**	**Affiliation:**	**EPA**
Subject Name:	**Marie Young & Keith Wilkins**	**Affiliation:**	**Escambia County**

Subject Contact Information:

Time: **10:30 A.M.** **Date:** **04/26/2012**

Interview Location: **Escambia County Building, 221 Palafox Place, Pensacola**

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **Local Government**

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

2. Do you feel well-informed regarding the Site's activities and remedial progress? If not, how might EPA convey site-related information in the future?
   The County has not been directly involved as we are transitioning out of the lead. Yes, the County is aware of what we need to know regarding the Site.
   Marie—I have been in informal contact with many community members and they seem happy.

3. Have there been any problems with unusual or unexpected activities at the Site, such as emergency response, vandalism or trespassing?
   Usually the property looks the same when we drive by it. The Site looks very good, a lot better than when it was just a soil pile. There were some small amounts of erosion.

4. Are you aware of any changes to state laws or local regulations that might affect the protectiveness of the Site's remedy?
   There have not been any changes yet but the City has plans for annexation, rezoning and selling to another company which could result in changes.

5. Are you aware of any changes in projected land use(s) at the Site?
   The County asked the City to consider several items when the County transferred some parcels to them. This included giving some property to New Hope church as part of a local agreement. The other items were part of a bilateral agreement with the City.

6. 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?
   Yes, the community has been well aware. There have been several community meetings.

7. Do you have any comments, suggestions or recommendations regarding the project?
   Marie—I do not have criticism of the Site. EPA worked as quickly as they could and there have been many lessons learned and changes that were made over the past years. This has

helped the Site progress over the past several years.
Keith—The most important lesson that was learned was that there needs to be better community understanding upfront. This was where the discontent in the community came from and the second relocation went a lot smoother because of changes that were made. The community also learned that it was very important to work together because multiple perspectives are needed to deal with issues like this.

Site Name:	**Escambia Wood-Pensacola**	**EPA ID No.:**	**FLD008168346**
Interviewer Name:	**LaTonya Spencer**	**Affiliation:**	**EPA**
Subject Name:	**Keith Hadden & Michael Grove**	**Affiliation:**	**Army Corps of Engineers**
Time:	**10:00 A.M.**	**Date:**	**04/19/2012**
Interview Location:	**NA**		

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: Army Corps of Engineers—Relocation Staff

1. What types of site-related activities or communications has ACOE conducted in the last five years concerning relocation? Please give purpose and results.
   The last acquisition was in November 2008. The office opened in 2006 and closed in July 2008. Any activities after this point were handled by the district office in Mobile.

2. What is your overall impression of the project?
   The project has been successful.

3. Do you believe the past and current relocation efforts have been successful?
   Extremely, yes.

4. Has the demolition of vacated properties affected the relocation process? If so, please describe how.
   No, the demolition has not affected negatively or positively. The demolition was a seamless operation.

5. Are you comfortable with the ICs required for the site and their current status of implementation?
   The question is not applicable to the Corps. The Corps does not know about the ICs. Nancy, Teresa and the state attorneys would be able to answer this question. Corps attorneys were contacted in the drafting of the ICs.

6. Has ACOE accepted interest in the Escambia Treating Company property or any relocation properties for the purposes of enforcement of land use restrictions?
   No, no enforcement of land use.

7. Are you aware of or expecting any changes to local or State laws that might affect the protectiveness of the remedy?
   N/A

8. Are you aware of any complaints or inquiries regarding relocation or demolition from residents as part of this interim remedy?
   No, not aware of any complaints that came from the activities.

9. Do you feel well informed about the site's activities and progress?
   Yes, have been getting reports and have a basic view of what has been going on at the site.
   Mike—when working on project, I was always informed of what is going on.

10. Do you have any comments, suggestions, or recommendations regarding the site's management or operation?
    No.

Site Name:	**Escambia Wood-Pensacola**	**EPA ID No.:**	**FLD008168346**
Interviewer Name:	**Lynette Wysocki**	**Affiliation:**	**Skeo Solutions**
Subject Name:	**Jeff Day**	**Affiliation:**	**J2**
Subject Contact Information:			
Time:	**2:30 P.M.**	**Date:**	**04/26/2012**
Interview Location:	**Site**		

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **O&M Contractor**

1. What is your overall impression of the project; including cleanup, maintenance, and reuse activities (as appropriate)?
   Positive. EPA has done at a good job with the Site. The contamination has been contained. The Site is a good piece of property.

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

3. 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?
   The leachate contains high levels of PCP before it is treated. After treatment, the leachate meets Florida levels and is discharged to an onsite infiltration gallery.

4. Is there a continuous on-site O&M 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 O&M presence.
   Yes.

5. Have there been any significant changes in site O&M 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.
   No. The operation of the leachate collection and treatment system has been consistent.

6. Have there been unexpected O&M difficulties or costs at the Site since start-up or in the last five years? If so, please provide details.
   No.

7. Have there been opportunities to optimize O&M activities or sampling efforts? Please describe changes and any resulting or desired cost savings or improved efficiencies.
   N/A

8. Do you have any comments, suggestions or recommendations regarding O&M activities and schedules at the Site?
   No. Activities at the Site have followed the work plan which has been effective. There is nothing to add to the activities.

Escambia Wood-Pensacola Superfund Site **Five-Year Review Interview Form**

Site Name: Escambia Wood-Pensacola		**EPA ID No.:**	FLD008168346
Interviewer Name:	LaTonya Spencer	**Affiliation:**	EPA
Subject Name:	Clarinda Triangle Resident 1	**Affiliation:**	Clarinda Triangle Association (2nd TAG Recipient)

Time: 10:00 A.M. EST **Date:** 05/08/2012
Interview Location: NA

Interview Format (circle one): In Person **Phone** Mail Other:

Interview Category: **Residents-Community Organization Leaders**

1. How has your organization been involved with the Escambia Treating Company Superfund site? Please describe the goals and results of any activities?
   Clarinda Triangle Association received the Technical Assistance Grant (TAG) after competition with the Community Against Toxic Exposure. They worked with all parties, most intently, while phase two of the permanent relocation took place and further during the collaboration of desired redevelopment and review of technical documents.

2. What is your overall impression of the project?
   Everyone is doing their job. EPA really stepped up to the plate and provided information that was needed. EPA did a fabulous job working with the community as a team.

3. How well do you believe the interim remedy (relocation, demolition, soil stockpiling, and ICs) is performing?
   There is still stigma, concern and fears for the health concerns that have cropped up. Health effects are still a concern for mental and physical.

4. Are you aware of or expecting any changes to local or state laws that might affect the protectiveness of the remedy?
   No.

5. Has your organization received any citizen complaints or inquiries regarding the site's environmental issues or the remedy since its implementation?
   No. The site has been remediated and the community has been relocated. So, people are healing and overcoming. They are moving forward and there is not a lot of negativity. Businesses in the area now realized that there is a future.

6. What effect has this site had on the surrounding community?
   The Community is continuing and will continue to heal. However, the issues of health were not addressed and many still suffer.

7. What effects will the planned reuse of the site had on the community?

There are a lot of people that are still healing from the activities at the Site. Many have died and others are still suffering from many health issues. However, they are glad that the site has been remediated.

8. Do you feel well informed about site activities and progress? Should EPA do more to keep involved parties and surrounding neighbors informed? If so, how?
   Yes. Very informed and EPA Staff did an excellent job on keeping them informed about the activities at the Site and kept the community involved.

9. Do you have any comments, suggestions, or recommendations regarding the site's management or operation?
   No. Everyone's doing their job.

Escambia Wood-Pensacola Superfund Site **Five-Year Review Interview Form**

Site Name: Escambia Wood-Pensacola **EPA ID No.:** FLD008168346
Interviewer Name: LaTonya Spencer **Affiliation:** EPA
Subject Name: Relocated Resident 2 **Affiliation:** Phase II Relocation
Time: 03:30 P.M. **Date:** 04/24/2012
Interview Location: Resident's Home

Interview Format (circle one): In Person Phone Mail Other:

Interview Category: Residents

1. Are you aware of the former environmental issues at the Escambia Treating Company site and what cleanup activities have occurred?
   Yes.

2. What are your views about current site conditions, problems, or related concerns?
   No. She has not been over that way in a while. She assumes that it's just empty.

3. What effect has this site had on the surrounding community, if any?
   Most residents still stay in touch. All of them were separated from each other. If possible, folks should try to be moved in to the same neighborhood or nearby. Practically most of the elderly had a lot of health issues, including but not limited to, emphysema, asthma, skin problems, and kidney problems.

4. What effects will the planned reuse of the site had on the community? Are you aware of any changes in projected land use?
   Not aware of any issues with planned reuse or projected land use.

5. Should EPA do more to keep involved parties and surrounding neighbors informed of activities at the site? By what methods?
   No, all things went alright. Resident's daughter thinks there should be better information given to people during relocation related to tax obligations for housing; there should be some remuneration for the health issues and obligations of health that have not been addressed at all (even though people have moved away from the area) because a lot of older people now played in that area (dirt, etc.); and older people now have health issues that are probably related to the Site that are still bothering them.

6. Do you have any comments, suggestions, or recommendations regarding the site's management or operations?
   Not aware of any current issues, but would like to continue to receive any EPA information related to the Site. Resident's daughter has property in the area and is interested in selling the property.

Escambia Wood-Pensacola Superfund Site **Five-Year Review Interview Form**

Site Name: Escambia Wood-Pensacola		**EPA ID No.:**	FLD008168346
Interviewer Name:	LaTonya Spencer	**Affiliation:**	EPA
Subject Name:	Relocated Residents 3 and 4	**Affiliation:**	Phase II Relocation
Time: 03:30 P.M.	**Date:** 05/03/2012		
Interview Location:	Resident's Home		

Interview Format (circle one): In Person **Phone** Mail Other:

Interview Category: Residents

1. Are you aware of the former environmental issues at the Escambia Treating Company site and what cleanup activities have occurred?
   Yes

2. What are your views about current site conditions, problems, or related concerns?
   Last time going by the Site area, weeds and grass were all grown up. However, that's been a while because of back and forth to California.

3. What effect has this site had on the surrounding community, if any?
   None, that can be thought of right now. Really miss former neighbors.

4. What effects will the planned reuse of the site had on the community? Are you aware of any changes in projected land use?
   Not aware of any changes in projected land use. They are surprised that the property has not been turned over to the City or County at this point. Looking forward to seeing what's going to be there.

5. Should EPA do more to keep involved parties and surrounding neighbors informed of activities at the site? By what methods?
   No, they felt really informed about what was going on throughout the relocation process. However, with future relocations, additional information should be given when homes are within commercial/industrial areas so that the properties are appropriately appraised.

6. Do you have any comments, suggestions, or recommendations regarding the site's management or operations?
   They did not have any additional comments, suggestions, or recommendations for this question. However, they would still like to receive information pertaining to the Site.

Appendix D: Site Inspection Checklist

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST

I. SITE INFORMATION

Site name: Escambia Wood—Pensacola	**Date of inspection:** 4/25/2012
Location and Region: Pensacola, Escambia County, Florida, Region 4	**EPA ID:** FLD008168346
Agency, office, or company leading the five-year review: EPA, Region 4	**Weather/temperature:** 70s, sunny, windy

Remedy Includes: (Check all that apply)

- ☒ Landfill cover/containment
- ☒ Access controls
- ☒ Institutional controls
- ☐ Groundwater pump and treatment
- ☐ Surface water collection and treatment
- ☒ Other Leachate collection and treatment
- ☐ Monitored natural attenuation
- ☐ Groundwater containment
- ☐ Vertical barrier walls

Attachments: ☒ Inspection team roster attached ☐ Site map attached

II. INTERVIEWS (Check all that apply)

1. **O&M site manager** Jeff Day (Name) | J2 (Title) | 04/26/2012 (Date)
   Interviewed ☒ at site ☐ at office ☐ by phone Phone no.
   Problems, suggestions; ☒ Report attached see Appendix C

2. **O&M staff** _____ (Name) | _____ (Title) | _____ (Date)
   Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____
   Problems, suggestions; ☐ Report attached _____

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.). Fill in all that apply.

Agency Escambia County

Keith Wilkins	Marie Young	Glenn Griffith	_____
Name	Name	Name	Name

Problems; suggestions; ☒ Report attached see Appendix C

Agency _____

_____	_____	_____	_____	_____
Name	Name	Title	Date	Phone No.

Problems; suggestions; ☐ Report attached

Agency _____

Contact

_____	_____	_____	_____
Name	Title	Date	Phone No.

Problems; suggestions; ☐ Report attached

Agency _____

Contact

_____	_____	_____	_____
Name	Title	Date	Phone No.

Problems; suggestions; ☐ Report attached

Agency _____

Contact

_____	_____	_____	_____
Name	Title	Date	Phone No.

Problems; suggestions; ☐ Report attached

4. **Other interviews** (optional) ☒ Report attached Sand Castle Day Care, New Hope Missionary Baptist Church member, CATE members

Resident Resident 1

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. **O&M Documents**

☐ O&M manual	☐ Readily available	☐ Up to date	☒ N/A
☐ As-built drawings	☐ Readily available	☐ Up to date	☒ N/A
☐ Maintenance logs	☐ Readily available	☐ Up to date	☒ N/A

Remarks: _____

2. **Site-Specific Health and Safety Plan** ☐ Readily available ☐ Up to date ☒ N/A

☐ Contingency plan/emergency response plan ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

3. **O&M and OSHA Training Records** ☐ Readily available ☐ Up to date ☒ N/A

Remarks: _____

4.	**Permits and Service Agreements**			
	☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A
	☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A
	☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A
	☐ Other permits _____	☐ Readily available	☐ Up to date	☒ N/A
	Remarks: _____			
5.	**Gas Generation Records**	☐ Readily available	☐ Up to date	☒ N/A
	Remarks: _____			
6.	**Settlement Monument Records**	☐ Readily available	☐ Up to date	☒ N/A
	Remarks: _____			
7.	**Groundwater Monitoring Records**	☐ Readily available	☐ Up to date	☒ N/A
	Remarks: _____			
8.	**Leachate Extraction Records**	☐ Readily available	☒ Up to date	☐ N/A
	Remarks: Samples are collected and sent for analysis regularly.			
9.	**Discharge Compliance Records**			
	☐ Air	☐ Readily available	☐ Up to date	☒ N/A
	☐ Water (effluent)	☐ Readily available	☐ Up to date	☒ N/A
	Remarks: _____			
10.	**Daily Access/Security Logs**	☐ Readily available	☐ Up to date	☒ N/A
	Remarks: _____			

IV. O&M COSTS

1.	**O&M Organization**	
	☐ State in-house	☐ Contractor for State
	☐ PRP in-house	☐ Contractor for PRP
	☐ Federal Facility in-house	☐ Contractor for Federal Facility
	☒ O&M activities have not begun at the Site.	

2. **O&M Cost Records**

☐ Readily available ☐ Up to date

☐ Funding mechanism/agreement in place ☐ Unavailable

Original O&M cost estimate _____ ☐ Breakdown attached

Total annual cost by year for review period if available

From mm/dd/yyyy	To mm/dd/yyyy	_____	☐ Breakdown attached
Date	Date	Total cost	
From mm/dd/yyyy	To mm/dd/yyyy	_____	☐ Breakdown attached
Date	Date	Total cost	
From mm/dd/yyyy	To mm/dd/yyyy	_____	☐ Breakdown attached
Date	Date	Total cost	
From mm/dd/yyyy	To mm/dd/yyyy	_____	☐ Breakdown attached
Date	Date	Total cost	
From mm/dd/yyyy	To mm/dd/yyyy	_____	☐ Breakdown attached
Date	Date	Total cost	

3. **Unanticipated or Unusually High O&M Costs During Review Period**

Describe costs and reasons: _____

V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A

A. Fencing

1. **Fencing damaged** ☐ Location shown on site map ☒ Gates secured ☐ N/A

Remarks: Fencing well maintained; locked gates.

B. Other Access Restrictions

1. **Signs and other security measures** ☐ Location shown on site map ☐ N/A

Remarks: Superfund site signs; No unauthorized access.

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 _____

Contact _____ _____ mm/dd/yyyy _____

Name Title Date Phone no.

Reporting is up-to-date ☐ Yes ☐ No ☒ N/A

Reports are verified by the lead agency ☐ Yes ☐ No ☒ N/A

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** ☐ ICs are adequate ☐ ICs are inadequate ☒ N/A

Remarks: Restrictive covenants have been drafted but not in place at the Site. Zoning changes will be made by local government. Once implemented, ICs should be adequate.

D. General

1. **Vandalism/trespassing** ☐ Location shown on site map ☒ No vandalism evident

Remarks:_____

2. **Land use changes on site** ☒ N/A

Remarks: _____

3. **Land use changes off site** ☒ N/A

Remarks: _____

VI. GENERAL SITE CONDITIONS

A. Roads ☒ Applicable ☐ N/A

1. Roads damaged ☒ Location shown on site map ☒ Roads adequate ☐ N/A

Remarks: _____

B. Other Site Conditions

Remarks: _____

VII. LANDFILL COVERS ☒ Applicable ☐ N/A

A. Landfill 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	☒ Holes not evident
	Arial extent _____		Depth _____
	Remarks: _____		
5.	**Vegetative Cover**	☒ Grass	☒ Cover properly established
	☒ No signs of stress	☐ Trees/Shrubs (indicate size and locations on a diagram)	
	Remarks: Grass established and well-maintained.		
6.	**Alternative Cover** (armored rock, concrete, etc.)		☒ N/A
	Remarks: _____		
7.	**Bulges**	☐ Location shown on site map	☒ Bulges not evident
	Arial extent _____		Height _____
	Remarks: _____		
8.	**Wet Areas/Water Damage**	☒ Wet areas/water damage not evident	
	☐ Wet areas	☐ Location shown on site map	Arial extent _____
	☐ Ponding	☐ Location shown on site map	Arial extent _____
	☐ Seeps	☐ Location shown on site map	Arial extent _____
	☐ Soft subgrade	☐ Location shown on site map	Arial extent _____
	Remarks: _____		
9.	**Slope Instability**	☐ Slides	☐ Location shown on site map
	☒ No evidence of slope instability		
	Arial extent _____		
	Remarks: _____		

B. Benches ☐ Applicable ☒ N/A

(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and 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. Letdown Channels ☐ Applicable ☒ N/A

(Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. **Settlement** (Low spots) ☐ Location shown on site map ☐ No evidence of settlement

Arial extent _____ Depth _____

Remarks: _____

2. **Material Degradation** ☐ 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 Growth** Type _____

☐ No evidence of excessive growth

☐ Vegetation in channels does not obstruct flow

☐ Location shown on site map Arial extent _____

Remarks: _____

D. Cover Penetrations ☒ Applicable ☐ N/A

1. **Gas Vents** ☐ Active ☐ Passive

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs Maintenance ☒ N/A

Remarks: _____

2. **Gas Monitoring Probes**

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs maintenance ☒ N/A

Remarks: _____

3. **Monitoring Wells** (within surface area of landfill)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs Maintenance ☒ N/A

Remarks: _____

4. **Extraction of Containment Cell Leachate**

☒ Properly secured/locked ☒ Functioning ☒ Routinely sampled ☒ Good condition

☐ Evidence of leakage at penetration ☐ Needs Maintenance ☐ N/A

Remarks: The leachate collection system operates as intended.

5. **Settlement Monuments** ☐ Located ☐ Routinely surveyed ☒ N/A

Remarks: _____

E. Gas Collection and Treatment ☐ Applicable ☒ N/A

1. **Gas Treatment Facilities**

☐ Flaring ☐ Thermal destruction ☐ Collection for reuse

☐ Good condition ☐ Needs Maintenance

Remarks: _____

2. **Gas Collection Wells, Manifolds and Piping**

☐ Good condition ☐ Needs Maintenance

Remarks: _____

3. **Gas Monitoring Facilities** (e.g., gas monitoring of adjacent homes or buildings)

☐ Good condition ☐ Needs Maintenance ☐ N/A

Remarks: _____

F. Cover Drainage Layer ☐ Applicable ☒ N/A

1. **Outlet Pipes Inspected** ☐ Functioning ☐ N/A

Remarks: _____

2. **Outlet Rock Inspected** ☐ Functioning ☐ N/A

Remarks: _____

G. Detention/Sedimentation Ponds ☐ Applicable ☒ N/A

1. **Siltation** Area extent _____ Depth _____ ☐ N/A

☐ Siltation not evident

Remarks: _____

2.	**Erosion**	Area extent _____	Depth _____
	☐ Erosion not evident		
	Remarks: _____		
3.	**Outlet Works**	☐ Functioning	☐ N/A
	Remarks: _____		
4.	**Dam**	☐ Functioning	☐ N/A
	Remarks: _____		
H. Retaining Walls		☐ Applicable	☒ N/A
1.	**Deformations**	☐ Location shown on site map	☐ Deformation not evident
	Horizontal displacement _____		Vertical displacement _____
	Rotational displacement _____		
	Remarks: _____		
2.	**Degradation**	☐ Location shown on site map	☐ Degradation not evident
	Remarks: _____		
I. Perimeter Ditches/Off-Site Discharge		☐ Applicable	☒ 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 _____		Type _____
	Remarks: _____		
3.	**Erosion**	☐ Location shown on site map	☐ Erosion not evident
	Area extent _____		Depth _____
	Remarks: _____		
4.	**Discharge Structure**	☐ Functioning	☐ N/A
	Remarks: _____		
VIII. VERTICAL BARRIER WALLS		☐ Applicable	☒ N/A
1.	**Settlement**	☐ Location shown on site map	☐ Settlement not evident
	Area extent _____		Depth _____
	Remarks: _____		

2. **Performance Monitoring** Type of monitoring _____

☐ Performance not monitored

Frequency _____ ☐ Evidence of breaching

Head differential _____

Remarks: _____

IX. GROUNDWATER/SURFACE WATER REMEDIES ☐ Applicable ☒ N/A

A. Groundwater 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: _____

2. **Extraction 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: _____

B. Surface Water Collection Structures, Pumps, and Pipelines ☐ Applicable ☒ N/A

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. Treatment System ☐ Applicable ☒ N/A

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 groundwater treated annually _____

☐ Quantity of surface water treated annually _____

Remarks: _____

2. **Electrical Enclosures and Panels** (properly rated and functional)

☐ N/A ☐ Good condition ☐ Needs Maintenance

Remarks: _____

3. **Tanks, Vaults, Storage Vessels**

☐ N/A ☐ Good condition ☐ Proper secondary containment ☐ Needs Maintenance

Remarks: _____

4. **Discharge Structure and Appurtenances**

☐ N/A ☐ Good condition ☐ Needs Maintenance

Remarks: _____

5. **Treatment Building(s)**

☐ N/A ☐ Good condition (esp. roof and doorways) ☐ Needs repair

☐ Chemicals and equipment properly stored

Remarks: _____

6. **Monitoring Wells** (pump and treatment remedy)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ 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:**

☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining

E. Monitored 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: _____

X. OTHER REMEDIES

If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. 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 to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

In 2010, EPA completed containing contaminated soil, installing a leachate collection system, constructing a cap and covering the area with vegetation to address soil contamination at the Site. The soil containment and the leachate collection and treatment system continue to operate as intended.

B. Adequacy of O&M

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.

O&M activities have not begun at the Site.

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.

None noted.

D. Opportunities for Optimization

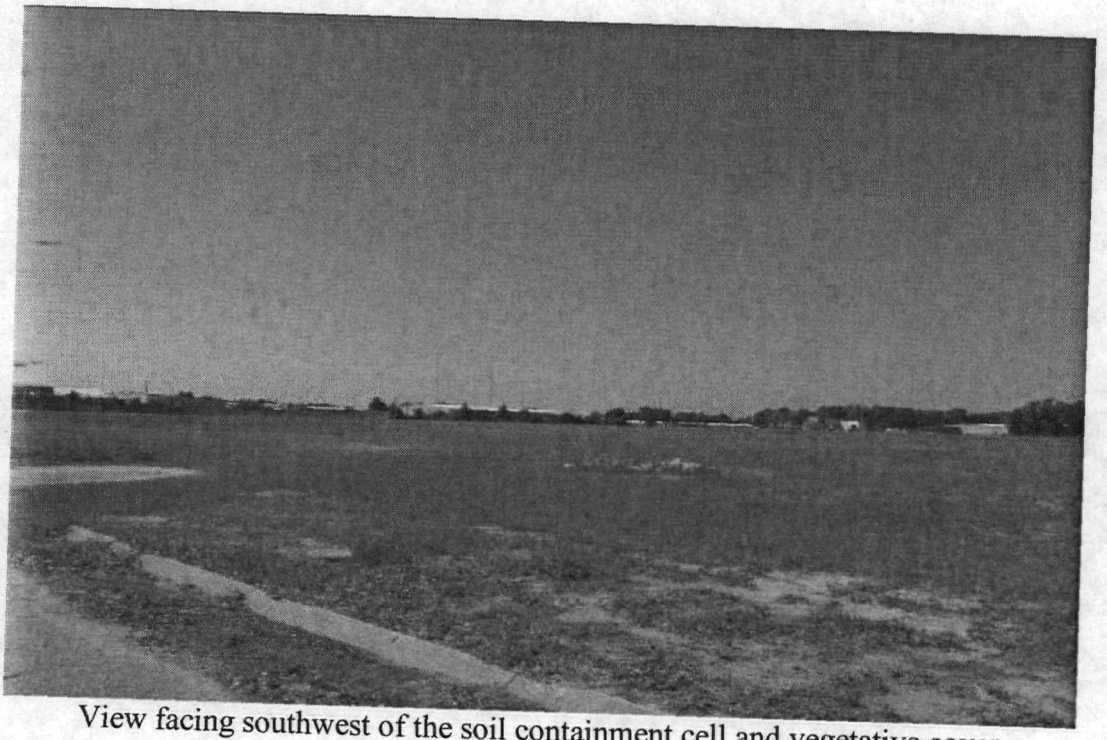
Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

None noted.

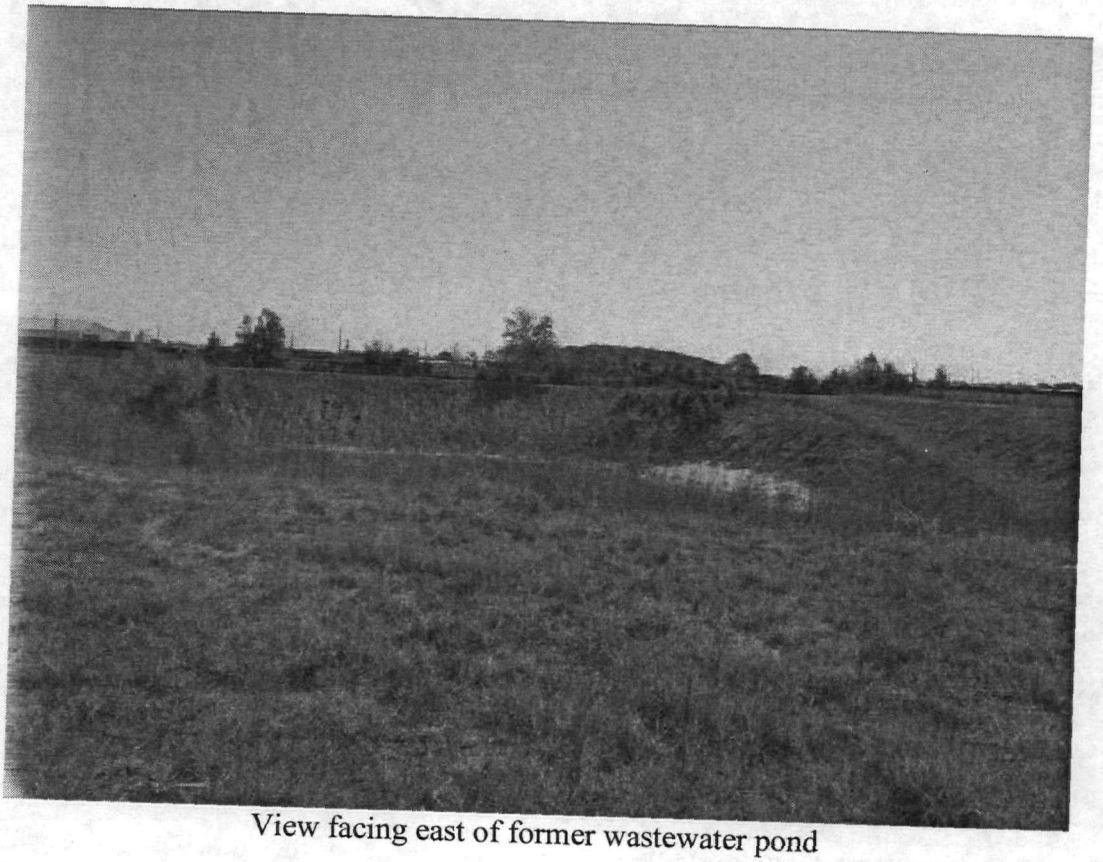
Site Inspection Participants

Erik Spalvins EPA
Deb Cox, EPA
L'Tonya Spencer, EPA
Ryan Burdge, Skeo Solutions
Lynette Wysocki, Skeo Solutions

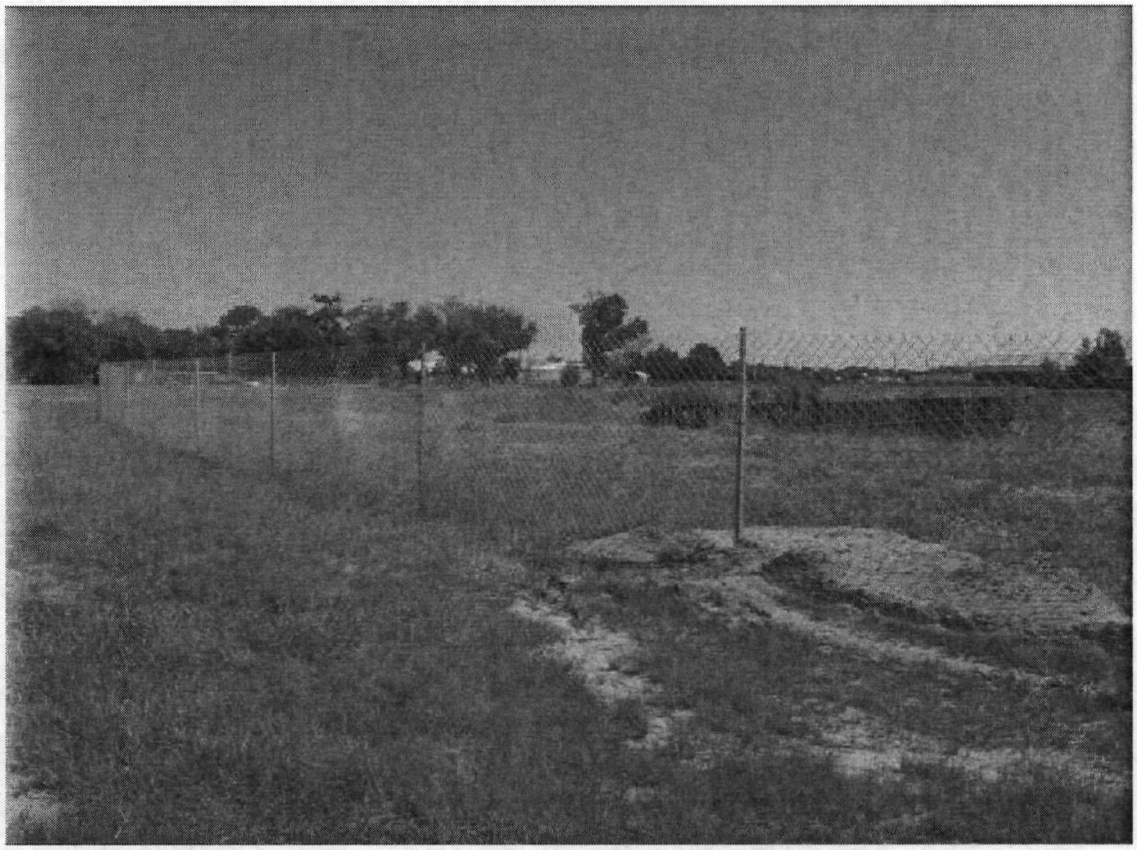
Appendix E: Photographs from Site Inspection Visit



View facing southwest of the soil containment cell and vegetative cover

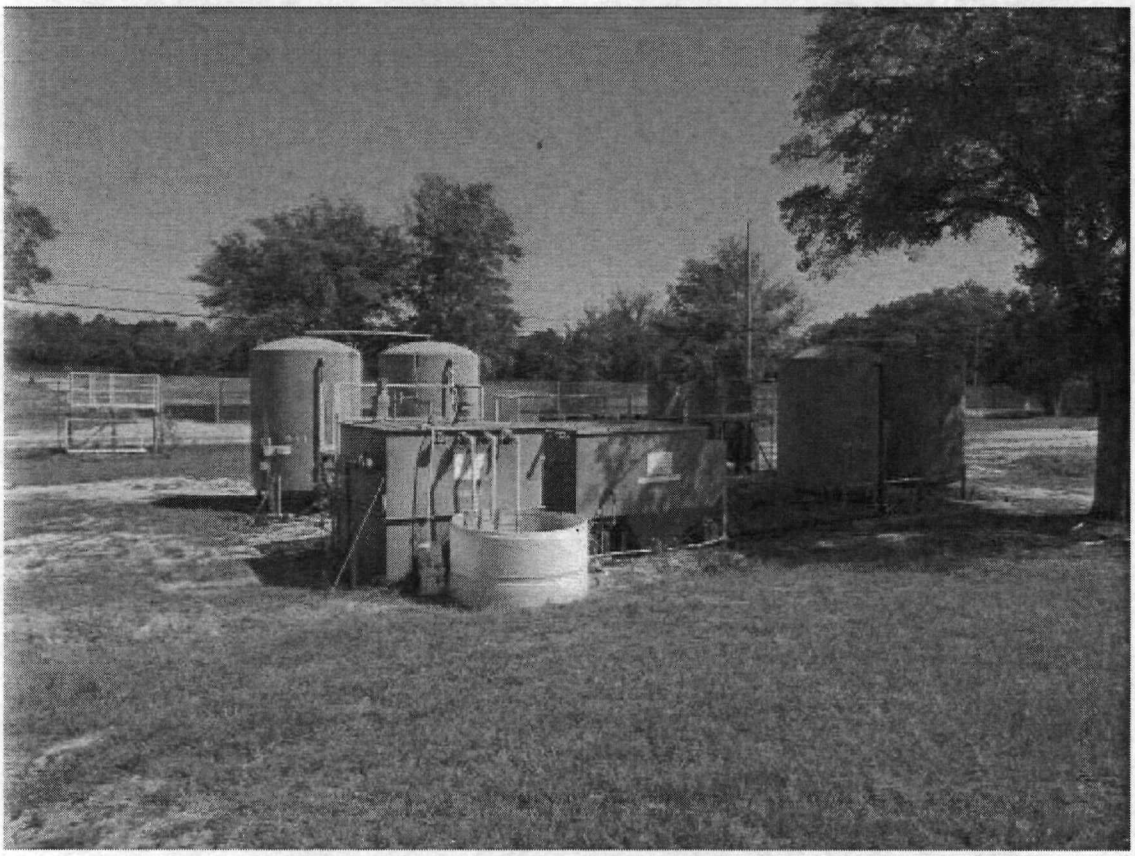


View facing east of former wastewater pond

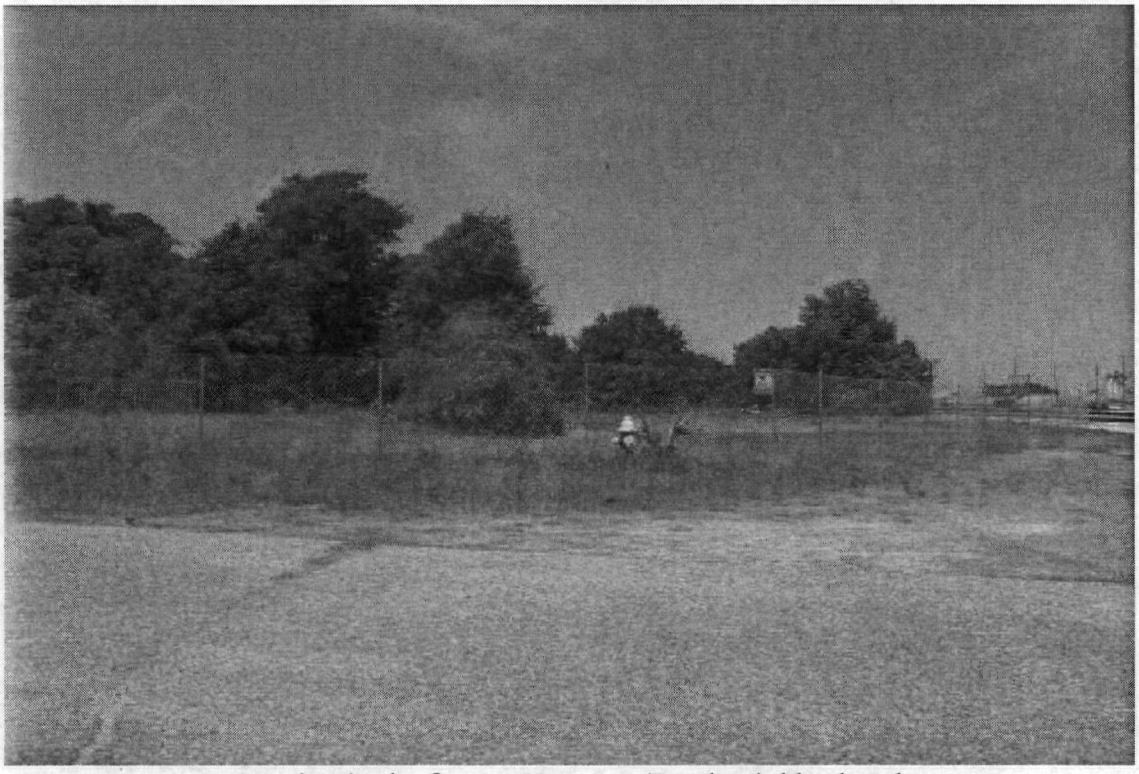


View facing northeast of the fenced former wastewater pond area and the remaining sheet piling

Leachate collection system located on the southeast corner of the soil containment cell

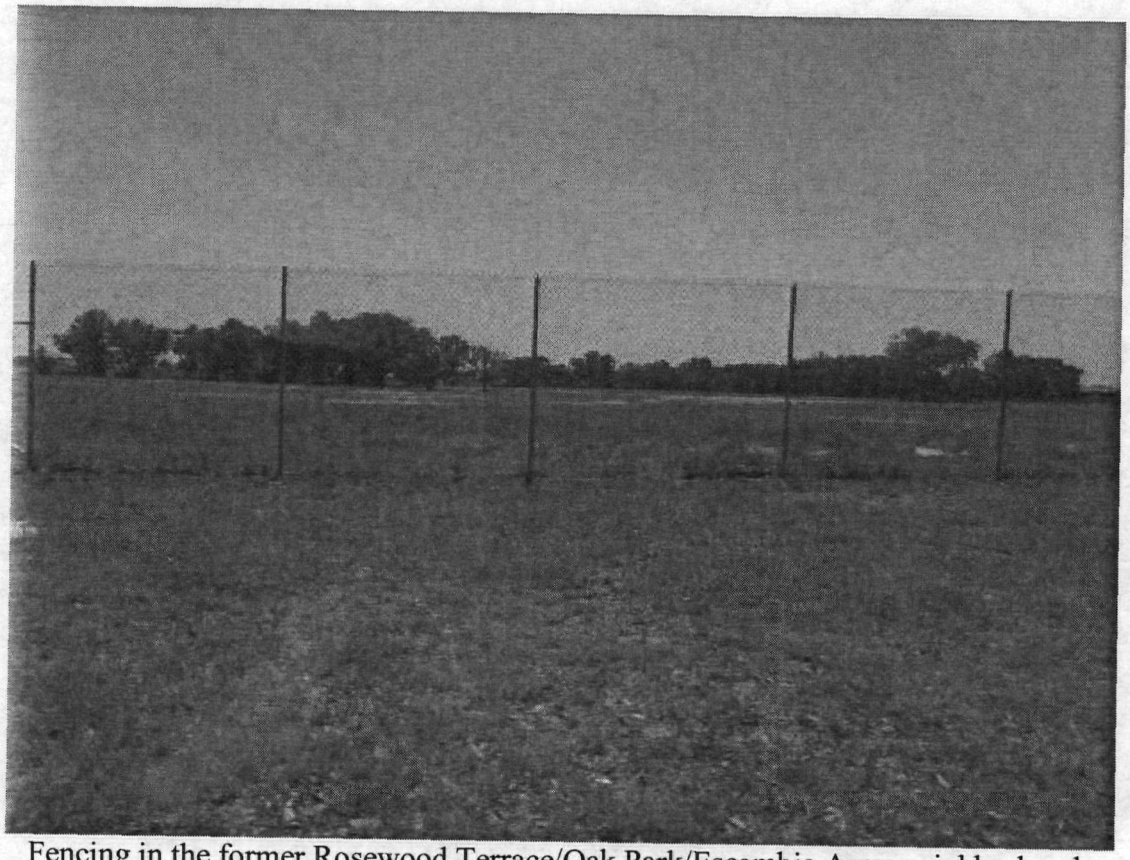


Leachate treatment system

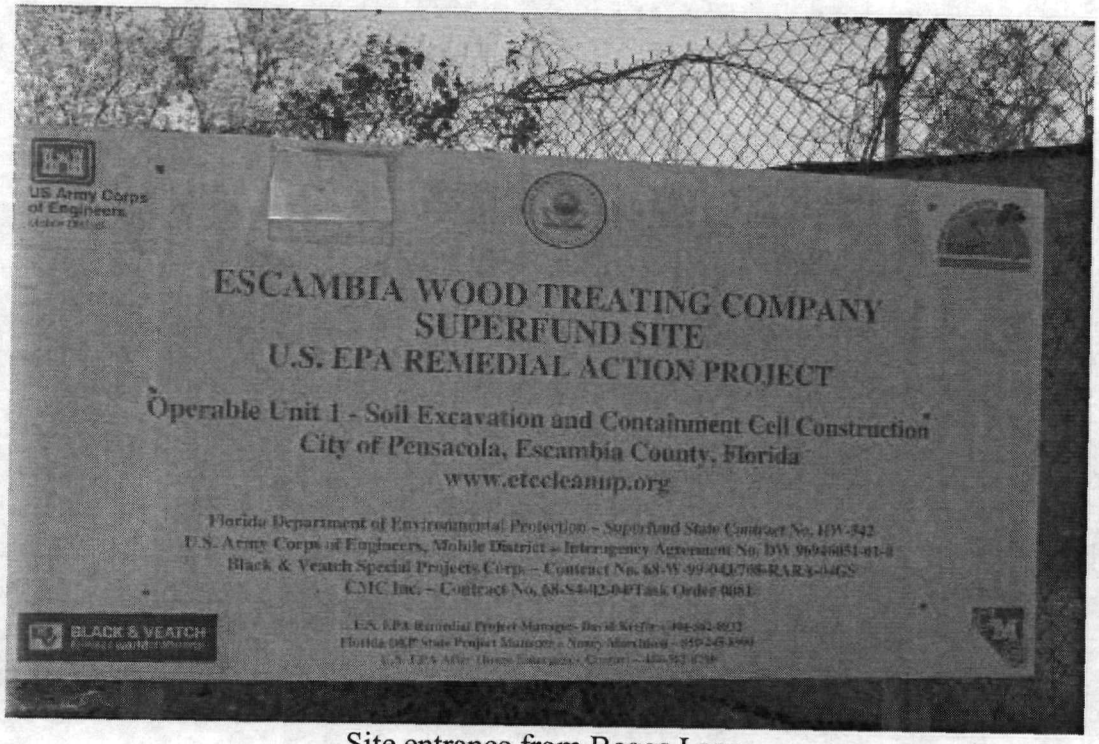


Fencing in the former Hermann/Pearl neighborhood

Fencing in the former Clarinda Triangle neighborhood



Fencing in the former Rosewood Terrace/Oak Park/Escambia Arms neighborhoods



Site entrance from Beggs Lane

Appendix F. Site Parcels

Parcel Number	Parcel Owner	Parcel Address
08-2S-30-5003-000-005	UNITED STATES OF AMERICA	4103 CLOVER ST
08-2S-30-5005-000-001	UNITED STATES OF AMERICA	100 BLK 42ND ST
08-2S-30-4003-000-006	UNITED STATES OF AMERICA	22 CLARINDA LN
08-2S-30-4002-000-001	UNITED STATES OF AMERICA	45 W CLARINDA LN
08-2S-30-4003-001-002	UNITED STATES OF AMERICA	62 CLARINDA LN
08-2S-30-4002-004-001	UNITED STATES OF AMERICA	49 W CLARINDA LN
08-2S-30-5006-000-004	UNITED STATES OF AMERICA	9 W LORETTA ST
08-2S-30-5007-000-000	UNITED STATES OF AMERICA	
08-2S-30-5007-000-004	UNITED STATES OF AMERICA	4111 N PALAFOX ST OFF OF
08-2S-30-5007-002-001	UNITED STATES OF AMERICA	114 42ND ST
08-2S-30-4003-000-004	UNITED STATES OF AMERICA	40 CLARINDA LN
08-2S-30-4003-002-005	UNITED STATES OF AMERICA	32 CLARINDA LN
08-2S-30-5004-000-003	UNITED STATES OF AMERICA	101 W 42ND LN
08-2S-30-5005-002-001	UNITED STATES OF AMERICA	109 42ND AVE
08-2S-30-4003-000-003	UNITED STATES OF AMERICA	54 CLARINDA LN 1/2
08-2S-30-5005-003-001	UNITED STATES OF AMERICA	105 42ND LN
08-2S-30-4003-000-005	UNITED STATES OF AMERICA	36 CLARINDA LN
08-2S-30-4003-002-003	UNITED STATES OF AMERICA	CLARINDA LN OFF OF
08-2S-30-5002-000-002	UNITED STATES OF AMERICA	27 W 40TH LN
08-2S-30-5008-000-009	UNITED STATES OF AMERICA	118 W LORETTA ST
08-2S-30-7001-200-002	UNITED STATES OF AMERICA	33 BEGGS LN
08-2S-30-4003-001-005	UNITED STATES OF AMERICA	34 CLARINDA LN
08-2S-30-5003-000-002	UNITED STATES OF AMERICA	4001 N CLOVER ST
08-2S-30-5007-001-001	UNITED STATES OF AMERICA	119 W LORETTA ST
08-2S-30-4002-003-001	UNITED STATES OF AMERICA	43 CLARINDA LN
08-2S-30-5007-000-002	UNITED STATES OF AMERICA	21 W LORETTA ST
08-2S-30-4003-004-003	UNITED STATES OF AMERICA	54 CLARINDA LN
08-2S-30-4003-001-007	UNITED STATES OF AMERICA	16 CLARINDA LN
05-2S-30-1002-000-055	UNITED STATES OF AMERICA	49 E HERMAN ST
05-2S-30-1002-000-073	UNITED STATES OF AMERICA	24 E HERMAN AVE 1/2
05-2S-30-1002-000-084	UNITED STATES OF AMERICA	56 E HERMAN AVE
05-2S-30-1002-001-079	UNITED STATES OF AMERICA	44 E HERMAN ST
08-2S-30-4002-009-001	UNITED STATES OF AMERICA	
05-2S-30-1002-000-008	UNITED STATES OF AMERICA	23 E PEARL ST
05-2S-30-1002-000-030	UNITED STATES OF AMERICA	22 E PEARL ST
05-2S-30-1002-000-043	UNITED STATES OF AMERICA	PEARL AVE
08-2S-30-4004-000-000	UNITED STATES OF AMERICA	100 CLARINDA LN
08-2S-30-8000-001-004	UNITED STATES OF AMERICA	103 LANSDOWNE AVE

Parcel Number	Parcel Owner	Parcel Address
08-2S-30-8000-003-002	UNITED STATES OF AMERICA	205 HICKORY ST
08-2S-30-8000-004-005	UNITED STATES OF AMERICA	3941 JACOTTE AVE
08-2S-30-8000-008-001	UNITED STATES OF AMERICA	3995 TYNDALE AVE
08-2S-30-8000-010-004	UNITED STATES OF AMERICA	205 LANSDOWNE AVE A
08-2S-30-8000-013-004	UNITED STATES OF AMERICA	211 LANSDOWNE AVE
08-2S-30-4003-005-003	UNITED STATES OF AMERICA	50 CLARINDA LN BLK
08-2S-30-5004-000-002	UNITED STATES OF AMERICA	131 W LORETTA ST
08-2S-30-5008-000-003	UNITED STATES OF AMERICA	20 W LORETTA ST
05-2S-30-1002-000-081	UNITED STATES OF AMERICA	52 E HERMAN AVE
08-2S-30-8000-006-001	UNITED STATES OF AMERICA	111 HICKORY ST
08-2S-30-8000-017-002	UNITED STATES OF AMERICA	3992 TYNDALE AVE
08-2S-30-5007-000-001	UNITED STATES OF AMERICA	26 N 42ND LN 8
08-2S-30-4002-006-001	UNITED STATES OF AMERICA	55 CLARINDA LN
08-2S-30-8000-019-002	UNITED STATES OF AMERICA	3996 TYNDALE AVE
08-2S-30-5005-000-002	UNITED STATES OF AMERICA	4109 N PALAFOX ST
05-2S-30-1002-000-006	UNITED STATES OF AMERICA	19 E PEARL ST
08-2S-30-4002-008-001	UNITED STATES OF AMERICA	41 CLARINDA LN
08-2S-30-4003-003-003	UNITED STATES OF AMERICA	56 CLARINDA LN
08-2S-30-4003-002-007	UNITED STATES OF AMERICA	20 CLARINDA LN
08-2S-30-5004-000-001	UNITED STATES OF AMERICA	103 W 42ND LN 1/2
05-2S-30-1002-000-010	UNITED STATES OF AMERICA	27 E PEARL ST
08-2S-30-4003-000-007	UNITED STATES OF AMERICA	18 CLARINDA LN
05-2S-30-1002-000-005	UNITED STATES OF AMERICA	19 E PEARL ST
05-2S-30-1002-000-032	UNITED STATES OF AMERICA	25 E HERMAN ST
08-2S-30-5006-001-002	COMMANDER BUCK & MARY L	4113 42ND ST
08-2S-30-8100-000-022	UNITED STATES OF AMERICA	15 SPRUCE ST
08-2S-30-8100-000-012	UNITED STATES OF AMERICA	14 MULBERRY ST
08-2S-30-7001-003-004	UNITED STATES OF AMERICA	49 BEGGS LN
08-2S-30-8100-000-023	UNITED STATES OF AMERICA	17 SPRUCE ST
05-2S-30-1002-000-015	UNITED STATES OF AMERICA	37 E PEARL ST
05-2S-30-1002-000-016	UNITED STATES OF AMERICA	PEARL AVE OFF OF
05-2S-30-1002-000-074	UNITED STATES OF AMERICA	34 E HERMAN ST
05-2S-30-1002-000-075	UNITED STATES OF AMERICA	30 E HERMAN ST
08-2S-30-8000-002-001	UNITED STATES OF AMERICA	103 HICKORY ST
08-2S-30-8000-002-002	UNITED STATES OF AMERICA	203 HICKORY ST
08-2S-30-8000-006-004	UNITED STATES OF AMERICA	113 LANSDOWNE AVE
08-2S-30-8000-006-005	UNITED STATES OF AMERICA	3945 JACOTTE
08-2S-30-8000-013-001	UNITED STATES OF AMERICA	108 KILLARNEY CT
08-2S-30-8000-013-002	UNITED STATES OF AMERICA	208 MONTROSE CT
08-2S-30-8000-020-002	UNITED STATES OF AMERICA	3998 TYNDALE

Parcel Number	Parcel Owner	Parcel Address
08-2S-30-8100-000-003	UNITED STATES OF AMERICA	5 MULBERRY ST
05-2S-30-1002-000-082	UNITED STATES OF AMERICA	67 E HERMAN AVE
05-2S-30-1002-002-085	UNITED STATES OF AMERICA	59 E HERMAN ST
08-2S-30-8000-004-003	UNITED STATES OF AMERICA	3992 TALISMAN DR
08-2S-30-8100-000-007	UNITED STATES OF AMERICA	2 MULBERRY ST
08-2S-30-7001-220-002	UNITED STATES OF AMERICA	7 BEGGS LN
08-2S-30-8100-000-024	UNITED STATES OF AMERICA	19 SPRUCE ST
08-2S-30-8100-000-014	UNITED STATES OF AMERICA	16 MULBERRY ST
08-2S-30-8100-000-008	UNITED STATES OF AMERICA	4 MULBERRY ST
08-2S-30-8100-001-029	UNITED STATES OF AMERICA	14 SPRUCE ST
08-2S-30-8100-000-021	UNITED STATES OF AMERICA	13 SPRUCE ST
08-2S-30-8100-000-026	UNITED STATES OF AMERICA	2 SPRUCE ST
08-2S-30-7001-130-002	UNITED STATES OF AMERICA	200 HICKORY ST
08-2S-30-7001-131-002	UNITED STATES OF AMERICA	200 HICKORY ST
08-2S-30-8100-000-006	UNITED STATES OF AMERICA	9 MULBERRY ST
08-2S-30-8100-000-017	UNITED STATES OF AMERICA	5 SPRUCE ST
08-2S-30-8100-000-031	UNITED STATES OF AMERICA	18 SPRUCE ST
08-2S-30-7001-240-002	UNITED STATES OF AMERICA	9 BEGGS LN
08-2S-30-7001-002-004	UNITED STATES OF AMERICA	47 BEGGS LN
08-2S-30-7001-004-004	UNITED STATES OF AMERICA	BEGGS LN
08-2S-30-7001-210-002	UNITED STATES OF AMERICA	35 BEGGS LN
08-2S-30-8100-000-030	UNITED STATES OF AMERICA	16 SPRUCE ST
08-2S-30-8100-001-020	UNITED STATES OF AMERICA	11 SPRUCE ST
08-2S-30-8100-000-029	UNITED STATES OF AMERICA	12 SPRUCE ST
08-2S-30-8100-000-016	UNITED STATES OF AMERICA	3 SPRUCE ST
08-2S-30-8000-001-003	UNITED STATES OF AMERICA	3998 TALISMAN DR
08-2S-30-8100-001-010	UNITED STATES OF AMERICA	10 MULBERRY ST
08-2S-30-8100-000-025	UNITED STATES OF AMERICA	21 SPRUCE ST
08-2S-30-8100-000-032	UNITED STATES OF AMERICA	20 SPRUCE ST
08-2S-30-7001-005-003	UNITED STATES OF AMERICA	46 BEGGS LN
08-2S-30-8100-000-011	UNITED STATES OF AMERICA	12 MULBERRY ST
08-2S-30-7001-004-003	UNITED STATES OF AMERICA	48 BEGGS LN
08-2S-30-8100-000-019	UNITED STATES OF AMERICA	9 SPRUCE ST
08-2S-30-8100-000-027	UNITED STATES OF AMERICA	302 HICKORY ST
08-2S-30-8100-000-010	UNITED STATES OF AMERICA	8 MULBERRY ST
08-2S-30-8100-000-005	UNITED STATES OF AMERICA	9 MULBERRY ST 1/2
05-2S-30-1002-000-051	UNITED STATES OF AMERICA	71 HERMAN ST
08-2S-30-8000-016-002	UNITED STATES OF AMERICA	202 MONTROSE CT
05-2S-30-1002-000-009	UNITED STATES OF AMERICA	25 E PEARL ST
05-2S-30-1002-000-012	UNITED STATES OF AMERICA	33 E PEARL ST

Parcel Number	Parcel Owner	Parcel Address
05-2S-30-1002-000-069	UNITED STATES OF AMERICA	20 E HERMAN ST
05-2S-30-1002-000-072	UNITED STATES OF AMERICA	24 E HERMAN ST
05-2S-30-1002-000-080	UNITED STATES OF AMERICA	46 E HERMAN ST
05-2S-30-1002-000-085	UNITED STATES OF AMERICA	63 E HERMAN ST
05-2S-30-1002-000-042	UNITED STATES OF AMERICA	PEARL AVE
05-2S-30-1002-000-044	UNITED STATES OF AMERICA	42 PEARL AVE
05-2S-30-1002-000-054	UNITED STATES OF AMERICA	54 E HERMAN ST
05-2S-30-1002-000-056	UNITED STATES OF AMERICA	45 E HERMAN ST
05-2S-30-1002-000-058	UNITED STATES OF AMERICA	33 E HERMAN ST
05-2S-30-1002-001-085	UNITED STATES OF AMERICA	64 E HERMAN ST
08-2S-30-4003-000-010	UNITED STATES OF AMERICA	2 CLARINDA LN
05-2S-30-1002-000-040	UNITED STATES OF AMERICA	PEARL AVE
05-2S-30-1002-000-060	UNITED STATES OF AMERICA	31 E HERMAN ST
05-2S-30-1002-000-066	UNITED STATES OF AMERICA	16 E HERMAN ST
05-2S-30-1002-001-003	UNITED STATES OF AMERICA	15 E PEARL ST
05-2S-30-1002-001-030	UNITED STATES OF AMERICA	PEARL AVE
05-2S-30-1002-001-060	UNITED STATES OF AMERICA	29 E HERMAN ST
08-2S-30-8000-003-005	UNITED STATES OF AMERICA	3999 JACOTTE AVE
05-2S-30-1002-000-041	UNITED STATES OF AMERICA	32 E PEARL ST
05-2S-30-1002-000-057	UNITED STATES OF AMERICA	41 E HERMAN ST
05-2S-30-1002-000-071	UNITED STATES OF AMERICA	22 E HERMAN AVE
05-2S-30-1002-000-078	UNITED STATES OF AMERICA	42 E HERMAN ST
05-2S-30-1002-002-016	UNITED STATES OF AMERICA	E PEARL AVE
08-2S-30-4003-000-009	UNITED STATES OF AMERICA	4 CLARINDA LN
08-2S-30-8000-002-005	UNITED STATES OF AMERICA	3997 JACOTTE AVE
08-2S-30-8000-005-002	UNITED STATES OF AMERICA	209 HICKORY ST
08-2S-30-8000-007-004	UNITED STATES OF AMERICA	115 LANSDOWNE AVE
08-2S-30-8000-009-004	UNITED STATES OF AMERICA	203 LANSDOWNE AVE
08-2S-30-8000-012-001	UNITED STATES OF AMERICA	110 KILLARNEY CT
08-2S-30-8000-014-002	UNITED STATES OF AMERICA	206 MONTROSE CT
08-2S-30-8000-018-002	UNITED STATES OF AMERICA	3994 TYNDALE AVE
05-2S-30-1002-000-031	UNITED STATES OF AMERICA	26 E PEARL ST
05-2S-30-1002-000-059	UNITED STATES OF AMERICA	35 E HERMAN ST
05-2S-30-1002-001-017	UNITED STATES OF AMERICA	39 E PEARL AVE
05-2S-30-1002-001-031	UNITED STATES OF AMERICA	26 E PEARL ST 1/2
08-2S-30-8000-003-004	UNITED STATES OF AMERICA	107 LANSDOWNE AVE
08-2S-30-8000-004-001	UNITED STATES OF AMERICA	107 HICKORY ST
08-2S-30-8000-004-004	UNITED STATES OF AMERICA	109 LANSDOWNE
08-2S-30-8000-008-002	UNITED STATES OF AMERICA	3995 TALISMAN DR
08-2S-30-8000-009-001	UNITED STATES OF AMERICA	3993 TYNDALE AVE

Parcel Number	Parcel Owner	Parcel Address
08-2S-30-8000-015-001	UNITED STATES OF AMERICA	104 KILLARNEY CT
08-2S-30-8000-015-004	UNITED STATES OF AMERICA	215 LANSDOWNE DR
05-2S-30-1002-000-049	UNITED STATES OF AMERICA	PEARL AVE
08-2S-30-8000-003-001	UNITED STATES OF AMERICA	105 HICKORY ST
08-2S-30-8000-003-003	UNITED STATES OF AMERICA	3994 TALISMAN DR
08-2S-30-8000-011-004	UNITED STATES OF AMERICA	207 LANSDOWNE AVE
08-2S-30-8000-014-001	UNITED STATES OF AMERICA	106 KILLARNEY CT
08-2S-30-8000-014-004	UNITED STATES OF AMERICA	213 LANSDOWNE AVE
05-2S-30-1002-000-050	UNITED STATES OF AMERICA	60 HERMAN ST
08-2S-30-8000-006-002	UNITED STATES OF AMERICA	3999 TALISMAN DR
08-2S-30-8000-010-001	UNITED STATES OF AMERICA	3991 TYNDALE AVE
08-2S-30-8000-005-001	UNITED STATES OF AMERICA	109 HICKORY ST
08-2S-30-8000-005-004	UNITED STATES OF AMERICA	111 LANSDOWNE AVE
08-2S-30-8000-007-002	UNITED STATES OF AMERICA	3997 TALISMAN DR
08-2S-30-8000-007-005	UNITED STATES OF AMERICA	101 LANSDOWNE
08-2S-30-8000-018-001	UNITED STATES OF AMERICA	3994 JACOTTE ST
08-2S-30-8000-019-001	UNITED STATES OF AMERICA	3996 JACOTTE
05-2S-30-1002-000-017	UNITED STATES OF AMERICA	47 E PEARL ST
08-2S-30-8000-016-001	UNITED STATES OF AMERICA	102 KILLARNEY CT
08-2S-30-8000-017-001	UNITED STATES OF AMERICA	3992 JACOTTE AVE
08-2S-30-8100-000-002	UNITED STATES OF AMERICA	
08-2S-30-8000-004-002	UNITED STATES OF AMERICA	207 HICKORY ST
08-2S-30-8000-008-004	UNITED STATES OF AMERICA	201 LANSDOWNE AVE
08-2S-30-8000-009-002	UNITED STATES OF AMERICA	3993 TALISMAN DR
08-2S-30-8000-015-002	UNITED STATES OF AMERICA	204 MONTROSE CT
08-2S-30-8000-016-004	UNITED STATES OF AMERICA	301 LANSDOWNE LN
08-2S-30-8000-011-001	UNITED STATES OF AMERICA	112 KILLARNEY CT
08-2S-30-8000-010-002	UNITED STATES OF AMERICA	3991 TALISMAN DR
08-2S-30-8000-011-002	UNITED STATES OF AMERICA	212 MONTROSE CT
08-2S-30-7001-003-003	UNITED STATES OF AMERICA	12 BEGGS LN
08-2S-30-7001-001-004	UNITED STATES OF AMERICA	38 BEGGS LN
08-2S-30-8100-000-034	UNITED STATES OF AMERICA	24 SPRUCE ST
08-2S-30-8100-000-033	UNITED STATES OF AMERICA	22 SPRUCE ST
08-2S-30-8100-000-009	UNITED STATES OF AMERICA	6 MULBERRY ST
08-2S-30-8100-000-015	UNITED STATES OF AMERICA	210 HICKORY ST
08-2S-30-8100-000-028	UNITED STATES OF AMERICA	304 HICKORY ST
08-2S-30-8100-000-018	UNITED STATES OF AMERICA	7 SPRUCE ST
05-2S-30-1002-000-013	UNITED STATES OF AMERICA	35 E PEARL ST
05-2S-30-1002-000-048	UNITED STATES OF AMERICA	50 E PEARL AVE
05-2S-30-1002-000-076	UNITED STATES OF AMERICA	38 E HERMAN ST

Parcel Number	Parcel Owner	Parcel Address
05-2S-30-1002-000-077	UNITED STATES OF AMERICA	40 E HERMAN ST
08-2S-30-8000-002-003	UNITED STATES OF AMERICA	3996 TALISMAN DR
08-2S-30-8000-002-004	UNITED STATES OF AMERICA	105 LANSDOWNE
08-2S-30-8000-007-001	UNITED STATES OF AMERICA	3997 TYNDALE AVE
08-2S-30-8000-012-002	UNITED STATES OF AMERICA	210 MONTROSE CT
08-2S-30-8000-012-004	UNITED STATES OF AMERICA	209 LANSDOWNE AVE
08-2S-30-8100-000-004	UNITED STATES OF AMERICA	9 MULBERRY ST
05-2S-30-1002-000-079	UNITED STATES OF AMERICA	69 E HERMAN ST
08-2S-30-8000-001-001	UNITED STATES OF AMERICA	101 HICKORY ST
08-2S-30-8000-001-002	UNITED STATES OF AMERICA	201 HICKORY ST
47-1S-30-1101-004-001	UNITED STATES OF AMERICA	600 MASON LN BLK
08-2S-30-8100-001-007	UNITED STATES OF AMERICA	
08-2S-30-8100-001-015	UNITED STATES OF AMERICA	
08-2S-30-8100-000-001	UNITED STATES OF AMERICA	3 MULBERRY ST
08-2S-30-4003-001-008	UNITED STATES OF AMERICA	10 CLARINDA LN
08-2S-30-8000-005-005	UNITED STATES OF AMERICA	3943 JACOTTE AVE
08-2S-30-8000-001-005	UNITED STATES OF AMERICA	3995 JACOTTE AVE