CYPRESS
Environmental Science & Engineering

Phase I
Environmental Site Assessment

Site:
Calgon Site
Port Bienville, Hancock County, Mississippi

Submitted to:
Hancock Port and Harbor Commission

Prepared by:

Cypress Environmental Science & Engineering

May 22, 2019

CYPRESS
Environmental Science & Engineering

Table of Contents

1 Introduction 1-1
1.1 Purpose of ESA 1-1
1.2 General Site Description 1-1
1.3 General Vicinity Description 1-1
1.4 Physical Environmental Setting 1-2
1.4.1 General Topography and Soils 1-2
1.4.2 Surface Waters and Wetlands 1-2
1.4.3 Hydrogeology 1-2
1.5 Limitations 1-3
1.6 Required Statements 1-4
1.6.1 Statement of Qualifications 1-4
1.6.2 Statement of Completion 1-5
2 Records Review 2-1
2.1 Site Contact – Provided Information 2-1
2.2 Site Chain of Title 2-1
2.3 Previous Phase I Environmental Site Assessments 2-1
2.4 Regulatory Agency Records 2-1
2.5 Database of Environmental Enforcement Records 2-2
2.5.1 Records Pertaining to the Site 2-2
2.5.2 Records Pertaining to the Sites Offsite 2-2
2.6 Area Radon Information 2-3
2.7 Publicly Available Maps 2-3
2.8 Historical Aerial Photographs 2-3
2.9 Historical Topographic Maps 2-5
2.10 Historical City Directory 2-6
2.11 Fire Insurance Maps 2-7
2.12 Environmental Clean-Up Liens AULs 2-7
2.13 Vapor Encroachment Screening/Conditions 2-7
2.14 Summary of Site Records Review 2-7
3 Site Reconnaissance 3-1
3.1 Observations of Exterior and Interior Portions of Property 3-1
3.1.1 Exterior Property Description 3-1
3.1.2 Observations of Structures on Property 3-1
3.1.3 Roads, Parking Areas, and Site Access 3-1
3.1.4 Hazardous Substances and Petroleum Products Storage Areas 3-1
3.1.5 Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs) 3-1
3.1.6 Solid Waste Disposal Areas & Debris 3-1
3.1.7 Odors 3-1
3.1.8 Stained Soil, Stained Pavement, and Stressed Vegetation 3-1
3.1.9 Pools of Liquid 3-1
3.1.10 Storm water and Wastewater 3-2
3.1.11 Pits, Ponds, or Lagoons 3-2
3.1.12 Wells 3-2
3.1.13 PCBs and Asbestos 3-2

3.1.14 Interior Utilities and Equipment 3-2
3.2 Observations and Adjoining Properties 3-2
4 Information from Interviews 4-1
4.1 Interviews with Current Owners and Occupants of the Site 4-1
4.2 Interviews with Parties other than Current Owner and Occupant 4-1
4.3 Attempted Interviews with Parties other than Current Owner and Occupant 4-2
5 Results 5-1
5.1 Property Data Gaps 5-1
5.2 Findings 5-1
5.3 Opinion 5-1
5.4 Conclusions 5-1
6 References 6-1
7 Qualifications 7-1

Appendices

A. Figures
B. Site Photographs
C. Environmental Database Report
D. Historical Aerial Photographs
E. Historical Topographic Maps
F. City Directory
G. Sanborn Map Report
H. Building Permits
I. Environmental Lien and AUL Search
J. Chain of Title Search
K. Tax Map Report
L. MDEQ Records

CYPRESS
Environmental Science & Engineering

Executive Summary

Cypress Environmental Science & Engineering, (Cypress) was retained by the Hancock County Port and Harbor Commission to conduct a Phase I Environmental Site Assessment (ESA) for the 5.74-acre Calgon Site included within Parcel 186-0-24-005.000 to identify recognized environmental conditions (REC)s on the subject site, as defined by the American Society of Testing Materials (ASTM) in the standard ASTM E 1527-13. There are no exceptions or deletions from the ASTM Practice E 1527-13.

The site is located adjacent to Road C1 within the Bienville Industrial Park in Hancock County, Mississippi. The site has been cleared where the coal dust pile had been located. A wetland area is present to the north and ditches are present to the north, west, and south. The ditches and the wetland areas are vegetated. No structures are present onsite. Piles of railroad ties are present and remnant piles of coal dust are present. Electrical lines are present on the south side of the property and a single pole transformer is present on the northwest corner of the site. There are no tenants or businesses on the site.

Aerial photos show the site undeveloped up to 1973 and forested. After 1973, the site was cleared. No structures have been built on the site. The coal dust pile was clearly present on the site from 2007 to 2016. The coal dust has now been removed.

Data Gaps

As defined by ASTM, a data gap is a lack or inability to obtain information required by the standard and practices listed in ASTM despite a good faith effort by the Environmental Professional to gather information about the site. ASTM guidelines require documenting site history in 5-year increments back to 1940 or initial site development. Topographic maps for this site are dated 1893 with a 1936 15-minute topographic map showing the site. The historical information available for this site exceeds the guideline was and no data gap is identified for the site.

The site usage of the property to the north, which includes buildings but is unoccupied, in unknown. No addresses for businesses on this road were included in the City Directory and the site did not appear on any environmental database. Aerial photos indicate the site was active for a period from 1975 to 2010. The lack of information about the adjacent site constitutes an identified data gap.

Findings

This assessment has revealed the presence of potential RECs. No HREC or CRECs were found on site.

RECs:

- Coal dust: The coal dust and the byproducts of the coal dust fire are potential RECs.
- Pole transformer: There is evidence of a potential leaking transformer and there are no markings regarding the PCB status of the transformer.
- Railroad ties: The railroad ties may contain creosote and a potential REC.

CYPRESS
Environmental Science & Engineering

Opinions

Based on the analysis conducted for this report, the following opinion is made regarding the identified REC, HREC, or CRECs onsite.

A Phase II ESA is recommended for the following RECs:

- Coal dust: The coal dust and the byproducts of the coal dust fire are potential RECs.
- Pole transformer: There is evidence of a potential leaking transformer.
- Railroad ties: The railroad ties may contain creosote and a potential REC.

Conclusions

Based on the findings of this Phase I, we believe this site is impacted by RECs. We do not believe that HRECs or CRECs are present on site.

CYPRESS
Environmental Science & Engineering

1 Introduction

Subject to the limitations included in this section, this report presents the results of a Phase I Environmental Site Assessment (ESA) for the 5.74-acre Calgon Site. The Calgon Site includes a portion of one parcel adjacent to Road C1. A site vicinity map showing the site is included in Appendix A as Figure 1 and the site is described in Table 1. Per the scope of work, a portion of Parcel 186-0-24-005.000 was the site evaluated in this ESA (Appendix A, Figure 1 and 2).

This Phase I was commissioned by the Hancock County Port and Harbor Commission and was conducted by Cypress Environmental Science & Engineering (Cypress). The scope of this assessment included a site reconnaissance conducted by Ms. Cynthia Henderson on April 29, 2019, and an environmental database search and records review.

1.1 Purpose of ESA

The purpose of this ESA is to identify recognized environmental conditions (RECs) on the subject site, as defined by the American Society of Testing Materials (ASTM) in the standard ASTM E 1527-13. ASTM E 1527-13 provides a procedure for satisfying the Standards and Practices for All Appropriate Inquires. This report is one aspect of the Client's environmental due diligence to investigate previous ownership and uses of the site as is consistent with good commercial or customary practices. This report may not address all requirements in the Client's due diligence assessment of risks associated with site.

1.2 General Site Description

The site is in Hancock County, Mississippi, adjacent to Road C1 and within the boundaries of the Bienville Industrial Park. The site boundaries are shown in the map included in Appendix A as Figure 1. Ownership and acreage of the entire parcel are shown in Table 1 as identified in the Hancock County Property Records. The Calgon Site as identified in this report is 5.74 acres within the parcel identified in Table 1.

Table 1: Calgon Site Parcel and Ownership

Name	Parcel Number	Parcel Owner	Acreage
Parcel 1	186-0-24-005.000	Hancock County	55.5

Overall, this site is flat with an elevation of approximately 5-10 feet above sea level. The site is currently unoccupied with remnants of coal dust on the surface. No tenants or businesses are currently operating from this site.

The site is adjacent to Road C1 to the west, a railroad spur to the east, a staging site for fill material to the south, and a closed facility to the north. No utilities were obvious on the site but electrical lines run along the west side. Ditches were present along the site boundary to the north, west, and south. A wetland area is located to the north and the wetland area and the ditches are vegetated.

1.3 General Vicinity Description

Adjacent land uses in the vicinity are described below. Figure 3 in Appendix A shows site location. Photos of the general site vicinity are included in Appendix B.

- Parcel 1 (186-0-24-005.000)
  - North: A ditch and wetland is located north of the site. The property located north of the site is a closed facility.
  - South: A ditch is located south of the site. A staging area for fill material is located south of the ditch.
  - East: East of the site is a railroad spur with undeveloped land to the east.
  - West: West of the site is a ditch, Road C1, and an unloading dock.

1.4 Physical Environmental Setting

General information about the physical environment is based on visual observations, relevant United States Geological Survey (USGS) 7.5-minute topographic maps, and the relevant environmental database information.

1.4.1 General Topography and Soils

The most recent topographic map of the site is dated 2012. The 1992 map shows that site elevation is approximately 5-10 feet above sea level. According to the Federal Emergency Management Agency Floodzone maps, this site is within the 100-year floodplain (Appendix A, Figure 3).

Surface soils on the site are Beauregard silt loam (Class C) and Guyton silt loam (Class D). The United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) describes Beauregard soils as moderately well-drained and slowly permeable soils with medium to slow runoff. Guyton soils are poorly or very poorly drainer with high surface runoff and slow permeability.

1.4.2 Surface Waters and Wetlands

Surface water was present onsite in ditches on the north, west, and south sides of the site. Onsite observation indicates the area north of the site may be wetlands.

1.4.3 Hydrogeology

Based on the soil series present on this site, the depth to the water table is at the surface to 1.5 feet below the ground surface. According to the EDR Report, the general direction of topographic gradient is to the northwest. The area has very little topographic relief and actual groundwater flow for the site would require a site-specific analysis.

State and USGS water wells are located in the area around the site in addition to state oil and gas wells.

Type of Well	Distance	# of Wells
Federal USGS Well	1/4 - 1/2 mile	2
Federal USGS Well	1/2 - 1.0 mile	5
State Well	1/4 - 1/2 mile	5
State Well	1/2 - 1.0 mile	10
State Well – Oil & Gas	1/4 - 1/2 mile	3
State Well – Oil & Gas	1/2 - 1.0 mile	7

Additional information on wells within the one-mile search radius is included in the EDR Report (Appendix C).

1.5 Limitations

This Phase I ESA has been prepared for the sole use of Hancock County Port and Harbor Commission (Client). This report is intended to provide information to the Client on the environmental conditions of the 5.74-acre Calgon Site located adjacent to Road C1, in Port Bienville Industrial Park, Mississippi.

The use of or reliance on this Report by any person or entity other than the Client is not authorized unless the user enters into a secondary user agreement with Cypress. It is the responsibility of unauthorized users to ensure the information included in this report is accurate and complete. Reliance on the contents of this report shall be solely at the unauthorized user's risk.

Cypress's work included in this report is pursuant to an agreement between Cypress and the Client to provide a Phase I ESA. Material deviations or exceptions to the services proposed or limitations on the scope of the ESA originating from site access issues and actual availability of data and information related to the site are:

- No survey for asbestos materials was conducted.

This report may not address all requirements of the Client's or other user's due diligence assessment of risks associated with the site. This includes, but is not limited to, an evaluation of the relationship of the potential purchase price of the site to the fair market value in consideration of site contamination, if it exists.

A Phase I ESA can reduce, but not wholly eliminate, uncertainty regarding the potential for a recognized environmental condition in connection to the site. Conclusions in this report have been based, in part, on information obtained from third parties including historical aerial photography, environmental agency records, and other public records regarding the site and obtained from various sources. Unless noted in this report, Cypress has not independently verified or evaluated the accuracy or completeness of third-party information.

Visual observation made by Cypress staff related to hazardous materials or waste on or near the site only represent conditions at the time of the site reconnaissance. Cypress makes no warranties that onsite observations made during site reconnaissance during the Phase I ESA are representative of historical or future conditions on the site. Cypress has performed its services and prepared this report at the level customary for other prudent and competent professional engineers performing such services at the time and place where the services are provided. Cypress makes no other warranty, expressed or implied.

CYPRESS
Environmental Science & Engineering

1.6 Required Statements

1.6.1 Statement of Qualifications

Cypress Environmental Science & Engineering, declares that, to the best of its professional knowledge and belief, the Cypress Environmental Science & Engineering, employees responsible for this report meet the definition of Environmental Professionals.

Signature

Cynthia J. Henderson, P.E.

Printed Name

Project Engineer

Title

May 22, 2019

Date

CYPRESS
Environmental Science & Engineering

1.6.2 Statement of Completion

Cypress Environmental Science & Engineering, has assigned appropriate personnel with the specific qualifications based on education, training, and experience to assess a site of the nature, history, and setting of the site. Cypress Environmental Science & Engineering, has developed and performed its approach relative to the all appropriate inquiries in conformance with the standards and practices set forth in ASTM E 1527-13.

Signature

Cynthia J. Henderson, P.E.

Printed Name

Project Engineer

Title

May 22, 2019

Date

CYPRESS
Environmental Science & Engineering

2 Records Review

Cypress reviewed records from readily available sources to obtain information regarding the potential for RECs associated with the site. Descriptions of the sources and information obtained are provided in the following section. Historical records review included information dating back to 1893.

2.1 Site Contact – Provided Information

The site is comprised of a portion of one parcel. This parcel is owned by the Hancock County, based on the chain of title for the site included in Appendix J. Mr. James Lewis was interviewed as the owner's representative. His interview is included in Section 4.

2.2 Site Chain of Title

A chain of title search was conducted for this site by EDR. The deeds indicate that the parcel including the project is Parcel 186-0-24.005.000. Title information by deed includes:

Table 2: Chain of Title for Parcel (186-0-24-005.000)

Owner	Year Purchased
Lester F. Alexander	Prior to 1940
International Paper	1947
Hancock County	1967

Based on the information provided, a private individual, a timber company (International Paper), and the county have owned the property. Aerial photos from 1967 to present show that during the county's ownership, the site was unused prior to placement of the coal pile for Calgon in 2006. The other owners associated with the property are unlikely to have RECs due to site usage. No title information prior to 1940 was provided. Copies of the deeds are included in Appendix J.

2.3 Previous Phase I Environmental Site Assessments

The site manager had no knowledge of a previous Phase I ESA having been completed for the site.

2.4 Regulatory Agency Records

For the purpose of obtaining information on potential RECs for the site, the following regulatory agencies were contacted:

Mississippi Department of Environmental Quality (MDEQ) - Public Information Officer
Lorenzo Boddie
Phone: (601) 961-5758

MDEQ Office of Pollution Control (OPC) Groundwater Assessment and Remediation Division (GARD)
Armed Raspberry
Phone: (601) 961-5388

Hancock County Emergency Management
John Evans, Deputy Director
Phone: (228) 255-0942

Information obtained from those interviews is included in Section 4.2.

2.5 Database of Environmental Enforcement Records

A listing of federal and state environmental databases identifying sites located in the vicinity of the site was obtained by Cypress. EDR of Milford, Connecticut, a private database management firm, provided that information. The federal and state lists included in EDR's report are compiled from a variety of government agency sources and presented in a consolidated format. The report provided by EDR is included in Appendix C. The report details all databases searched, the geographic area included in the search, and defines the acronyms used in the report.

2.5.1 Records Pertaining to the Site

Information obtained in the database searches shows the site is included on the federal and state lists reviewed. A summary of the EDR report findings pertaining to the site includes:

- **Federal Institutional Controls Engineering Controls Registry** (Site only)
  - None identified within the site.
- **Federal ERNS list** (Site only)
  - None identified within the site.
- **Hazardous Waste / Enforcement and Compliance History (ECHO) Database** (Site only):
  - None identified within the site.
- **Facility Index System (FINDS) Database** (Site only):
  - None identified within the site.
- **Environmental Site Information System Listing (PERMITS)** (Site only):
  - None identified within the site.

2.5.2 Records Pertaining to the Sites Offsite

A summary of the EDR report findings pertaining to sites within the minimum applicable distance of the site but located offsite includes:

- **Federal NPL site list** (sites located within 1.0 mile/5,280 feet of the site)
  - None identified within 1.0 miles of the site.
- **Federal Delisted NPL site list** (sites location within 0.5 mile/2,640 feet of the site)
  - None identified within 0.5 miles of the site.
- **Federal CERCLIS list** (sites location within 0.5 mile/2,640 feet of the site)
  - None identified within 0.5 miles of the site.
- **Federal CERCLIS NFRAP site list** (sites location within 0.5 mile/2,640 feet of the site)
  - None identified within 0.5 miles of the site.
- **Federal RCRA CORRACTS facilities list** (sites located within 1.0 mile/5,280 feet of the site)
  - None identified within 1.0 miles of the site.
- **Federal RCRA non-CORRACTS TSD Facilities list** (sites location within 0.5 mile/2,640 feet of the site)
  - None identified within 0.5 miles of the site.
- **Federal RCRA – Large Quantity Generators** (sites adjacent to the site)
  - No RCRA large quantity generators were identified adjacent to the site.
- **Federal RCRA – Small Quantity Generators** (sites adjacent to the site)
  - No RCRA small quantity generators were identified adjacent to the site.

- **Federal RCRA – Conditionally Exempt Small Quantity Generators** (sites adjacent to the site)
    - No RCRA conditionally exempt small quantity generator was identified offsite and adjacent to the site.
- **State and Tribal Hazardous Waste Sites** – equivalent to CERCLIS (sites located within 0.5 mile/ 2,640 feet of the site):
    - None identified within 0.5 miles of site.
- **State and Tribal Voluntary Clean Up Sites** (sites within 0.5 mile / 2,640 feet of the site):
    - None identified within 0.5 miles of site.
- **State and tribal landfill and/or solid waste disposal sites (sites within 0.5 miles / 2,640 feet of the site):**
    - Former VT Halter Marine Site – This site is located approximately 1,000 feet southwest of the southwest corner of the site boundary. It was granted State No Further Action (SNFA) on 6/21/2004. The EDR record shows that no soil, groundwater, or surface water contamination is present. A records request was submitted to MDEQ on May 2, 2019, to obtain more information about this site. That information provided by MDEQ includes sampling plans conducted to delineate the extent of benzo(b)fluoranthene after a previous Phase II ESA showed evidence of the chemical. The additional sampling of groundwater showed that the contaminant of concern (COC) was not present above MDEQ TRG Levels. Based on that sampling and analysis, the site was granted SNFA. TRG levels for the COC have not changed since 2004.
- **State and Tribal Registered Underground Storage Tanks (USTs) Database** (**sites adjacent to the site**). Above ground storage (AST)s are noted where applicable:
    - None identified on properties adjacent to the site.
- **State and Tribal Leaking Underground Storage Tanks (LUST) Database** (sites located within 0.5 mile/2,640 feet of the site):
    - None identified on properties adjacent to the site.

No orphan sites were identified in the EDR Report within the applicable search radius.

2.6 Area Radon Information

The Federal EPA Radon Zone rating for Jackson County, Mississippi is 3. The indoor average level of radon in Zone 3 in Hancock County is less than 2 pCi/L. Eleven sites were tested for radon to inform this rating.

2.7 Publicly Available Maps

The following government-published maps of the site and the surrounding area were reviewed for information related to potential RECs.

USGS Topographic Map: Cypress reviewed the USGS, 7.5 Minute Topographic Quadrangle for Ocean Springs to assess site and regional topographic characteristics that may influence the site's RECs. These characteristics are described in Section 2.8. A portion of the topographic quadrangle is provided in Appendix E.

2.8 Historical Aerial Photographs

Cypress performed a review of historical aerial photographs of the site and the surrounding properties to ascertain the approximate dates of landscape and terrain modifications. Copies of the aerial photographs are included in Appendix D. Information obtained from the photographs is summarized below.

Historical Aerial Photograph dated 1954 (Scale shown on photo): This image was provided via the EDR Report. The site appears to be undeveloped with a large amount of tree cover. The properties adjacent to the site are undeveloped and largely wooded.

Historical Aerial Photograph dated 1967 (Scale shown on photo): This image was provided via the EDR Report. This image shows no change from the previous image.

Historical Aerial Photograph dated 1973 (Scale shown on photo): This image was provided via the EDR Report. This image shows the site being undeveloped and forested. The parcel south of the site has been partially cleared. The parcel north of the site is also undeveloped and forested. The right-of-way for the railroad has been cleared, but the railroad has not been built. Roads are present to the west of the site and south of the site.

Historical Aerial Photograph dated 1975 (Scale shown on photo): This image was provided via the EDR Report. The site still is undeveloped but appears to have been cleared. The railroad appears to be under construction. The property to the south has been cleared. The property to the northwest shows some dirt roads. Photo quality is too poor to distinguish other site features.

Historical Aerial Photograph dated 1985 (Scale shown on photo): This image was provided via the EDR Report. The site is largely cleared. There appears to be a dark area on the photo. The dock between the site and the canal is also dark. The property to the south is cleared, but undeveloped with one square structure is present. The property to the north is partially cleared. The property to the north west has dirt roads and some structures. Photo quality is too poor to distinguish other site features.

Historical Aerial Photography dated 1989 (Scale shown on photo): This image was provided via the EDR Report. This photo also shows darker areas on the site and the dock area. The railroad is present to the east side. Properties to the north and south side of the site, are unchanged. Photo quality is too poor to distinguish other site features.

Historical Aerial Photography dated 1996 (Scale shown on photo): This image was provided via the EDR Report. The site appears to be cleared. The property to the north appears to have additional dirt roads. Photo quality is too poor to distinguish specific features.

Historical Aerial Photography dated 1998 (Scale shown on photo): This image was provided via the EDR Report. The site appears to be cleared. The property to the north appears to have additional dirt roads. Photo quality is too poor to distinguish specific features.

Historical Aerial Photograph dated 2007 (Scale shown on photo): This image was provided via the EDR Report. The site is cleared and clearly shows a pile of coal onsite covering approximately 75% of the site. The property to the south is partially cleared and partially forested. The property to the north includes two buildings and unclear material laid on the site.

Historical Aerial Photography dated 2010 (Scale shown on photo): This image was provided via the EDR Report. The site is unchanged from the previous image.

Historical Aerial Photography dated 2014 (Scale shown on photo): This image was provided via the EDR Report. The property to the north still includes two buildings but the material around the site has been removed. Otherwise the site and surrounding properties are unchanged.

Historical Aerial Photography dated 2016 (Scale shown on photo): This image was provided via the EDR Report. The site is unchanged from the previous image.

2.9 Historical Topographic Maps

Cypress reviewed topographic maps of the site and the surrounding properties for the years 1893, 1914, 1921, 1935, 1936, 1954, 1956/58, 1957/1959, 1969, 1976, 1994, 1996, and 2012. Copies of the topographic maps are included in Appendix E. Information obtained from the maps is summarized in the following paragraphs.

Historical Topographic Map dated 1893 (Scale shown on map): This map was provided via the EDR Report. The property is shown as marsh or swamp but no roads or other features are shown in the area.

Historical Topographic Map dated 1914 (Scale shown on map): This map was provided via the EDR Report. This map shows only the area north of the site. The area is undeveloped besides Pearlington Road, which is approximately 0.5 miles north of the site. One house is located adjacent to Pearlington Road.

Historical Topographic Map dated 1921 (Scale shown on map): This map was provided via the EDR Report. This map shows only the area north of the site. This map shows no changes to the area.

Historical Topographic Map dated 1935 (Scale shown on map): This map was provided via the EDR Report. This map does not show anything and appears to be an error.

Historical Topographic Map dated 1936 (Scale shown on map): This map was provided via the EDR Report. This map shows the site as forested and undeveloped with a stream running near the southwest corner of the site. Roads are shown south and east of the site. A few structures are shown, but the area appears to be largely undeveloped with forested and cleared areas.

Historical Topographic Map dated 1954 (Scale shown on map): This map was provided via the EDR Report. This map does not show anything and appears to be an error.

Historical Topographic Map dated 1956/58 (Scale shown on map): This map was provided via the EDR Report. This map shows the site as forested and undeveloped. Roads are shown south and east of the site. An orchard is shown south of the site with two structures present. Several oil or gas wells are located south and north of the site more than one mile from the site. Otherwise, the area appears to be largely undeveloped and forested.

Historical Topographic Map dated 1957/59 (Scale shown on map): This map was provided via the EDR Report. This map shows the site as forested and undeveloped. The road network south of the site has continued to develop.

Historical Topographic Map dated 1969 (Scale shown on map): This map was provided via the EDR Report. This map shows the site as forested and undeveloped. The road network south of the site has continued to develop. The area previously designated as orchard includes some additional structures and ponds. The oil or gas wells are not shown on this map. Otherwise, the area is forested and undeveloped.

Historical Topographic Map dated 1973 (Scale shown on map): This map was provided via the EDR Report. This map shows the site as forested and undeveloped. The road network south of the site has continued to develop. The area previously designated as orchard includes some additional structures and ponds. The oil or gas wells are not shown on this map. Otherwise, the area is forested and undeveloped.

Historical Topographic Map dated 1976 (Scale shown on map): This map was provided via the EDR Report. This map shows the site as cleared but not developed. The canal that serves Port Bienville is shown and the railroad spur on the east side of the site is shown. The property to the south is cleared but undeveloped. The property to the north is forested and undeveloped. The property to the east in forested and undeveloped.

Historical Topographic Map dated 1994 (Scale shown on map): This map was provided via the EDR Report. This map shows the site as cleared but not developed. A ditch has been constructed and routed along the south side of the site. A landing strip is shown just east of the site. The industrial park south to the site has gained additional roads and buildings. A power substation is located near the entrance of the industrial park.

Historical Topographic Map dated 1996 (Scale shown on map): This map was provided via the EDR Report. This map shows the site as cleared but not developed. A ditch has been constructed and routed along the south side of the site. A landing strip is shown just east of the site. The industrial park south to the site has gained additional roads and buildings. A power substation is located near the entrance of the industrial park.

Historical Topographic Map dated 2012 (Scale shown on map): This map was provided via the EDR Report. This map shows the site as cleared but not developed. The site is shown as a pond. The landing strip still appears to be cleared but is no longer designated.

2.10 Historical City Directory

A city directory search was conducted for this ESA. The directory search included Roads C1, C and E. The city directory search included searches from 1964 through 2014. The City Directory search is included in Appendix F.

A summary of the city directory information includes:

- Road C1, where the site is located, was not included in the directory for any year
- Road C, a cross-street included the following:
  - 1964 – 1986 the street was not listed
  - 1992 – 1995 the target and adjoining properties are not listed
  - 2000
    - 13151 Halter Marine Inc
  - 2005
    - 13260 Professional Construction Services
  - 2010
    - 13260 Professional Construction Services
  - 2014
    - 13260 Professional Construction Services
- Road E, a cross-street included the following:
  - 1964 – 1986 the street is not listed.
  - 1992 – 1995 and 2005 the target and adjoining properties are not listed
  - 2000
    - 13151 Halter Marine Inc
  - 2010
    - 13130 Southern Material Transport
  - 2014
    - 13151 Pearlington Clay

2.11 Fire Insurance Maps

Sanborn map coverage was sought for the project vicinity. Fire Insurance maps were not found for the site. A copy of the Sanborn Map Report is included in Appendix G.

2.12 Environmental Clean-Up Liens AULs

Mr. Lewis stated he did not know of any environmental clean-up liens or activity and land use limitation (AUL)s related to environmental issues on the site. He also stated that he had no knowledge of the value of the property or whether it reflects any environmental issues or concerns.

An environmental lien search was performed for Parcel 186-0-24-005.000 by EDR. No environmental clean-up lien or AUL were located for the parcel. The environmental lien search and AUL Report is included in Appendix I.

2.13 Vapor Encroachment Screening/Conditions

Cypress conducted a Vapor Encroachment Screen (VES) utilizing the Tier I methodology provided in ASTM's *Standard for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* (E2600-15). The Tier I methodology in E2600-15 was utilized in order to identify a Vapor Encroachment Condition (VEC), which is the "presence or likely presence of chemicals of concern (COC) (i.e. petroleum hydrocarbons and/or chlorinated solvents) vapors in the vadose zone of the subject property caused by the release of vapors from contaminated soil and/or groundwater either on or near the subject property."

Based on our review of the historical use information, database reports provided by EDR, and the additional documentation obtained from MDEQ, this Former VT Halter Marine site would be the potential source of a VEC. However, further investigation showed that the there was no evidence of contaminants above MDEQ TRG limits for unrestricted sites. Therefore, no operations were identified on the site or on properties within the applicable study radius which have operations, releases, or hazardous materials that would result in a vapor migration/intrusion concern.

2.14 Summary of Site Records Review

The database information reviewed for this Phase I ESA and adjacent properties did not indicate a significant potential for RECs and no HREC or CREC was identified on the site.

No orphan sites were identified for this study. No additional database search is recommended at this time.

CYPRESS
Environmental Science & Engineering

3 Site Reconnaissance

Cypress conducted site reconnaissance on foot to visually collect information indicating the likelihood of RECs in connection with the site. Observations made during the site reconnaissance are presented below. Cypress also performed a windshield survey of properties surrounding the site and the general area. Observations made during the windshield survey are incorporated into area descriptions provided in preceding parts of this report. The site reconnaissance and windshield survey took place on April 29, 2019, by Cynthia Henderson. Photographs taken during the reconnaissance are included in Appendix B.

3.1 Observations of Exterior and Interior Portions of Property

3.1.1 Exterior Property Description

This site includes 5.74 acres. No buildings are located on the property. The coal has been removed from the site except for a few remnant areas. Site includes ditches to the south and east and a wetland area to the north. The wetland area is forested and some vegetation is present along the ditch to the south side. Piles of railroad tiles are present on the east side of the property adjacent to the rail line. Photos are included in Appendix B.

3.1.2 Observations of Structures on Property

No structures are present on this site.

3.1.3 Roads, Parking Areas, and Site Access

The site is bordered by Road C1 to the west and a rail line to the east. The site is easily accessible from Road C1 (Appendix B, Photos 1 and 2).

3.1.4 Hazardous Substances and Petroleum Products Storage Areas

No hazardous substances were observed being stored and no structures are present onsite.

3.1.5 Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs)

No USTs or ASTs or evidence of them were observed on the site during site reconnaissance.

3.1.6 Solid Waste Disposal Areas & Debris

No solid waste/landfill facilities were noted on the EDR Report in the vicinity of the site. Debris observed onsite or adjacent to the site included:

- Pile of site materials including coal dust and rocks (Photo 4)
- Piles of railroad ties (Photo 6)

3.1.7 Odors

No unusual odors were detected during site reconnaissance.

3.1.8 Stained Soil, Stained Pavement, and Stressed Vegetation

Coal dust still obscures some of the surface of the site. Areas not obscured by coal dust are covered with vegetation. (Appendix B, Photo 1, 4, and 7).

3.1.9 Pools of Liquid

No pools of liquid were observed onsite.

3.1.10 Storm water and Wastewater

Ditches are present on the west and south side of the site. Surface water seems to flow into the ditches mostly on the west and south sides. A wetland area is also present on the north side of the site. There is no sewer or wastewater facilities present on site (Appendix B, Photos 2, 3, and 7).

3.1.11 Pits, Ponds, or Lagoons

No pit or pond was identified in connection with waste treatment or waste disposal.

3.1.12 Wells

No wells were observed onsite.

3.1.13 PCBs and Asbestos

One single phase pole transformer is located on site. The transformer exhibits a discolored bottom. The base of the timber power pole is discolored and the vegetation appears stressed or dead (Appendix B, Photo 8 and 9).

No survey for asbestos was completed at the site.

3.1.14 Interior Utilities and Equipment

No buildings are present on site.

3.2 Observations and Adjoining Properties

Direct evidence of discharges was not observed at nearby properties. Evidence of potential releases from the nearby properties was not observed.

The property adjacent to the north side of the site is unoccupied and vacant. The property south of the site is unoccupied although fill material appears to have been staged there.

The Halter Marine Facility was located approximately 1,000 feet southwest of the site but that site is now occupied by JLB Construction Services and Coastal Mining & Marine LLC. The industrial park has other tenants including large industrial facilities, but they are located more than 1.0 mile from the site boundary.

Many state and USGS wells were mapped to a location within one mile of the site. None of the wells were observed.

CYPRESS
Environmental Science & Engineering

4 Information from Interviews

In the completion of this Phase I ESA, Cypress contacted individuals thought to have knowledge of the site to request interviews regarding the site and any potential environmental conditions. Information obtained through those interviews is summarized below.

4.1 Interviews with Current Owners and Occupants of the Site

Mr. James Lewis
Calgon Plant Manager
Site Manager/Tenant
228-493-0796

This interview was conducted on April 25, 2019 via phone with Mr. James Lewis. Mr. Lewis is a chemical engineer who manages the Calgon Plant in the Bienville Industrial Park. Calgon leased the property in approximately 2006 to store the coal dust after unloading from the barges and prior to transit by truck to the plant. He thought the site might have been used for coal storage in the past. He was unaware of any environmental cleanup liens or AULs. Since the property has not been purchased, he had no knowledge of the value of the property or any potential impact on the value due to past use. The coal stored onsite is metallurgical-grade bituminous coal sourced from West Virginia. The coal is used in the manufacture of activated carbon. He stated that they only placed coal on the site and he knew of no other spills or contaminates on site. He stated that the ditches onsite had filled with coal dust at times and a local contractor had removed the material periodically. He knew of no right-of-ways on the site. He knew of no previous Phase I ESAs or similar reports that had been completed for the property.

4.2 Interviews with Parties other than Current Owner and Occupant

Armed Raspberry
OPC GARD
MDEQ
Phone: (601) 961-5388
Mr. Raspberry was interviewed on May 2, 2019. He worked in the Office of Pollution Control, Groundwater Assessment & Remediation Division. Information on the Halter Marine site was requested. He stated that due to the age of the site, a formal records request would have to be filed with the Public Information Officer.

Lorenzo Boddie
Public Information Officer
MDEQ
Phone: (601) 961-5758
Mr. Boddie was contacted on May 2, 2019. He replied via email with the information request form. The form was submitted on May 2, 2019. The documents were received by email on May 20, 2019.

John Evans, Deputy Director
Hancock County Emergency Management
Phone: (228) 255-0942

Mr. Evans was interviewed on May 21, 2019. He is the Deputy Director of Hancock County Emergency Management. He knew of the Calgon Site and the surrounding area. He knew of no chemical spills or issues at the site or the adjacent barge dock. He did state that the coal pile had caught fire approximately 6-7 years ago due to internal combustion. He stated that the fire took some time to extinguish, but did not remember how long.

4.3 Attempted Interviews with Parties other than Current Owner and Occupant

Interviews with personnel at the West Hancock Fire Department were attempted to gain more information about the site or area. However, no one in that office was reached by phone on May 21, 2019.

5 Results

Cypress conducted this Phase I ESA in conformance with the scope proposed and subject to limitations detailed in the report. Any exceptions to or deletions from this practice are described in Section 1.5 of this report.

5.1 Property Data Gaps

As defined by ASTM, a data gap is a lack or inability to obtain information required by the standard and practices listed in ASTM despite a good faith effort by the Environmental Professional to gather information about the site. ASTM guidelines require documenting site history in 5-year increments back to 1940 or initial site development. Topographic maps for this site are dated 1893 with a 1936 15-minute topographic map showing the site. The historical information available for this site exceeds the guideline was and no data gap is identified for the site.

The site usage of the property to the north, which includes buildings but is unoccupied, in unknown. No addresses for businesses on this road were included in the City Directory and the site did not appear on any environmental database. Aerial photos indicate the site was active for a period from 1975 to 2010. The lack of information about the adjacent site constitutes an identified data gap.

5.2 Findings

Cypress has performed the Phase I ESA documentation in conformance with the scope and limitations of ASTM Practice 1527-13 of the site. Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed the presence of potential RECs. No HREC or CRECs were found on site.

RECs:

- Coal dust: The coal dust and the byproducts of the coal dust fire are potential RECs.
- Pole transformer: There is evidence of a potential leaking transformer and there are no markings regarding the PCB status of the transformer.
- Railroad ties: The railroad ties may contain creosote and a potential REC.

No other environmental concerns that meet the criteria of an REC under ASTM Practice 1527-13 were identified.

5.3 Opinion

Based on the analysis conducted for this report, the following opinion is made regarding the identified REC, HREC, or CRECs onsite.

A Phase II ESA is recommended for the following RECs:

- Coal dust: The coal dust and the byproducts of the coal dust fire are potential RECs.
- Pole transformer: There is evidence of a potential leaking transformer.
- Railroad ties: The railroad ties may contain creosote and a potential REC.

5.4 Conclusions

Based on the findings of this Phase I, we believe this site is impacted by RECs. We do not believe that HRECs or CRECs are present on site.

CYPRESS
Environmental Science & Engineering

6 References

American Society for Testing and Materials (ASTM) Designation E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessments*, 2013.

Environmental Protection Agency Enforcement and Compliance History Online website, 2019, https://echo.epa.gov/facilities/facility-search/results

Hancock County Emergency Management, John Evans, personal communication May 21,2019.

Calgon, Site Manager James Lewis, personal communication May 25, 2019 and May 20, 2019.

Mississippi Department of Environmental Quality, Armed Raspberry, personal communication May 2, 2019.

Mississippi Department of Environmental Quality, Lorenzo Boddie, personal communication May 2, 2019 and May 20, 2019.

Mississippi Department of Environmental Quality GARD website, https://opcgis.deq.state.ms.us/musterwebmap/ March27,2019.

United States Department of Agriculture, Natural Resource Conservation Services (NRCS), 2019. Website database, heep://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

CYPRESS
Environmental Science & Engineering

7 Qualifications

This Phase I ESA was prepared by Cynthia Henderson. I declare that to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in Section 312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a site of the nature, history, and setting of the subject site. I have developed and performed the all appropriate inquiry in conformance with the standards and practices set forth in 40 CFR Part 312.

Ms. Henderson is a Professional Engineer with 19 years of experience in environmental regulation and consulting. Ms. Henderson is a practicing environmental engineer with a BS and MS in Biological Engineering. Her professional experience includes many environmental studies and investigations including Phase I and Phase II site assessments on a variety of sites from military to industrial.