

**PHASE I ENVIRONMENTAL
SITE ASSESSMENT REPORT**

**TAX PARCEL 002057 00008
26 SOUTH MAIN STREET
MEMPHIS, TENNESSEE 38103**

**EnSafe Project Number
0888810687/PH11**

Prepared for:

**Wolf River Brownfield Assessment Project
Shelby County Division of Planning and Development
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Prepared by:



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February 7, 2012

EXECUTIVE SUMMARY

EnSafe Inc. conducted a Phase I Environmental Site Assessment (ESA) of the property at 26 South Main Street (subject property) in Memphis, Shelby County, Tennessee. The Phase I ESA was conducted in support of the Wolf River Brownfields Assessment Project for the Shelby County Division of Planning and Development and the property owner Taylor Waller Development LLC, who plans to redevelop the subject property. A Phase I ESA is an integral part of all appropriate inquiry (AAI), as codified in Title 40 Code of Federal Regulations Part 312, into the previous ownership and uses of the property consistent with good commercial or customary practice. The ASTM International Standard E 1527-05 is the industry standard used to comply with the AAI requirements.

SIGNIFICANT FINDINGS

Site Location, Description, and Current Uses

The 0.07-acre rectangular subject property is improved with a 14,900-square-foot three-story building with a basement. The property is accessible from the northwest through a main entrance along South Main Street and from the southeast through the basement along South November 6th Street. The subject property is currently vacant and has not been occupied since the mid-2000s.

Site History

The subject property has been developed commercially since at least 1888, the date of the earliest useful standard historical source (Sanborn fire insurance map) obtained for this Phase I ESA. Occupants of the subject property include a furniture store (late 1800s), a book seller and tailor (early 1900s), a café (circa 1915 to the early 1930s), a hotel on the second and third floors (1920), clothing stores (mid-1930s to mid-1940s), a jewelry store (circa 1945 to early 1970s), optometrist office (circa 1961 to 1969), fashion clothing store (1970s), gift shop (1983), restaurant (1990), pager/beeper store (mid-1990s), hat store (early to mid-2000s), and a comedy club and karaoke café (mid-2000s).

Site Observations

The subject property was visually assessed on January 18, 2012. No hazardous substances, petroleum products, unidentified substance containers, or storage tanks were observed in the subject property.

Based on the age of the subject property, asbestos-containing material (ACM) may be present. Suspect ACM observed during the site visit include plaster walls, floor tiles and associated mastics, ceiling tile and associated glue, acoustical wall/ceiling tile, and roofing materials. Additional suspect ACM may be present that were not observed during the site visit and/or are currently inaccessible (behind walls, above ceilings, etc.). Based on the age of the site building and evidence of numerous interior renovations, lead-based paint (LBP) may also be present. Painted surfaces observed during the site visit include walls, ceilings, piping, and decorative fixtures and panels. Certain areas of painted surfaces were chipped, peeling, and/or cracked.

Due on the age of the building and estimated date equipment was last likely serviced, polychlorinated biphenyl (PCB)-containing oils may remain in equipment and control panels onsite.

Floor drains were observed in restrooms and janitor's closets (utility sinks, mop basins) on the first, second, and third floors and reportedly discharge to the sanitary sewer system. Updated plumbing piping was observed along the north wall on the upper floors related to incomplete/partial renovations on the third floor. The renovations (planned apartment spaces) reportedly occurred in the late 1990s. The new plumbing was incomplete and open/unfinished connections were observed in the area of the third floor renovations.

Floor drains were also observed in the ceramic tile floor in the central portion of the basement. Details regarding the age, former use, and discharge destination of the drains are unknown. Several holes were observed in the concrete floor of the basement near mechanical equipment and beneath the rear (east side) stairwell. The circular holes range from a few inches to approximately 1 foot in diameter, and appeared filled — either intentionally or with accumulated dirt and debris. A pipe extends along the southern wall of the basement and into the hole under the stairs. A manhole-type cover and several capped metal pipes were also observed in the basement. EnSafe was unable to determine the use of these features from interviews and reviews conducted during this ESA.

In the basement, near mechanical equipment, were linear areas of cut concrete. The cut areas may be related to installation, repair, or removal of piping associated with nearby former mechanical equipment; however, the source of and/or reason for the cut areas could not be confirmed during research and interviews.

An area of the floor and adjoining walls in the basement (near mechanical equipment) was stained with what appeared to be a petroleum product. The staining did not appear to be associated with mechanical equipment currently in the basement; however, the source of the staining was not determined.

Facility Permits and Regulatory History

Standard and additional federal, state, and local environmental records sources were researched for the subject property and surrounding area properties. Site-specific information for facilities identified with environmental records were researched through city (fire department and publicly owned treatment works), county (Shelby County Health Department and Local Emergency Planning Committee), state (Tennessee Department of Environment and Conservation [TDEC] and Tennessee Emergency Management Agency), and federal (U.S. Environmental Protection Agency [USEPA]) sources. Regulatory research identified no records of reported releases to the subject property; activities, conditions, or incidents likely to cause or contribute to releases; or subject property addresses or prior occupants on regulatory databases or tracking systems, or with environmental/regulatory permits.

Adjoining and Surrounding Area Properties

The subject property is in downtown Memphis in an area primarily developed with office buildings, hotels, and retail and commercial spaces. The subject property is bordered on the north by

The Peanut Shoppe at 24 South Main Street and Nice as New consignment shop at 23 South November 6th Street; on the east by South November 6th Street, beyond which is the First Parking Place garage at 21 South Second Street and McEwen's on Monroe restaurant at 120 Monroe Avenue; on the south by the Residence Inn (aka the William Len Building) at 110 Monroe Avenue; and on the west by South Main Street, beyond which is the Brinkley Plaza building at 80 Monroe Avenue.

The subject property is in a portion of downtown Memphis that has been developed commercially and residentially since at least 1888. Historically, adjoining properties have been retail (clothing, furniture, shoes, jewelry, and candy/peanut) stores, commercial (furniture sales and upholstery), service- and entertainment-oriented (hotels, restaurants, gaming halls, barber shops, and tourist attractions), and offices (insurance agents, banks, attorneys). In addition, four adjoining properties were listed in historical sources as printing facilities (19 and 21 South Second Street housed printing operations between approximately 1950 and 1980, and 122 and 124 Monroe Avenue housed printing operations in the 1890s and early 1900s).

Three adjoining facilities (19 and 21 South Second Street and 80 Monroe Avenue) were identified as former generators of hazardous waste. Information regarding these facilities was not available at TDEC or on the USEPA Web site.

Regulatory research identified facilities on environmental databases, with reported releases, and/or with permits or other environmental records within 1 mile of the subject property. Five facilities located between approximately 230 and 1,200 feet from the subject property, are former printing facilities listed as former generators of hazardous waste. No files for these facilities were available for review at the TDEC Memphis Environmental Field Office (EFO). Research and review of available files at the TDEC Memphis EFO for the additional listed facilities — primarily facilities that have reported releases from leaking underground storage tanks — does not indicate contaminants at those facilities have migrated to the subject property; most were issued “no further action” required or “clean closure” letters and/or had groundwater flow direction carrying contaminants away from the subject property.

ENVIRONMENTAL PROFESSIONAL OPINION

This Phase I ESA has identified *recognized environmental conditions*¹, a *de minimis condition*, and *business environmental risks*² associated with the subject property, as follows.

The stained areas on the floor and walls in the basement are evidence of a release of hazardous substances and/or petroleum products into structures on the property, which is considered a *recognized environmental condition*.

¹ ASTM defines a *recognized environmental condition* as “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws.

² *Business environmental risks* are those that may have a material environmental or environmentally driven impact on the business associated with the current or planned use of a parcel or commercial real estate.

The printing facilities that historically adjoined and/or surrounded the subject property are an environmental concern due to their typical usage of hazardous substances such as inks, solvents, and adhesives. Waste disposal practices by printing facilities operating before the early 1980s are suspect, because environmental regulatory controls were not fully developed, enforced, or recognized. Although releases have not been reported from these former printing operations, based on the number of printing operations in proximity to the subject property and the years those operations spanned (late 1800s to 1980s and later), the potential for releases from these operations to have caused regional soil and/or groundwater contamination in the site area is considered a *recognized environmental condition*.

What appears to be paint staining on the floor tiles on the first floor, including in and around the janitor's closet, was limited in extent, and is considered *de minimis*.

Based on its age, the building was likely constructed with ACM and LBP. Future use of the property includes commercial and residential redevelopment; therefore, the presence of ACM and LBP is a *business environmental risk* due to the capital costs and potential liability associated with its identification, abatement, encapsulation/removal, and disposal.

The data gaps detailed below may have limited EnSafe's ability to identify *recognized environmental conditions* associated with or resulting from historical uses of the subject property.

DATA GAPS, LIMITATIONS, AND EXCEPTIONS

EnSafe's earliest useful historical source obtained for this Phase I ESA, an 1888 Sanborn fire insurance map, showed the property to be developed commercially. The City of Memphis was founded in 1819 and incorporated in 1826. The subject property's central downtown location suggests prior commercial and/or residential development is possible — therefore, a data failure has occurred with regard to past site development. Information regarding specific historical operations conducted onsite, as well as information regarding current site features (staining on basement floor and walls, piping, drains, floor cuts, holes in basement floor, etc.) was not available from interviews and research conducted during this Phase I ESA. The absence of detailed information regarding past uses and site features is considered a data failure that limits the conclusions of this report. These data failures are considered a data gap that may have limited EnSafe's ability to identify *recognized environmental conditions*. The following limitations and exceptions encountered during EnSafe's Phase I ESA are also considered data gaps.

- The inability to interview a key site manager, or former owners, operators, and occupants — particularly regarding features and equipment in the site building's basement.
- The condition of the property — unoccupied, deteriorating, and unlighted (basement) — limited observations for staining or other evidence of releases, especially in the basement.
- A dressing room area on the first floor was equipped with a rectangular plywood ceiling access that could not be reached from floor level; the ceiling area was not inspected by EnSafe.

- Roof access is not available from the interior of the subject property; EnSafe viewed the subject property roof from the roof of the south-adjoining building.
- City directory research included only addresses along South Main Street; therefore, historical information regarding occupants of east adjoining properties is incomplete.
- The absence of regulatory and other information regarding hazardous waste generation and printing operations at the east adjoining and other surrounding area properties is considered a data gap.

PHASE II ENVIRONMENTAL SITE ASSESSMENT

The following summarize what specific activities a Phase II ESA of the subject property may entail based on the Phase I ESA findings; corresponding cost estimates and timeframes for conducting the Phase II ESA are included.

Additional Site Research (two weeks) \$1,000
 Conduct additional site research and records review to attempt to confirm the presence or absence of petroleum tanks and/or piping beneath the basement floor.

Subsurface Investigation (60 days) \$21,800
 The subsurface investigation would be designed to focus on impact from historical onsite and offsite operations, and is proposed to be conducted in stages. Constituents of concern are petroleum hydrocarbons and VOCs.

Stage 1: Passive Soil-Gas Survey

Soil-gas survey to assess presence of contaminants beneath the site, and determine the necessity for engineering controls to address vapor intrusion for residential occupancy \$10,800

If findings of the Additional Site Research and Passive Soil-Gas Survey indicate the presence of contaminants beneath the site, Stage 2 sampling will be performed to identify contaminants and concentrations in select areas.

Stage 2: Subsurface Soil and Water Sampling

Direct push technology borings for soil and groundwater (if encountered) sampling inside the accessible portions of the basement \$11,000

Asbestos and Lead-Based Paint Survey (30 days) \$5,950

***Asbestos survey* \$2,150**

- to determine renovation requirements
- to determine abatement and disposal options
- in accordance with National Emission Standards for Hazardous Air Pollutants

***Lead-based paint survey using X-ray fluorescence (XRF)* \$3,800**

- to determine requirements for renovation, abatement, and/or disposal
- in accordance with USEPA and Housing and Urban Development guidelines

Potential PCB Equipment Inventory (30 days)\$500

Inspect and assess equipment and control panels onsite for the potential presence of polychlorinated biphenyl (PCB)-containing oils; provide recommendations, if needed, for handling, removal and/or disposal procedures; no laboratory samples will be collected.

EnSafe recommends the Phase II ESA be conducted with the intention of entering into a Brownfields Agreement with the State of Tennessee, which may limit the liability of a party (and certain future parties) who is willing and able to conduct an investigation and remediation of a hazardous substances site or Brownfields Project and who did not generate, transport, or release the contamination that is to be addressed at the Site.

Notes:

This cost estimate has been prepared using rates and fees specific to EnSafe’s contract with the Shelby County Division of Planning and Development for the Wolf River Brownfields Assessment Project.

This general cost estimate has been prepared for informational purposes only. An updated cost estimate should be prepared once a final scope of work is determined by all involved parties.