

2.0 INTRODUCTION

2.1 Site Description

The MSL Property is located at 112 and 114 Brent Street, Crystal Springs, Copiah County, MS 39059, at latitude N 31° 59' 04" and longitude W 90° 21' 21". The MSL Property assessed during this site characterization is approximately 1.39 acres in size. The site is located within the town limits of Crystal Springs. The town center is located approximately 0.4 miles northeast of the subject property. The MSL Property is in a residential neighborhood and is located on the west side of Brent Street. The property at 112 Brent Street contains an occupied singlewide mobile home. The property at 114 Brent Street contains an unoccupied single-family frame house on a concrete slab. The site is bordered to the north and east by residential dwellings. The property is bordered to the west and south by drainage ditches and undeveloped wooded areas. A site vicinity map is presented as Figure 1.

The main drainage ditch that receives stormwater runoff from the MSL Property is located on the western portion of the site. A tributary ditch in the southeastern corner of the 114 Brent Street property flows along the toe of the slope on the southeast portion of the filled area and adjoins the main drainage ditch. The main drainage ditch then flows due south from the MSL Property onto property owned by Raymond Lamar, Sr. A small pond, formerly a gravel pit, is located on the Raymond Lamar, Sr. property approximately 450 feet southwest of the MSL Property.

The eastern and central portion of the MSL Property is flat to moderately sloping toward Brent Street. The western and southern portions are steeply sloping toward the west and south. The toe of the slope rests at the edge of the drainage ditch, which flows south and southwest from the filled area.

The western and southern sections of the MSL Property were heavily vegetated with small trees, brush, and vines. A sufficient amount of this vegetation was cleared in order to install the protective liner over fill material on the property and to allow for the soil and sediment sample collection along the drainage ditch to the southwest.

The adjacent property to the south of the MSL Property is a 20.20-acre tract owned by Raymond Lamar, Sr. The property to the south of the Raymond Lamar, Sr. property and down gradient from the MSL site is a 20.40-acre tract owned by Raymond Lamar, Jr.

The adjacent and down gradient properties were heavily vegetated with small trees, brush, and vines. Vegetation was cleared in the drainage ditch itself and laterally to the east and west to allow sufficient access for soil and sediment sample collection. A map showing the study area is presented as Figure 2.

2.2 Background

The KEC plant was constructed and has been operated as a transformer manufacturing plant since the 1950s by KEC or its predecessors (collectively "KEC"). KEC continued to own and operate the plant in March 1999 when BorgWarner Inc. purchased the stock of Kuhlman Corporation, the parent of KEC, and thereafter as well. Seven months later, on October 5, 1999, Kuhlman Corporation sold KEC's stock to KEC Acquisition Corporation. BorgWarner and Kuhlman Corporation indemnified KEC, KEC Acquisition Corporation and their affiliates for historic contamination at the site and have, under the purchase agreement, exercised their right to control any remediation of such contamination. Neither BorgWarner nor Kuhlman Corporation nor KEC Acquisition Corporation has ever owned or operated the plant.

Assessments conducted on the KEC property and adjacent properties including the Davis Farmer property (referred to in this report as the Ice House property) confirmed that the PCB Aroclor 1260 was present in site soils and that soil had been transported off site in

trucks by L. M. & R. Service, Inc. following routine construction and maintenance activities at the KEC plant site. During the course of the PCB investigations, David Rodgers acknowledged that L.M. & R Service, Inc. had deposited truckloads of demolition debris, including soil, concrete, rebar and dust removed from the KEC plant site as well as loads of demolition debris from the post-fire clean-up of the former Ice House at Fulgham Avenue onto the MSL properties at 112 and 114 Brent Street. Debris from the Ice House included bricks, wood, sawdust, and soil. In addition to the debris listed above, David Rodgers also confirmed that L. M. & R. Service, Inc. transported sawdust from the Gem Plant, a manufacturer of furniture in Crystal Springs, and placed it onto the 114 Brent Street property.

Following sale of the property by David Rodgers to Mid South Leasing in December 2000, MSL constructed a rental house in 2001 on the 114 Brent Street portion of the property. This house is currently unoccupied.

A property line survey conducted during this site characterization indicates that fill material has been placed beyond the MSL south property line, on the northeast corner of the Raymond Lamar, Sr. property and covering an area of approximately 5,000 square feet (0.11 acre).

2.3 Site Characterization Objectives

As a result of the information provided by Mr. Rodgers, regarding the placement of PCB containing soils and other materials on these properties, Martin & Slagle GeoEnvironmental Associates, LLC (MSGA) conducted an initial environmental assessment of the fill material on the MSL Property from June 6, 2002 to June 29, 2002. Soil samples were collected using Geoprobe™ direct push rig and hand auger. During sample collection activities debris was encountered at varying depths below ground surface in numerous areas of the site. Due to auger refusal in areas containing significant

quantities of debris, it was determined that soil samples could not be collected at depths necessary to horizontally delineate PCB contamination on the property. Sample locations with corresponding PCB analytical data results are presented in Figure 3.

Analytical data generated from the initial assessment indicated PCB concentrations exceeded the Mississippi Department of Environmental Quality (MDEQ) maximum allowable limit of 1.0 milligram per kilogram (mg/Kg) in multiple locations in the fill material. Of the 119 soil samples collected, 62 samples had PCB concentration above 1.0 mg/Kg with 20 of these samples having PCB concentrations greater than 50 mg/Kg. A summary of the analytical results from the initial assessment is presented in as Table 1. A summary of field and on-site laboratory data is presented in Appendix 4.

Based on information of the placement of PCB-containing material as fill on these properties and results obtained from the initial assessment, Mississippi Department of Environmental Quality (MDEQ) issued an order to Mr. David Rodgers and Kuhlman Electric Corporation on May 22, 2003 to assess and remediate the resultant PCB contamination. After obtaining key information from Mr. Rodgers, BorgWarner, on behalf of KEC, engaged Martin & Slagle GeoEnvironmental Associates, L.L.C. (MSGA) to prepare the *Site Characterization Work Plan, Mid South Leasing Property, dated December 2003*, for MDEQ review and approval. The work plan was approved by MDEQ in February 2004 and included the following general site characterization objectives:

1. Fill data gaps from previous site characterizations utilizing investigation and sampling methods (geophysical survey, truck-mounted rotary auger drilling and test pits) that would allow for identification of fill material areas that contain significant quantities of debris. Determine potential soil sampling locations; determine the depth of debris and impacted media; analyze soils below 8 feet bgs; and visually identify the types of materials used as fill.

2. Conduct additional drilling and soil-sampling activities in the filled area of 114 Brent Street property to depths that could not be completed successfully during previous site assessments and determine the depth of debris and PCB impacted soils at depths greater than 8 feet below ground surface (bgs) down to native soils.
3. Conduct soil and sediment sampling on the MSL Property and adjacent properties to the south and west utilizing Geoprobe™ direct push and hand augering to determine the potential for PCB migration and, if applicable, the extent of vertical and horizontal impacts.

The site assessment activities as described above were conducted from March 23, 2004 through May 14, 2004. Photographic documentation of the site assessment activities conducted during this characterization assessment is presented in Appendix 1.

2.4 Current and Former Land Use

The current land use in the areas surrounding the MSL Property is predominantly single-family residential and undeveloped property. The MSL-owned single-family, one-story frame house at 114 Brent Street is unoccupied. The MSL-owned singlewide mobile home at 112 Brent Street is currently occupied.

The Raymond Lamar, Sr. property located immediately adjacent to the south and down gradient of the MSL Property is undeveloped and covered with trees and underbrush.

The Raymond Lamar, Jr. property, located immediately south of the Raymond Lamar, Sr. tract and down gradient from the MSL Property, is undeveloped and overgrown. The stormwater drainage flow from the Raymond Lamar, Sr. property empties into a section of Turkey Creek contained within the boundaries of the Raymond Lamar, Jr. property.

Historical land use of the MSL and surrounding properties has been residential with the exception of a portion of the Raymond Lamar, Sr. property to the south and southwest from the MSL site. This section of the Raymond Lamar, Sr. property was formerly a gravel pit that is now a pond.

2.5 Summary of Previous Work at the MSL Property

A preliminary assessment of the MSL Property was conducted during the period from June 6, 2002 to June 29, 2002. A total of 119 soils samples were collected from the MSL Property 114 Brent Street. Samples were collected using direct push and hand auger sampling methods and were analyzed by the on-site laboratory for the presence of PCBs. A total of 10% of those samples were split and sent to an off-site laboratory to confirm the on-site lab results. Sample locations and corresponding analytical data results are presented in Figure 3.

Laboratory results indicated that of the 119 soil samples collected from 31 boring locations, 62 samples had concentrations of PCBs in excess of 1.0 mg/Kg (ppm), the MDEQ Target Remediation Goal (TRG) for unrestricted use properties. Concentrations of PCBs ranged from below laboratory detection limits to 580 mg/Kg. During the initial investigation, concentrations of PCBs above 1.0 mg/Kg were detected at a maximum depth of 8.5 feet. Deeper samples could not be collected with the direct push sampler due to auger refusal by debris buried below the ground surface.

Because PCBs were detected above regulatory limits, MDEQ ordered that an Interim Corrective Action Plan be prepared and implemented. The Interim Corrective Action, completed in April 2003, involved the placement of a temporary, protective, low density polyethylene (LDPE) liner over the fill material on the MSL and Raymond Lamar, Sr. properties in order to prevent contact by humans and/or animals, and to eliminate the off-site transport of contaminated soil by stormwater runoff or wind erosion. Photographic

documentation of the liner installation is presented in Appendix 1. The boundaries of the protective liner are presented in Figure 4.

The protective liner, which consists of a 12-mil scrim cushion fabric underlayment and an impervious, 40-mil, LDPE top liner over the underlayment, was installed over the fill material. A total of approximately 26,200 square feet of liner was installed over the fill material. Based on the resultant property boundary survey, approximately 4,800 square feet of the liner was installed over fill material that has been placed on the adjacent property owned by Raymond Lamar, Sr. Liner installation activities were conducted from August 19, 2003 to August 22, 2003.