REMEDIATION WORK PLAN

MidSouth Lease and Sales Property
115 Brent Street
Crystal Springs, Mississippi

Prepared for

BorgWarner Inc.

July 2005

GeoEnvironmental Associates, LLC | MARTIN & SLAGLE

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MARTIN&SLAGLE GeoEnvironmental Associates, LLC
PO Box 1023
Black Mountain, North Carolina

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Project Manager

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1.0 INTRODUCTION

Kuhlman Electric Corporation (KEC) owns and operates a transformer manufacturing plant in Crystal Springs, Mississippi (Figure 1). Previous environmental assessments conducted at the KEC plant site indicated that soil contaminated with the polychlorinated biphenyl (PCB) Aroclor 1260 was present on-site. During the course of performing grading work on the KEC plant site and adjacent properties, soil, brick, and other construction/demolition debris containing PCB were reportedly transported and deposited by L. M. & R. Service, Inc. on property located at 112 and 114 Brent Street in Crystal Springs, Mississippi, which was formerly owned by Mr. David Rodgers, President of L. M. & R. Service, Inc.

MidSouth Lease & Sales (MidSouth) of Crystal Springs, MS, currently owns the 112 and 114 Brent Street properties. As a result of the placement of PCB containing soil on these properties, the Mississippi Department of Environmental Quality (MDEQ) issued an Order to David Rodgers and KEC to assess and remediate the resultant PCB contamination. After obtaining key information from Mr. David Rodgers, BorgWarner, on behalf of KEC, began the site assessment activities at the 112 and 114 Brent Street properties. At the request of MidSouth, surface soil samples were also collected on the 115 Brent Street property. The 115 Brent Street property was also previously owned by Mr. David Rodgers, but is currently owned by MidSouth. Based on the analytical results the 115 Brent Street property has been impacted by PCB.

On September 27, 2004 MDEQ issued an Order to Mr. David Rodgers and KEC to assess and remediate the resultant PCB contamination at the 115 Brent Street property. BorgWarner, on behalf of KEC, has completed the site characterization of the property located at 115 Brent Street pursuant to the Mississippi Commission on Environmental Quality Order No. 4877-04. The Site Characterization Plan for 115 Brent Street was submitted to MDEQ on May 11, 2005.

This remediation work plan describes the activities necessary to remove and properly dispose of soils and debris, which have PCB concentrations greater than 1.0 part-per-million (ppm) or milligrams per kilogram (mg/kg). The remediation work plan also describes the process for restoring the property to its former condition.

1.1 Site Description

The MSL property is located at 115 Brent Street, Crystal Springs, Copiah County, MS 39059, at latitude N 31° 59' 04" and longitude W 90° 21' 48". The site is located within the town limits of Crystal Springs. The town center is located approximately 0.3 miles northeast of the subject property. The property is owned by MidSouth and is a residential property containing an unoccupied single-family, single story frame house situated on a concrete block pier foundation.

During the initial assessments conducted in May and June 2004, the property was covered in grass. After these preliminary investigations, areas of the site that had PCB concentrations exceeding the MDEQ maximum allowable limit of 1 mg/Kg were covered with an impervious low-density polyethylene liner to prevent contact with contaminated soils by humans/animals and to eliminate off site transport of PCB-containing soils through wind erosion and stormwater runoff. This impervious liner was installed prior to conducting the additional site characterization activities detailed in this report. An area with trees and vegetative undergrowth is situated in the northeast corner of the site. The property slopes southwest toward Brent Street. The stormwater runoff from the property flows to the south and southwest.

The property is bordered to the east and northeast by single story frame houses, to the north by a single-wide mobile home, to the west by the 112 Street and 114 Brent Street properties and to the south by drainage ditches, Brent Street, and undeveloped wooded properties. The predominant land-use in the surrounding area is residential.

1.2 Background

The Kuhlman Electric Corporation (KEC) plant in Crystal Springs, Mississippi was constructed and has been owned and 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.

On April 19, 2000, BorgWarner Inc. received notification from KEC, in accordance with the purchase agreement, that areas of contaminated soil had been found in Crystal Springs, Mississippi. BorgWarner responded by sending a representative to meet with KEC plant representatives and a representative from Mississippi Department of Environmental Quality (MDEQ), Eric Dear, on April 25, 2000. During this meeting all parties were briefed on the existing situation at the plant and MDEQ's expectations regarding assessment of the site.

Soil assessments conducted on the KEC property and surrounding residential properties confirmed the presence of PCB Aroclor 1260 in soils.

During the course of the PCB investigations at 112 and 114 Brent Street, David Rodgers acknowledged that, in the mid-1990s, L. M. &R. Service, Inc. transported 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. Debris from the ice house property included bricks, wood, sawdust and soil. In addition to the ice house debris, David Rodgers also confirmed that

L. M. & R. Service, Inc. transported sawdust from the Gem Plant, a manufacturer of furniture in Crystal Springs and deposited the material on the 112 and 114 Brent Street properties. David Rodgers owned the 112, 114, and 115 Brent Street properties until December 2000 at which time the properties were sold to MidSouth. Following the sale of these properties by David Rodgers to MidSouth, MidSouth relocated a house from elsewhere onto the 115 Brent Street property.

1.3 Summary of Previous Work Performed at 115 Brent Street

From March through May 2004 a detailed assessment of the MidSouth properties at 112 and 114 Brent Street was conducted to determine the horizontal and vertical extent of PCB impacted soil. At the request of MidSouth, surface soil samples were also collected on the 115 Brent Street property. Two grab samples were collected at a depth of 0-6 inches from a depression in the southwestern portion of the 115 Brent Street property on March 31, 2004. Laboratory results indicated that PCB was present in the samples above the MDEQ regulatory limit of 1 mg/Kg.

The investigation at 115 Brent Street was expanded in May 2004 to include the collection of a total of 35 soil samples from 34 separate locations. Shallow soil samples were collected with a hand auger at depths ranging from 0-6 inches. The horizontal distribution of the samples collected did not extend beyond the 115 Brent Street property boundary. Analytical results indicated that of the 35 samples collected, 23 samples had PCB concentrations exceeding the MDEQ regulatory limit of 1 mg/Kg. Of the samples that exceeded 1 mg/Kg, samples collected at two locations had PCB levels in excess of 50 mg/Kg with the highest concentration being 370 mg/Kg.

On June 30, 2004, five subsurface direct push borings were installed in locations where the surface samples previously collected had PCB concentrations exceeding 1 mg/Kg. The borings were advanced until the PCB levels did not exceed the on-site laboratory detection limit of 0.10 mg/Kg. A total of 30 soil samples were collected from the five

borings. Analytical results indicated that of the 30 samples collected, a total of nine samples from three separate borings had PCB concentrations exceeding the MDEQ regulatory limit of 1 mg/Kg. Samples with PCB concentrations greater than 1 mg/Kg were observed to a depth of 4 to 6 feet in two of these three borings, of the samples that had PCB concentrations exceeding 1 mg/Kg, five samples collected in the three borings had PCB concentrations greater than 50 mg/Kg. PCB concentrations ranged from the laboratory detection limit of less than 0.10 mg/Kg to a maximum concentration of 150 mg/Kg.

After the preliminary investigations in May and June 2004, areas of the site that had PCB concentrations exceeding the MDEQ maximum allowable limit of 1 mg/Kg were covered with a low-density polyethylene impervious liner to prevent contact with contaminated soils by humans/animals and to eliminate off site transport of PCB-containing soils through wind erosion and stormwater runoff. This impervious liner was installed prior to finalizing the site characterization activities.

The assessment of 115 Brent Street and surrounding properties was completed during two sampling events in January and April 2005. A total of 183 samples were collected from 40 locations on the 115 and 113 Brent Street properties; 11 samples were collected from 11 locations on the 314 Liberty Street property (east); and 12 samples were collected from 3 locations on the 312 Liberty Street property (northeast).

Analytical results confirm that the soil that was placed on the 115 Brent Street property contains PCB at concentrations greater than the MDEQ maximum allowable limit of 1.0 mg/Kg. PCB concentrations above the MDEQ regulatory threshold of 1 mg/Kg were not detected in the adjacent properties located to the north, northeast, and east of 115 Brent Street. No PCB was detected above the regulatory threshold in samples collected greater than 10 feet bgs. The deepest contamination appears to be south of the house located on the 115 Brent Street property. Laboratory analyses indicated that a total of 10 samples collected over the course of the investigation of the 115 Brent Street property have

concentrations of PCB greater than 50 mg/Kg. The maximum depth, to which PCB was detected at a concentration above 50 mg/Kg, is 4 – 6 feet in sample location MSL-110. Samples could not be collected below 6 feet in this location due to auger refusal. The vertical extent of contamination has been determined in sample locations surrounding sample location MSL-110.

Sample locations and corresponding analytical results are presented on Figure 2. Summaries of the analytical results of the sampling performed in March and May 2004 are included in the *Site Characterization Report, MidSouth Lease and Sales, Crystal Springs, Mississippi,* dated May 2005.

1.4 Remediation Objectives and Rationale

The remediation goal established by MDEQ for unrestricted properties is 1.0 mg/kg. This remediation goal is deemed protective of human health and the environment for unrestricted site use according to *Subpart II, Mississippi Department of Environmental Quality, Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites* (1999), as amended February 28, 2002.

The general objective for remediation of this site is to conduct active remediation by removal and proper disposal of contaminated materials with concentrations of PCBs in excess of 1.0 mg/kg and to restore the property, after soil removal and replacement, to its original condition.

2.0 CONCEPTUAL PLAN

The property to be remediated, 115 Brent Street, totals approximately 0.33 acres in size. The area to be remediated was identified in the *Site Characterization Report- MidSouth Lease and Sales Property, 115 Brent Street Crystal Springs, Mississippi,* dated May 2005.

The remediation concept for this property is based on the maximum allowable concentration of 1.0 mg/kg of total PCBs for unrestricted use sites. This remedial goal is established by the MDEQ in *Subpart II, Mississippi Department of Environmental Quality, Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites* (1999), as amended February 28, 2002.

Remediation of 115 Brent Street will be conducted in conjunction with the remediation of 112 and 114 Brent Street, located to the west and across the street from 115 Brent Street. The plan for remediation of these adjacent properties is described in the *Remediation Work Plan, 114 and 112 Brent Street, Crystal Springs, Mississippi,* submitted to MDEQ in December 2004. The remediation process will begin with the removal of contaminated soil on the north side of the 115 Brent Street property up gradient from all areas of contamination. When the 115 Brent Street site remediation is complete, the remediation activities will continue across Brent Street onto the 112 and 114 Brent Street properties. Excavation and removal will proceed downgradient, and at the appropriate depth, until all materials with PCB concentrations greater than 1.0 mg/Kg are removed and replaced with clean soil. Soil and debris with PCB concentrations greater that 1.0 mg/kg will be excavated and properly disposed of at permitted disposal facilities.

The remediation plan is based on completion of the following tasks:

1. All soil and porous debris with PCB concentrations exceeding the maximum allowable limit of 1.0 mg/kg PCB will be excavated and transported to permitted

disposal facilities based on the PCB concentrations already identified and/or based on confirmation sampling during site remedial activities.

2. Excavated and stockpiled soil will be protected from stormwater and wind erosion. Only small areas will be opened that can be remediated and closed at the end of each workday. If the area cannot be closed, at the end of the workday, it will be covered with plastic sheeting and secured. Stockpiles of clean soil used as backfill will be covered with plastic sheeting until used. A Sedimentation and Erosion Control Plan will be prepared for the remediation of all of the Brent Street properties and will be maintained on-site.

3. Excavated areas will be backfilled with clean soil, graded to control runoff, and seeded.

Workers that have received the OSHA hazardous waste operations training (HAZWOPER) will conduct all site remediation activities. The remediation contractor will install stormwater collection, detention, and diversion structures, as necessary, to control runoff during remedial activities and will be responsible for dust control during the site excavation activities. The remediation will be conducted in accordance with federal, state and local regulations and will be subject to approval by the Mississippi Department of Environmental Quality (MDEQ).

3.0 REMEDIATION PLAN

The contaminant of concern is polychlorinated biphenyl (PCB), Aroclor 1260. The Target Remediation Goal (TRG) for this site is 1.0 mg/kg as established by MDEQ. The areas identified for remediation were delineated in the *Site Characterization Report-MidSouth Lease and Sales Property, 115 Brent Street Crystal Springs, Mississippi,* dated May 2005 and approved by MDEQ May 18, 2005.

3.1 Remediation Activities

The area to be remediated is approximately 0.33 acres in size. The impacted soil is fill dirt, bricks and gravel deposited on the site by L. M. & R. Service Inc. Based on investigation results, debris and contaminated soil extends to a maximum depth of approximately 8 feet below ground surface (bgs).

Prior to beginning any removal activities, MidSouth will be contacted to coordinate access and discuss the remediation process. Inventories will be conducted to document the existing condition of the property. Photographs, sketches and written descriptions of landscaping will be prepared including shape and configuration of driveways, and sidewalks. Underground utilities will be located and mapped by a utility locating service prior to property remediation.

Remediation will consist of excavation and removal of PCB impacted soil and debris. Delineation of the PCB concentrations across the site is shown on Figure 2.

Remediation of the property will involve excavation of soil and debris, disposal of impacted media, backfilling with clean soil material, and site restoration. The work will include:

- Installation of silt fencing and/or other sedimentation and erosion control measures around areas of active remediation.

- Removal of the LDPE liner currently covering the site from areas of limited size to minimize exposure of the work area to stormwater and wind. The exposed area will be of a size that can be excavated and backfilled before the end of the workday. No excavation will be left exposed overnight. If, due to weather, the area cannot be backfilled at the end of the workday, it will be covered with plastic sheeting until work can proceed.

- Excavation and disposal of all soils and debris identified as having PCB concentrations greater than 1.0 mg/kg to a minimum depth as determined during assessment activities. Confirmation samples will be collected and analyzed to verify removal of all impacted media.

- Disposal of soils and debris with PCB concentrations greater than 1.0 mg/kg but less than 50 mg/kg at a permitted RCRA Subtitle "D" landfill. Soils and debris with PCB levels exceeding 50 mg/kg will be excavated and transported to a permitted RCRA Subtitle "C" landfill for disposal. As an additional measure a five-point composite sample will be collected from the contents of each roll-off box destined for transport to the RCRA Subtitle "D" landfill. The sample will be analyzed for PCBs to confirm that no soils or debris with PCB concentrations greater than 50 mg/kg are being disposed of at the Subtitle "D" facility.

- Backfilling of excavated areas using clean soil, following confirmation sampling and analysis verifying that remaining soils have PCB concentrations less than 1.0 mg/kg.

- Replacement of structures, such as fences, sidewalks, driveways, etc. that require removal with structures of equal quality and price.

- Replacement of existing landscaping with new of equal quality.

3.1.1 Work Progression and Staging

The remediation work will be conducted systematically by removing small sections of the liner material, which covers the site and excavating soil and solid waste material beneath that small section. Impacted soil and debris will be loaded into roll-off boxes. When each excavated area is verified, by confirmation sampling, to contain PCB concentrations of less than 1.0 mg/kg, clean soil will be placed in the excavation zone, compacted and the surface brought up to the current existing grade.

Remediation will start on the north end of 115 Brent Street. Work will proceed down gradient through to the edge of the Brent Street pavement. If analytical results from sidewall confirmation samples indicate that impacted soil extends beneath the pavement, excavation will continue until clean confirmation samples are obtained.

Excavation equipment will be dedicated to the work area inside the exclusion zone. The site will be accessed using the most practical route and efforts will be made to minimize disruptions to local traffic.

3.1.2 Additional Sampling Activities

As the result of MDEQ's review of the site characterization report for 115 Brent Street, additional sampling was requested in the area south of Brent Street in order to complete the delineation of all of the Brent Street properties. Samples were collected in this area and analyzed for PCB in April of 2004. All analytical results were below 1.0 mg/Kg. Figure 2 shows the locations of the samples and Table 1 includes the results.

All samples identified in Table 1 were analyzed for PCBs in accordance with the sampling protocols and QA/QC procedures described in Section 5.0.

3.1.3 Remediation of Delineated Areas

The area to be remediated is shown on Figure 2. The areas to be excavated will be located and marked by OSHA trained land surveyors licensed in the State of Mississippi. Excavation will proceed as described in Section 3.1.

After the field geologist has inspected the excavation and the analytical testing confirms that all soil above 1.0 mg/kg has been removed, the remedial contractor will backfill the entire excavation area with clean soil, and will grade the area to prevent ponding and promote positive drainage of stormwater. Approximately 6 inches of topsoil will be placed over the clean backfill. Immediately upon completion of topsoil placement the remediated area will be seeded with grass. Silt fencing and/or other sedimentation or erosion control measures will remain in place in the seeded areas until approximately 90% of the seeded area has a substantial growth of grass cover.

3.2 Prevention of Off-Site Migration

The possible transport mechanisms for PCBs are via stormwater runoff and wind-blown dust. Sediment transport as well as airborne PCBs will be controlled during remediation.

3.2.1 Sediment and Runoff Control during Remediation

Soil erosion and deposition of sediments into State of Mississippi waters will be controlled during remediation activities. The erosion and sediment control measures utilized during remediation of this site will be implemented in accordance with the State of Mississippi *Planning and Design Manual for Control of Erosion, Sediment and Stormwater.*

Runoff will be controlled through staging and progression of the remedial activities as well as active stormwater control. The remediation will begin at the upgradient end of the project site, which will eliminate sources of PCBs as work progresses downgradient.

Dust generation will be controlled by minimizing the area of exposed ground during remediation activities, and by using a fine water mist to spray the work area. A dust monitoring program, to monitor breathing air for remediation workers and to monitor migration of fugitive dust at the perimeter of the active working area, is described and included in the Health and Safety Plan. Air monitoring for airborne dust will be conducted using a Personal Data RAM, Model PDR-1000AN "Airborne Particulates Monitor" or equivalent instrumentation. Monitors will be set upwind and downwind of remedial activities and in the active breathing zone inside the exclusion zone.

3.2.2 Post-Remediation Sedimentation and Erosion Control

Excavated areas will be immediately reseeded with grass after backfilling with clean soil and topping the clean backfill with 6 inches of clean topsoil. The grassed areas will be covered with hay or straw to prevent erosion. The silt fencing and/or other erosion control measures will remain around the grassed excavation areas until approximately 90% of the area has a substantial vegetative cover.

3.2.3 Vegetative Stabilization

Establishing a perennial vegetative cover will be the principal method used for stabilizing areas that are disturbed during site remediation activities. These areas will be prepared and seeded with vegetation in accordance with the practices, site considerations and methods specified in the State of Mississippi *Planning and Design Manual for Control of Erosion, Sediment and Stormwater, Chapter 5 – Vegetative Practice Standards* First Edition, April 1994.

To reduce the potential for erosion during the establishment stage of vegetation, the silt fencing, hay bales and other erosion and sedimentation control measures used during excavation activities will remain around seeded areas. Areas that fail to establish vegetation will be reseeded. Straw mulch will be placed over seeded areas on areas with slopes greater than 3:1. Fabric netting will be placed over mulched areas that have a high potential for erosion. In all cases, erosion and sedimentation control measures will remain in place until ground cover is established.

3.3 Confirmation Sampling Plan

Following excavation, all excavated areas will be sampled to confirm that impacted soil with concentrations of PCBs above the remedial goal was removed. The sampling program is based on criteria established in the *State of Michigan Department of Environmental Quality, Waste Management Division, Guidance Document, Verification of Soil Remediation, April 1994, Revision 1*, as adopted by Mississippi DEQ for use on projects of this nature.

The guidance document provides statistically based procedures for establishing a soil-sampling grid for confirmation that cleanup goals were met or exceeded. The procedure that applies to "medium sites" with a surface area of 0.25 to 3.0 acres (10,890 to 130,680 square feet) will be used for confirmation sampling at this site. For medium size properties the grid spacing is determined by the following equation:

$$(A / \pi)^{1/2} / 4 = GI$$

Where: A = area to be gridded (ft^2)

GI = grid interval

π = 3.14159

Grab samples will be collected at all nodes of the grid that will be laid out within the remediated area of the site. Sidewall samples will be collected on the same spacing as determined by the equation for establishing sample grid nodes for medium size sites. If a grab sample concentration exceeds the cleanup criteria, excavation will continue to a depth of at least 1 foot below the node and laterally to a distance equal to the grid spacing in all directions from the node. One sample, from the base of the re-excavated area, will be collected and analyzed by the on-site laboratory.

All samples will be collected in accordance with EPA Region IV EISOPQAM and the project Quality Assurance Plan presented in Section 5.0. Sample locations and limits of excavation will be referenced to the Mississippi State Plane Coordinate System (horizontally) and the North American Vertical Datum - 1988. Sample locations will be depicted on a scaled site map. Surveying and mapping will be performed under the direction of a licensed Mississippi Professional Land Surveyor.

3.4 Management of Investigation Derived Waste

Management of investigation derived waste (IDW) will be the responsibility of the Field Manager. IDW includes but is not limited to decontamination solutions and water, personal protective clothing, gloves, plastic sheeting and any other material to be discarded that has come in contact with PCBs.

All daily IDW will be placed in designated plastic bags in a secure location on the Brent Street property. At the end of each day the IDW will be transferred to a designated roll-off box located in a secure location on the KEC plant site until removal to an appropriate disposal facility. Prior to disposal IDW will be profiled either by direct sampling and analysis of the material or by using current, existing analytical data from the assessment activities. The roll-off box containing the IDW will be manifested under the KEC EPA I.D. Number and transported to a disposal facility within 90 days of final IDW accumulation.

4.0 SCHEDULE

Remediation of 115 Brent Street property will be conducted in conjunction with the remediation of 114 and 112 Brent Street properties. The Remediation Work Plan for the 114 and 112 Brent Street properties was submitted to MDEQ in December 2004 but has not yet been approved. It is anticipated that remediation will be scheduled upon receipt of MDEQ's work plan approval for the 112, 114 and 115 Brent Street properties. Prior to any remediation work, the MDEQ will be notified of the anticipated schedule and start dates.

5.0 QUALITY ASSURANCE /QUALITY CONTROL PLAN

As established by the Mississippi Department of Environmental Quality (MDEQ) guidelines, all work related to remediation of the 115 Brent Street property will be performed in accordance with the *Environmental Protection Agency (EPA), Region IV "Environmental Investigations, Standard Operating Procedures and Quality Assurance Manual", November 2001* (EISOPQAM). Copies of relevant and applicable portions of the EISOPQAM will be maintained on site during all field activities and all field personnel will be trained in its implementation.

5.1 Sampling Objectives

The sampling objective for this site remediation is to confirm that the remedial goal has been met following removal of PCB impacted soils. Soil samples will be collected by the field geologist at the locations and frequencies prescribed in Section 3 of this work plan.

5.2 Analytical Methods

Samples will be analyzed for PCBs by the on-site laboratory, Environmental Chemistry Consulting Services (ECCS) of Madison, Wisconsin. At least 10% of all samples will be split and sent to the off-site laboratory, Paradigm Analytical Laboratories, Inc. (PAL) in Wilmington, North Carolina for PCB analysis. . This measure is taken to corroborate the results of on-site laboratory analyses.

The on-site laboratory will analyze the soil samples using a mini-extraction procedure followed by gas chromatography based on EPA Method 8082 for PCB. The procedure incorporates all the quality control rigors of the full 8082 method including quantification based on 6-point calibration with continuing calibration verification, surrogate method performance monitoring, method blanks, laboratory control samples (LCS), and matrix spike/matrix spike duplicate (MS/MSD) samples.

The off-site laboratory will analyze all soil samples using EPA Method 8082 for PCBs.

5.3 Key Personnel

The following is the list of key personnel dedicated to this project:

Project Manager:	Robert Martin, Martin & Slagle GeoEnvironmental Associates, LLC
Duties:	Responsible for overall management of project, including all field coordination efforts.
Field Manager:	Charles Peel, Peel Consulting, PLLC
Duties:	Field oversight of remedial activities. Collection of samples. Maintenance of all field logs and records.
On-Site Laboratory Manager:	Richard Johnson, ECCS
Duties:	Responsible for accepting custody of samples from the field personnel. Maintenance of laboratory records. Analyze samples.
QA/QC Coordinator:	Christine Slagle, Martin & Slagle GeoEnvironmental Associates, LLC
Duties:	Review daily sample logs. Confirm that QC samples are collected and sampling protocols are met. Assure that data quality objectives are met.

5.4 Quality Assurance Objectives for Data

The data quality objectives are pre-defined for the ECCS data in that MDEQ considers all on-site lab data as screening level data. ECCS uses the same equipment and methodology as the off-site lab, with the exception of the mini-extraction modification. A total of 10% of the samples collected will be split and submitted to Paradigm Analytical for confirmation analysis. Following this procedure, the data will qualify as screening data with definitive confirmation under EPA Region IV EISOPQAM guidelines.

Samples designated for further analysis by Paradigm will be delivered to the on-site lab where ECCS personnel will take their aliquot for analysis following thorough mixing of the sample in the sample container. Due to the limited sample volume required by the ECCS mini-extraction and the low volatility of the contaminants of concern, the sample container will be resealed, refrigerated, and then sent to the off-site (Paradigm) laboratory for analysis. Therefore, Paradigm will be analyzing the exact same sample as the on-site (ECCS) laboratory.

Equipment rinsates will be collected, preserved and analyzed for evaluation of cross-contamination potential. Equipment rinsates will be prepared by pouring distilled water over the sampling equipment after its decontamination and collecting, preserving, and analyzing the rinsates.

Field blanks will be collected by filling sampling containers, which have been kept in the transition zone, with distilled water.

Blind duplicate samples will be collected for analysis and sent to both the on-site and off-site labs. Blind duplicate samples will be prepared by splitting the homogenized sample into 2 separate containers. After the on-site lab (ECCS) retains its aliquot the remainder of the sample will be sent to the off-site (Paradigm) lab for analysis.

5.5 Sample Control and Field Records

5.5.1 Sample Identification

Each sample will be assigned a unique alpha-numeric identifier that will be clearly recognizable by both laboratories. Sample labels will conform to the labeling requirements under section 3.2.1 of the EISOPQAM.

5.5.2 Chain of Custody Procedures

The field geologist will record the sample ID, date, and time sampled in the field logbook at the time of collection. Samples will be placed on ice in a cooler and transferred, under proper chain of custody, by the field geologist to the on-site laboratory. Upon arrival at the on-site lab, the samples will be transferred to the ECCS laboratory manager who will log each sample on ECCS chain of custody forms. Each sample will be assigned a unique ECCS internal ID for tracking purposes. After analysis, the samples will be transferred to a sample refrigerator in the on-site lab until they are either sent to Paradigm for confirmation analysis or disposed of. For samples sent to Paradigm a new chain of custody form will be filled out by the field geologist prior to the sample transfer.

5.5.3 Field Records

Field records will be kept in accordance with procedures specified in section 3.5 of EISOPQAM.

5.6 Laboratory QA/QC

QA/QC for both labs is identical. Summaries of each lab's procedures follow.

On-site Laboratory, ECCS:

- Continuing calibration standards will be analyzed every ten samples or less and at the end of a run.
- Blank and LCS samples will be analyzed every twenty samples or less with a minimum of one per day.
- MS/MSD samples will be analyzed every twenty samples or less with a minimum of one per day.

Off –Site Laboratory, Paradigm:

- Continuing calibration standards will be analyzed at least once every 12-hour shift plus a minimum of every 20 samples.
- Blank and LCS samples will be analyzed every twenty samples or less with a minimum of one per day.
- MS/MSD samples will be analyzed every twenty samples or less with a minimum of one per day.

5.7 Data Review and Validation

All laboratory reports will be reviewed for reporting accuracy and consistency with laboratory QA/QC protocols. The primary validation of data will be accomplished through comparison of the data from the on-site laboratory with the data from the off-site laboratory. The relative percent difference (RPD) between the laboratory's results for split samples will be calculated and compared to a 100 % RPD acceptability threshold.

6.0 REFERENCES

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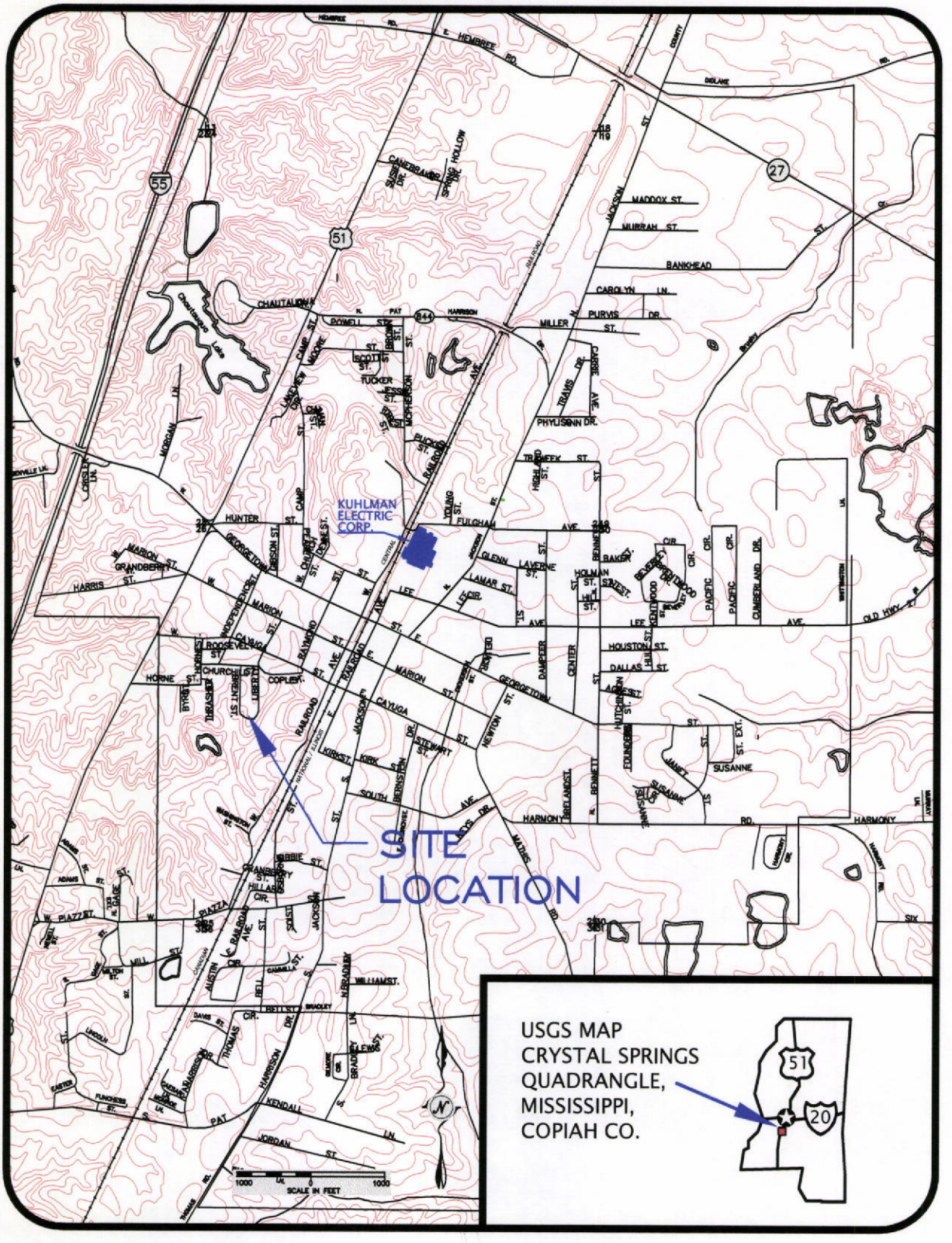

MARTIN&SLAGLE GeoEnvironmental Associates, LLC PO Box 1023 Black Mountain NC 28711 828.669.3929 828.669.5289	SCALE = 1":2000' REV: 0 DATE: 6/30/05 DR: DGR CHK: RLM	LOCATION MAP MID-SOUTH LEASING 115 BRENT STREET CRYSTAL SPRINGS, MS
	PREPARED FOR: **BorgWarner Inc.**	FIGURE 1

MidSouth Lease & Sales
112 BRENT STREET

MidSouth Lease & Sales
113 BRENT STREET

MidSouth Lease
& Sales
115 BRENT
STREET

MidSouth Lease &
Sales
114 BRENT STREET

312 LIBERTY STREET

314 LIBERTY
STREET

1 STORY
WOOD FRAME
HOUSE

1 STORY
WOOD FRAME
HOUSE

MOBILE HOME

PORCH

MANUFACTURED HOME

SHED

SHED

GRAVEL DRIVE

CONCRETE DRIVE

WOODLINE

Lot 9

Lot 8

BRENT STREET
(ASPHALT)

LIBERTY STREET

MSL – 150
7153
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 120-144" <0.10

MSL – 160
7154
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10

MSL – 159
7155
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10

MSL – 158
7156
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10

MSL – 151
7160
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 120-144" <0.10

MSL – 161
7161
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10

MSL – 156
7162
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10

MSL – 157
7163
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10

SSP – 001
7164
DP 001 0-24" 0.12
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10

SSP – 002
7165
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10

MSL – 152
7168
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 120-144" <0.10

MSL – 155
7170
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10

MSL – 162
7172
DP 001 0-24" 0.22
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10

SSP – 003
7173
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10

MSL – 149
7176
DP 001 0-24" <0.10
DP 002 24-48" <0.10

MSL – 153
7177
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 120-144" <0.10

MSL – 140
6099
DP 001 0-24" 0.26
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 60-72" <0.10

MSL – 119
6059
HA 001 0-6" 9.3
HA 002 12-24" 1.9
HA 003 24-36" 1.9
HA 004 36-48" 0.15

MSL – 113
6057
HA 001 0-6" <0.10

MSL – 154
7178
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 120-144" <0.10

MSL – 115
6056
HA 001 0-6" 2.0
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 120-144" <0.10

MSL – 147
7179
DP 001 0-24" <0.10
DP 002 24-48" 0.16
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 120-144" <0.10

MSL – 133
6060
HA 001 0-6" 0.71

MSL – 139
6095
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 60-72" <0.10

MSL – 117
6054
HA 001 0-6" 0.15

MSL – 146
7180
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-144" <0.10

LSP – 001
7181
HA 001 0-6" <0.10

MSL – 112
6041
HA 001 0-6" 2.7
DP 002 24-48" <0.10
DP 003 48-72" 0.17
DP 004 72-96" <0.10
DP 005 96-120" 0.12
DP 006 120-144" <0.10

MSL – 114
6055
HA 001 0-6" 8.5
DP 002 24-48" 1.0
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" 0.13
DP 006 120-144" <0.10

MSL – 116
6053
HA 001 0-6" 2.5
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 120-144" <0.10

MSL – 132
6061
HA 001 0-6" 0.23

LSP – 003
7182
HA 001 0-6" 0.15

MSL – 118
6058
HA 001 0-6" 2.0
HA 002 12-24" <0.10
HA 003 24-36" <0.10
HA 004 36-48" <0.10

MSL – 134
6062
HA 001 0-6" 0.74

MSL – 120
6052
HA 001 0-6" 0.17

MSL – 148
7184
DP 001 0-24" <0.10
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" 0.35
DP 006 120-144" <0.10

LSP – 002
7185
HA 001 0-6" 0.46

MSL – 124
6049
HA 001 0-6" 0.88

LSP – 004
7186
HA 001 0-6" <0.10

MSL – 141
6097
DP 001 0-24" 6.3
DP 002 24-48" 66
DP 003 48-72" 1.3
DP 004 72-96" 2.0
DP 005 96-120" 0.62
DP 006 60-72" <0.10

LSP – 008
7187
HA 001 0-6" <0.10

MSL – 107
6036
HA 001 0-6" 16
HA 002 12-24" <0.10
HA 003 24-36" 0.84
HA 004 36-48" 0.24

MSL – 121
6051
HA 001 0-6" 4.0
DP 002 24-48" 1.5
DP 003 48-72" 21
DP 004 72-96" 24
DP 005 96-120" 5.4
DP 006 120-144" <0.10

MSL – 122
6050
HA 001 0-6" 1.3
DP 002 24-48" 7.6
DP 003 48-72" 18
DP 004 72-96" 0.17
DP 005 96-120" 0.90
DP 006 120-144" <0.10

MSL – 131
6063
HA 001 0-6" 9.7
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" 0.12
DP 006 120-144" <0.10

MSL – 111
6040
HA 001 0-6" 10
DP 002 24-48" 97
DP 003 48-72" 0.17
DP 004 72-96" <0.10
DP 005 96-120" 1.4
DP 006 120-144" <0.10

MSL – 138
6096
DP 001 0-24" 150
DP 002 24-48" 140
DP 003 48-72" 0.87
DP 004 72-96" 0.18
DP 005 96-120" <0.10
DP 006 60-72" <0.10

MSL – 110
6039
HA 001 0-6" 22
DP 002 24-48" 2.1
DP 003 48-72" 130
AUGER REFUSAL BELOW THIS DEPTH

MSL – 123
6048
HA 001 0-6" <0.10

LSP – 005
7188
HA 001 0-6" 0.19

MSL – 106
6035
HA 001 0-6" 7.1
HA 002 12-24" 0.78
DP 003 24-48" 0.16
DP 006 72-120" 5.5
DP 007 120-144" 0.26

MSL – 125
6047
HA 001 0-6" 7.1
DP 002 24-48" <0.10
DP 003 48-72" 0.11
DP 004 72-96" <0.10
DP 005 96-120" 0.88
DP 006 120-144" <0.10

LSP – 009
7189
HA 001 0-6" <0.10

MSL – 105
6034
HA 001 0-6" 3.5
DP 002 24-48" 0.32
HA 002 6-12" 7.2
DP 003 48-72" 2.3
DP 004 72-96" <0.10
DP 005 96-120" 0.40
DP 006 120-144" <0.10

MSL – 109
6038
HA 001 0-6" 6.1
DP 002 24-48" 55
DP 003 48-72" 17
DP 004 72-96" <0.10
DP 005 96-120" 1.3
DP 006 120-144" <0.10

MSL – 001
6022
GS 0 3.2

MSL – 108
6037
HA 001 0-6" 99
DP 002 24-48" 32
DP 003 48-72" <0.10
DP 004 72-96" 2.6
DP 005 96-120" 7.8
DP 006 120-144" <0.10

LSP – 006
7190
HA 001 0-6" <0.10

MSL – 002
6023
GS 0 3.1

MSL – 137
6095
DP 001 0-24" 72
DP 002 24-48" 51
DP 003 48-72" 7.3
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 60-72" <0.10

MSL – 129
6045
HA 001 0-6" 0.29
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 120-144" <0.10

MSL – 126
6046
HA 001 0-6" 4.2
DP 002 24-48" <0.10
DP 003 48-72" <0.10
DP 004 72-96" <0.10
DP 005 96-120" <0.10
DP 006 120-144" <0.10

LSP – 010
7191
HA 001 0-6" <0.10

MSL – 104
6033
HA 001 0-6" 5.4
DP 002 24-48" 0.19
DP 003 48-72" 0.20
DP 004 72-96" <0.30
DP 005 96-120" <0.11
DP 006 120-144" <0.10

MSL – 103
6032
HA 001 0-6" 20
HA 002 12-24" 1.1
HA 003 24-36" 0.25
HA 004 36-48" 0.28

MSL – 127
6043
HA 001 0-6" 370
HA 002 12-24" 38
HA 003 24-36" 2.3
HA 004 36-48" 10
DP 005 48-72" <0.10
DP 006 72-96" <0.10
DP 007 96-120" 2.8
DP 008 120-144" <0.10

LSP – 007
7192
HA 001 0-6" <0.10

MSL – 128
6044
HA 001 0-6" 6.5
HA 002 18-24" <0.10
HA 003 42-48" <0.10

LSP – 011
7193
HA 001 0-6" <0.10

MSL – 130
6042
HA 001 0-6" 0.14

MSL – 135
6065
HA 001 0-6" <0.10

MSL – 136
6064
HA 001 0-6" 0.53

10 5 0 10 20

LEGEND

MSL MID-SOUTH LEASING PROPERTY
LSP LYDIA SPEED PROPERTY
SSP SUE STEVENS PROPERTY
HA HAND AUGER SAMPLE
DP DIRECT PUSH SAMPLE

SAMPLE POINT

1. SAMPLE LOCATION NUMBER
2. SURVEY NUMBER
3. SAMPLE POINT
4. SAMPLE TYPE
5. SAMPLE NUMBER by DEPTH
6. SAMPLE DEPTH RANGE
7. RESULTS IN mg/kg

SURVEY CONTROL POINT
OVERHEAD POWER
UTILITY POLE
AREA LIGHT
WATER METER
LOT LINE
ROAD
PROPERTY LINE
FENCE
VEGETATION

GeoEnvironmental Associates LLC | MARTIN&SLAGLE
PO Box 1023
Black Mountain NC 28711
828.669.3929 828.669.5289

SCALE 1":10'	#	REVISION NOTES
DR: DGR	1	
CHK:	2	
REV: 0	3	
DATE: 06/30/05	4	
	5	

DRAWING NAME: MSL\115 Remed WP.dwg

PREPARED FOR:
BorgWarner Inc.

REMEDIATION WORK PLAN
115 BRENT STREET
PCB DELINEATION

KUHLMAN ELECTRIC CORPORATION
101 KUHLMAN DRIVE
CRYSTAL SPRINGS, MS

2
FIGURE

Table 1
Summary of Analytical Results
Additional Requested Sampling
MidSouth Lease and Sales Property
115 Brent Street
Crystal Springs, Mississippi

Sample ID	Depth	Paradigm Split	Date Collected	Time Collected	On-Site Laboratory		Off-Site Laboratory		
					Date Analyzed	PCB (mg/kg)	Date Extracted	Date Analyzed	PCB (mg/kg)
MSL HA 130 001	0-6"		5/5/2004	14:45	5/5/2004	0.14			
MSL HA 135 001	0-6"		5/6/2004	11:10	5/6/2004	<0.10 U			
MSL HA 136 001	0-6"		5/6/2004	11:15	5/6/2004	0.35			