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April 17, 2026

Mr. Greg Cassidy

South Carolina Department of Environmental Services  
Bureau of Land and Waste Management  
2600 Bull Street, Columbia, South Carolina 29201

**SUBJECT: Remedial Action Work Plan – Parcel 2  
CSXT Bramlett Road Site  
400 East Bramlett Road  
Greenville, South Carolina**

Dear Mr. Cassidy:

Duke Energy Carolinas, LLC is submitting the attached Remedial Action Work Plan for limited soil removal on Parcel 2 of the CSXT Bramlett Road Site. If you have any questions regarding this submittal, please contact me at 980.373.2663 or by email at [Richard.Powell2@duke-energy.com](mailto:Richard.Powell2@duke-energy.com).

Sincerely,

*Richard E. Powell*

Richard E. Powell  
Project Manager II

Cc: Kevin Boland, CSXT; Daniel Schmitt, Esq., CSXT  
Ty Houck, Greenville County  
Todd Plating, Haley & Aldrich, Inc.  
Angie Grooms, ERM  
Pastor Stacey Mills, Mountain View Baptist Church

**REMEDIAL ACTION WORK PLAN – PARCEL 2**  
CSXT BRAMLETT ROAD SITE  
400 EAST BRAMLETT ROAD  
GREENVILLE, SOUTH CAROLINA

by  
Haley & Aldrich, Inc.  
Greenville, South Carolina

for  
Duke Energy Carolinas, LLC  
Charlotte, North Carolina

File No. 0206190-005  
April 2026



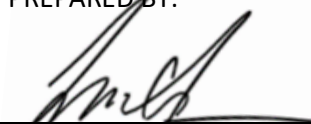
**SIGNATURE PAGE FOR****REMEDIAL ACTION WORK PLAN – PARCEL 2**

CSXT BRAMLETT ROAD SITE  
400 EAST BRAMLETT ROAD  
GREENVILLE, SOUTH CAROLINA

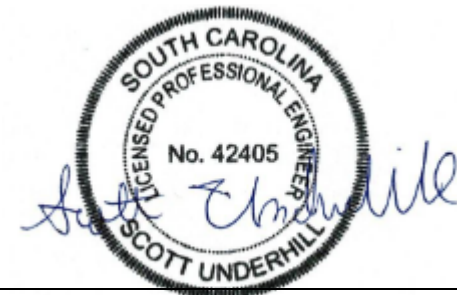
**PREPARED FOR**

DUKE ENERGY CAROLINAS, LLC  
CHARLOTTE, NORTH CAROLINA

PREPARED BY:

  
\_\_\_\_\_  
Zachary Gardner  
Project Engineer  
Haley & Aldrich, Inc.

REVIEWED AND APPROVED BY:

  
\_\_\_\_\_  
Todd Plating, P.E.  
Project Principal  
Haley & Aldrich, Inc.  
\_\_\_\_\_  
Scott Underhill, P.E.  
Principal Consultant  
South Carolina P.E. No. 42405  
Haley & Aldrich, Inc.

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# 1. Introduction

This Remedial Action Work Plan (RAWP) describes the remedial action (RA) activities to address environmental impacts north of East Bramlett Road on the CSX Transportation Bramlett Road Site (Site; also referred to as the Former Bramlette Manufactured Gas Plant [MGP] Site) located at 400 East Bramlett Road in Greenville, South Carolina. The Site layout and tax parcels are shown on **Figure 1** and information regarding the tax parcels is provided in **Table 1**.

This RAWP was prepared for the South Carolina Department of Environmental Services (SCDES) to meet the requirements of the Site's Operable Unit 1 and 2 (OU-1 and OU-2) Record of Decision (ROD) dated April 2025.

The RAWP is specific to limited soil removal on Parcel 2. Existing conditions on the proposed Parcel 2 are shown on **Figure 2**. A RAWP for Parcels 3, 4, 5, and the Legacy Early College Elementary School of the Site will be addressed under separate cover.

## 1.1 PURPOSE

The primary purpose of this RAWP is to present the remedial components, procedures, and guidelines for completion of a limited excavation of MGP-impacted soils from Parcel 2.

## 1.2 BACKGROUND AND REGULATORY BASIS

A MGP operated on Parcel 1 from 1917 to 1952. Historical Site features included a ditch that began on Parcel 1, crossed Parcel 2, and discharged toward the Reedy River. This ditch likely served as a pathway for wastewater-related impacts.

Between 2001 and 2002, Duke Energy Carolinas, LLC (Duke Energy) completed a removal action on Parcels 1 and 2. That work included removal of more than 61,000 tons of impacted soil and debris. Duke Energy later entered into a voluntary cleanup agreement and completed additional remedial investigation work from 2016 through 2021. As part of that work, a *Human Health and Ecologic Risk Assessment* was completed (SynTerra, 2020) followed by a technical memorandum, *Bramlette Former MGP Parcel 2 Soil Removal – Risk Estimation and Basis for Removal Action* (Risk Estimation Memorandum; SynTerra, 2021). Findings included that shallow soils on Parcels 1 and 2 met the criteria for industrial/commercial use with land use controls (LUCs); however, it presented a potentially unacceptable risk for the residential use scenario due to elevated polycyclic aromatic hydrocarbon (PAH) concentrations within the MGP-impacted soils. It was further found that limited removal of soils with elevated PAH concentrations could be completed to reduce the risk to an acceptable level for residential use. Proposed excavation extents around prior boring locations SA-SB-46 and RI-SB-15 were included in the Risk Estimation Memorandum (SynTerra, 2021). The memorandum was included as an appendix to the *Focused Feasibility Study* (Geosyntec, 2023) and is attached as **Appendix A** to this document.

In April 2025, a ROD was issued. The ROD presented the selected remedy for OU-1 (soil and sediment) and OU-2 (surface water). The selected remedy included the removal of soil impacted on Parcel 2 to allow Parcels 1 and 2 to meet residential use criteria when paired with LUCs to restrict groundwater use.

### 1.3 REMEDIAL ACTION OBJECTIVE

The remedial action objective for Parcel 2 is to remove shallow MGP-impacted soil around prior boring locations SA-SB-46 and RI-SB-15 (**Figure 3**) to allow shallow soil conditions to meet unrestricted (residential) use levels for Parcels 1 and 2.

## 2. Remedial Action

The key activities outlined in this Parcel 2 RA include the following:

- Excavation and removal of an estimated 150 cubic yards of PAH-impacted soil within the wetlands and upland areas to a depth of 2 feet below ground surface.
- Transportation and disposal of excavated material off-Site in accordance with federal, state, and local rules and regulations for handling, transport, and disposal.
- Restoration of the disturbed areas including import, placement, and compaction of backfill meeting the requirements of SCDES.

The following subsections provide additional detail for the planning and completion of these activities.

### 2.1 PLANNING AND PERMITS

Prior to initiating the RA, Duke Energy and/or the RA Contractor will prepare a Site-specific construction health and safety plan, secure property access agreements, and obtain required permits and approvals.

The RAWP implementation is subject to the following permits:

- United States Army Corps of Engineers Nationwide Permit 38
- Greenville County Floodplain Development Permit
- South Carolina Department of Transportation Encroachment Agreement/City of Greenville Encroachment Permit

The Site is in the floodplain; however, given the duration of the work is one week, the work will be scheduled when there is minimal risk of flooding.

### 2.2 SITE PREPARATION

A Site preparation plan is shown on **Figure 3**. As part of the Site preparation, the RA Contractor will:

- Install temporary facilities (e.g., sanitation, laydown areas).
- Contact South Carolina 811 for public utility mark-out.
- Complete a private party utility locate using ground penetrating radar.
- Install erosion and sediment controls.
- Stake excavation limits.
- Clear vegetation to allow for access to the excavation area.
- Protect monitoring well MW-35BR adjacent to the excavation.
- Protect existing facilities including fencing, monitoring wells, and utilities within the vicinity of the excavation.

## 2.3 EXCAVATION AND WASTE MANAGEMENT

The planned excavation depth is 2 feet and includes a 40-foot by 40-foot area around soil boring SA-SB-46 and a 30-foot by 30-foot extension of 10 feet around RI-SB-15 for a total area of 2,100 square feet. Delineation of this area was completed and summarized in the *Focused Feasibility Study* (Geosyntec, 2023); therefore, no confirmatory sampling after soil removal is necessary. The RA Contractor will survey the excavation limits after excavation is complete.

The estimated volume of excavated material is approximately 150 cubic yards of soil. Excavated soil and vegetation will be loaded directly into lined trucks or temporarily staged in lined and covered stockpiles before off-Site disposal. If unknown source material is encountered, work will stop while the material is evaluated, sampled, and managed for proper disposal.

Excavated material will be classified as non-hazardous for proper off-Site disposal. The RA Contractor will utilize the waste profile obtained by Duke Energy, provided that the profile remains current and representative of the excavated material. The impacted soil and debris will be transported by licensed haulers to the Republic Services Union County Landfill located in Enoree, South Carolina. The RA Contractor will prepare manifests, bills of lading, weight tickets, and any other related disposal documentation.

Trucks will be direct loaded. They will be parked on polyethylene sheeting during loading. Prior to leaving the polyethylene sheeting pad, the truck will be broom swept. Material captured on the polyethylene sheeting will be disposed of as non-hazardous waste. If temporary staging is needed, the materials will be placed in designated areas and managed to control moisture, dust, and odor.

Impacted soil and debris will be hauled off-Site, utilizing county and state roads. Approximately 10 to 15 truckloads of material are anticipated to be removed from the Site. If soil is tracked onto public roads (i.e., Bramlett Road), the material will be removed by the RA Contractor.

No liquids are anticipated to be generated as a result of the RA. If liquids are generated, these will be placed in appropriate containers (e.g., drums, frac tanks), sampled, and sent to an appropriate off-Site disposal/treatment facility.

## 2.4 RESTORATION

Following the completion of excavation activities, the excavated areas will be backfilled with topsoil. The topsoil should consist of fertile, friable soil and shall contain a normal amount of organic matter and be reasonably free from subsoil, refuse, roots, heavy or stiff clay, stones larger than 1 inch in size, coarse sand, noxious seeds, brush, litter or other deleterious substances. Topsoil shall be free from toxic amounts of either acid or alkaline elements. The lower 18 inches of topsoil shall be compacted while the upper 6 inches, which are most critical for adequate vegetative reestablishment, will be minimally compacted. This area will then be graded to the approximate pre-disturbance contours shown on **Figure 4**.

Imported topsoil will need documentation indicating that the material does not contain constituents above *de minimis* standards published by the SCDES. The RA Contractor will collect a grab sample of topsoil and submit it for laboratory analysis of:

- volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260;
- semi-volatile organic compounds by USEPA Method 8270;
- metals by USEPA Method 6010 and 7471;
- total recoverable petroleum hydrocarbons;
- pesticides by USEPA Method 8081 and 8141; and
- polychlorinated biphenyls by USEPA Method 8082.

The RA Contractor will submit bills of lading for each imported backfill material transport vehicle.

After the placement of topsoil, the area will be seeded with a mixture of tall fescue and annual ryegrass mixture at a coverage rate of 3 to 5 pounds per 1,000 square feet and then covered with straw. Silt fencing or sediment tubes shall be placed downgradient of the restored areas to prevent erosional runoff, until adequate vegetative cover is reestablished within the disturbed area.

Following completion of backfill activities, a topographical survey will be conducted to document that backfilling was completed to the approximate original Site grade based on pre-excavation land elevation measurements and geographic coordinates.

## 2.5 PERIMETER AIR MONITORING

Perimeter air monitoring for particulates (i.e., dust) and VOCs at the upwind and downwind perimeters will be completed when ground intrusive activities are in progress at the Site. The perimeter air monitoring is completed to evaluate and control potential off-Site emissions and minimize impacts to receptors through the surrounding communities. In addition, visual and olfactory observations will be made to keep dust and odors to a minimum around the work areas.

The following actions will be taken based on the monitoring of particulate concentrations:

- If the downwind level of particulate matter less than 10 micrometers (PM-10) is 150 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) greater than the background (upwind perimeter) or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed and work will be stopped. Work will resume once the downwind PM-10 particulate concentration falls below  $150 \mu\text{g}/\text{m}^3$  of the upwind level and/or no visible dust is observed.

The following actions will be taken based on VOC monitoring:

- If the ambient air concentration of VOCs at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above the background or if odors are identified emanating from the work area, work activities will be temporarily halted and monitoring continued. Once the VOC levels decrease below 5 ppm over the background and/or no odors are identified, work activities will resume with continued monitoring.

## 2.6 SCHEDULE

The Parcel 2 RA has an expected duration of approximately one week to complete, subject to weather, access, and field conditions.

### 3. Reporting

A Parcel 2 RA construction completion report summarizing the completed remedial activities will be submitted to SCDES for review and approval within 90 days of completion of the Parcel 2 RA. The construction completion report will document information related to excavation, transportation, and disposal of soil, photographs, as-built drawings, field notes, and other pertinent information. The construction completion report will be signed and sealed by the South Carolina-licensed professional engineer responsible for the project. The final report will conform, at a minimum, with the requirements of the SCDES Voluntary Cleanup Program and will include the following:

- A listing of the quantities and types of materials removed from the Site.
- A discussion of the removal and disposal options employed for removed materials.
- A listing of the final destinations of removed materials.
- Appendices containing relevant documentation generated during the remedial action (e.g., manifests, permits).

## References

1. SynTerra Corporation, 2020. *Human Health and Ecological Risk Assessment – Former Bramlette Road MGP Site, Greenville, South Carolina*. June.
2. SynTerra Corporation, 2021. *Technical Memorandum: Bramlette Former MGP Parcel 2 Soil Removal – Risk Estimation and Basis for Removal Action*. August 4.
3. Geosyntec Consultants, 2023. *Focused Feasibility Study, Revision 1 CSXT Bramlett Road Site. Titusville, Florida*.

[https://haleyaldrich.sharepoint.com/sites/Duke-0206190.BramletteSC/Shared Documents/0206190.Bramlett SC/002\\_Remedial Design/Design Workplans/RA Work Plan - Parcel 2/2026\\_04\\_17\\_Bramlett\\_Parcel 2 RA Work Plan-F.docx](https://haleyaldrich.sharepoint.com/sites/Duke-0206190.BramletteSC/Shared Documents/0206190.Bramlett SC/002_Remedial Design/Design Workplans/RA Work Plan - Parcel 2/2026_04_17_Bramlett_Parcel 2 RA Work Plan-F.docx)



## TABLES

**TABLE 1**  
**SUMMARY OF SITE PARCELS**  
 CSXT BRAMLETT ROAD SITE  
 400 EAST BRAMLETT ROAD  
 GREENVILLE, SOUTH CAROLINA

| Parcel ID                                               | Tax Map Serial Number    | Estimated Acreage <sup>1</sup>                    | Location Description (Address)                                                      | Current Owner                 |
|---------------------------------------------------------|--------------------------|---------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------|
| Parcel 1                                                | 0140000300300            | 3.69                                              | North of East Bramlett Road (400 East Bramlett Road)                                | CSXT <sup>2</sup>             |
| Parcel 2                                                | 0140000300200            | 10.25                                             | North of East Bramlett Road (408 East Bramlett Road)                                | CSXT <sup>2</sup>             |
| Parcel 3                                                | 0138000100100            | 7.8                                               | South of East Bramlett Road (411 East Bramlett Road)                                | CSXT <sup>2</sup>             |
| Parcel 4                                                | 0054000300100            | 3.817                                             | South of Parcel 3                                                                   | CSXT <sup>2</sup>             |
| Parcel 5                                                | 0054000600100            | 4.206                                             | South of Parcel 4                                                                   | CSXT <sup>2</sup>             |
| Approximate LOE on Western Portion of the LECE Property | Portion of 0138000100300 | 0.90 (approximate LOE)<br>7.374 (entire property) | Northeast of Parcel 3 and south of East Bramlett Road (1613 West Washington Street) | Legacy School Properties, LLC |

**Notes:**

1. The estimated acreage of Parcels 1 through 5 and the entire LECE School Property were derived from the Greenville County, South Carolina GIS Advanced Internet Mapping System (<https://www.gcgis.org/apps/GreenvilleJS/>). The estimated acreage of the approximate LOE on the western portion of the LECE School Property was calculated using AutoCAD measurement tools.

2. Owner listed as Seaboard Coast Line Railroad Company on the Greenville County GIS Advanced Internet Mapping System website

bgs - below ground surface

CSXT - CSX Transportation

LECE - Legacy Early College Elementary

LOE - limits of excavation

MGP - manufactured gas plant

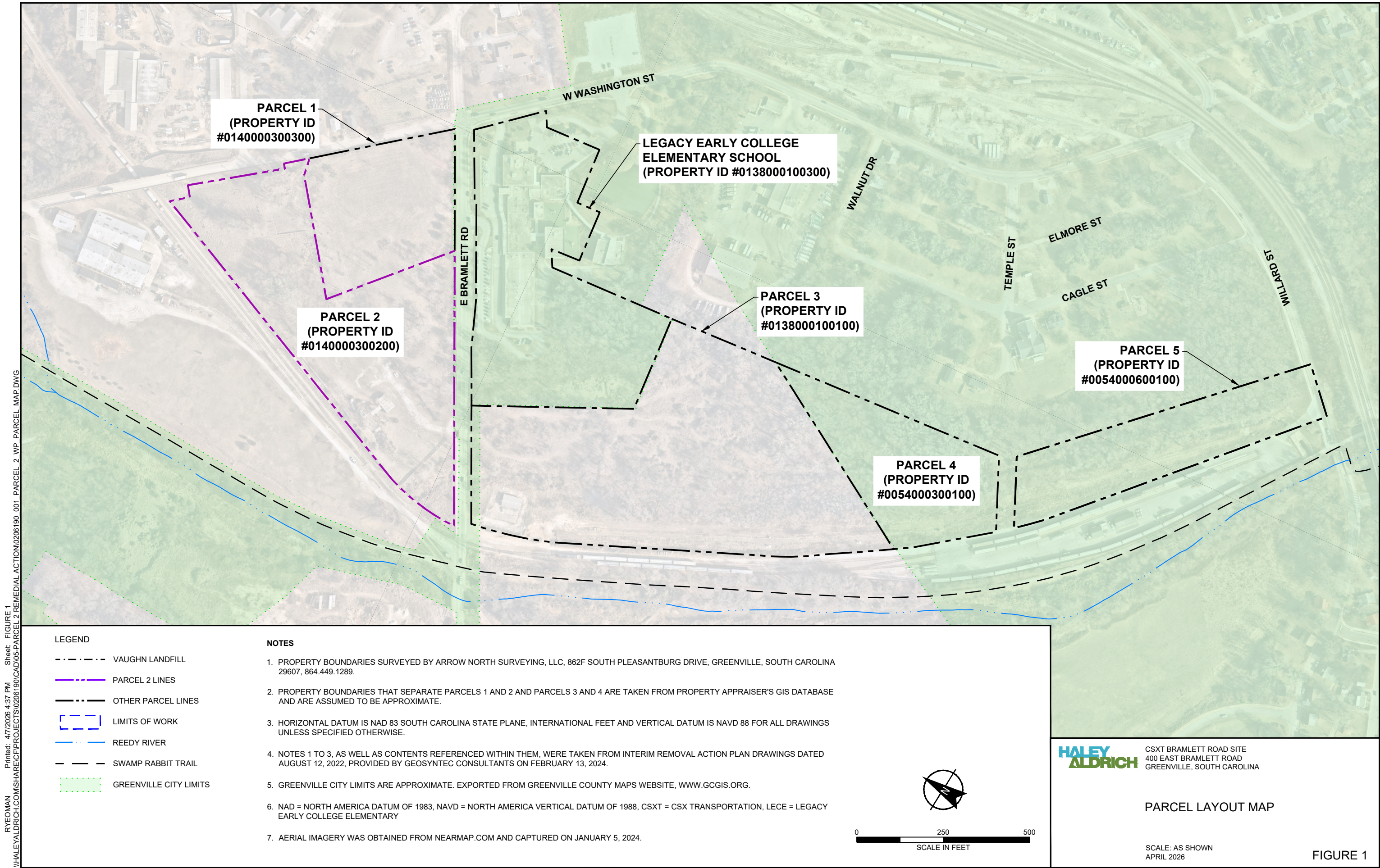
NAPL - non-aqueous phase liquid

OLM - oil-like material

USACE - United States Army Corps of Engineers

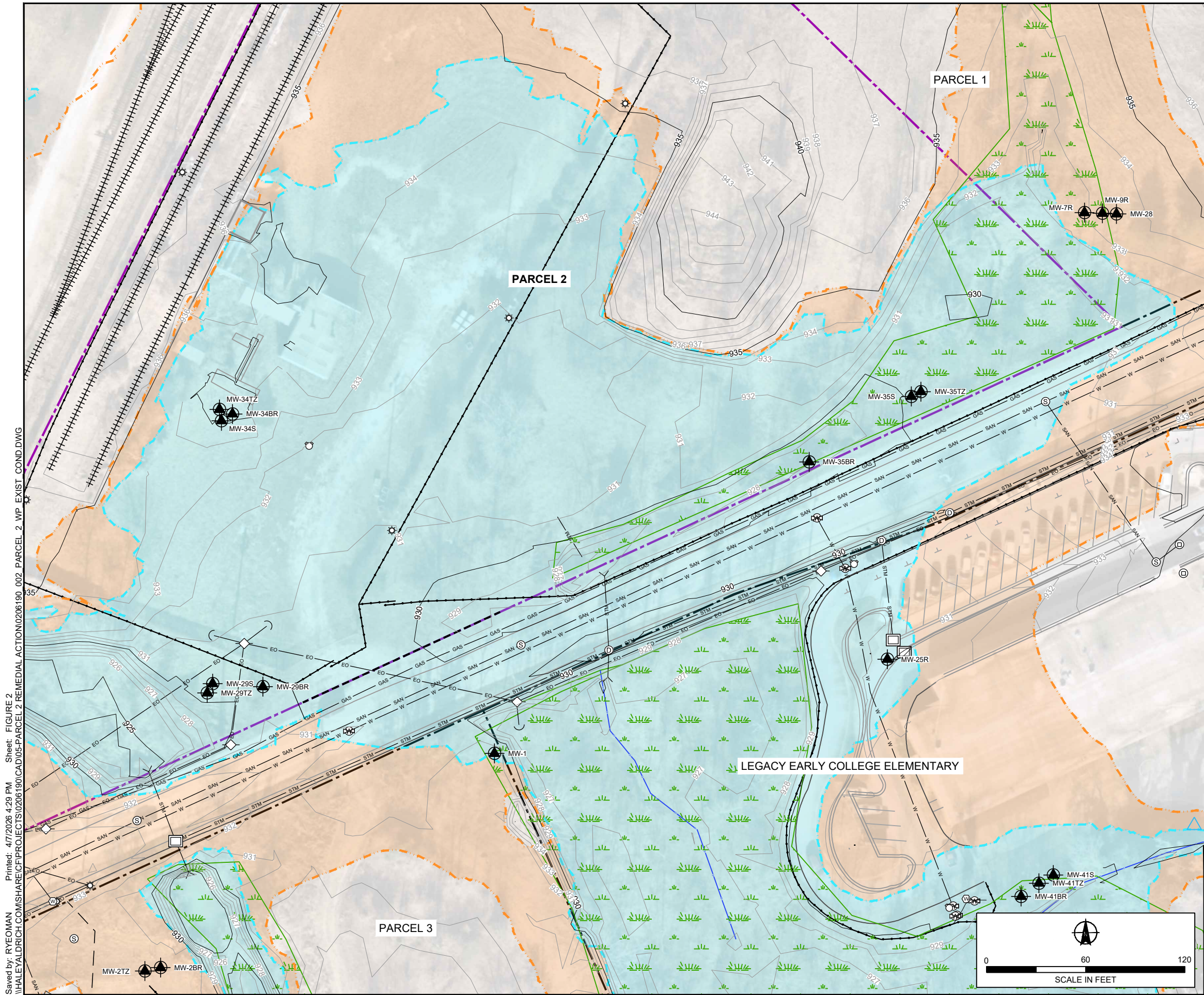
## FIGURES





RYEOMAN Printed: 4/7/2026 4:37 PM Sheet: FIGURE 1  
\\HALEYALDRICH\COM\SHARE\PROJECTS\0206190\CAD\05-PARCEL 2 WP PARCEL MAP.DWG





**LEGEND**

Parcel 2 Lines

Minor Contour (1-Ft)

Major Contour (5-Ft)

Wetlands

Active Monitoring Wells

100-Year Floodplain

500-Year Floodplain

Railroad Tracks

Swamp Rabbit Trail

Reedy River

Chain Link Fence

Streams and Creeks

Sanitary Clean Out

Sanitary Manhole

Sanitary Sewer Line

Storm Sewer Drainage Inlet (DI) or Catch Basin (CB)

Storm Sewer Manhole

Storm Sewer Line

Water Meter

Water Valve

Fire Hydrant

Water Line

Gas Valve

Gas Line

Power Pole

Light Pole

Guy Anchor

Overhead Electric Line

Other Parcel Lines

- NOTES**
1. TOPOGRAPHY (EXISTING GROUND CONTOURS), PROPERTY BOUNDARIES, AND OTHER BASE MAP FEATURES WERE SURVEYED ON MAY 26, 2021 AND PROVIDED BY ARROW NORTH SURVEYING, LLC 862F SOUTH PLEASANTBURG DRIVE, GREENVILLE, SOUTH CAROLINA 29607, 864.449.1289.

2. FLOODPLAIN EXTENTS PROVIDED BY FEMA, UPDATED MARCH 2, 2018, RETRIEVED FROM THE NATIONAL FLOOD HAZARD LAYER FLOOD INSURANCE RATE MAP ON MAY 23, 2024.

3. PROPERTY BOUNDARIES THAT SEPARATE PARCELS 1 AND 2 WERE TAKEN FROM PROPERTY APPRAISER'S GIS DATABASE AND ARE ASSUMED TO BE APPROXIMATE.

4. HORIZONTAL DATUM IS NAD 83 SOUTH CAROLINA STATE PLANE. INTERNATIONAL FEET AND VERTICAL DATUM IS NAVD 88 FOR ALL DRAWINGS UNLESS SPECIFIED OTHERWISE.

5. JURISDICTIONAL WETLANDS, STREAMS, AND CREEKS DELINEATED BY ENVIRONMENTAL RESOURCES MANAGEMENT IN 2023 AND 2024.

6. AERIAL IMAGERY WAS OBTAINED FROM NEARMAP.COM AND CAPTURED ON JANUARY 5, 2024.

HALEY  
ALDRICH

CSXT BRAMLETT ROAD SITE  
400 EAST BRAMLETT ROAD  
GREENVILLE, SOUTH CAROLINA

EXISTING CONDITIONS

SCALE: AS SHOWN  
APRIL 2026

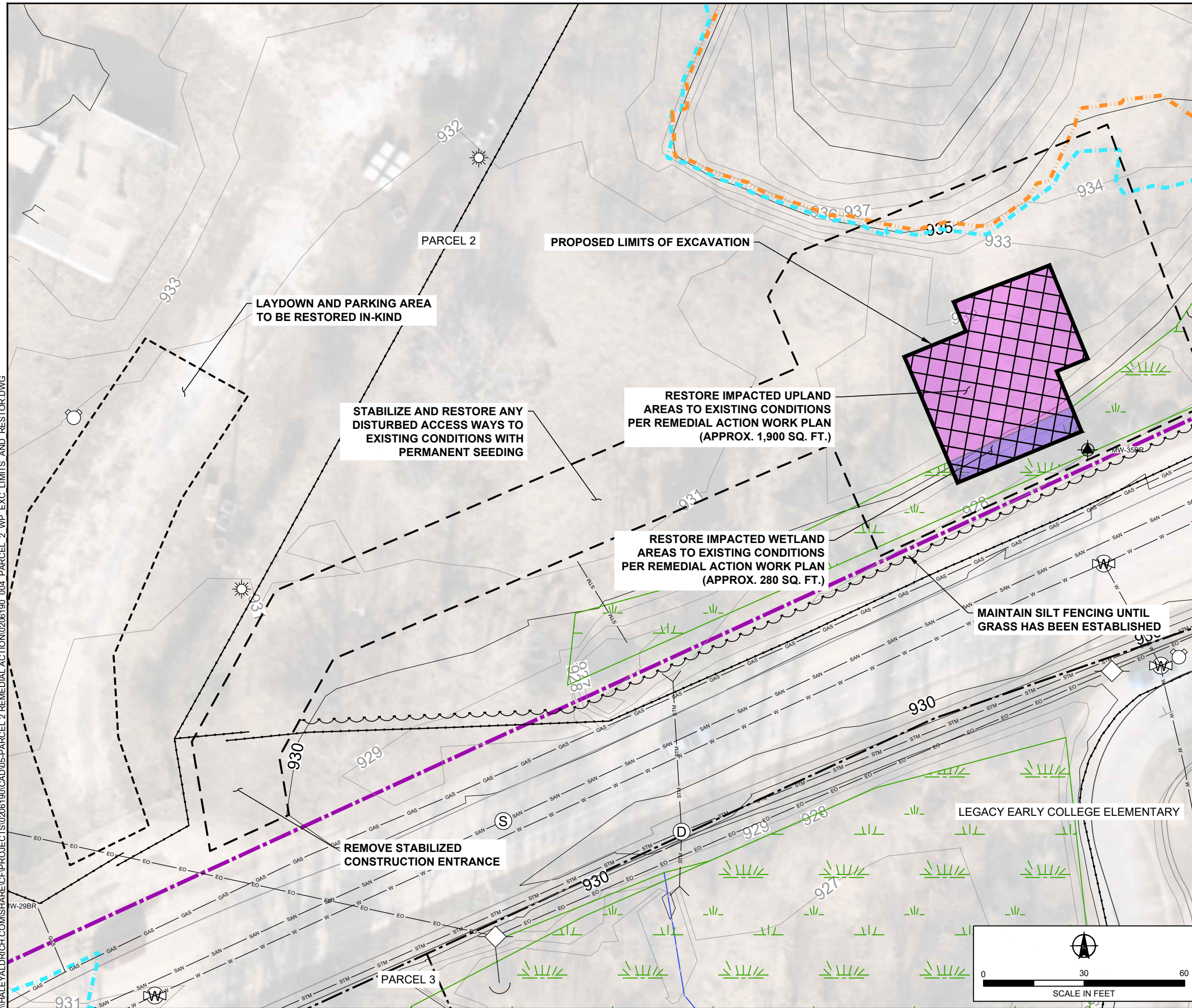
FIGURE 2







Saved by: RYCOMAN  
\\HALEYALDRICH.COM\SHARE\PROJECTS\02061901\CAD\05-PARCEL 2 REMEDIAL ACTION\0206190\_004 PARCEL 2 WP EXC LIMITS AND RESTOR.DWG  
Sheet: FIGURE 4  
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**LEGEND**

|  |                                                     |  |                    |
|--|-----------------------------------------------------|--|--------------------|
|  | PARCEL 2 LINES                                      |  | OTHER PARCEL LINES |
|  | MINOR CONTOUR (1-FT)                                |  |                    |
|  | MAJOR CONTOUR (5-FT)                                |  |                    |
|  | WETLANDS                                            |  |                    |
|  | ACTIVE MONITORING WELLS                             |  |                    |
|  | 100-YEAR FLOODPLAIN                                 |  |                    |
|  | 500-YEAR FLOODPLAIN                                 |  |                    |
|  | RAILROAD TRACKS                                     |  |                    |
|  | SWAMP RABBIT TRAIL                                  |  |                    |
|  | REEDY RIVER                                         |  |                    |
|  | CHAIN LINK FENCE                                    |  |                    |
|  | STREAMS AND CREEKS                                  |  |                    |
|  | SANITARY CLEAN OUT                                  |  |                    |
|  | SANITARY MANHOLE                                    |  |                    |
|  | SANITARY SEWER LINE                                 |  |                    |
|  | STORM SEWER DRAINAGE INLET (DI) OR CATCH BASIN (CB) |  |                    |
|  | STORM SEWER MANHOLE                                 |  |                    |
|  | STORM SEWER LINE                                    |  |                    |
|  | WATER METER                                         |  |                    |
|  | WATER VALVE                                         |  |                    |
|  | FIRE HYDRANT                                        |  |                    |
|  | WATER LINE                                          |  |                    |
|  | GAS VALVE                                           |  |                    |
|  | GAS LINE                                            |  |                    |
|  | POWER POLE                                          |  |                    |
|  | LIGHT POLE                                          |  |                    |
|  | GUY ANCHOR                                          |  |                    |
|  | LIMITS OF WORK                                      |  |                    |
|  | LIMITS OF EXCAVATION                                |  |                    |
|  | UPLAND RESTORATION                                  |  |                    |
|  | WETLAND RESTORATION                                 |  |                    |
|  | SILT FENCE (SEE NOTE 6)                             |  |                    |

- NOTES**
- TOPOGRAPHY (EXISTING GROUND CONTOURS), PROPERTY BOUNDARIES, AND OTHER BASE MAP FEATURES WERE SURVEYED ON MAY 26, 2021 AND PROVIDED BY ARROW NORTH SURVEYING, LLC 862F SOUTH PLEASANTBURG DRIVE, GREENVILLE, SOUTH CAROLINA 29607, 864.449.1289.
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  - HORIZONTAL DATUM IS NAD 83 SOUTH CAROLINA STATE PLANE, INTERNATIONAL FEET AND VERTICAL DATUM IS NAVD 88 FOR ALL DRAWINGS UNLESS SPECIFIED OTHERWISE.
  - JURISDICTIONAL WETLANDS, STREAMS, AND CREEKS DELINEATED BY ENVIRONMENTAL RESOURCES MANAGEMENT IN 2023 AND 2024.
  - REMEDIAL ACTION CONTRACTOR TO UTILIZE GREENVILLE COUNTY'S STORMWATER MANAGEMENT DESIGN MANUAL AND/OR SCDHEC'S (CURRENTLY SCDES) STORMWATER MANAGEMENT BMP FIELD MANUAL FOR REFERENCED EROSION SEDIMENT CONTROL AND BETTER MANAGEMENT PRACTICE DEVICES.

CSXT BRAMLETT ROAD SITE  
400 EAST BRAMLETT ROAD  
GREENVILLE, SOUTH CAROLINA

**EXCAVATION LIMITS AND  
RESTORATION PLAN**

SCALE: AS SHOWN  
APRIL 2026

**FIGURE 4**

**APPENDIX A**  
**Appendix A from Focused Feasibility Study**  
**(Geosyntec, 2023)**





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## TECHNICAL MEMORANDUM

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Date: August 4, 2021 File: 00.2731.00

To: Mr. Richard Powell

Cc: Mr. Jim Langenbach P.E., Mr. David Riotte P.E., Mr. Andrew Brey P.G.,  
Mr. Todd Plating P.G.

From: Dr. Matt Huddleston Ph.D. *GMH*

Subject: Bramlette Former MGP Parcel 2 Soil Removal – Risk Estimation and Basis for  
Removal Action

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On behalf of Duke Energy, SynTerra prepared a Remedial Investigation (RI) Report pertaining to the location of the Former Bramlette Manufactured Gas Plant (MGP, Site) at 400 East Bramlette Road. The Site is in Greenville, Greenville County, South Carolina and is comprised of five parcels and a portion of the Legacy Elementary School property that total approximately 35 acres in area. The RI report was submitted to the South Carolina Department of Health and Environmental Control (SCDHEC) on June 26, 2020. SCDHEC approved the RI Report on September 1, 2020.

This technical memorandum presents the regulatory framework, risk estimation approach, and confirmation sampling effort to demonstrate that removal of impacted soil from a limited area in Parcel 2 can reduce potential risk to less than residential exposure thresholds.

### RISK ESTIMATION FOR PARCEL 1 AND PARCEL 2

The 2020 RI Report included a human health risk assessment to evaluate potential risks associated with constituents of interest that might remain in environmental media. The Virginia Unified Risk Assessment Model (VURAM) can be used to assist in the development of voluntary remediation program risk assessments.

## REGULATORY BASIS

For evaluating potential risk to human health, screening level and baseline assessments were conducted in accordance with the following United Environmental Protection Agency (USEPA) guidance:

- Risk Assessment Guidance for Superfund, Volume 1: Human Health Evaluation Manual, Part A (1989)
- Guidelines for Cancer Risk Assessment (1996, 2005)
- Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites (2002a)
- Regional Screening Levels Tables (November 2019 or current version)
- Region 4 Human Health Risk Assessment Supplemental Guidance (2018)

## RESULTS

No risks were identified for a construction worker exposed to soil at Parcel 1 or Parcel 2 which are currently zoned for industrial land use. As a conservative measure and to understand the potential risk of residential land use, a screening level comparison of surface soil data to USEPA Soil Screening Levels (SSLs) for residential soil was completed. Comparison to residential SSLs indicated five constituents at one location (SA-SB-46) contained concentrations greater than screening levels. Soil data screened in the 2020 RI report to estimate Parcel 1 and Parcel 2 risk are summarized in **Table 1**.

The five surface soil chemicals of potential concern (COPCs) evaluated in the 2020 baseline risk assessment included:

- Benzo(a)anthracene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Dibenzo(a,h)anthracene
- Indeno(1,2,3-cd)pyrene

The five COPCs were selected based on the screening level assessment indicating concentrations of each constituent exceeded human health screening criteria. Exposure point concentrations (EPCs) were calculated for each COPC using ProUCL 5.1 and used in the risk estimation calculation in VURAM. ProUCL output and EPCs are provided in **Attachment 1**. Potential cancer risk for a residential exposure scenario greater than the Lifetime Cancer Risk (ELCR) was identified.

Carcinogenic and non-carcinogenic risk results are listed for each exposure scenario below.

| Exposure scenario                                            | Cancer risk          | Non-Cancer risk      | Non-Cancer risk child |
|--------------------------------------------------------------|----------------------|----------------------|-----------------------|
| Construction worker cumulative site risk to surface soil     | $2.9 \times 10^{-8}$ | $8.3 \times 10^{-3}$ | NA                    |
| Construction worker cumulative site risk to sub-surface soil | $1.0 \times 10^{-7}$ | $2.9 \times 10^{-2}$ | NA                    |
| Residential cumulative site risk to surface soil             | $8.7 \times 10^{-6}$ | $4.9 \times 10^{-3}$ | $4.26 \times 10^{-2}$ |

VURAM output and default exposure factors are in **Attachment 2a**.

Because the potential risk given a residential exposure scenario is only incrementally greater than the residential risk cancer threshold, a limited soil removal proximate to the SA-SB-46 location was evaluated. The risk driver for residential exposure to surface soil is benzo(a)pyrene, representing 75 percent of the contribution to soil carcinogenic risk. The other four COPCs were not carried forward as significant contributors to risk because their individual carcinogenic risk contribution is less than  $1 \times 10^{-6}$  and their non-carcinogenic hazard quotient is less than 0.1 (USEPA, 2018). Therefore, the benzo(a)pyrene concentration is considered in the planning and confirmatory risk modeling for the limited soil removal.

#### PROPOSED LIMITED SOIL REMOVAL ACTION EVALUATION

Because the estimated risk at the Site is likely the result of an isolated occurrence of benzo(a)pyrene within Parcel 2, an effort to evaluate if a limited soil removal would successfully reduce risk to acceptable levels for residential use was completed. The following evaluation demonstrates that removal and replacement of soil in the vicinity of SA-SB-46 with clean fill would reduce risk to less than residential cancer risk thresholds ( $1 \times 10^{-6}$ ).

Shallow soil was evaluated for the purposes of estimating potential risk through residential exposure. The USEPA states that residential activities such as gardening may disturb soils to a depth of up to two feet, potentially exposing receptors to contaminants in subsurface soil via direct contact pathways such as ingestion and dermal absorption (USEPA, 2002). In the conservative gardening scenario, twenty-four (24) inches of clean soil cover is protective of human health. A minimum of a 24-inch clean fill barrier is necessary to prevent plant roots, root vegetables, and clean soil that is mixed via rototilling from encountering contaminated soil at depth (USEPA, 2003).

The USEPA recently completed a remedial cleanup of polycyclic aromatic hydrocarbon (PAH) impacted soils in Eastwick, Pennsylvania which included the removal of the top two feet of soil and replacement with clean fill (USEPA, 2016). That approach is similar to the approach described herein and considered protective of human health.

#### DELINEATION SAMPLING METHODS AND RESULTS

To determine the horizontal extent of a limited soil removal, a sampling grid was established at the SA-SB-46 location (**Figure 1**). Borings were advanced using direct push technology (DPT) from land surface to approximately 5 feet below land surface (bls). The soil cores were visually inspected and logged for lithology and presence/absence of non-aqueous phase liquid (NAPL) from MGP operations. Borings were abandoned in accordance with SCDHEC well installation standards, R. 61-71. Boring logs are included in **Attachment 3**.

Nine boring locations closest to SA-SB-46 (40 by 40-foot square and center boring) were initially sampled and analyzed. Subsequent analysis of soil samples collected from the outer sampling grid boring locations was completed until surface soils indicated constituent concentrations less than residential RSLs. Soil samples were collected from 0.5 foot to 1 foot bls and 5.5 feet to 6 feet bls and submitted to Pace Analytical for analysis. Field screening and sample collection were completed in accordance with procedures described in the Quality Assurance Project Plan (QAPP) (SynTerra, 2018). Additional shallow soil samples were collected to achieve lower method detection limits (MDLs) for benzo(a)pyrene and dibenz(a,h)anthracene.

One delineation sample (RI-SB-15) contained elevated PAH concentrations similar to SA-SB-46. Benzo(a)pyrene data are shown on **Figure 1**. Delineation analytical results are summarized in **Table 2** and laboratory analytical reports are included in **Attachment 4**.

#### POST SOIL REMOVAL RISK ESTIMATION

Risk was calculated using VURAM. Conservative default model exposure values were used for the construction worker and residential exposure scenarios.

*“VURAM Guidance document does not establish binding rules but provides a recommended risk assessment process that incorporates risk assessment methodology described in RAGS Part A through E and EPA RSL Guidance. The report outputs from VURAM provide the information required in RAGS Part D tables.” (VURAM, 2020).*

Analytical results that correspond to soil remaining in place after a removal action were used to calculate updated EPCs for benzo(a)pyrene. Analytical results from locations where soil would be removed were replaced with MDLs to represent a clean-fill



scenario. The updated EPCs were modeled to evaluate residential risk at Parcel 1 and Parcel 2 under a post-soil removal scenario.

Results indicate a total non-cancer hazard index less than 1.0 and a cancer risk of  $9.0 \times 10^{-7}$ , which is less than the cancer risk threshold of  $1 \times 10^{-6}$ .

VURAM output and default exposure factors are presented in **Attachment 2b**.

## RECOMMENDATIONS

The following recommendations are based on an evaluation of potential risk for a residential land use scenario and confirmation sampling:

- Remove and replace soil within the 40 x 40-foot area around SA-SB-46 and the RI-SB-15 location as shown in **Figure 1**.
- Consistent with USEPA guidance and similar soil removal efforts, remove soil to a depth of two feet and replace with clean fill.

## ATTACHMENTS

|               |                                                                                  |
|---------------|----------------------------------------------------------------------------------|
| Figure 1      | Proposed Limited Soil Removal                                                    |
| Table 1       | Summary of Soil Analytical Result 2019                                           |
| Table 2       | Summary of Soil Analytical Results for Proposed Limited Soil Removal Delineation |
| Attachment 1  | Surface Soil 2019 ProUCL Output                                                  |
| Attachment 2a | Residential and Construction Output and Default Exposure Factors                 |
| Attachment 2b | Residential VURAM BaP Post-Soil Removal Output and Default Exposure Factors      |
| Attachment 3  | Boring Logs                                                                      |
| Attachment 4  | Laboratory Analytical Reports                                                    |

## REFERENCES

- SynTerra, 2018. SynTerra Corporation. Quality Assurance Project Plan (QAPP): Former Bramlette MGP Site. 2018.
- USEPA, 1989. United States Environmental Protection Agency, Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A). December 1989.
- USEPA 1996, United States Environmental Protection Agency, Proposed Guidelines for Carcinogen Risk Assessment. Fed. Reg. 61(79), 17960-18011.
- USEPA 2002, United States Environmental Protection Agency, Supplemental Guidance for Developing Soil Screening Levels for Superfund Site. December 2002. Office of Solid Waste and Emergency Response, Washington DC OSWER 9355.4-24.
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- USEPA 2018, United States Environmental Protection Agency, Region 4 Human Health Risk Assessment Supplemental Guidance. March 2018. [https://www.epa.gov/sites/default/files/2018-03/documents/hhra\\_regional\\_supplemental\\_guidance\\_report-march-2018\\_update.pdf](https://www.epa.gov/sites/default/files/2018-03/documents/hhra_regional_supplemental_guidance_report-march-2018_update.pdf)
- VURAM 2020, Virginia Department of Environmental Quality. Virginia Unified Risk Assessment Model (VURAM) User Guide. June 2020. <https://www.deq.virginia.gov/home/showpublisheddocument/6949/637514940761700000>

FIGURE

**NOTES:**

1. SOIL BORING LOCATIONS ARE BASED ON GPS COORDINATES AND ARE APPROXIMATE.

2. mg/kg - MILLIGRAMS PER KILOGRAM

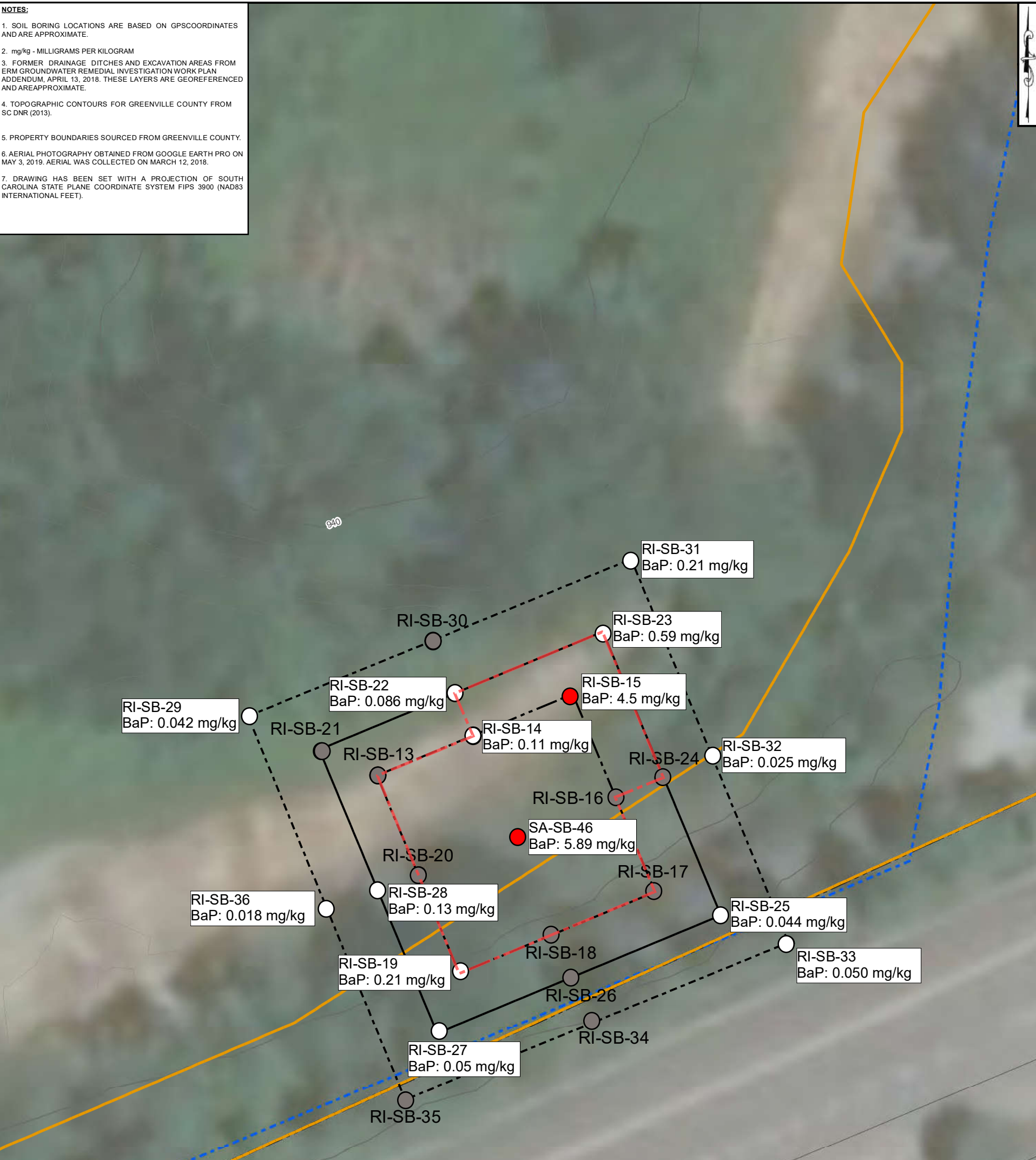
3. FORMER DRAINAGE DITCHES AND EXCAVATION AREAS FROM ERM GROUNDWATER REMEDIAL INVESTIGATION WORK PLAN ADDENDUM, APRIL 13, 2018. THESE LAYERS ARE GEOREFERENCED AND ARE APPROXIMATE.

4. TOPOGRAPHIC CONTOURS FOR GREENVILLE COUNTY FROM SC DNR (2013).

5. PROPERTY BOUNDARIES SOURCED FROM GREENVILLE COUNTY.

6. AERIAL PHOTOGRAPHY OBTAINED FROM GOOGLE EARTH PRO ON MAY 3, 2019. AERIAL WAS COLLECTED ON MARCH 12, 2018.

7. DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83 INTERNATIONAL FEET).



**LEGEND**

SOIL BORING - BaP DETECTED

SOIL BORING - BaP MAX CONCENTRATIONS

SOIL BORING - BaP NOT DETECTED

**Notes:**  
BaP - Benzo(a)pyrene

PROPOSED SOIL REMOVAL EXTENT

DELINEATION SAMPLING GRID (20 FOOT)

DELINEATION SAMPLING GRID (30 FOOT)

DELINEATION SAMPLING GRID (40 FOOT)

EXCAVATED AREA (2001-2002)

FORMER AND/OR CURRENT DRAINAGE DITCH (1964)

PARCEL BOUNDARY

TOPOGRAPHIC CONTOUR

100  
0  
10  
20  
(IN FEET)

DRAWN BY: C. DAVIS  
REVISED BY: T. PLATING  
CHECKED BY: K. SIMMS  
APPROVED BY: T. PLATING  
PROJECT MANAGER: T. PLATING

DATE: 05/21/2019  
DATE: 03/04/2021  
DATE: 03/04/2021  
DATE: 03/04/2021

FIGURE 1

PROPOSED LIMITED SOIL REMOVAL

FORMER BRAMLETTE ROAD MGP SITE

REMEDIAL INVESTIGATION REPORT

EAST BRAMLETTE ROAD

GREENVILLE, SOUTH CAROLINA

www.synTerracorp.com



## TABLES

TABLE 1  
SUMMARY OF SOIL ANALYTICAL RESULTS 2019  
FORMER BRAMLETTE MGP SITE  
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

| Analytical Parameter       |                           |                         |                              | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Dibenz(a,h)anthracene | Indeno(1,2,3-cd)pyrene | Naphthalene |
|----------------------------|---------------------------|-------------------------|------------------------------|--------------------|----------------|----------------------|----------------------|-----------------------|------------------------|-------------|
| Reporting Unit             |                           |                         |                              | mg / kg            | mg / kg        | mg / kg              | mg / kg              | mg / kg               | mg / kg                | mg / kg     |
| USEPA RSL Industrial Soil  |                           |                         |                              | 21                 | 2.1            | 21                   | 210                  | 2.1                   | 21                     | 17          |
| USEPA RSL Residential Soil |                           |                         |                              | 1.1                | 0.11           | 1.1                  | 11                   | 0.11                  | 1.1                    | 3.8         |
| Sample ID                  | Start Depth<br>(feet bls) | End Depth<br>(feet bls) | Sample<br>Collection<br>Date | Analytical Results |                |                      |                      |                       |                        |             |
| SA-SB-01                   | 0.5                       | 1                       | 11/15/2019                   | 0.0362             | 0.0258         | 0.0536               | 0.0164               | 0.0083 j              | 0.0247                 | <0.0053     |
| SA-SB-02                   | 0.5                       | 1                       | 11/12/2019                   | 0.0072 j           | 0.0077 j       | 0.0099 j             | 0.0043 j             | 0.0014 j              | 0.0051 j               | 0.0032 j    |
| SA-SB-03                   | 0.5                       | 1                       | 11/15/2019                   | 0.0341             | 0.0585         | 0.079                | 0.0235               | 0.0156                | 0.0516                 | <0.0051     |
| SA-SB-04                   | 0.5                       | 1                       | 11/13/2019                   | 0.204              | 0.183          | 0.283                | 0.0948               | 0.0392                | 0.129                  | <0.0046     |
| SA-SB-05                   | 0.5                       | 1                       | 11/12/2019                   | 0.0358             | 0.0399         | 0.0644               | 0.0241               | 0.0119                | 0.0403                 | <0.0043     |
| SA-SB-06                   | 0.5                       | 1                       | 11/12/2019                   | 0.0141             | 0.0111 j       | 0.0231               | 0.0082 j             | 0.0033 j              | 0.0099 j               | <0.111      |
| SA-SB-07                   | 0.5                       | 1                       | 11/13/2019                   | 0.112              | 0.0851         | 0.161                | 0.0601               | 0.0234                | 0.0699                 | <0.0058     |
| SA-SB-08                   | 0.5                       | 1                       | 11/13/2019                   | 0.104              | 0.0915         | 0.17                 | 0.0562               | 0.0275                | 0.0839                 | <0.0047     |
| SA-SB-09                   | 0.5                       | 1                       | 11/13/2019                   | 0.618              | 0.673          | 0.856                | 0.369                | 0.161                 | 0.464                  | <0.0048 R0  |
| SA-SB-10                   | 0.5                       | 1                       | 11/12/2019                   | 0.0138             | 0.0096 j       | 0.0219               | 0.0059 j             | 0.0033 j              | 0.0087 j               | <0.149      |
| SA-SB-11                   | 0.5                       | 1                       | 11/12/2019                   | 0.0045 j           | 0.0041 j       | 0.0077 j             | 0.0028 j             | <0.0128 R1            | 0.0032 j               | 0.0103 j    |
| SA-SB-12                   | 0.5                       | 1                       | 11/14/2019                   | 0.212              | 0.158          | 0.227                | 0.0864               | 0.0293                | 0.0899                 | <0.0046     |
| SA-SB-13                   | 0.5                       | 1                       | 11/13/2019                   | 0.0439             | 0.0391         | 0.0716               | 0.0223               | 0.01 j                | 0.0305                 | <0.0049     |
| SA-SB-14                   | 0.5                       | 1                       | 11/13/2019                   | 0.0823             | 0.118          | 0.145                | 0.0509               | 0.0299                | 0.106                  | <0.0053     |
| SA-SB-15                   | 0.5                       | 1                       | 11/12/2019                   | 0.0625             | 0.173          | 0.159                | 0.0537               | 0.0696                | 0.272                  | <0.0045     |
| SA-SB-16                   | 0.5                       | 1                       | 11/12/2019                   | 0.0865             | 0.0915         | 0.13                 | 0.0485               | 0.0215                | 0.0635                 | <0.0056     |
| SA-SB-17                   | 0.5                       | 1                       | 11/12/2019                   | 0.0014 j           | 0.00089 j      | 0.0019 j             | 0.00068 j            | <0.0148               | <0.0148                | 0.0042 j    |
| SA-SB-18                   | 0.5                       | 1                       | 11/14/2019                   | 0.109              | 0.0708         | 0.134                | 0.0416               | 0.0175                | 0.0467                 | <0.0051     |
| SA-SB-19                   | 0.5                       | 1                       | 11/14/2019                   | 0.0125 M1 R1       | 0.0107 j M1 R1 | 0.021 M1 R1          | 0.0065 j M1 R1       | 0.0032 j M1 R1        | 0.009 j M1 R1          | 0.0402 j    |
| SA-SB-20                   | 0.5                       | 1                       | 11/13/2019                   | 0.035              | 0.0333         | 0.0639               | 0.0181               | 0.01 j                | 0.0298                 | <0.0057     |
| SA-SB-21                   | 0.5                       | 1                       | 11/13/2019                   | 0.372              | 0.331          | 0.429                | 0.187                | 0.0503                | 0.198                  | <0.0042     |
| SA-SB-22                   | 0.5                       | 1                       | 11/13/2019                   | 0.0576             | 0.0635         | 0.112                | 0.038                | 0.0198                | 0.0637                 | <0.0054     |
| SA-SB-23                   | 0.5                       | 1                       | 11/12/2019                   | 0.0312             | 0.0435         | 0.0585               | 0.0225               | 0.0091 j              | 0.0325                 | 0.0106 j    |
| SA-SB-24                   | 0.5                       | 1                       | 11/12/2019                   | <0.0125            | <0.0125        | <0.0125              | <0.0125              | <0.0125               | <0.0125                | <0.004      |
| SA-SB-25                   | 0.5                       | 1                       | 11/14/2019                   | 0.0762             | 0.0688         | 0.111                | 0.0358               | 0.0182                | 0.0558                 | <0.0046     |
| SA-SB-26                   | 0.5                       | 1                       | 11/14/2019                   | 0.0155             | 0.032          | 0.0393               | 0.0135               | 0.0082 j              | 0.0236                 | 0.0096 j B  |
| SA-SB-27                   | 0.5                       | 1                       | 11/13/2019                   | 0.0098 S1          | 0.0091 S1      | 0.0143 S1            | 0.0061 S1            | 0.0023 S1             | 0.0067 S1              | 0.0096 S1   |
| SA-SB-28                   | 0.5                       | 1                       | 11/13/2019                   | 0.116              | 0.102          | 0.155                | 0.0599               | 0.0217                | 0.0696                 | <0.0043 R0  |
| SA-SB-29                   | 0.5                       | 1                       | 11/13/2019                   | 0.0997             | 0.083          | 0.151                | 0.0529               | 0.0219                | 0.0681                 | <0.0044     |
| SA-SB-30                   | 0.5                       | 1                       | 11/13/2019                   | 0.0364             | 0.0428         | 0.0567               | 0.0233               | 0.0087 j              | 0.0287                 | 0.0032 j    |
| SA-SB-31                   | 0.5                       | 1                       | 11/12/2019                   | <0.0116            | <0.0116        | <0.0116              | <0.0116              | <0.0116               | <0.0116                | <0.107      |
| SA-SB-32                   | 0.5                       | 1                       | 11/14/2019                   | 0.00083 j          | 0.00072 j      | 0.0011 j             | <0.0113              | <0.0113               | <0.0113                | <0.0042     |
| SA-SB-33                   | 0.5                       | 1                       | 11/14/2019                   | 0.0396 S1          | 0.0342 S1      | 0.054 S1             | 0.0177 S1            | 0.0077 S1             | 0.0236 S1              | <0.005      |
| SA-SB-34                   | 0.5                       | 1                       | 11/14/2019                   | 0.053              | 0.0423         | 0.0841               | 0.0256               | 0.012                 | 0.0359                 | <0.0055     |
| SA-SB-35                   | 0.5                       | 1                       | 11/13/2019                   | 0.114              | 0.0646         | 0.157                | 0.0491               | 0.0231                | 0.0621                 | <0.0051 R0  |
| SA-SB-36                   | 0.5                       | 1                       | 11/13/2019                   | 0.0027 j           | 0.003 j        | 0.0043 j             | 0.0017 j             | <0.0115               | 0.0022 j               | 0.00093 j   |
| SA-SB-37                   | 0.5                       | 1                       | 11/13/2019                   | 0.0099 j           | 0.0104 j       | 0.0141               | 0.0049 j             | 0.0021 j              | 0.0065 j               | 0.0012 j    |
| SA-SB-38                   | 0.5                       | 1                       | 11/12/2019                   | 0.706              | 0.675          | 0.928                | 0.335                | 0.151                 | 0.408                  | <0.0048     |
| SA-SB-39                   | 0.5                       | 1                       | 11/14/2019                   | 0.0027 j           | 0.0018 j       | 0.0023 j             | 0.0012 j             | <0.0115               | <0.0115                | <0.0046     |

TABLE 1  
SUMMARY OF SOIL ANALYTICAL RESULTS 2019  
FORMER BRAMLETTE MGP SITE  
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

| Analytical Parameter       |                           |                         |                              | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Dibenz(a,h)anthracene | Indeno(1,2,3-cd)pyrene | Naphthalene |
|----------------------------|---------------------------|-------------------------|------------------------------|--------------------|----------------|----------------------|----------------------|-----------------------|------------------------|-------------|
| Reporting Unit             |                           |                         |                              | mg / kg            | mg / kg        | mg / kg              | mg / kg              | mg / kg               | mg / kg                | mg / kg     |
| USEPA RSL Industrial Soil  |                           |                         |                              | 21                 | 2.1            | 21                   | 210                  | 2.1                   | 21                     | 17          |
| USEPA RSL Residential Soil |                           |                         |                              | 1.1                | 0.11           | 1.1                  | 11                   | 0.11                  | 1.1                    | 3.8         |
| Sample ID                  | Start Depth<br>(feet bls) | End Depth<br>(feet bls) | Sample<br>Collection<br>Date | Analytical Results |                |                      |                      |                       |                        |             |
| SA-SB-40                   | 0.5                       | 1                       | 11/14/2019                   | 0.376              | 0.354          | 0.442                | 0.184                | 0.0638                | 0.182                  | <0.0063     |
| SA-SB-41                   | 0.5                       | 1                       | 11/14/2019                   | 0.0023 j           | 0.0023 j       | 0.0025 j             | 0.003 j              | 0.0038 j              | 0.0033 j               | <0.0047     |
| SA-SB-42                   | 0.5                       | 1                       | 11/14/2019                   | 0.0557             | 0.0524         | 0.0736               | 0.0292               | 0.0104 j              | 0.0371                 | 0.0017 j B  |
| SA-SB-43                   | 0.5                       | 1                       | 11/13/2019                   | 0.0012 j           | 0.0012 j       | 0.0018 j             | 0.00063 j            | <0.012                | <0.012                 | <0.0045     |
| SA-SB-44                   | 0.5                       | 1                       | 11/14/2019                   | <0.0127            | <0.0127        | <0.0127              | <0.0127              | <0.0127               | <0.0127                | <0.0047     |
| SA-SB-45                   | 0.5                       | 1                       | 11/14/2019                   | 0.0211             | 0.0243         | 0.0288               | 0.014                | 0.0044 j              | 0.0141                 | 0.0092 j    |
| SA-SB-46                   | 0.5                       | 1                       | 11/14/2019                   | 6.47 S1            | 5.89 S1        | 7.7 S1               | 2.94 S1              | 1.08 S1               | 2.72 S1                | 0.0749 S1   |
| SA-SB-47                   | 0.5                       | 1                       | 11/14/2019                   | 0.041              | 0.0442         | 0.0559               | 0.0202               | 0.0083 j              | 0.0278                 | <0.0089     |
| SA-SB-01                   | 5.5                       | 6                       | 11/15/2019                   | <0.0123            | <0.0123        | <0.0123              | <0.0123              | <0.0123               | <0.0123                | <0.0063     |
| SA-SB-02                   | 5.5                       | 6                       | 11/12/2019                   | 0.0085 j           | 0.0066 j       | 0.0182               | 0.0099 j             | 0.0015 j              | 0.0047 j               | <0.0068     |
| SA-SB-03                   | 5.5                       | 6                       | 11/15/2019                   | 0.0215             | 0.0146         | 0.0279               | 0.0113 j             | 0.004 j               | 0.0114 j               | <0.006      |
| SA-SB-04                   | 5.5                       | 6                       | 11/13/2019                   | NA                 | NA             | NA                   | NA                   | NA                    | NA                     | <0.0044     |
| SA-SB-05                   | 5.5                       | 6                       | 11/12/2019                   | 0.0542             | 0.043          | 0.0771               | 0.0323               | 0.0124                | 0.0377                 | <0.0045     |
| SA-SB-06                   | 5.5                       | 6                       | 11/12/2019                   | 0.0459             | 0.0289         | 0.0567               | 0.02                 | 0.0077 j              | 0.0221                 | <0.0049     |
| SA-SB-07                   | 5.5                       | 6                       | 11/13/2019                   | 0.589              | 0.469          | 0.893                | 0.282                | 0.121                 | 0.349                  | <0.0045     |
| SA-SB-08                   | 5.5                       | 6                       | 11/13/2019                   | 0.418              | 0.311          | 0.538                | 0.191                | 0.0703                | 0.2                    | <0.0048     |
| SA-SB-09                   | 5.5                       | 6                       | 11/13/2019                   | <0.0118            | <0.0118        | <0.0118              | <0.0118              | <0.0118               | <0.0118                | 0.829       |
| SA-SB-10                   | 5.5                       | 6                       | 11/12/2019                   | 0.0754             | 0.072          | 0.133                | 0.0471               | 0.0212                | 0.0572                 | <0.004      |
| SA-SB-11                   | 5.5                       | 6                       | 11/12/2019                   | 0.0146             | 0.0109 j       | 0.0187               | 0.008 j              | 0.0027 j              | 0.0077 j               | <0.0044     |
| SA-SB-12                   | 5.5                       | 6                       | 11/14/2019                   | 0.0312             | 0.0226         | 0.0424               | 0.0146               | 0.0054 j              | 0.0151                 | 0.0661 j    |
| SA-SB-13                   | 5.5                       | 6                       | 11/13/2019                   | 0.368              | 0.309          | 0.451                | 0.188                | 0.0691                | 0.184                  | <0.0047     |
| SA-SB-14                   | 5.5                       | 6                       | 11/13/2019                   | 0.214              | 0.193          | 0.154                | 0.0754               | 0.0263 j              | 0.0711                 | 27.3 M1     |
| SA-SB-15                   | 5.5                       | 6                       | 11/12/2019                   | 0.185              | 0.144          | 0.189                | 0.064                | 0.0246                | 0.0743                 | <0.0047     |
| SA-SB-16                   | 5.5                       | 6                       | 11/12/2019                   | 0.0177             | 0.0184         | 0.0243               | 0.0103 j             | 0.0038 j              | 0.0117 j               | <0.0038     |
| SA-SB-17                   | 5.5                       | 6                       | 11/12/2019                   | 0.0038 j           | 0.0043 j       | 0.008 j              | 0.0075 j             | <0.0112               | 0.0027 j               | 0.0032 j    |
| SA-SB-18                   | 5.5                       | 6                       | 11/14/2019                   | 0.268              | 0.227          | 0.322                | 0.13                 | 0.0494                | 0.154                  | <0.0048     |
| SA-SB-19                   | 5.5                       | 6                       | 11/14/2019                   | 0.142 S1           | 0.125 S1       | 0.185 S1             | 0.0775 S1            | 0.0286 S1             | 0.087 S1               | <0.0049     |
| SA-SB-20                   | 5.5                       | 6                       | 11/13/2019                   | 0.0038 j           | 0.0039 j       | 0.0051 j             | 0.0022 j             | <0.0115               | 0.0021 j               | 0.0019 j    |
| SA-SB-21                   | 5.5                       | 6                       | 11/13/2019                   | 0.0402             | 0.034          | 0.0498               | 0.0218               | 0.0071 j              | 0.0226                 | <0.0033     |
| SA-SB-22                   | 5.5                       | 6                       | 11/13/2019                   | 0.0943             | 0.0864         | 0.0969               | 0.0341               | 0.0128                | 0.047                  | 0.0062 j    |
| SA-SB-23                   | 5.5                       | 6                       | 11/12/2019                   | <0.0118            | <0.0118        | <0.0118              | <0.0118              | <0.0118               | <0.0118                | <0.0052     |
| SA-SB-24                   | 5.5                       | 6                       | 11/12/2019                   | <0.0122            | <0.0122        | <0.0122              | <0.0122              | <0.0122               | <0.0122                | <0.0044     |
| SA-SB-25                   | 5.5                       | 6                       | 11/14/2019                   | 0.136              | 0.13           | 0.184                | 0.0583               | 0.0311                | 0.0973                 | 0.0023 j B  |
| SA-SB-26                   | 5.5                       | 6                       | 11/14/2019                   | 0.153              | 0.118          | 0.199                | 0.0694               | 0.0263                | 0.0791                 | <0.0043     |
| SA-SB-27                   | 5.5                       | 6                       | 11/13/2019                   | 0.109 M1           | 0.104 M1       | 0.143 M1             | 0.0737               | 0.0212 S1             | 0.0653 S1              | <0.0045 M1  |
| SA-SB-28                   | 5.5                       | 6                       | 11/13/2019                   | 0.0512             | 0.0421         | 0.058                | 0.024                | 0.0078 j              | 0.0237                 | 0.0047 j    |
| SA-SB-29                   | 5.5                       | 6                       | 11/13/2019                   | 0.0689             | 0.0809         | 0.1                  | 0.0456               | 0.0153                | 0.0495                 | 0.0073 j    |
| SA-SB-30                   | 5.5                       | 6                       | 11/13/2019                   | 0.004 j            | 0.0042 j       | 0.0051 j             | 0.0022 j             | <0.0125               | 0.0024 j               | 0.0013 j B  |
| SA-SB-31                   | 5.5                       | 6                       | 11/12/2019                   | <0.0126            | <0.0126        | <0.0126              | <0.0126              | <0.0126               | <0.0126                | <0.0048     |

TABLE 1  
SUMMARY OF SOIL ANALYTICAL RESULTS 2019  
FORMER BRAMLETTE MGP SITE  
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

| Analytical Parameter       |                           |                         |                              | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Dibenz(a,h)anthracene | Indeno(1,2,3-cd)pyrene | Naphthalene    |
|----------------------------|---------------------------|-------------------------|------------------------------|--------------------|----------------|----------------------|----------------------|-----------------------|------------------------|----------------|
| Reporting Unit             |                           |                         |                              | mg / kg            | mg / kg        | mg / kg              | mg / kg              | mg / kg               | mg / kg                | mg / kg        |
| USEPA RSL Industrial Soil  |                           |                         |                              | 21                 | 2.1            | 21                   | 210                  | 2.1                   | 21                     | 17             |
| USEPA RSL Residential Soil |                           |                         |                              | 1.1                | 0.11           | 1.1                  | 11                   | 0.11                  | 1.1                    | 3.8            |
| Sample ID                  | Start Depth<br>(feet bls) | End Depth<br>(feet bls) | Sample<br>Collection<br>Date | Analytical Results |                |                      |                      |                       |                        |                |
| SA-SB-32                   | 5.5                       | 6                       | 11/14/2019                   | 0.0376             | 0.0361         | 0.0467               | 0.017                | 0.0066 j              | 0.0196                 | 0.0051 j B     |
| SA-SB-33                   | 5.5                       | 6                       | 11/14/2019                   | 0.143 M1           | 0.108 M1       | 0.192 M1             | 0.0615               | 0.0271                | 0.0845                 | 0.116 M1       |
| SA-SB-34                   | 5.5                       | 6                       | 11/14/2019                   | 0.157              | 0.127          | 0.212                | 0.0779               | 0.0297                | 0.0828                 | <0.0045        |
| SA-SB-35                   | 5.5                       | 6                       | 11/13/2019                   | 0.0015 j           | 0.0014 j       | 0.0023 j             | 0.00073 j            | <0.0122               | <0.0122                | <0.004         |
| SA-SB-36                   | 5.5                       | 6                       | 11/13/2019                   | 0.0031 j           | 0.0028 j       | 0.0023 j             | 0.0043 j             | 0.0053 j              | 0.0033 j               | <0.0045        |
| SA-SB-37                   | 5.5                       | 6                       | 11/13/2019                   | <0.0124            | <0.0124        | <0.0124              | <0.0124              | <0.0124               | <0.0124                | <0.0049 R0     |
| SA-SB-38                   | 5.5                       | 6                       | 11/12/2019                   | 0.0011 j           | 0.0011 j       | 0.0011 j             | 0.0014 j             | 0.002 j               | 0.0017 j               | <0.0053        |
| SA-SB-39                   | 5.5                       | 6                       | 11/14/2019                   | <0.0121            | <0.0121        | <0.0121              | <0.0121              | <0.0121               | <0.0121                | 0.0058 j B     |
| SA-SB-40                   | 5.5                       | 6                       | 11/14/2019                   | 0.0068 j           | 0.0068 j       | 0.0077 j             | 0.003 j              | <0.0113               | 0.004 j                | 0.0034 j B     |
| SA-SB-41                   | 5.5                       | 6                       | 11/14/2019                   | 0.0068 j           | 0.0052 j       | 0.0087 j             | 0.0032 j             | <0.0116               | 0.0038 j               | 0.0082 j B     |
| SA-SB-42                   | 5.5                       | 6                       | 11/14/2019                   | <0.0112            | <0.0112        | <0.0112              | <0.0112              | <0.0112               | <0.0112                | 0.0061 j B     |
| SA-SB-43                   | 5.5                       | 6                       | 11/13/2019                   | 0.157              | 0.0586         | 0.0921               | 0.0331               | 0.0089 j              | 0.021                  | <0.0047        |
| SA-SB-44                   | 5.5                       | 6                       | 11/14/2019                   | 0.0857             | 0.0826         | 0.102                | 0.0347               | 0.0126                | 0.0445                 | 6.19           |
| SA-SB-45                   | 5.5                       | 6                       | 11/14/2019                   | <0.0115            | <0.0115        | <0.0115              | <0.0115              | <0.0115               | <0.0115                | <0.112         |
| SA-SB-46                   | 5.5                       | 6                       | 11/14/2019                   | 27.9 M1 R1         | 21.5 M1 R1     | 27.2 M1 R1           | 12.1 M1 R1           | 2.17 M1 R1            | 11 M1 R1               | 0.0057 j M1 R1 |
| SA-SB-47                   | 5.5                       | 6                       | 11/14/2019                   | 0.0023 j           | 0.0026 j       | 0.0046 j             | 0.0015 j             | <0.0123               | 0.0025 j               | 0.0028 j       |

Prepared by: KCS      Checked by: JPC

Notes:

  - Bold highlighted concentrations indicate that the compound was detected at a concentration greater than the USEPA Regional Screening Level Industrial limit.

  - Bold highlighted concentrations indicate that the compound was detected at a concentration greater than the USEPA Regional Screening Level Residential limit.

< - Concentration not detected at or greater than the adjusted reporting limit

B - Target analyte detected in method blank at or above the reporting limit. Target analyte concentration in sample is less than 10X the concentration in the method blank. Analyte concentration in sample could be due to blank contamination.

bls - below land surface

j - Estimated concentration greater than the adjusted method detection limit and less than the adjusted reporting limit.

M1 - Matrix spike recovery was high: the associated Laboratory Control Spike (LCS) was acceptable.

mg/kg - milligrams per kilogram

NA - Not analyzed

R0 - The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.

R1- Relative percent difference value was outside control limits.

RSL - Regional Screening Level

S1 - Data review findings indicate result may be biased; however, data is usable.

USEPA - United States Environmental Protection Agency

RSL - Regional Screening Level



TABLE 2  
SUMMARY OF SOIL ANALYTICAL RESULTS FOR PROPOSED LIMITED SOIL REMOVAL DELINEATION  
FORMER BRAMLETTE MGP SITE  
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

| Analytical Parameter     |             |           |                        | 1-Methylnaphthalene | 2-Methylnaphthalene | Acenaphthene   | Acenaphthylene | Anthracene     | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Chrysene       |                |
|--------------------------|-------------|-----------|------------------------|---------------------|---------------------|----------------|----------------|----------------|--------------------|----------------|----------------------|----------------------|----------------------|----------------|----------------|
| Reporting Unit           |             |           |                        | mg / kg             | mg / kg             | mg / kg        | mg / kg        | mg / kg        | mg / kg            | mg / kg        | mg / kg              | mg / kg              | mg / kg              | mg / kg        |                |
| EPA RSL Industrial Soil  |             |           |                        | 73                  | 3,000               | 45,000         | NE             | 230,000        | 21                 | 2.1            | 21                   | NE                   | 210                  | 2,100          |                |
| EPA RSL Residential Soil |             |           |                        | 18                  | 240                 | 3,600          | NE             | 18,000         | 1.1                | 0.11           | 1.1                  | NE                   | 11                   | 110            |                |
| Sample ID                | Start Depth | End Depth | Sample Collection Date | Analytical Results  |                     |                |                |                |                    |                |                      |                      |                      |                |                |
| SA-SB-46                 | 0.5         | 1         | 11/14/2019             | 1.02 S1             | 1.25 S1             | 1.28 S1        | 1.45 S1        | 3.25 S1        | 6.47 S1            | 5.89 S1        | --                   | 7.7 S1               | 3 S1                 | 2.94 S1        | 6.23 S1        |
| RI-SB-13                 | 0.5         | 1         | 3/15/2021              | < 0.381             | < 0.381             | < 0.381        | < 0.381        | < 0.381        | < 0.381            | < 0.012        | a.                   | < 0.381              | < 0.381              | < 0.381        | < 0.381        |
| RI-SB-14                 | 0.5         | 1         | 3/15/2021              | < 0.368             | < 0.368             | < 0.368        | < 0.368        | < 0.368        | < 0.368            | 0.11           | a.                   | < 0.368              | < 0.368              | < 0.368        | < 0.368        |
| RI-SB-15                 | 0.5         | 1         | 3/15/2021              | 0.458               | 0.52                | 0.214 j        | 0.169 j        | 0.376          | 0.801              | 4.5            | a.                   | 0.944                | 0.436                | 0.398          | 0.822          |
| RI-SB-16                 | 0.5         | 1         | 3/15/2021              | < 0.389             | < 0.389             | < 0.389        | < 0.389        | < 0.389        | < 0.389            | < 0.011        | a.                   | < 0.389              | < 0.389              | < 0.389        | < 0.389        |
| RI-SB-17                 | 0.5         | 1         | 3/15/2021              | < 0.414             | < 0.414             | < 0.414        | < 0.414        | < 0.414        | < 0.414            | < 0.012        | a.                   | < 0.414              | < 0.414              | < 0.414        | < 0.414        |
| RI-SB-18                 | 0.5         | 1         | 3/15/2021              | < 0.411             | < 0.411             | < 0.411        | < 0.411        | < 0.411        | < 0.411            | < 0.012        | a.                   | < 0.411              | < 0.411              | < 0.411        | < 0.411        |
| RI-SB-19                 | 0.5         | 1         | 3/15/2021              | < 0.429             | < 0.429             | < 0.429        | < 0.429        | < 0.429        | < 0.429            | 0.21           | a.                   | < 0.429              | < 0.429              | < 0.429        | < 0.429        |
| RI-SB-20                 | 0.5         | 1         | 3/15/2021              | < 0.383             | < 0.383             | < 0.383        | < 0.383        | < 0.383        | < 0.383            | < 0.011        | a.                   | < 0.383              | < 0.383              | < 0.383        | < 0.383        |
| RI-SB-21                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | < 0.012        | --                   | NS                   | NS                   | NS             | NS             |
| RI-SB-22                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | 0.086          | --                   | NS                   | NS                   | NS             | NS             |
| RI-SB-23                 | 0.5         | 1         | 3/15/2021              | < 0.385             | < 0.385             | < 0.385        | < 0.385        | < 0.385        | < 0.385            | 0.59           | a.                   | < 0.385              | < 0.385 ,v1          | < 0.385        | < 0.385        |
| RI-SB-24                 | 0.5         | 1         | 3/15/2021              | < 0.388             | < 0.388             | < 0.388        | < 0.388        | < 0.388        | < 0.388            | < 0.011        | a.                   | < 0.388              | < 0.388 ,v1          | < 0.388        | < 0.388        |
| RI-SB-25                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | 0.044          | --                   | NS                   | NS                   | NS             | NS             |
| RI-SB-26                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | < 0.014        | --                   | NS                   | NS                   | NS             | NS             |
| RI-SB-27                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | 0.05           | --                   | NS                   | NS                   | NS             | NS             |
| RI-SB-28                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | 0.13           | --                   | NS                   | NS                   | NS             | NS             |
| RI-SB-29                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | 0.042          | --                   | NS                   | NS                   | NS             | NS             |
| RI-SB-30                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | < 0.013        | --                   | NS                   | NS                   | NS             | NS             |
| RI-SB-31                 | 0.5         | 1         | 3/17/2021              | < 0.382 ,H3,R0      | < 0.382 ,H3,R0      | < 0.382 ,H3,R0 | < 0.382 ,H3,R0 | < 0.382 ,H3,R0 | < 0.382 ,H3,R0     | 0.21           | a.                   | < 0.382 ,H3,R0       | < 0.382 ,H3,R0       | < 0.382 ,H3,R0 | < 0.382 ,H3,R0 |
| RI-SB-32                 | 0.5         | 1         | 3/17/2021              | < 0.391 ,H3,R0      | < 0.391 ,H3,R0      | < 0.391 ,H3,R0 | < 0.391 ,H3,R0 | < 0.391 ,H3,R0 | < 0.391 ,H3,R0     | 0.025          | a.                   | < 0.391 ,H3,R0       | < 0.391 ,H3,R0       | < 0.391 ,H3,R0 | < 0.391 ,H3,R0 |
| RI-SB-33                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | 0.05           | --                   | NS                   | NS                   | NS             | NS             |
| RI-SB-34                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | < 0.015        | --                   | NS                   | NS                   | NS             | NS             |
| RI-SB-35                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | < 0.013        | --                   | NS                   | NS                   | NS             | NS             |
| RI-SB-36                 | 0.5         | 1         | 6/30/2021              | NS                  | NS                  | NS             | NS             | NS             | NS                 | 0.018          | --                   | NS                   | NS                   | NS             | NS             |
| SA-SB-46                 | 5.5         | 6         | 11/14/2019             | 1.17 M1 R1          | 1.45 M1 R1          | 1.15 M1        | 4.38 M1 R1     | 21.1 M1 R1     | 27.9 M1 R1         | 21.5 M1 R1     | --                   | 27.2 M1 R1           | 12.3 M1 R1           | 12.1 M1 R1     | 24 M1 R1       |
| RI-SB-13                 | 5.5         | 6         | 3/15/2021              | < 0.557             | < 0.557             | < 0.557        | < 0.557        | < 0.557        | 0.291 j            | 0.254 j        | --                   | 0.33 j               | < 0.557              | < 0.557        | 0.271 j        |
| RI-SB-14                 | 5.5         | 6         | 3/15/2021              | < 0.493             | < 0.493             | < 0.493        | < 0.493        | < 0.493        | 0.269 j            | 0.231 j        | --                   | 0.333 j              | < 0.493              | < 0.493        | 0.255 j        |
| RI-SB-15                 | 5.5         | 6         | 3/15/2021              | < 0.517             | < 0.517             | 0.269 j        | 0.185 j        | 0.716          | 1.64               | 1.44           | --                   | 2.02                 | 0.975                | 0.791          | 1.53           |
| RI-SB-16                 | 5.5         | 6         | 3/15/2021              | 1.49                | 0.695               | 7.71 E         | < 0.516        | 17.3           | 23.8               | 15.9           | --                   | 21.3                 | 9.63                 | 8.16           | 23             |
| RI-SB-17                 | 5.5         | 6         | 3/15/2021              | < 0.423             | < 0.423             | < 0.423        | < 0.423        | < 0.423        | < 0.423            | < 0.423        | --                   | < 0.423              | < 0.423              | < 0.423        | < 0.423        |
| RI-SB-18                 | 5.5         | 6         | 3/15/2021              | < 0.429             | < 0.429             | < 0.429        | < 0.429        | < 0.429        | < 0.429            | < 0.429        | --                   | < 0.429              | < 0.429              | < 0.429        | < 0.429        |
| RI-SB-19                 | 5.5         | 6         | 3/15/2021              | < 0.42              | < 0.42              | < 0.42         | < 0.42         | < 0.42         | < 0.42             | < 0.42         | --                   | < 0.42               | < 0.42               | < 0.42         | < 0.42         |
| RI-SB-20                 | 5.5         | 6         | 3/15/2021              | < 0.408             | < 0.408             | < 0.408        | < 0.408        | < 0.408        | < 0.408            | < 0.408        | --                   | < 0.408              | < 0.408              | < 0.408        | < 0.408        |
| RI-SB-23                 | 5.5         | 6         | 3/15/2021              | < 0.416             | < 0.416             | < 0.416        | < 0.416        | < 0.416        | < 0.416            | < 0.416        | --                   | < 0.416              | < 0.416 ,v1          | < 0.416        | < 0.416        |
| RI-SB-24                 | 5.5         | 6         | 3/15/2021              | < 0.492             | < 0.492             | < 0.492        | 0.194 j        | < 0.492        | 0.172 j            | 0.184 j        | --                   | 0.306 j              | 0.224 j,v1           | < 0.492        | 0.199 j        |
| RI-SB-31                 | 5.5         | 6         | 3/17/2021              | < 0.445 ,H3,R0      | < 0.445 ,H3,R0      | < 0.445 ,H3,R0 | < 0.445 ,H3,R0 | < 0.445 ,H3,R0 | < 0.445 ,H3,R0     | 0.132 H3,R0    | --                   | < 0.445 ,H3,R0       | < 0.445 ,H3,R0       | < 0.445 ,H3,R0 | < 0.445 ,H3,R0 |
| RI-SB-32                 | 5.5         | 6         | 3/17/2021              | 0.304 j,H3,R0       | 0.319 j,H3,R0       | 0.219 j,H3,R0  | < 0.402 ,H3,R0 | < 0.402 ,H3,R0 | 0.525 H3,R0        | 0.0117 j,H3,R0 | --                   | 0.999 H3,R0          | 0.782 H3,R0          | 0.4 j,H3,R0    | 0.413 H3,R0    |

**Notes:**  

- Bold highlighted concentrations indicate that the compound was detected at a concentration greater than the USEPA Regional Screening Level Industrial limit.  
 - Bold highlighted concentrations indicate that the compound was detected at a concentration greater than the USEPA Regional Screening Level Residential limit.

a. - Analytical result from 6/30/2021 sampling event.  
< - Concentration not detected at or greater than the adjusted reporting limit.  
-- - No value or indicator  
C8 - Result may be biased high due to carryover from previously analyzed sample.  
E - Analyte concentration exceeded the calibration range. The reported result is estimated.  
H3 - Sample was received or analysis requested beyond the recognized method holding time.  
j - Estimated concentration greater than the adjusted method detection limit and less than the adjusted reporting limit.  
M1 - Matrix spike recovery was high: the associated Laboratory Control Spike (LCS) was acceptable.  
mg/kg - milligrams per kilogram  
NE - No screening level established at this time. A site-specific risk-based screening level may be established as part of the risk assessment process outlined in Section 5.0 of the RIWP-A.  
NS - not sampled  
R0 - The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.  
R1 - Relative percent difference (RPD) value was outside control limits.  
RS - The RPD value in one of the constituent analytes was outside the control limits.  
RSL - Regional Screening Level  
S1 - Data review findings indicate result may be biased; however, data is usable.  
USEPA - United States Environmental Protection Agency  
v1 - The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

TABLE 2  
SUMMARY OF SOIL ANALYTICAL RESULTS FOR PROPOSED LIMITED SOIL REMOVAL DELINEATION  
FORMER BRAMLETTE MGP SITE  
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

| Analytical Parameter     |             |           |                        | Dibenz(a,h)anthracene |    | Fluoranthene   | Fluorene       | Indeno(1,2,3-cd)pyrene | Naphthalene    | Phenanthrene   | Pyrene         | Ethylbenzene    | m,p-Xylenes     | Toluene        | Xylene (Total) | Xylene, o-      | Benzene         |
|--------------------------|-------------|-----------|------------------------|-----------------------|----|----------------|----------------|------------------------|----------------|----------------|----------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|
| Reporting Unit           |             |           |                        | mg / kg               |    | mg / kg        | mg / kg        | mg / kg                | mg / kg        | mg / kg        | mg / kg        | mg / kg         | mg / kg         | mg / kg        | mg / kg        | mg / kg         | mg / kg         |
| EPA RSL Industrial Soil  |             |           |                        | 2.1                   |    | 30,000         | 30,000         | 21                     | 17             | NE             | 23,000         | 25              | 2,400           | 47,000         | 2,500          | 2,800           | 5.1             |
| EPA RSL Residential Soil |             |           |                        | 0.11                  |    | 2,400          | 2,400          | 1.1                    | 3.8            | NE             | 1,800          | 5.8             | 560             | 4,900          | 580            | 650             | 1.2             |
| Sample ID                | Start Depth | End Depth | Sample Collection Date | Analytical Results    |    |                |                |                        |                |                |                |                 |                 |                |                |                 |                 |
| SA-SB-46                 | 0.5         | 1         | 11/14/2019             | 1.08 S1               | -- | 11 S1          | 1.86           | 2.72 S1                | 0.0749 S1      | 9.41 S1        | 9.67 S1        | < 0.0062        | NA              | < 0.0062       | < 0.0123       | < 0.0062        | < 0.0062        |
| RI-SB-13                 | 0.5         | 1         | 3/15/2021              | < 0.012               | a. | < 0.381        | < 0.381        | < 0.381                | < 0.0063       | < 0.381        | < 0.381        | < 0.0063        | < 0.0125        | < 0.0063       | < 0.0125       | < 0.0063        | < 0.0063        |
| RI-SB-14                 | 0.5         | 1         | 3/15/2021              | 0.027                 | a. | < 0.368        | < 0.368        | < 0.368                | 0.0297         | < 0.368        | < 0.368        | < 0.0070        | 0.0205          | 0.0128         | 0.0325         | 0.012           | < 0.0070        |
| RI-SB-15                 | 0.5         | 1         | 3/15/2021              | 0.64                  | a. | 1.37           | 0.289 j        | 0.37 j                 | 0.372          | 1.47           | 1.4            | 0.0234          | 0.0498          | 0.0646         | 0.0704         | 0.0206          | 0.0418          |
| RI-SB-16                 | 0.5         | 1         | 3/15/2021              | < 0.011               | a. | < 0.389        | < 0.389        | < 0.389                | 0.0078         | < 0.389        | < 0.389        | < 0.0062        | 0.0105 j        | 0.0097         | 0.0105 j       | < 0.0062        | < 0.0062        |
| RI-SB-17                 | 0.5         | 1         | 3/15/2021              | < 0.012               | a. | < 0.414        | < 0.414        | < 0.414                | 0.0080 j,C8    | < 0.414        | < 0.414        | < 0.0087        | 0.0114 j        | 0.0127         | 0.0114 j       | < 0.0087        | < 0.0087        |
| RI-SB-18                 | 0.5         | 1         | 3/15/2021              | < 0.012               | a. | < 0.411        | < 0.411        | < 0.411                | < 0.0074       | < 0.411        | < 0.411        | < 0.0074        | < 0.0148        | < 0.0074       | < 0.0148       | < 0.0074        | < 0.0074        |
| RI-SB-19                 | 0.5         | 1         | 3/15/2021              | 0.032                 | a. | < 0.429        | < 0.429        | < 0.429                | 0.0064 j       | < 0.429        | < 0.429        | < 0.0073        | < 0.0146        | 0.0057 j       | < 0.0146       | < 0.0073        | < 0.0073        |
| RI-SB-20                 | 0.5         | 1         | 3/15/2021              | < 0.011               | a. | < 0.383        | < 0.383        | < 0.383                | < 0.0066       | < 0.383        | < 0.383        | < 0.0066        | < 0.0131        | 0.0141         | < 0.0131       | < 0.0066        | < 0.0066        |
| RI-SB-21                 | 0.5         | 1         | 6/30/2021              | < 0.012               | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| RI-SB-22                 | 0.5         | 1         | 6/30/2021              | 0.015                 | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| RI-SB-23                 | 0.5         | 1         | 3/15/2021              | 0.08                  | a. | < 0.385        | < 0.385        | < 0.385                | < 0.0071       | < 0.385        | < 0.385        | < 0.0071        | < 0.0141        | < 0.0071       | < 0.0141       | < 0.0071        | < 0.0071        |
| RI-SB-24                 | 0.5         | 1         | 3/15/2021              | < 0.011               | a. | < 0.388        | < 0.388        | < 0.388                | 0.0077         | < 0.388        | < 0.388        | < 0.0071        | < 0.0141        | 0.0046 j       | < 0.0141       | < 0.0071        | < 0.0071        |
| RI-SB-25                 | 0.5         | 1         | 6/30/2021              | < 0.015               | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| RI-SB-26                 | 0.5         | 1         | 6/30/2021              | < 0.014               | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| RI-SB-27                 | 0.5         | 1         | 6/30/2021              | < 0.012               | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| RI-SB-28                 | 0.5         | 1         | 6/30/2021              | 0.026                 | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| RI-SB-29                 | 0.5         | 1         | 6/30/2021              | < 0.012               | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| RI-SB-30                 | 0.5         | 1         | 6/30/2021              | < 0.013               | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| RI-SB-31                 | 0.5         | 1         | 3/17/2021              | 0.034                 | a. | < 0.382 ,H3,R0 | < 0.382 ,H3,R0 | < 0.382 ,H3,R0         | 0.0149 H3,R0   | 0.177 j,H3,R0  | < 0.382 ,H3,R0 | < 0.0057 ,H3,R0 | < 0.0114 ,H3,R0 | 0.0086 H3,R0   | < 0.0114       | < 0.0057 ,H3,R0 | < 0.0057 ,H3,R0 |
| RI-SB-32                 | 0.5         | 1         | 3/17/2021              | < 0.012               | a. | < 0.391 ,H3,R0 | < 0.391 ,H3,R0 | < 0.391 ,H3,R0         | 0.0083 H3,R0   | < 0.391 ,H3,R0 | < 0.391 ,H3,R0 | < 0.0058 ,H3,R0 | 0.0068 j,H3,R0  | 0.0046 j,H3,R0 | 0.0101 j       | 0.0033 j,H3,R0  | < 0.0058 ,H3,R0 |
| RI-SB-33                 | 0.5         | 1         | 6/30/2021              | < 0.012               | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| RI-SB-34                 | 0.5         | 1         | 6/30/2021              | < 0.015               | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| RI-SB-35                 | 0.5         | 1         | 6/30/2021              | < 0.013               | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| RI-SB-36                 | 0.5         | 1         | 6/30/2021              | < 0.011               | -- | NS             | NS             | NS                     | NS             | NS             | NS             | NS              | NS              | NS             | NS             | NS              | NS              |
| SA-SB-46                 | 5.5         | 6         | 11/14/2019             | 2.17 M1 R1            | -- | 63.3 M1 R1     | 8.84 M1        | 11 M1 R1               | 0.0057 j M1 R1 | 77.7 M1 R1     | 50.3 M1 R1     | < 0.0061 R1     | NA              | < 0.0061 R1    | < 0.0122 RS    | < 0.0061 R1     | < 0.0061 R1     |
| RI-SB-13                 | 5.5         | 6         | 3/15/2021              | < 0.557               | -- | 0.574          | < 0.557        | < 0.557                | 0.315          | 0.219 j        | 0.556 j        | 0.0406          | 0.0906          | 0.0325         | 0.153          | 0.0623          | < 0.0193        |
| RI-SB-14                 | 5.5         | 6         | 3/15/2021              | < 0.493               | -- | 0.598          | < 0.493        | < 0.493                | 0.203          | 0.406 j        | 0.505          | 0.0328          | 0.0437          | 0.02           | 0.0741         | 0.0304          | < 0.0128        |
| RI-SB-15                 | 5.5         | 6         | 3/15/2021              | < 0.517               | -- | 3.92           | 0.329 j        | 0.8                    | 0.06           | 2.73           | 3.54           | < 0.01          | 0.0157 j        | 0.0051 j       | 0.0157 j       | < 0.01          | < 0.01          |
| RI-SB-16                 | 5.5         | 6         | 3/15/2021              | 2.92                  | -- | 58.5           | 10.2 E         | 9.2                    | 1.41           | 55.4           | 48.1           | 0.0108          | 0.0695          | 0.0172         | 0.131          | 0.0611          | < 0.0107        |
| RI-SB-17                 | 5.5         | 6         | 3/15/2021              | < 0.423               | -- | < 0.423        | < 0.423        | < 0.423                | < 0.0064       | < 0.423        | < 0.423        | < 0.0064        | < 0.0129        | 0.0050 j       | < 0.0129       | < 0.0064        | < 0.0064        |
| RI-SB-18                 | 5.5         | 6         | 3/15/2021              | < 0.429               | -- | < 0.429        | < 0.429        | < 0.429                | < 0.0091       | < 0.429        | < 0.429        | < 0.0091        | < 0.0183        | < 0.0091       | < 0.0183       | < 0.0091        | < 0.0091        |
| RI-SB-19                 | 5.5         | 6         | 3/15/2021              | < 0.42                | -- | < 0.42         | < 0.42         | < 0.42                 | < 0.0169       | < 0.42         | < 0.42         | 0.0092 j        | 0.0659          | < 0.0169       | 0.0899         | 0.024           | < 0.0169        |
| RI-SB-20                 | 5.5         | 6         | 3/15/2021              | < 0.408               | -- | < 0.408        | < 0.408        | < 0.408                | < 0.0063       | < 0.408        | < 0.408        | < 0.0063        | < 0.0126        | 0.0050 j       | < 0.0126       | < 0.0063        | < 0.0063        |
| RI-SB-23                 | 5.5         | 6         | 3/15/2021              | < 0.416               | -- | < 0.416        | < 0.416        | < 0.416                | 0.021          | < 0.416        | < 0.416        | 0.0054 j        | < 0.0176        | 0.0081 j       | < 0.0176       | < 0.0088        | < 0.0088        |
| RI-SB-24                 | 5.5         | 6         | 3/15/2021              | < 0.492               | -- | 0.267 j        | < 0.492        | 0.209 j                | 1.32           | < 0.492        | 0.261 j        | 0.019           | 0.0942          | 0.0241         | 0.174          | 0.0801          | 0.0057 j        |
| RI-SB-31                 | 5.5         | 6         | 3/17/2021              | < 0.445 ,H3,R0        | -- | < 0.445 ,H3,R0 | < 0.445 ,H3,R0 | < 0.445 ,H3,R0         | 0.959 H3,R0    | < 0.445 ,H3,R0 | < 0.445 ,H3,R0 | 0.103 H3,R0     | 0.396 H3,R0     | 0.214 H3,R0    | 0.632          | 0.237 H3,R0     | 0.0311 H3,R0    |
| RI-SB-32                 | 5.5         | 6         | 3/17/2021              | < 0.402 ,H3,R0        | -- | 0.225 j,H3,R0  | 0.169 j,H3,R0  | 0.717 H3,R0            | 0.0183 H3,R0   | 0.398 j,H3,R0  | 0.294 j,H3,R0  | 0.0057 j,H3,R0  | 0.0109 j,H3,R0  | 0.0051 j,H3,R0 | 0.0224         | 0.0115 H3,R0    | < 0.0058 ,H3,R0 |

**Notes:**  
 - Bold highlighted concentrations indicate that the compound was detected at a concentration greater than the USEPA Regional Screening Level Industrial limit.  
 - Bold highlighted concentrations indicate that the compound was detected at a concentration greater than the USEPA Regional Screening Level Residential limit.  
a. - Analytical result from 6/30/2021 sampling event.  
< - Concentration not detected at or greater than the adjusted reporting limit.  
-- - No value or indicator  
C8 - Result may be biased high due to carryover from previously analyzed sample.  
E - Analyte concentration exceeded the calibration range. The reported result is estimated.  
H3 - Sample was received or analysis requested beyond the recognized method holding time.  
j - Estimated concentration greater than the adjusted method detection limit and less than the adjusted reporting limit.  
M1 - Matrix spike recovery was high: the associated Laboratory Control Spike (LCS) was acceptable.  
mg/kg - milligrams per kilogram  
NE - No screening level established at this time. A site-specific risk-based screening level may be established as part of the risk assessment process outlined in Section 5.0 of the RIWP-A.  
NS - not sampled  
R0 - The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.  
R1 - Relative percent difference (RPD) value was outside control limits.  
RS - The RPD value in one of the constituent analytes was outside the control limits.  
RSL - Regional Screening Level  
S1 - Data review findings indicate result may be biased; however, data is usable.  
USEPA - United States Environmental Protection Agency  
v1 - The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

TABLE 2  
SUMMARY OF SOIL ANALYTICAL RESULTS FOR PROPOSED LIMITED SOIL REMOVAL DELINEATION  
FORMER BRAMLETTE MGP SITE  
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

| Analytical Parameter     |             |           |                        | p-Isopropyltoluene | Styrene         | 1,2,4-Trimethylbenzene | 1,4-Dichlorobenzene | 2-Butanone (MEK) | Acetone        | Chlorobenzene   | Dibenzofuran   | Isopropylbenzene (Cumene) | n-Propylbenzene | 1,3,5-Trimethylbenzene |
|--------------------------|-------------|-----------|------------------------|--------------------|-----------------|------------------------|---------------------|------------------|----------------|-----------------|----------------|---------------------------|-----------------|------------------------|
| Reporting Unit           |             |           |                        | mg / kg            | mg / kg         | mg / kg                | mg / kg             | mg / kg          | mg / kg        | mg / kg         | mg / kg        | mg / kg                   | mg / kg         | mg / kg                |
| EPA RSL Industrial Soil  |             |           |                        | NE                 | 35,000          | 1,800                  | 11                  | 190,000          | 670,000        | 1,300           | 1,000          | 9,900                     | 24,000          | 1500                   |
| EPA RSL Residential Soil |             |           |                        | NE                 | 6,000           | 300                    | 2.6                 | 27,000           | 61,000         | 280             | 73             | 1,900                     | 3,800           | 270                    |
| Sample ID                | Start Depth | End Depth | Sample Collection Date | Analytical Results |                 |                        |                     |                  |                |                 |                |                           |                 |                        |
| SA-SB-46                 | 0.5         | 1         | 11/14/2019             | < 0.0062           | < 0.0062        | < 0.0062               | < 0.0062            | < 0.123          | < 0.123        | < 0.0062        | < 3.83         | < 0.0062                  | < 0.0062        | < 0.0062               |
| RI-SB-13                 | 0.5         | 1         | 3/15/2021              | < 0.0063           | < 0.0063        | < 0.0063               | < 0.0063            | < 0.125          | < 0.125        | < 0.0063        | < 0.381        | < 0.0063                  | < 0.0063        | < 0.0063               |
| RI-SB-14                 | 0.5         | 1         | 3/15/2021              | < 0.0070           | < 0.0070        | 0.011                  | < 0.0070            | < 0.139          | < 0.139        | < 0.0070        | < 0.368        | < 0.0070                  | < 0.0070        | < 0.0070               |
| RI-SB-15                 | 0.5         | 1         | 3/15/2021              | 0.0096             | 0.0038 j        | 0.0192                 | < 0.0063            | < 0.125          | < 0.125        | 0.007           | 0.26 j         | 0.0057 j                  | < 0.0063        | 0.0068                 |
| RI-SB-16                 | 0.5         | 1         | 3/15/2021              | < 0.0062           | < 0.0062        | 0.0034 j               | < 0.0062            | < 0.124          | < 0.124        | < 0.0062        | < 0.389        | < 0.0062                  | < 0.0062        | < 0.0062               |
| RI-SB-17                 | 0.5         | 1         | 3/15/2021              | < 0.0087           | < 0.0087        | < 0.0087               | < 0.0087            | < 0.174          | < 0.174        | < 0.0087        | < 0.414        | < 0.0087                  | < 0.0087        | < 0.0087               |
| RI-SB-18                 | 0.5         | 1         | 3/15/2021              | < 0.0074           | < 0.0074        | < 0.0074               | < 0.0074            | < 0.148          | < 0.148        | < 0.0074        | < 0.411        | < 0.0074                  | < 0.0074        | < 0.0074               |
| RI-SB-19                 | 0.5         | 1         | 3/15/2021              | < 0.0073           | < 0.0073        | < 0.0073               | < 0.0073            | 0.0476 j         | 0.0973 j       | < 0.0073        | < 0.429        | < 0.0073                  | < 0.0073        | < 0.0073               |
| RI-SB-20                 | 0.5         | 1         | 3/15/2021              | < 0.0066           | < 0.0066        | < 0.0066               | < 0.0066            | < 0.131          | < 0.131        | < 0.0066        | < 0.383        | < 0.0066                  | < 0.0066        | < 0.0066               |
| RI-SB-21                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| RI-SB-22                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| RI-SB-23                 | 0.5         | 1         | 3/15/2021              | < 0.0071           | < 0.0071        | < 0.0071               | < 0.0071            | < 0.141          | < 0.141        | < 0.0071        | < 0.385        | < 0.0071                  | < 0.0071        | < 0.0071               |
| RI-SB-24                 | 0.5         | 1         | 3/15/2021              | < 0.0071           | < 0.0071        | < 0.0071               | < 0.0071            | < 0.141          | < 0.141        | < 0.0071        | < 0.388        | < 0.0071                  | < 0.0071        | < 0.0071               |
| RI-SB-25                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| RI-SB-26                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| RI-SB-27                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| RI-SB-28                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| RI-SB-29                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| RI-SB-30                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| RI-SB-31                 | 0.5         | 1         | 3/17/2021              | 0.0071 H3,R0       | 0.192 H3,R0     | < 0.0057 ,H3,R0        | < 0.0057 ,H3,R0     | < 0.114 ,H3,R0   | 0.0612 j,H3,R0 | < 0.0057 ,H3,R0 | < 0.382 ,H3,R0 | < 0.0057 ,H3,R0           | < 0.0057 ,H3,R0 | < 0.0057 ,H3,R0        |
| RI-SB-32                 | 0.5         | 1         | 3/17/2021              | 0.0252 H3,R0       | < 0.0058 ,H3,R0 | 0.0118 H3,R0           | < 0.0058 ,H3,R0     | < 0.116 ,H3,R0   | < 0.116 ,H3,R0 | < 0.0058 ,H3,R0 | < 0.391 ,H3,R0 | < 0.0058 ,H3,R0           | < 0.0058 ,H3,R0 | < 0.0058 ,H3,R0        |
| RI-SB-33                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| RI-SB-34                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| RI-SB-35                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| RI-SB-36                 | 0.5         | 1         | 6/30/2021              | NS                 | NS              | NS                     | NS                  | NS               | NS             | NS              | NS             | NS                        | NS              | NS                     |
| SA-SB-46                 | 5.5         | 6         | 11/14/2019             | 0.0023 j M1 R1     | < 0.0061 M1 R1  | < 0.0061 R1            | < 0.0061            | < 0.122          | 0.0768 j M1    | < 0.0061 R1     | < 2.25         | < 0.0061 R1               | < 0.0061 R1     | < 0.0061 R1            |
| RI-SB-13                 | 5.5         | 6         | 3/15/2021              | 0.0541             | < 0.0193        | 0.0667                 | < 0.0193            | 0.0975 j         | 0.139 j        | 0.0119 j        | < 0.557        | 0.0952                    | < 0.0193        | 0.0249                 |
| RI-SB-14                 | 5.5         | 6         | 3/15/2021              | 0.0704             | < 0.0128        | 0.0334                 | 0.0065 j            | 0.0810 j         | 0.164 j        | 0.0208          | < 0.493        | 0.0978                    | < 0.0128        | < 0.0128               |
| RI-SB-15                 | 5.5         | 6         | 3/15/2021              | 0.0343             | < 0.01          | 0.013                  | < 0.01              | < 0.199          | < 0.199        | 0.0068 j        | < 0.517        | 0.0206                    | < 0.01          | < 0.01                 |
| RI-SB-16                 | 5.5         | 6         | 3/15/2021              | 0.0569             | 0.0058 j        | 0.107                  | 0.0122              | 0.0746 j         | 0.0835 j       | 0.0402          | 4.16           | 0.173                     | < 0.0107        | 0.043                  |
| RI-SB-17                 | 5.5         | 6         | 3/15/2021              | < 0.0064           | < 0.0064        | < 0.0064               | < 0.0064            | < 0.129          | < 0.129        | < 0.0064        | < 0.423        | < 0.0064                  | < 0.0064        | < 0.0064               |
| RI-SB-18                 | 5.5         | 6         | 3/15/2021              | < 0.0091           | < 0.0091        | < 0.0091               | < 0.0091            | < 0.183          | < 0.183        | < 0.0091        | < 0.429        | < 0.0091                  | < 0.0091        | < 0.0091               |
| RI-SB-19                 | 5.5         | 6         | 3/15/2021              | < 0.0169           | < 0.0169        | < 0.0169               | < 0.0169            | < 0.337          | < 0.337        | < 0.0169        | < 0.42         | < 0.0169                  | < 0.0169        | < 0.0169               |
| RI-SB-20                 | 5.5         | 6         | 3/15/2021              | < 0.0063           | < 0.0063        | < 0.0063               | < 0.0063            | < 0.126          | < 0.126        | < 0.0063        | < 0.408        | < 0.0063                  | < 0.0063        | < 0.0063               |
| RI-SB-23                 | 5.5         | 6         | 3/15/2021              | < 0.0088           | < 0.0088        | < 0.0088               | < 0.0088            | < 0.176          | < 0.176        | < 0.0088        | < 0.416        | < 0.0088                  | < 0.0088        | < 0.0088               |
| RI-SB-24                 | 5.5         | 6         | 3/15/2021              | < 0.0111           | < 0.0111        | 0.0693                 | < 0.0111            | 0.117 j          | 0.273          | 0.0172          | < 0.492        | 0.254                     | 0.0161          | 0.0299                 |
| RI-SB-31                 | 5.5         | 6         | 3/17/2021              | 0.0981 H3,R0       | < 0.0094 ,H3,R0 | 0.207 H3,R0            | 0.0060 j,H3,R0      | 0.0640 j,H3,R0   | 0.185 j,H3,R0  | 0.0300 H3,R0    | < 0.445 ,H3,R0 | 0.193 H3,R0               | 0.0315 H3,R0    | 0.0827 H3,R0           |
| RI-SB-32                 | 5.5         | 6         | 3/17/2021              | 0.0321 H3,R0       | < 0.0058 ,H3,R0 | 0.0224 H3,R0           | < 0.0058 ,H3,R0     | < 0.116 ,H3,R0   | 0.0625 j,H3,R0 | < 0.0058 ,H3,R0 | < 0.402 ,H3,R0 | < 0.0058 ,H3,R0           | 0.178 H3,R0     | < 0.0058 ,H3,R0        |

Prepared by: KCS    Checked by: JPC

**Notes:**

- Bold highlighted concentrations indicate that the compound was detected at a concentration greater than the USEPA Regional Screening Level Industrial limit.

- Bold highlighted concentrations indicate that the compound was detected at a concentration greater than the USEPA Regional Screening Level Residential limit.

a. - Analytical result from 6/30/2021 sampling event.

< - Concentration not detected at or greater than the adjusted reporting limit.

-- - No value or indicator

C8 - Result may be biased high due to carryover from previously analyzed sample.

E - Analyte concentration exceeded the calibration range. The reported result is estimated.

H3 - Sample was received or analysis requested beyond the recognized method holding time.

j - Estimated concentration greater than the adjusted method detection limit and less than the adjusted reporting limit.

M1 - Matrix spike recovery was high: the associated Laboratory Control Spike (LCS) was acceptable.

mg/kg - milligrams per kilogram

NE - No screening level established at this time. A site-specific risk-based screening level may be established as part of the risk assessment process outlined in Section 5.0 of the RIWP-A.

NS - not sampled

R0 - The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.

R1 - Relative percent difference (RPD) value was outside control limits.

RS - The RPD value in one of the constituent analytes was outside the control limits.

RSL - Regional Screening Level

S1 - Data review findings indicate result may be biased; however, data is usable.

USEPA - United States Environmental Protection Agency

v1 - The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.