Prepared for
Berkeley Lake Village
Owners Association

February 2021

MONITORING AND MAINTENANCE PLAN

3351 NORTH BERKELY LAKE ROAD PROPERTY
HSI NO. 10844

Ramboll
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Contents

Attachments

Acronyms and Abbreviations

EPD	Georgia Environmental Protection Division
HSRA	Hazardous Site Response Act
MMP	Monitoring and Maintenance Plan
RRS	Risk Reduction Standards
SMP	Soil Management Plan

1. INTRODUCTION

On behalf of the Berkeley Lake Village Owners Association (BLVOA), Ramboll US Corporation (Ramboll) has prepared this Monitoring and Maintenance Plan (MMP) for the property located at 3351 North Berkeley Lake Road NW, in the City of Duluth, Gwinnett County, Georgia, as part of its participation in the Georgia Environmental Protection Division (EPD) Voluntary Remediation Program (VRP).

The Berkeley Lake Village Owners Association Property (the property or site) is part of a larger multi-parcel site designated by the EPD as the North Berkeley Lake Road Site (Hazardous Site Inventory [HSI] No. 10844], and consists of Tax Parcel IDs 6290-231, 6290-232, and 6267-030 (Figure 1). Within Parcel ID 6290-232, there are eight sub-parcels that correspond with the footprints of existing and/or planned future multi-story commercial buildings. The property layout is presented in **Attachment A**.

The site was listed on EPD's HSI based on the presence of arsenic in the soil. Based on the information developed for the site and presented in the Compliance Status Report (Ramboll, 2019), EPD agreed that exposure to arsenic in the soil at the property will be mitigated through the use of engineering and institutional controls. Specifically, the engineering controls will consist of a protective surface cover to minimize exposure to arsenic-impacted soil, and the institutional controls will consist of an Environmental Covenant for the site that includes this Maintenance and Monitoring Plan (MMP). Per the Environmental Covenant, the property shall be used only for non-residential purposes, as defined in Section 391-3-19-.02 of the Rules.

The remainder of this MMP presents the following:

- Engineering controls for the property (**Section 2**);
- Institutional Controls (**Section 3**); and,
- Reporting associated with the property (**Section 4**).

This MMP will be reviewed and revised as appropriate. If such revisions are necessary, the revised MMP will be submitted to EPD for review and approval.

2. ENGINEERING CONTROLS

Engineering controls are physical mechanisms, devices, measures, systems, or actions taken at a property that minimize the potential for exposure, control migration or dispersal, or maintain the effectiveness of other remedial actions. The property is currently covered by pavement, building structures, maintained landscaping, and a fenced retention pond that limit or prevent exposure to soil at the site. These surface features comprise the engineering controls with respect to the soil at the property.

To maintain compliance with the approved risk reduction standards for arsenic in soil at the property between the ground surface and 3 feet below ground surface (bgs), the surface features comprising the engineering controls at the site will be maintained to prevent exposure to the soil.

3. INSTITUTIONAL CONTROLS

Institutional controls are legal or administrative measures that minimize the potential for human exposure to contaminants of concern or protect and enhance the integrity of a remedy or engineering controls.

The property shall be used only for non-residential purposes, as defined in Section 391-3-19-.02 of the HSRA Rules, and defined in and allowed under the Gwinnett County's zoning regulations as of the date of the Environmental Covenant (October 2020). Therefore, any residential use of the property is prohibited, unless approved in advance by the Director of the EPD. Advance notice must be provided to EPD for any planned future changes in the use of the property.

An annual inspection must verify the use of the property by owners, tenants, and other occupants to be consistent with non-residential use. In addition, all lease agreements and other agreements concerning the use of the property must be reviewed to ensure the language is consistent with non-residential use of the property. The results of the inspection must be summarized in the Annual Evaluation Form provided in **Attachment B**.

Because no data is available for soil below a depth of 3 feet, and as set forth in the Environmental Covenant, disturbance of soil more than 3 feet below ground surface (bgs) must be performed in accordance with an EPD-approved Soil Management Plan (SMP; **Attachment C**). The attached SMP has been prepared by a Georgia registered professional geologist (P.G.) who has experience in responsible charge of the investigation and remediation of releases of regulated substances. In accordance with the SMP, if soil samples from depths of more than 3 feet bgs exceed the established criterion of 990 mg/kg for arsenic in soil more than 3 feet bgs, then additional characterization of the soil more than 3 ft bgs will be performed to delineate the extent of the arsenic impacts in the deeper soil, and EPD will be notified.

In summary, the SMP specifies that all intrusive activities below a depth of 3 feet must be evaluated before implementation to determine applicable health and safety requirements, and waste management and disposal requirements. During implementation of intrusive activities, hardscape and softscape materials will be properly characterized and appropriately managed on-site, and if necessary, disposed of at an offsite disposal facility. Any excavations that are undertaken will be backfilled with clean soil or fill material (analyzed by a certified laboratory to confirm that concentrations are less than background and/or the HSRA Notification Criteria), and the surface will be restored with material that is comparable to the existing surface cover. Additionally, all intrusive activities will need to be conducted in compliance with applicable Occupational Health and Safety Administration requirements.

Any significant damage to the surface soil will be repaired within 60 days of discovery, while damages that are considered to non-significant will be repaired within 90 days of discovery. Significant damage is erosion or removal of soil greater than 1 foot in depth over an area more than 100 square feet. The repairs will be made in accordance with good engineering practices (including standard laboratory analysis of any fill material brought in from offsite) and will be conducted by qualified personnel. Observed damaged conditions and any repair activities will be documented using the Non-Scheduled Maintenance Log Form provided in **Attachment B**.

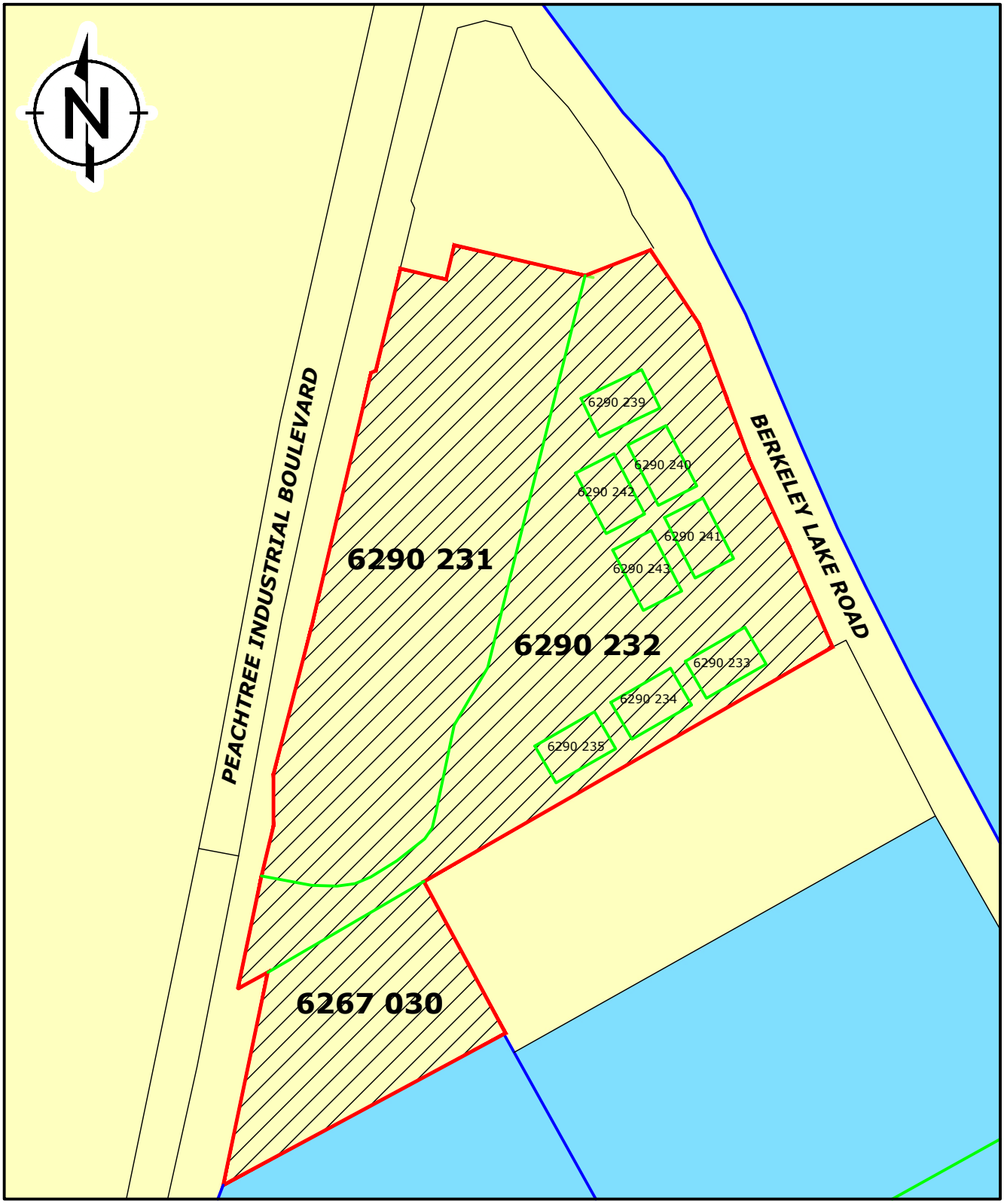
Any significant changes to the surface soil observed during the inspection will be noted in the Annual Evaluation Form provided in **Attachment B**.

4. REPORTING

Inspections will be performed at least annually, and will be documented using the Annual Evaluation Form provided in **Attachment B**. The property owner shall complete and submit the Annual Evaluation Form to EPD annually by January 31 of the following year. The cover letter for the Annual Evaluation Form shall include the name, mailing address, telephone number, facsimile number, and email address of the person that EPD should contact regarding the requirements associated with the property.

Attachment A

Property Layout



LEGEND:

SITE BOUNDARY (APPROXIMATE)

BLVOA PROPERTY (THE SITE)

0 180

SCALE IN FEET

SOURCE:
Base map source from
Gwinnett County GIS department.

RAMBOLL

BLVOA Property Layout
DULUTH, GEORGIA

FIGURE
1

DRAFTED BY: RGM | DATE: 6/19/2018 | PROJECT: 1690010729

GMILES 5/1/20 F:\GRAEME\1690010729 < NORTH_BERKELEY_LAKE_ROAD_PARCELS >

Attachment B

Annual Evaluation Form and Non-Scheduled Maintenance Log Form

ANNUAL EVALUATION FORM

North Berkeley Lake Road Site, (HSI No 10844)

Duluth, Gwinnett County, Georgia

TYPE	No.	CRITERIA RESPONSE	YES	NO
Land Use	1	Does this Property meet the definition of non-residential property as defined in HSRA Rule 391-3-19.02(2)? "Non-residential property means any property or portion of a property not currently being used for human habitation or for other purposes with a similar potential for human exposure, at which activities have been or are being conducted that can be categorized in one of the 1987 Standard Industrial Classification major group…"		
	1a	Has the use of the property changed or has construction occurred on the property?		
	1b	If no to 1 or yes to 1a, provide a written explanation to EPD with the subject Evaluation form.		
Exposure	2	Has there been any significant change surface soil (change in grade) not previously identified to EPD? If yes, are corrective measures being taken? Provide a written explanation to the EPD with the subject Evaluation Form.		
Erosion	3	Is there evidence of soil erosion on the Property?		
	3a	If yes to 3, are corrective measures being taken? Provide a written explanation to the EPD with the subject Evaluation Form.		
Property Instruments	4a	Do all leases or other property instruments for the site have the applicable deed notice language inserted into them? (i.e. HSRA Rule 391-3-19-8 and O.C.G.A. 44.5-48.)		
	4b	If no to 4a provide a written explanation (attached) to the EPD with the subject Evaluation Form.		
Inspection	5	Date of inspection:		
	5a	Name of inspector:		
	5b	Photographs with explanation showing current land use (attached):		

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____

Name (Please print or type) Title

_____ _____

Signature Date

NON-SCHEDULED MAINTENANCE FORM*

North Berkeley Lake Road Site (HSI No 10844)

Duluth, Gwinnett County, Georgia

Date Issue Identified:

Name of Inspector:

Issue:

Change to surface soil: ☐ ☐

Description of the Surface Soil Condition:

Severity of Observed Damage:

Start Date of Repair: **End Date of Repair:**

Description of the Repairs:

*Non-Scheduled Maintenance Form to be used for documenting observations and maintenance activities that are not included in the Annual Evaluation. This form, and any other supporting materials, should be submitted to the EPD with the Annual Evaluation Form on or before January 31 of the following calendar year.

Attachment C

Soil Management Plan

Prepared for
Berkeley Lake Village
Owners Association

February 2021

SOIL MANAGEMENT PLAN

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FIGURE

ATTACHMENT

ACRONYMS AND ABBREVIATIONS

CSR	Compliance Status Report
EH&S	Environment, Health, and Safety
EPD	Environmental Protection Division
bgs	below ground surface
HASP	Health and Safety Plan
HSRA	Hazardous Site Response Act
kV	kilovolt
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Level
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act
RSL	Regional Screening Level
SESD	Science and Ecosystem Support Division
SMP	Soil Management Plan
SVOCs	semivolatile organic compounds
VOCs	volatile organic compounds
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency

1. INTRODUCTION

On behalf of the Berkeley Lake Village Owners Association (BLVOA), Ramboll US Corporation (Ramboll) has prepared this Soil Management Plan (SMP) for the property located at 3351 North Berkeley Lake Road NW, in the City of Duluth, Gwinnett County, Georgia, as part of its participation in the Georgia Environmental Protection Division (EPD) Voluntary Remediation Program (VRP).

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Exposure to arsenic in the soil below a depth of 3 feet at the property will be mitigated through the use of engineering and institutional controls. Specifically, the engineering controls will consist of maintaining the surface features to minimize exposure to arsenic-impacted soil, and the institutional controls consist of an Environmental Covenant for the site that includes this SMP. Per the Environmental Covenant, the property shall be used only for non-residential purposes, as defined in Section 391-3-19-.02 of the Rules.

As described in the Final CSR, data is not available for soil below a depth of 3 feet. In order to maintain compliance with the approved non-residential risk reduction standards (RRS) for arsenic in soil at the property, this SMP will be followed when disturbing soil below 3 feet to minimize exposure to soil that may be impacted by arsenic. The property is currently covered by pavement, building structures, maintained landscaping, and a fenced retention pond.

2. EXPOSURE CONTROL MEASURES

Because data is not available for soil more than 3 feet below ground surface (bgs), soil disturbance activities that extend more than 3 feet bgs shall not be performed without collecting soil samples from the proposed work area prior to initiating the soil disturbance activities. The soil samples must be analyzed for arsenic to determine if the arsenic concentrations in the soil are less than the established RRS of 990 mg/kg for soil deeper than 3 feet bgs. If the arsenic concentrations exceed this RRS, or in the event of an emergency when samples can't be collected prior to disturbing soil at depths greater than 3 feet bgs, then the procedures specified below must be followed; in addition, additional subsurface soil samples must be collected and analyzed for arsenic in order to delineate the extent of the deeper soil arsenic impacts (after which EPD must be notified).

2.1 Project-Specific Health and Safety Plans

The available data indicates that soil at the site is known to be impacted arsenic that exceed residential criterion, but meet non-residential criterion from the surface to a depth of 3 feet (this criterion is also protective of industrial and construction workers). No data is available for soil below a depth of 3 feet. Therefore, prior to disturbing soil below a depth of 3 feet, a project-specific Health & Safety Plan (HASP) will be written prior to conducting any activities that results in the disruption or exposure of soil, including but not limited to excavation of soil. The HASP will present the site- and project-specific procedures that must be followed by all workers involved in soil disturbance activities. The HASP will also describe the personal protective equipment (PPE) that will need to be used during the disturbance work.

2.2 Hazard Assessment

Chemical Hazards

Historically, arsenic has been detected in the soil at the property. The potential for the ingestion of arsenic in soil during activities that will involve disturbing soil will be controlled by prohibiting any eating, smoking, or drinking in the work zone. Absorption of arsenic will be controlled by requiring all field personnel to remove soil particles adhered to their clothing and boots prior to leaving the work zone. Inhalation of chemicals and eye injuries will be controlled by implementing dust suppression techniques such as wetting soil during these activities. All potential exposures will be further minimized by using appropriate PPE.

The following table identifies Occupational Safety and Health Administration (OSHA) 8-hour permissible exposure limit (PEL) for arsenic:

Constituent	PEL[1]
Arsenic	10 mg/m^3

1. 29 CFR 1910 Subpart Z Accessed online at OSHA (April 2020).

Physical Hazards

There is always a risk of physical injury resulting from activities involved with equipment operations, as well as common-place slips, trips, and falls. All personnel should be aware of the presence of these hazards and take steps to avoid them. In particular, precautions should be taken to avoid hazards from overhead and underground utilities. A comprehensive list of physical hazards and preventive measures must be included in each project-specific HASP. If underground obstructions

are suspected at the site, then pre-project clearance will be required. Any equipment on site must not be within 20 feet of overhead power lines that transmit less than 350 kilovolts (kV) and must not be within 50 feet overhead powerlines that transmit greater than 350 kV[1]. Use of steel-toed boots, safety glasses, and hard hats will be required when working in the vicinity of heavy equipment. Before and after each shift (or at the beginning and end of each workday) the work area and areas in proximity to the work area should be cleared of objects that could present a slip/trip hazard to the degree practical. Personnel should be made aware of the fact that the use of protective equipment can impair visibility, hearing, and manual dexterity.

2.3 Safety Equipment Requirements

It is anticipated that site-specific PPE will be worn during field activities covered by this SMP. However, if site conditions make it necessary to upgrade the level of protection, work shall be suspended and the EH&S Manager or designated representative notified for guidance. Employers will be responsible for furnishing employees with all necessary safety equipment. The minimum recommended PPE is presented below.

General site work:

- Coveralls (or long-sleeved work shirt and trousers)
- Gloves: work gloves when use of hand and power tools, impermeable gloves when handling soil or exposed to groundwater
- Safety glasses

Work in or around excavations containing standing water will require the PPE listed above, plus the following:

- Chemical resistant (water resistant) coveralls
- Waterproof boots
- Chemical splash goggles, or face shield

[1] OSHA 1926.1409 Subpart CC.

3. FIELD METHODS AND PROCEDURES

This section describes the procedures to be followed during the soil disturbance activities at depths greater than 3 feet bgs in the event that arsenic is detected at a concentration greater than 280 mg/kg in the pre-disturbance soil samples discussed in Section 2.

3.1 Pre-Soil Disturbance Activities

Prior to soil disturbance, project personnel and the appropriate personnel will meet to ensure that everyone understands the planned activities and the procedures described in this SMP. A site- and project-specific HASP will be prepared that, at a minimum, presents the chemicals that may be present, potential exposure routes and toxicological effects, and methods to avoid and/or minimize exposure. The HASP will be available onsite whenever soil disturbing and/or groundwater encountering activities are occurring. All applicable permits will be obtained, and utilities identified prior to conducting any activities at the site that require the soil to be disturbed.

3.2 Soil Disturbance Activities

Once the disturbance activities begin, dust will be controlled, if necessary, by wetting the soil in the area of removal.

3.2.1 Handling and Management of Excavated Soil

Soil that is excavated during site activities will be staged at a secure location on property in a manner that prevents liquid infiltration, run off, and generation of fugitive dust (e.g., covered drums, covered roll-off containers, or enclosed on all sides by plastic sheeting). Samples of such excavated soil will be collected and characterized for disposal based on the written requirements of the receiving facility(ies); the analyses will be conducted by State of Georgia approved laboratory. The samples will be collected in accordance with United States Environmental Protection Agency (USEPA) Region 4 Science and Ecosystem Support Division Operating Procedure: Soil Sampling, Number SESDPROC-300-R3, dated 8-21-14 (SESD, 2014).

Once the soil has been characterized, the contractor will arrange for transportation and disposal of the soil. The soil will be transported from the property no more than 90 days from the completion of the activities associated with the soil disturbance.

Depending upon the waste determination of the displaced soil, the waste transporter may be a transporter of Hazardous Waste and be subject to The Rules and Regulations of the State of Georgia 391-3-11-.09 *Standards Applicable to Transporters of Hazardous Waste*, which incorporates 40 CFR Part 263 by reference.

3.2.2 Handling and Management of Proposed Backfill Material

If necessary, disturbed areas will be backfilled with clean soil or fill material. To evaluate whether the proposed fill material is suitable for use at the site, one composite sample will be obtained from four locations equally spaced across the area of fill material to be used at the site (engineered construction materials are excluded from this testing). The samples will be collected in accordance with USEPA Region 4 Science and Ecosystem Support Division Operating Procedure: Soil Sampling, Number SESDPROC-300-R3 (SESD, 2014). Soil sampling will consist of a single four-point composite sample from the fill material to be used at the site. The samples will be analyzed by a National Environmental Laboratory Accreditation Conference accredited laboratory for VOCs, semi-volatile organic compounds (SVOCs), and Resource Conservation and Recovery Act (RCRA) metals by USEPA Methods 8260B, 8270D and 6010C, respectively. The analytical results will be compared to the USEPA residential regional screening levels (RSLs; www.epa.gov/risk/regional-screening-levels-rsls-generic-tables) for VOCs and SVOCs, and to Georgia-approved background values for metals (**Attachment 1**; GA EPD, 2014). Soil that does not meet these criteria will not be used at the site.

3.2.3 Equipment Decontamination

All reusable equipment that will contact potentially contaminated soil will be decontaminated at the start of the project and prior to each reuse. The decontamination will be performed in accordance with USEPA Region 4 Science and Ecosystem Support Division Operating Procedure: Field Equipment Cleaning and Decontamination, Number SESDPROC-205-R3, dated 12-18-15 (2015, SESD).

In general, the decontamination procedures will consist of:

- Non-phosphate detergent (i.e., Luminox) and tap water wash, using a brush if necessary
- Tap-water rinse
- Deionized/distilled water rinse

Water generated from equipment decontamination activities will be placed in a storage container and appropriately disposed of following completion of the decontamination activities.

3.3 Post-Soil Disturbance Activities

After the soil excavation and related activities are complete, the documentation of the activities will be finalized, and the paperwork will be maintained onsite. Information regarding the work conducted, including location of the activity, volume of material removed, volume of backfill material placed on site, number of samples collected, analytical parameters, health and safety protocols, and monitoring activities will be maintained on site.

The final laboratory analytical reports will be maintained on site, along with the waste manifests, weight tickets, and final disposal reports.

4. WORKER REQUIREMENTS

All workers performing soil disturbance activities as described in Section 3, including but not limited to excavation, grading, placing fill, must comply with the following procedures. Workers not complying with these procedures will not be permitted to work at the site and may be held financially responsible for inappropriate soil and/or groundwater management and/or disposal activities.

- BLVOA and its contractors are independently responsible for ensuring the safety of their workers during activities at the site. All onsite workers must comply with all appropriate regulations, orders, and permits while onsite including the following:
  - OSHA Standards and Regulations, 29 CFR 1910 and 1926.
  - RCRA 40 CFR 261 and 264.
  - Facility Consent Order and Hazardous Waste Permit.
- Workers must review this SMP before initiating work. Any questions involving the SMP should be directed to BLVOA, or designated representative.
- Workers must be properly trained to conduct field screening (e.g., dust monitoring and other equipment described in the HASP). Any field observations must be maintained in a log that also describes the activity underway.
- BLVOA or its contractors (depending on the project) must prepare and follow a site- and project-specific HASP that, at a minimum, presents the constituents that may be present, potential exposure routes, and methods to avoid and/or minimize exposure. A copy of the HASP must be forwarded to the EH&S Manager or designated representative for review. The HASP must be available onsite at all times during the soil disturbance activities.
- Workers must use appropriate methods to handle and manage excavated soil. Soil suspected to be contaminated must be staged as described in Section 3 for proper characterization and disposal.

5. DOCUMENTATION AND REPORTING

Documentation of soil disturbance activities at the site undertaken as described in Section 3 shall be recorded in a bound field logbook with consecutively numbered pages. All entries will use factual objective language, be legible, written in permanent ink, and signed by the individual making the entries. At a minimum, the following information will be recorded in the field logbook:

- General narrative recording daily activities
- Soil sample descriptions (Unified Soil Classification System)
- Site or sampling area sketch showing sample location, sample depths, and measured distances. The sampling area sketch will be scaled, and the location of the sampling area will be depicted relative to a fixed structure
- Field instrument readings (including location that the reading was obtained) and calibration
- Field observations and details related to analysis or integrity of samples (e.g., weather conditions, noticeable odors, soil staining, soil descriptions, soil colorations, etc.)
- Work start and stop times
- Summary of any meetings or discussions with contractors, regulatory agency representatives, or interested third parties
- Levels of PPE used

Upon completion of each soil disturbance activity, a summary report will be submitted to EPD. The report will be submitted within 30 days of completion of the work (including receipt of analytical data and waste manifests), and will include the following:

- A written summary of the work performed, documenting the performance of all procedures specified in Section 3 (Field Methods and Procedures), as well as documentation recorded in the logbook as described above
- A description of each deviation from the approved SMP, and the reason for each occurrence
- A discussion of findings
- Complete laboratory analytical reports for all samples collected, including chain of custody forms
- Waste manifests
- Photographic documentation, if available

6. REFERENCES

EPA Region 4 Science and Ecosystem Support Division (SESD) Guidance Document Design and Installation of Monitoring Wells, Number SESDGUID-101-R1 dated 1-29-13

EPA Region 4 Science and Ecosystem Support Division (SESD) Operating Procedure: Soil Sampling, Number SESDPROC-300-R3, dated 8-21-14.

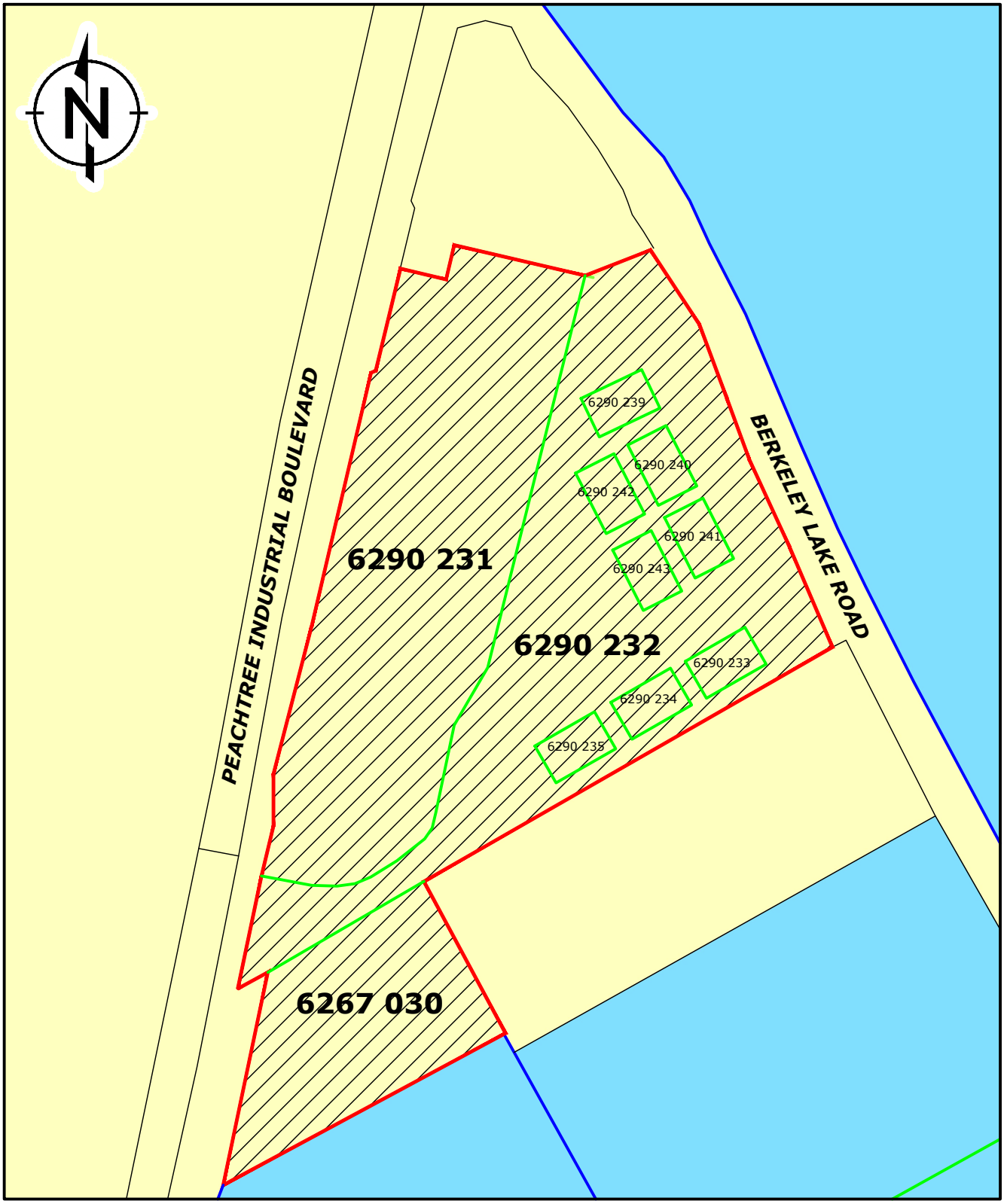
EPA Region 4 Science and Ecosystem Support Division (SESD) Operating Procedure: Field Equipment Cleaning and Decontamination, Number SESDPROC-205-R3, dated 12-18-15

GA EPD, 2014. Georgia Soil Background Concentrations, Georgia EPD VRP Frequently Asked Questions, January 21, 2014.

OSHA Permissible Exposure limit (PEL) 29 CFR 1910 Subpart Z https://www.osha.gov/laws-regs/regulations/standardnumber/1910

RAE Systems. 2011. Technical Note TN-186, MINIRAE 3000 and PPBRAE 3000 Pre-Programmed Compound Libraries. Accessed online: http://www.raesystems.com/sites/default/files/content/resources/Technical-Note-186_MiniRAE-3000-%26-ppbRAE-3000-Pre-Programmed-Compound-Libraries_02-11.pdf. 10-23-17.

FIGURE



LEGEND:

SITE BOUNDARY (APPROXIMATE)

BLVOA PROPERTY (THE SITE)

0 180

SCALE IN FEET

SOURCE:
Base map source from
Gwinnett County GIS department.

RAMBOLL

BLVOA Property Layout
DULUTH, GEORGIA

FIGURE
1

DRAFTED BY: RGM | DATE: 6/19/2018 | PROJECT: 1690010729

GMILES 5/1/20 F:\GRAEME\1690010729 < NORTH_BERKELEY_LAKE_ROAD_PARCELS >

ATTACHMENT

The United States Geological Survey (USGS) Open File Report 81-197 (Boerngen and Shacklette, 1981) doesn't include a data point for the county where the qualifying property is listed. Can I use this data set to establish delineation concentration criteria?

These data provide an ultra-low-density geochemical baseline for soils and other surficial materials in the conterminous United States collected from 1958 to 1976. The data contains 1,323 samples for a sampling density of approximately 1 sample per 6,000 square kilometers. The data set is a national geochemical data set collected and analyzed according to standardized protocols. The data are most appropriately used to provide information on background concentrations of elements in soil. The major drawback with the data set is its extremely low number of samples for the entire conterminous US. The US Geological Survey (USGS) provides the data "as is". THE USGS makes no guarantee or warranty concerning the accuracy of the information contained in the geographic data. The USGS further makes no warranties, either expressed or implied as to any other matter, whatsoever, including, without limitation, the condition of the product, or its fitness for any particular purpose. The burden for determining fitness for use lies entirely with the user.

There are 32 data points located in the state of Georgia and each data point does not necessarily include all of the metals listed. To statistically use this data as a representation of the concentrations of metals in soil in the state of Georgia, EPD evaluated this data using ProUCL 4.00.05 and recommends the following concentrations be used. In evaluating the data, please note the meaning of the following flags: N – not detected at concentration listed, L – detected but at a level below the concentration listed, B – no data for that particular element, and G – detected above the upper determination limit.

Regulated Substance	Outlier Test Results	Distribution	Background Threshold Value (BTV) (mg/kg)
Antimony		Only one sample in dataset	No BTV*
Arsenic (full set)	Potential Statistical Outlier	Log normal	12.86
Barium (full set)		Gamma	674.1
Beryllium (set with NDs)**		Insufficient sample size	No BTV
Bromine		Only one sample in dataset	No BTV
Chromium (full set)		No discernable distribution	100
Copper (full set)	Potential Statistical Outlier	Log normal	46.7
Fluorine (set with NDs)		Gamma	.065 %
Lead (set with NDs)	Potential Statistical Outlier	No discernable distribution	30
Mercury (full set)	Potential Statistical Outlier	No discernable distribution	.395
Nickel (set with NDs)	Potential Statistical Outlier	No discernable distribution	24
Phosphorus (set with NDs)	Potential Statistical Outlier	No discernable distribution	.0176 %
Selenium (set with NDs)	Potential Statistical Outlier	No discernable distribution	.0176
Zinc (full set)	Potential Statistical Outlier	No discernable distribution	67

*** Statistically unable to determine a BTV due to datasets with insufficient sample size**

**** Sets with non-detects were evaluated without non-detects as recommended by guidance document**