HAZARD RANKING SYSTEM (HRS) DOCUMENTATION RECORD COVER SHEET

Name of Site: Westside Lead

EPA ID No.: GAN000407160

Contact Persons

Documentation Record:

Leigh Lattimore, Remedial Project Manager
Superfund and Emergency Management Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W., 11th Floor
Atlanta, Georgia 30303
(404) 562-8768

Quinn Kelley, NPL Coordinator
Superfund and Emergency Management Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW, 11th Floor
Atlanta, Georgia 30303
(404) 562-8899

Alicia Shultz, Environmental Scientist
Tetra Tech, Inc.
1955 Evergreen Boulevard, Suite 300
Duluth, Georgia 30096
(678) 775-3087

Pathways, Components, or Threats Not Scored

The ground water, surface water, and air migration pathways, as well as the nearby population threat of the soil exposure component and the subsurface intrusion component of the soil exposure and subsurface intrusion pathway were not scored in this Hazard Ranking System (HRS) documentation record because the resident population threat of the soil exposure component of the soil exposure and subsurface intrusion pathway is sufficient to qualify the site for the National Priorities List (NPL). The ground water, surface water, and air migration pathways, and the nearby population threat of the soil exposure component of the soil exposure and subsurface intrusion pathway are of concern to the U.S. Environmental Protection Agency (EPA) and may be considered during a future evaluation. At the time of the listing, the site score is sufficient without, and the listing of the site would not be changed by the addition of the threats, components, and pathways mentioned above.

HAZARD RANKING SYSTEM (HRS) DOCUMENTATION RECORD

Name of Site:	Westside Lead
EPA Region:	4
Date Prepared:	September 2021
Street Address of Site*:	431 Vine Street NW
City, County, State, Zip:	Atlanta, Fulton County, Georgia 30318
General Location in the State:	Northwestern portion of state
Topographic Maps:	USGS, Northwest Atlanta, 2017 (Ref. 3)
Latitude:	33° 45' 59.3" North (33.766472)
Longitude:	84° 24' 26.2" West (84.407278)

The coordinates above for the Westside Lead site were measured from the approximate middle of 431 Vine Street NW, Atlanta, Georgia 30318, within the area of observed contamination (AOC) (Ref. 4) (see Figures 1 and 3 of this HRS documentation record).

* The street address, coordinates, and contaminant locations presented in this HRS documentation record identify the general area where the site is located. They represent one or more locations EPA considers to be part of the site based on the screening information EPA used to evaluate the site for NPL listing. EPA lists national priorities among the known "releases or threatened releases" of hazardous substances; thus, the focus is on the release, and not precisely delineated boundaries. A site is defined as where a hazardous substance has been "deposited, stored, disposed or placed, or has otherwise come to be located." Generally, HRS scoring and the subsequent listing of a release merely represent the initial determination that a certain area may need to be addressed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Accordingly, EPA contemplates that the preliminary description of facility boundaries at the time of scoring will be refined as more information is developed as to where the contamination has come to be located.

Pathway	**Pathway Score**
Ground Water[1] Migration	Not Scored
Surface Water Migration	Not Scored
Soil Exposure and Subsurface Intrusion	100.00
Air Migration	Not Scored
HRS SITE SCORE	**50.00**

[1] "Ground water" and "groundwater" are synonymous; the spelling is different due to "ground water" being codified as part of the HRS, while "groundwater" is the modern spelling.

WORKSHEET FOR COMPUTING HRS SITE SCORE

	S Pathway	S^2 Pathway
Ground Water Migration Pathway Score (S_{gw})	NS	NS
Surface Water Migration Pathway Score (S_{sw})	NS	NS
Soil Exposure and Subsurface Intrusion Pathway Score (S_{sessi})	100	10,000
Air Migration Pathway Score (S_a)	NS	NS
$S^2_{gw} + S^2_{sw} + S^2_{sessi} + S^2_a$		10,000
$(S^2_{gw} + S^2_{sw} + S^2_{sessi} + S^2_a) / 4$		2,500
$\sqrt{(S^2_{gw} + S^2_{sw} + S^2_{sessi} + S^2_a) / 4}$		**50.00**

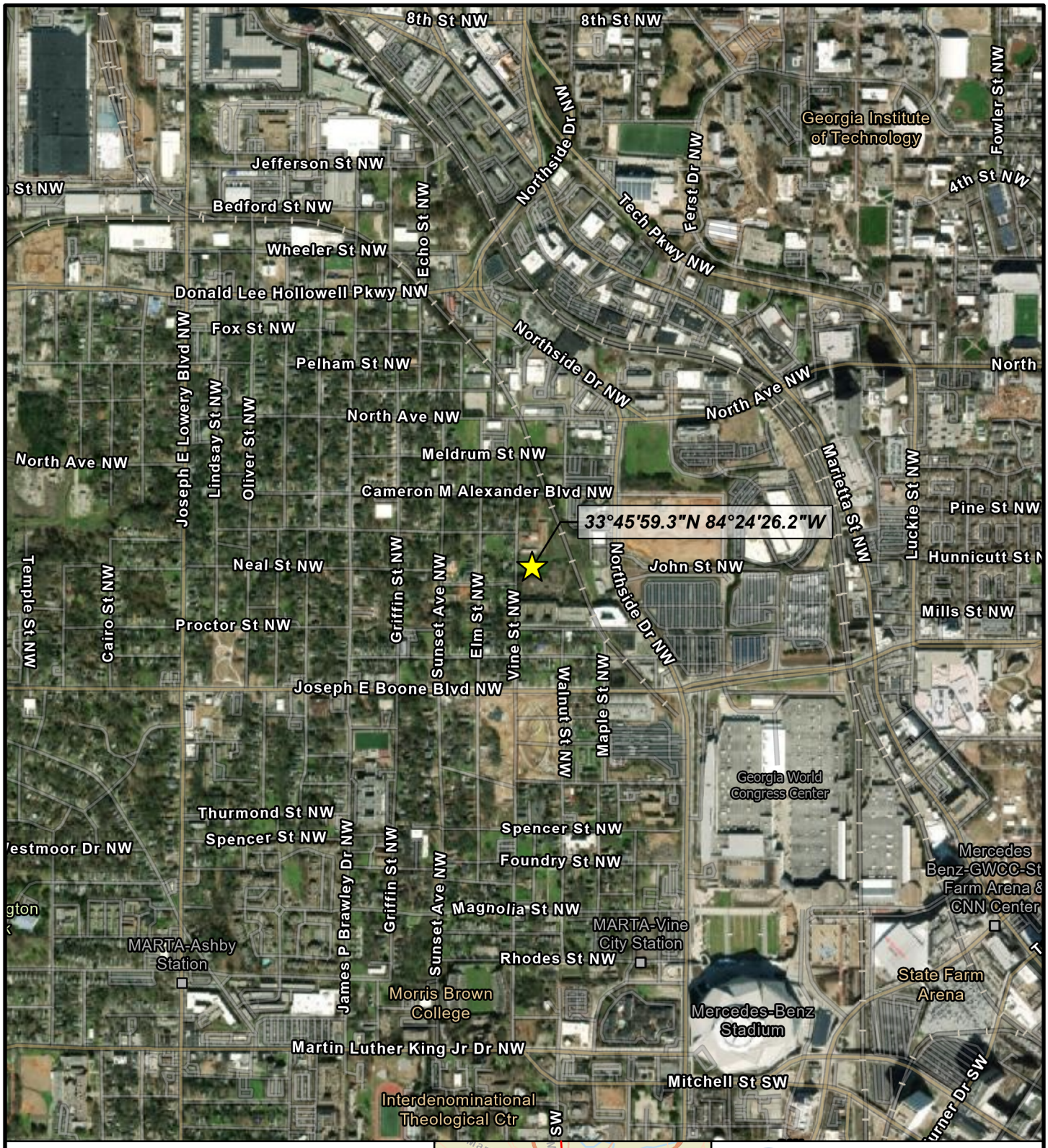
Note:

NS Not scored

TABLE 5-1 --SOIL EXPOSURE COMPONENT SCORESHEET			
Factor categories and factors	Maximum Value	Value Assigned	
Resident Population Threat			
Likelihood of Exposure:			
1. Likelihood of Exposure	550		550
Waste Characteristics:			
2. Toxicity	(a)	10,000	
3. Hazardous Waste Quantity	(a)	10	
4. Waste Characteristics	100		18
Targets:			
5. Resident Individual	50	50	
6. Resident Population:			
6a. Level I Concentrations	(b)	720	
6b. Level II Concentrations	(b)	181.88	
6c. Population (lines 6a + 6b)	(b)	901.88	
7. Workers	15	NS	
8. Resources	5	NS	
9. Terrestrial Sensitive Environments	(c)	NS	
10. Targets (lines 5 + 6c + 7 + 8 + 9)	(b)		951.88
Resident Population Threat Score			
11. Resident Population Threat Score (lines 1 x 4 x 10)	(b)		9,423,612
Nearby Population Threat			
Likelihood of Exposure:			
12. Attractiveness/Accessibility	100	NS	
13. Area of Contamination	100	NS	
14. Likelihood of Exposure	500	NS	NS
Waste Characteristics:			
15. Toxicity	(a)	NS	
16. Hazardous Waste Quantity	(a)	NS	
17. Waste Characteristics	100		NS
Targets:			
18. Nearby Individual	1	NS	
19. Population Within 1 Mile	(b)	NS	
20. Targets (lines 18 + 19)	(b)		NS
Nearby Population Threat Score:			
21. Nearby Population Threat (lines 14 x 17 x 20)	(b)		NS
Soil Exposure Component Score:			
22. Soil Exposure Component Score [d] (S_{se}), (lines [11+21]/82,500, subject to a maximum of 100)	100.00		100.00

Notes:

[a] Maximum value applies to waste characteristics category.
[b] Maximum value not applicable.
[c] No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to maximum of 60.
[d] Do not round to nearest integer.
NS Not scored



Legend

Site Location

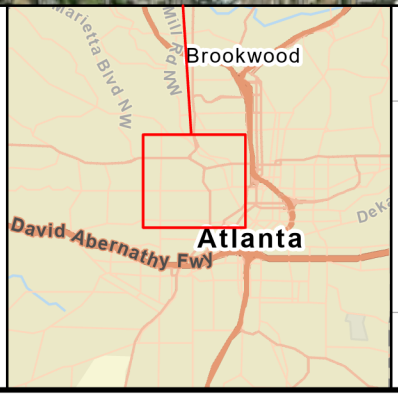
431 Vine Street NW
Atlanta, Fulton County
Georgia

N
W E
S

0 500 1,000
Feet

Note:
Latitude and Longitude measured from the center of 431 Vine Street NW, using ArcGIS Pro.

Map Source:
ESRI World Imagery Hybrid.
The source of this map image is Esri, used by the EPA with Esri's permission.



United States
Environmental Protection Agency
Region 4

FIGURE 1
Site Location

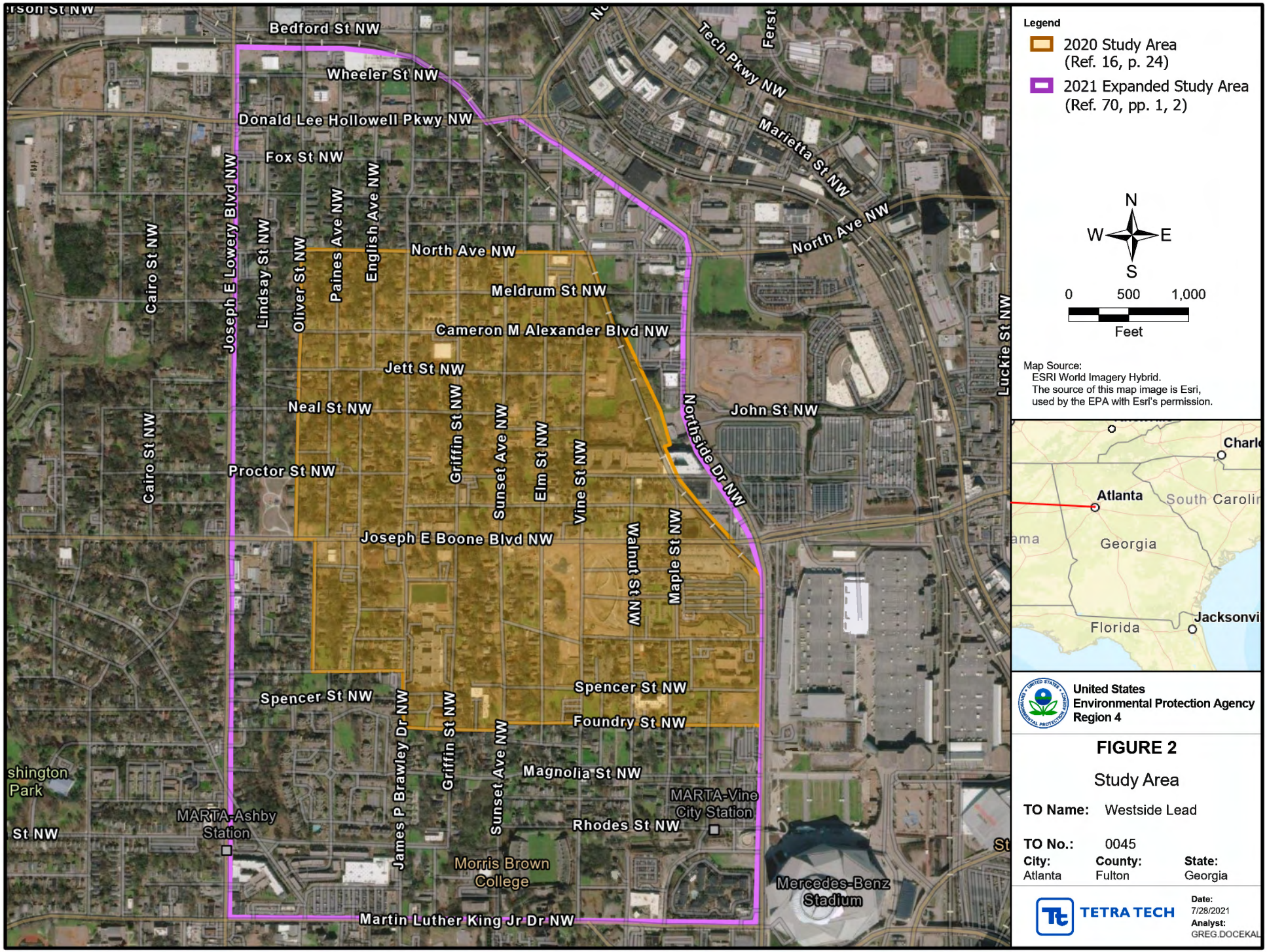
TO Name: Westside Lead

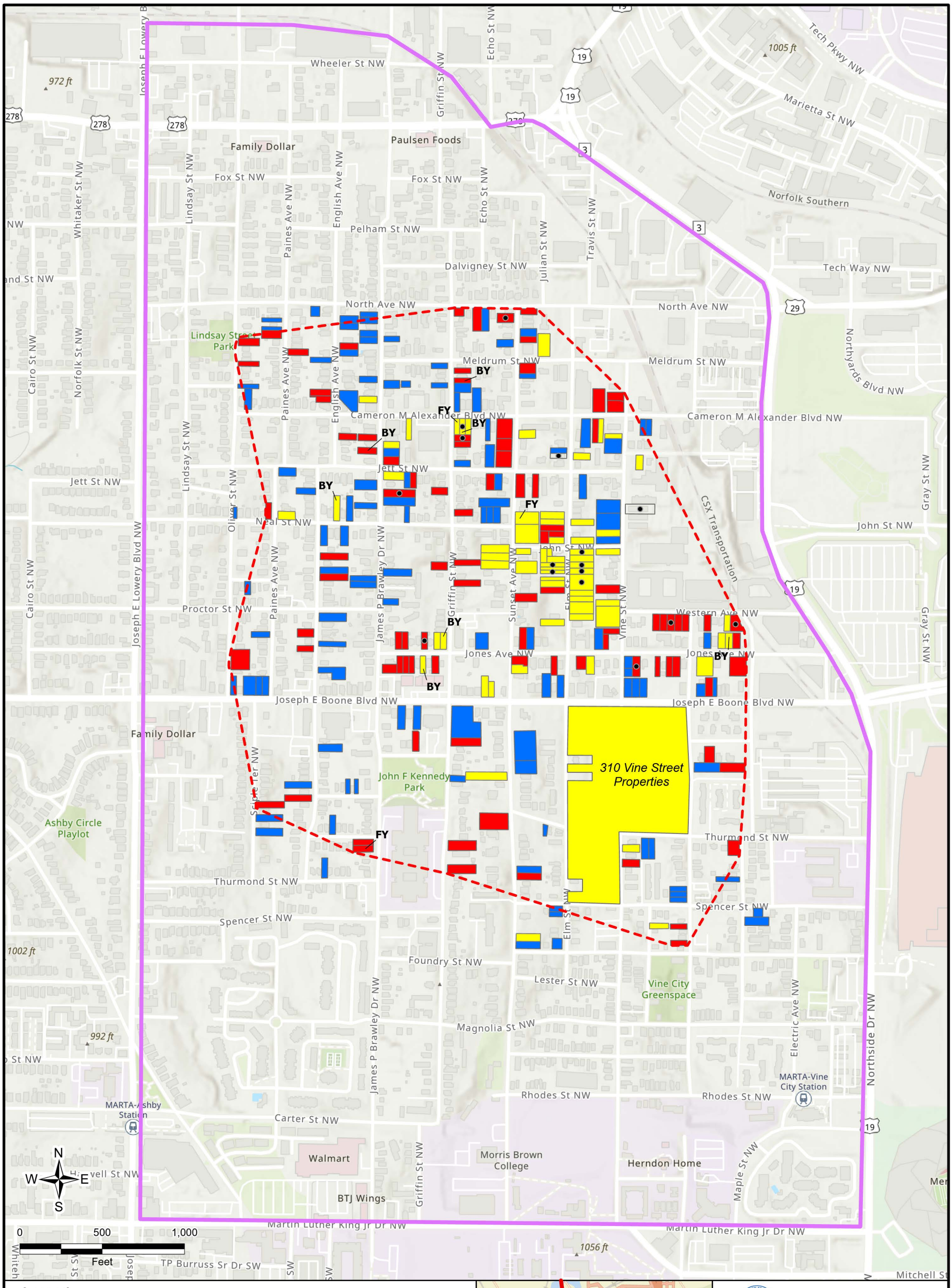
TO No.: 0045

City:	County:	State:
Atlanta	Fulton	Georgia

TETRA TECH

Date: 4/28/2021
Analyst: GREG.DOCEKAL


Bedford St NW
Wheeler St NW
Donald Lee Hollowell Pkwy NW
Fox St NW
Tech Pkwy NW
Marietta St NW
North Ave NW
Meldrum St NW
Cameron M Alexander Blvd NW
Jett St NW
Neal St NW
John St NW
Proctor St NW
Joseph E Boone Blvd NW
Spencer St NW
Foundry St NW
Magnolia St NW
Rhodes St NW
Martin Luther King Jr Dr NW
Joseph E Lowery Blvd NW
Lindsay St NW
Oliver St NW
Paines Ave NW
English Ave NW
Cairo St NW
Griffin St NW
Sunset Ave NW
Elm St NW
Vine St NW
Walnut St NW
Maple St NW
Northside Dr NW
Luckie St NW
James P Brawley Dr NW
MARTA-Ashby Station
MARTA-Vine City Station
Morris Brown College
Mercedes-Benz Stadium
Legend
2020 Study Area (Ref. 16, p. 24)
2021 Expanded Study Area (Ref. 70, pp. 1, 2)
N
W
E
S
0
500
1,000
Feet
Map Source:
ESRI World Imagery Hybrid.
The source of this map image is Esri, used by the EPA with Esri's permission.
Atlanta
Georgia
Florida
United States Environmental Protection Agency Region 4
FIGURE 2
Study Area
TO Name: Westside Lead
TO No.: 0045
City: Atlanta
County: Fulton
State: Georgia
TETRA TECH
Date: 7/28/2021
Analyst: GREG.DOCEKAL



Legend

- Parcels where slag has been observed
- 2021 Expanded Study Area *(Ref. 70, pp. 1, 2)*
- Parcel with Observed Contamination
- Removal Parcels excluded from the AOC *(Ref. 39)*
- Contaminated Soils Removed *(Ref. 39)*
- Area Of Observed Contamination (AOC)

Note:
FY - Front yard removal only
BY - Back yard removal only

References:
See Tables 3 and 4 of this HRS documentation record.

Map Source:
ESRI World Topographic.
The source of this map image is Esri, used by the EPA with Esri's permission.

United States Environmental Protection Agency
Region 4

FIGURE 3

Area of Observed Contamination

TO Name: Westside Lead

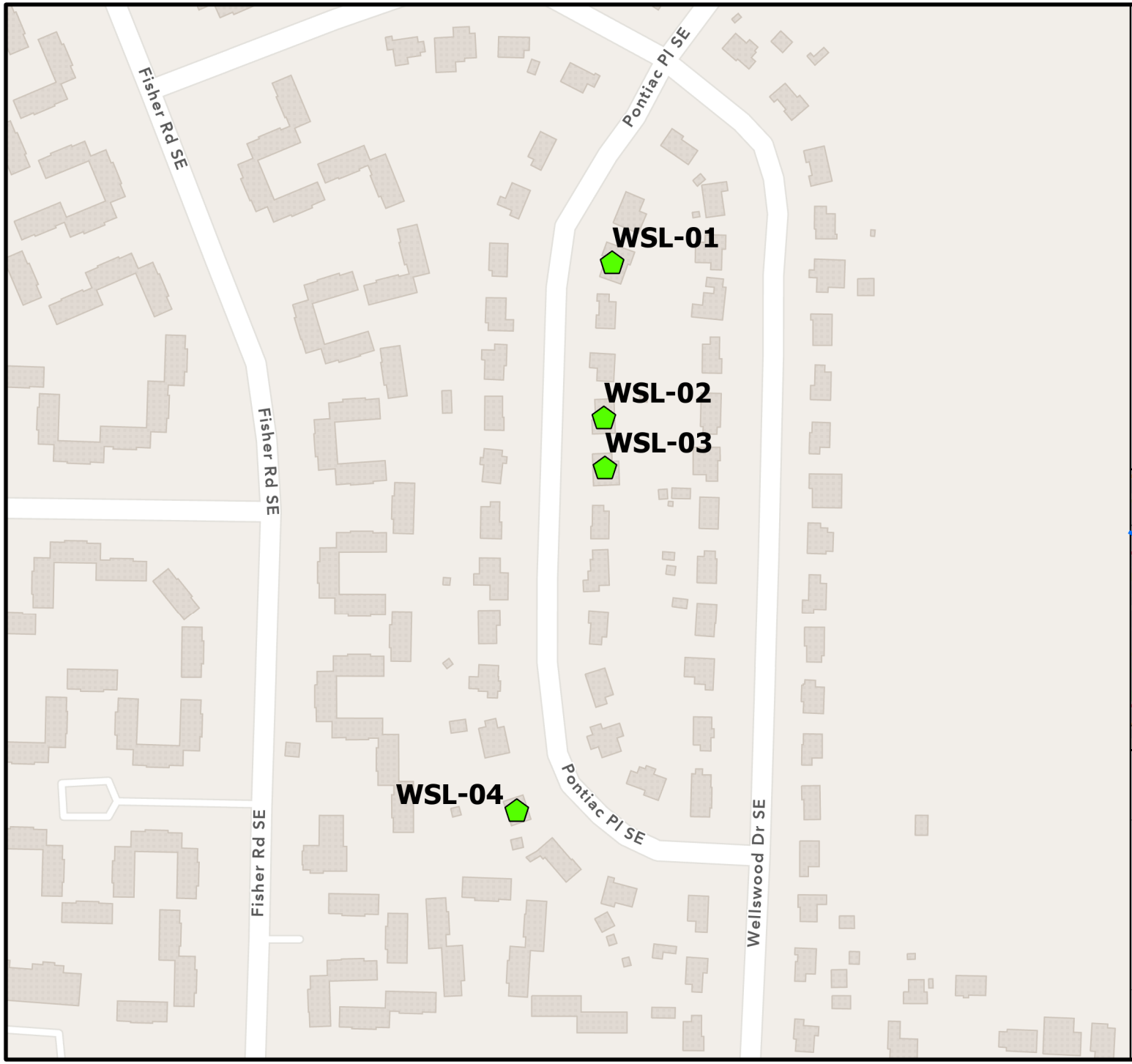
TO No.: 0045

City:	County:	State:
Atlanta	Fulton	Georgia

TETRA TECH

Date: 8/3/2021

Analyst: GREG.DOCEKAL



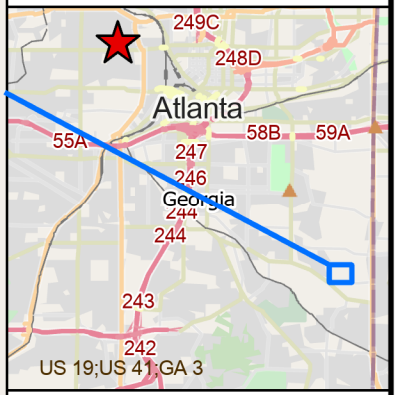
Legend

- Background Sample Location *(Ref. 16, p. 27)*
- Site Location
- WSL-01 EPA Sample Identification

N
W E
S

0 100 200
Feet

Map Source:
ESRI Community Map.
The source of this map image is Esri, used by the EPA with Esri's permission.



United States Environmental Protection Agency Region 4

FIGURE 4
Background Sample Locations

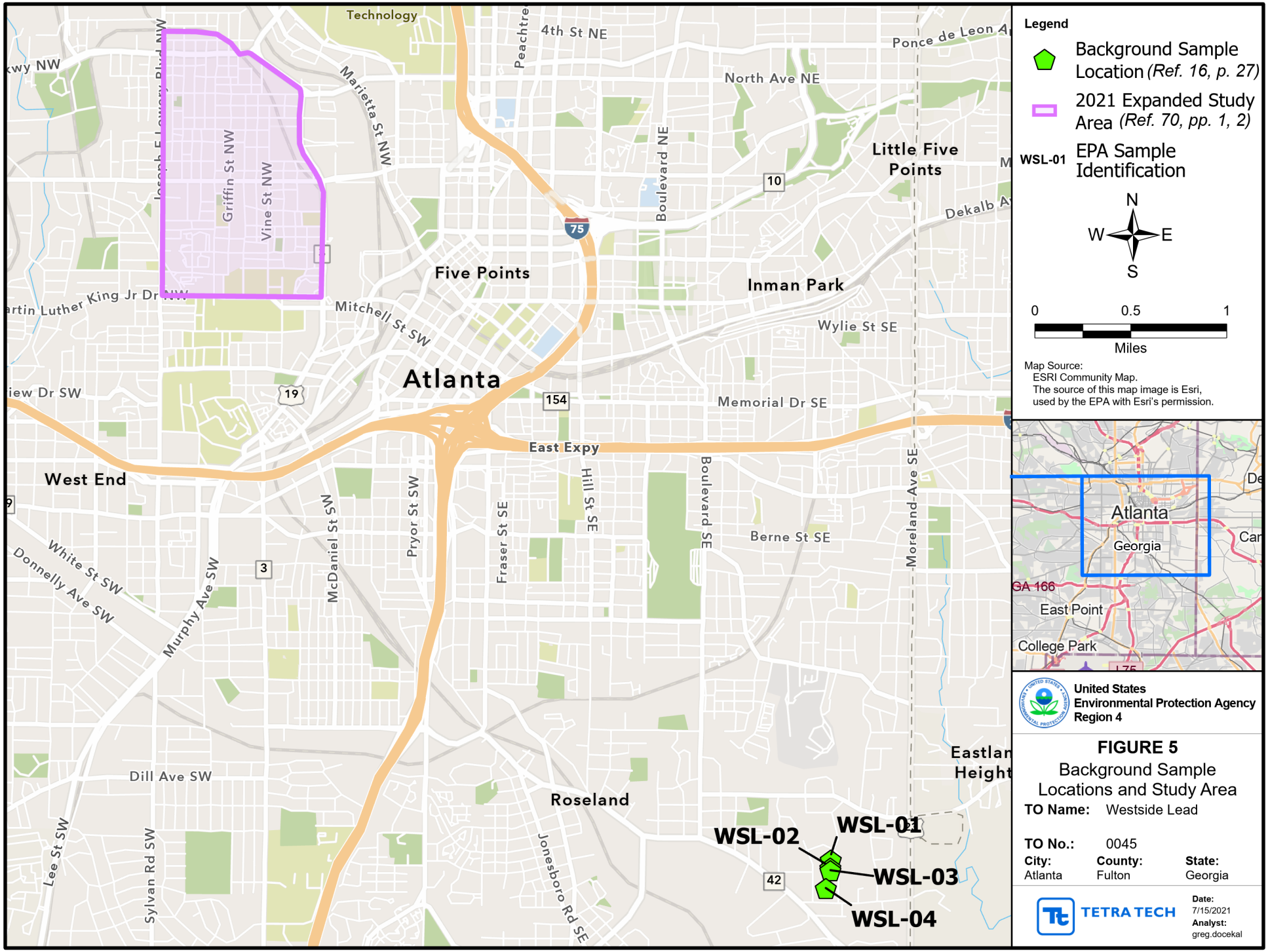
TO Name: Westside Lead

TO No.: 0045

City:	**County:**	**State:**
Atlanta	Fulton	Georgia

TETRA TECH

Date: 4/28/2021
Analyst: GREG.DOCEKAL


Legend
Background Sample Location (Ref. 16, p. 27)
2021 Expanded Study Area (Ref. 70, pp. 1, 2)
WSL-01 EPA Sample Identification
N
W
E
S
0
0.5
1
Miles
Map Source:
ESRI Community Map.
The source of this map image is Esri, used by the EPA with Esri's permission.
Technology
4th St NE
Peachtree
North Ave NE
Ponce de Leon Ave
Marietta St NW
Griffin St NW
Vine St NW
Boulevard NE
Little Five Points
Dekalb Ave
Five Points
Inman Park
Mitchell St SW
Wylie St SE
Atlanta
Memorial Dr SE
East Expy
West End
Hill St SE
Boulevard SE
Moreland Ave SE
Berne St SE
Pryor St SW
Fraser St SE
McDaniel St SW
White St SW
Donnelly Ave SW
Murphy Ave SW
Dill Ave SW
Roseland
Jonesboro Rd SE
Lee St SW
Sylvan Rd SW
WSL-01
WSL-02
WSL-03
WSL-04
10
75
19
154
3
42
Atlanta
Georgia
GA 166
East Point
College Park
United States Environmental Protection Agency Region 4
FIGURE 5
Background Sample Locations and Study Area
TO Name: Westside Lead
TO No.: 0045
City: Atlanta
County: Fulton
State: Georgia
TETRA TECH
Date: 7/15/2021
Analyst: greg.docekal

Area of Observed Contamination

North Ave NW
Meldrum St NW
Cameron M Alexander Blvd NW
Jett St NW
Neal St NW
John St NW
Western Ave NW
Jones Ave NW
Joseph E Boone Blvd NW
Thurmond St NW
Spencer St NW
Foundry St NW
Proctor St NW
Lindsay Street Park
Shoppers Super Market
Family Dollar
John F Kennedy Park
CSX Transportation
Lindsay St NW
Oliver St NW
Paines Ave NW
English Ave NW
Joseph E Lowery Blvd NW
James P Brawley Dr NW
Griffin St NW
Sunset Ave NW
Elm St NW
Vine St NW
Northside Dr NW
Gray St NW
Walnut St NW
Sciple Ter NW

Legend

Pre-Remedial Contaminated Parcels

- Level I Concentration
- Level II Concentration
- Parcels
- Area Of Observed Contamination

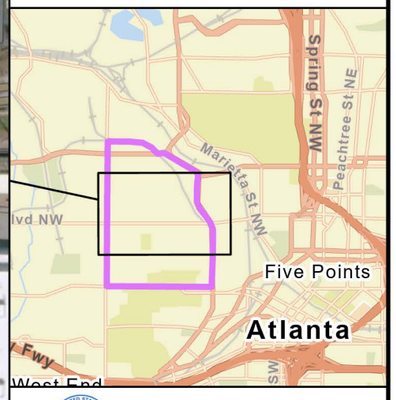
1234 EPA Sample Identification

N W E S

0 250 500
Feet

Note:
The Level I and II concentrations are documented in Sections 5.1.3.2.1 and 5.1.3.2.2 of the HRS documentation record. The numbers shown on this figure correspond with the first four numbers used in the sample identifications.

Map Source:
ESRI World Imagery Hybrid.
The source of this map image is Esri, used by the EPA with Esri's permission.



United States
Environmental Protection Agency
Region 4

FIGURE 6

Level I and Level II Concentrations

TO Name: Westside Lead

TO No.: 0045

City:	County:	State:
Atlanta	Fulton	Georgia

TETRA TECH

Date: 8/3/2021

Analyst: GREG.DOCEKAL

REFERENCES

1. U.S. Environmental Protection Agency (EPA). Hazard Ranking System (HRS), Title 40 *Code of Federal Regulations* (CFR) Part 300, Appendix A (55 *Federal Register* [FR] 51583, December 14, 1990, as amended at 82 FR 2779, Jan. 9, 2017; 83 FR 38037, Aug. 3, 2018), as published in the CFR on July 1, 2019, with two attachments—Attachment A: FR Vol. 55, No. 241. December 14, 1990. HRS Preamble. Attachment B: FR Vol. 82, No. 5, January 9, 2017. Addition of a Subsurface Intrusion Component to the Hazard Ranking System Preamble. 197 Pages. Available on-line at: https://semspub.epa.gov/work/HQ/174028.pdf and https://www.regulations.gov/document?D=EPA-HQ-SFUND-2010-1086-0104.

2. EPA. Superfund Chemical Data Matrix (SCDM) Query. Data Extracted on January 22, 2021. Available on-line at: https://www.epa.gov/superfund/superfund-chemical-data-matrix-scdm-query. 2 Pages.

3. U.S. Geological Survey (USGS). Northwest Atlanta Quadrangle, Georgia. 2017. 7.5-Minute Series. Modified by Tetra Tech, Inc. (Tetra Tech) to include the site location. 1 Map.

4. EPA. SEMS Search Results. Westside Lead. 431 Vine Street NW. Site EPA ID: GAN000407160. February 9, 2021. 3 Pages.

5. Tetra Tech. Final Quality Assurance Project Plan (QAPP). Westside Lead Site, Atlanta, Fulton County, Georgia. Prepared for EPA – Region 4. June 26, 2020. 85 Pages.

6. Emory University, Sam Peters. Slag Dump Site Report. Undated. 3 Pages.

7. Oneida Total Integrated Enterprises (OTIE). QAPP/Site Sampling Plan for Westside (Elm Street) Lead, Revision 2. Prepared for EPA – Region 4. September 13, 2019. 23 Pages.

8. Environmental Data Resources (EDR), Inc. The EDR Aerial Photo Decade Package. Westside Lead: North Avenue/Northside Drive/Foundry Street, Atlanta, GA 30314. Inquiry #6196561.8. September 18, 2020. 17 Pages.

9. OTIE. Project Note to File. Subject: EPA-approved Quality Assurance Project Plan. June 23, 2021. 1 Page.

10. AMEC Environment and Infrastructure, Inc. (AMEC). Report of Phase II Environmental Assessment. Proposed Mims Park. December 20, 2012. 203 Pages.

11. AMEC. Report of Phase I Environmental Assessment. Proposed Mims Park. December 20, 2012. 302 Pages.

12. City of Atlanta, Department of Watershed Management, Office of Watershed Protection. Voluntary Remediation Program Application for 310 Vine Street Properties, (also known as "Mims Park"), Atlanta, Fulton County, Georgia 30314. January 7, 2015. 1,270 Pages.

13. Clean Water Atlanta. Technical Memorandum. Subject: Task 29C, 310 Vine Street Historical Research Support – Report of Findings. April 15, 2013. 53 Pages.

14. EPA. Westside Lead Investigation, Fact Sheet #1. May 2019. 2 Pages.

15. EPA. Westside Lead Investigation, Fact Sheet #2. July 2019. 2 Pages.

16. Tetra Tech. Final Sampling Preliminary Assessment Report. February 12, 2021. 76 Pages.

17. EPA. Westside Lead Superfund Site Profile, Superfund Site Information. Accessed on March 18, 2021. 4 Pages.

18. EPA. Region 4. Science and Ecosystem Support Division (SESD), Athens, Georgia. Operating Procedure. Field X-Ray Fluorescence Measurement. SESDPROC-107-R4. September 8, 2017. 11 Pages.

19. EPA. Region 4. SESD, Athens, Georgia. Operating Procedure. Field Sampling Quality Control. SESDPROC-011-R5. April 26, 2017. 23 Pages

20. EPA. Region 4. SESD, Athens, Georgia. Operating Procedure. Sample and Evidence Management. SESDPROC-005-R3. May 25, 2016. 15 Pages.

21. Andy Miller. "Danger in the ground: Lead contaminates westside Atlanta neighborhood". *Atlanta Journal-Constitution.* December 6, 2019. Available on-line at: https://www.ajc.com/news/local/danger-the-ground-lead-contaminates-westside-atlanta-neighborhood/r1wiLsN2tyUIIbuTI7yxEO/. 14 Pages.

22. EPA. Region 4. Laboratory Services and Applied Science Division (LSASD), Athens, Georgia. Operating Procedure. Packing, Marking, Labeling and Shipping of Environmental and Waste Samples. LSASDPROC-209-R4. February 23, 2020. 7 Pages.

23. EPA. Region 4. SESD, Athens, Georgia. Operating Procedure. Global Positioning System. SESDPROC-110-R4. June 23, 2015. 21 Pages.

24. EPA. Region 4. SESD, Athens, Georgia. Operating Procedure. Logbooks. SESDPROC-010-R5. May 30, 2013. 9 Pages.

25. American Foundry Society. Environmental Profile. June 3, 2010. 4 Pages.

26. P2 InfoHouse. Primary Metals, Ferrous and Non-Ferrous Foundries. Accessed March 20, 2014. 18 Pages.

27. McBarron, Martha, and others. Risk-Based Management of Land Contamination at Foundry Sites. 2004. Available on-line at: http://www.academia.edu/21010807/Risk-based_Management_of_Land_Contamination_at_Foundry_Sites. 125 Pages.

28. EPA. Region 4. SESD, Athens, Georgia. Operating Procedure. Soil Sampling. SESDPROC-300-R3. August 21, 2014. 24 Pages.

29. U.S. Geological Survey (USGS). Geochemical and Mineralogical Data for Soils of the Conterminous United States. Data Series 801. 2013. 26 pages.

30. EPA. Using Qualified Data to Document an Observed Release and Observed Contamination. Quick Reference Fact Sheet. EPA 540-F-94-028, OSWER 9285.7-14FS, PB94-963311. November 1996. 18 Pages.

31. United States Census Bureau. QuickFacts, Fulton County, Georgia. Census April 1, 2020. Available on-line at: https://www.census.gov/quickfacts/fultoncountygeorgia. 3 Pages.

32. EPA. Westside Lead. Site Profile – Westside Lead – EPA OSC Response. Accessed on November 19, 2020. Available on-line at: https://response.epa.gov/site/site_profile.aspx?site_id=14081. 2 Pages.

33. EDR. Certified Sanborn Map Report. Westside Lead, North Avenue/Northside Drive/Foundry Street, Atlanta, Georgia, 30314. Inquiry Number: 6196561.3. September 21, 2020. 65 Pages.

34. Tetra Tech. Project Note to File with Attachment. Subject: Household Occupancy for Properties at Westside Lead. Attachments: Table. July 27, 2021. 9 Pages.

35. EPA, Region 4. Action Memorandum. Subject: Request for a Removal Action at the Westside Lead Site, Atlanta, Fulton County, Georgia. From: Charles L. Berry, On-Scene Coordinator (OSC), Emergency Response, Removal, Prevention, and Preparedness Branch (ERRPPB). Through: James W. Webster, Chief, ERRPPB. To: Franklin E. Hill, Director, Superfund and Emergency Management Division. Signed November 4, 2019. 12 Pages.

36. EPA, Atlanta, Georgia, Region 4 – Superfund Division. Guidance. Superfund X-Ray Fluorescence Field Operations Guide. DCN: SFDGUID-001-R0. Effective Date: July 19, 2017. 23 Pages.

37. EPA. Pollution/Situation Report, Westside Lead Site, Removal Site Evaluation POLREP. POLREP #1. Reporting Period November 8, 2019 to June 17, 2019. From: Chuck Berry, OSC. Through: Matt Taylor, Removal Operations Section. To: James W. Webster, Chief, ERRPPB. July 23, 2019. 6 Pages.

38. EPA, Region 4. Letter. Subject: Request for Identification of State ARARs, Westside Lead Site, EPA ID: GAN000407160. From: Chuck Berry, OSC, ERRPPB. To: Jason Metzger, Program Manager, Land Protection Branch – Response and Remediation Program, Georgia Environmental Protection Division, Georgia Department of Natural Resources. August 1, 2019. 3 Pages.

39. Tetra Tech. Project Note to File with Attachments. Subject: Figure 3 – Removals Completed and Parcels with Lead Concentrations Greater than 400 milligrams per kilogram. Attachments: Figures. March 25, 2021. 5 Pages.

40. EPA, Region 4. Action Memorandum. Subject: Change in Scope, Ceiling Increase and 12-Month Exemption for the Time-Critical Removal Action at the Westside Lead Site, Atlanta, Fulton County, Georgia. From: Charles L. Berry, OSC, ERRPPB. Through: James W. Webster, Chief, ERRPPB. To: Carol J. Monell, Director, Superfund and Emergency Management Division. Signed May 6, 2020. 6 Pages

41. EPA, Region 4. Letter with Attachment. Subject: Westside Lead Site, Atlanta, Georgia. From: James Webster, Chief, ERRPPB. To: Mr. Chuck Mueller, Chief, Land Projection Division, Environmental Protection Division, Georgia Department of Natural Resources. Attachment: POLREP #1. July 29, 2019. 7 Pages.

42. EPA. USGS Background Soil-Lead Survey: State Data, National Interactive Map, Georgia. Available on-line at: https://www.epa.gov/superfund/usgs-background-soil-lead-survey-state-data. Accessed on February 8, 2021. 7 Pages.

43. EPA. Westside Lead Cleanup, Atlanta, Georgia, Residential Yard Cleanup to begin February 2020. January 2020 Fact Sheet. 4 Pages.

44. EPA. Memorandum. Subject: Recommendations for Sieving Soil and Dust Samples at Lead Sites for Assessment of Incidental Ingestion. From: Dana Stalcup, Director, Assessment and Remediation Division, Office of Land and Emergency Management. To: Superfund National Program Managers, Regions 1-10. July 1, 2016. 34 Pages.

45. Tetra Tech. Source of Slag and Background of Slag Generation. February 17, 2021. 880 Pages.

46. OTIE. Westside Lead Vine Street Staging Area Sampling Investigation. 441 Vine Street, Atlanta, Fulton County, Georgia. Revision 0. November 15, 2019. 31 Pages.

47. Tetra Tech. Project Note to File with Attachments. Subject: Westside Lead Final Analytical Reports. Attachments: EPA, Region 4 LSASD Final Analytical Reports, 2019 to 2020. June 29, 2021. 871 pages.

48. Wood Environment and Infrastructure Solutions, Inc. 310 Vine Street (aka Rodney Cook Senior Park) VRP Site Semi-Annual Status Report #7. December 14, 2008. 27 Pages.

49. Tetra Tech. Project Note to File with Attachments. Subject: Westside Lead Final Analytical Report Chain of Custodies. Attachments: EPA LSASD COCs. July 14, 2021. 125 Pages.

50. Tetra Tech. Record of Telephone Conversation. Subject: Definitions of Minimum Reporting Limit, Contract Required Quantitation Limit, and Sample Quantitation Limit. Between Jessica Vickers, Quality Assurance Manager and Nardina Turner, Superfund Sample Control and Quality Assurance Coordinator, EPA, Region 4. July 25, 2013. 1 Page.

51. Tetra Tech. Project Note to File with Attachments. Subject: Westside Lead Sample Characterization Forms. Attachments: Surface Soil Characterization Forms. June 23, 2021. 199 Pages.

52. Tetra Tech. Westside Lead Background Logbook No. 1. September 3, 2019 to March 6, 2020. 7 Pages.

53. Tetra Tech. Project Note to File with Attachments. Subject: Address Confirmation. Attachments: Parcel Location Maps. June 24, 2021. 4 Pages.

54. Tetra Tech. Westside Lead Site – Soil Sample Collection Records. 112 Pages.

55. Tetra Tech. Topographic History for Westside Lead. February 12, 2021. 2 Pages.

56. Tetra Tech. Project Note to File with Attachment. Subject: Westside Lead – Soil Samples with Suspected Waste Foundry Material. Attachment: Soil Characterization Photographic Log. October 12, 2020. 174 Pages.

57. EPA. EPA Expands Westside Lead Study Area, Fact Sheet #10. May 2021. 4 Pages.

58. EPA. Memorandum. Subject: Slag at the Westside Lead Site. From: Tim Frederick, Chief, Scientific Support Section, Superfund and Emergency Management Division and Ben Bentkowski, Senior Hydrogeologist, Scientific Support Section, Superfund and Emergency Management Division.

To: Leigh Lattimore, Remedial Project Manager, Restoration and Site Evaluation Branch, Superfund and Emergency Management Division. March 3, 2021. 3 Pages.

59. EPA, Region 4 SESD. Analytical Support Branch Laboratory Operations and Quality Assurance Manual (LOQAM). April 2016. Accessed on-line at: https://www.epa.gov/sites/production/files/2016-06/documents/loqam_042816.pdf . 115 Pages.

60. Tetra Tech. Project Note to File with Attachment. Subject: Summary of Qualified Data. Attachment: Table. March 29, 2021. 4 Pages.

61. EPA. Environmental Monitoring Systems Laboratory, Office of Research and Development. Method 200.8, Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma – Mass Spectrometry, Revision 5.4. 1994. 58 Pages.

62. EPA. Method 6010D. Inductively Coupled Plasma—Optical Emission Spectrometry. SW-846 Update VI. Revision 5. July 2018. Available on-line at: https://www.epa.gov/hw-sw846. 35 Pages.

63. Tetra Tech. Record of Telephone Conversation. Subject: Westside Lead Site - Sampling Field Procedures. Between Alicia Shultz, Environmental Scientist and Chris Jones, Readiness Coordinator, Tetra Tech. March 23, 2021. 1 Page.

64. EPA. EPA Region 4 Data Validation Standard Operating Procedures for Contract Laboratory Program Routine Analytical Services. EPA, Region 4, LSASD, Athens, Georgia. Accessed on March 24, 2021. Available on-line at: https://www.epa.gov/quality/epa-region-4-data-validation-standard-operating-procedures-contract-laboratory-program. 2 Pages.

65. EPA, Region 4 SESD. Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Couple Plasma – Mass Spectroscopy. September 2, 2011. 45 Pages.

66. OTIE. Elm Street Westside Lead Logbook No. 1. March 18, 2019 to September 23, 2019. 76 Pages.

67. Tetra Tech. Review of Field Quality Control Samples. Prepared by Jessica A. Vickers. Project No.: 68HE0420F0045, Project Name: Westside Lead PA/HRS. March 25, 2021. 4 Pages.

68. EPA. Westside Lead Cleanup, Atlanta, Georgia. Update on Sampling and Cleanup Activities. January 2021.

69. Tetra Tech. Project Note to File. Subject: Quality Assurance Project Plan (QAPP) Deviations. April 19, 2021. 1 Page.

70. Tetra Tech. Project Note to File with Attachment. Subject: Chronology of Study Area Expansions. Attachment: Figure. May 4, 2021. 2 Pages.

SITE SUMMARY

The Westside Lead (WSL) site, EPA identification number GAN000407160, is located in the residential neighborhood of Westside in Atlanta, Georgia with the address of 431 Vine Street NW, Atlanta, Fulton County, Georgia 30318 (Refs. 3; 4, p. 2) (see Figures 1 and 2 of this HRS documentation record). The coordinates for the WSL site, as measured at the center of 431 Vine Street NW and from within the area of observed contamination (AOC) (see Section 5.0.1 of this HRS documentation record), are latitude 33° 45' 59.3" north and longitude 84° 24' 26.2" west (see Figure 1 of this HRS documentation record). The site, which consists of a contaminated soil AOC, is located within a larger study area being investigated for arsenic and lead soil contamination, includes properties north to Bedford St NW, west to Joseph E. Lowery Blvd. NW, south to Martin Luther King Jr Drive NW and east to Northside Drive NW (Ref. 68, p. 1) (see Figure 2 of this HRS documentation record). The study area changes in response to the on-going investigation where arsenic and lead soil contamination are being identified (Ref. 68, pp. 1 and 2).

The site is composed of arsenic- and lead-contaminated soil on residential (single and multi-family) parcels resulting from the use of arsenic- and lead-contaminated fill to level the ground surface before and after homes were constructed (Refs. 13, pp. 3, 4, 5; 16, pp. 5, 8, 14, 16; 45, p. 5; 55, pp. 1, 2). Samples of the fill contain arsenic and lead three times above background concentrations and arsenic above risk-based concentrations (see Tables 3 and 4 of this HRS documentation record). Investigations at the WSL site identified slag and sand in the fill, and slag was observed on the ground surface in the residential neighborhoods of Westside of Atlanta, including but not limited to English Avenue and Vine City (Refs. 5, p. 4; 6, p. 1; 14; 15; 16, pp. 45, 70 to 76; 56, pp. 22, 28, 33, 37, 43, 51, 52, 133, 170 to 174; 58, pp. 1, 2) (see Figure 3 and Table 3 of this HRS documentation record).

Additionally, fill containing slag and sand has been observed in soil borings, soil samples, excavations, piles, and on ground surfaces where topsoil has eroded away (Refs. 5, p. 4; 6, p. 1; 16, pp. 5, 15, 16, 45, 70 to 76; 21, p. 3; 37, pp. 2, 5; 45, pp. 2 to 5, 8; 56, pp. 22, 28, 33, 37, 43, 51, 52, 133, 166 to 174) (see Figure 3 and Table 3 of this HRS documentation record). Topographic maps show that the ground surface of the Westside neighborhood was leveled between 1927 and 1981 (Refs. 13, pp. 3, 4, 52, 53; 55). Based on the characteristics of the fill, including the presence of arsenic and lead, sand and slag, the fill appears to be foundry waste (Refs. 25, p. 1; 26, pp. 4, 5; 56, pp. 22, 28, 33, 37, 43, 51, 52, 133, 166 to 174; 58, pp. 1, 2). Nearby industries generated foundry waste, slag, and metal-containing wastes (Ref. 45, pp. 3, 4, 5, 12). These wastes were potentially used as fill in the Westside neighborhood as this was a common practice (Ref. 25, p. 1).

Arsenic-contaminated soil is present at Level I concentrations on residential parcels, and lead-contaminated soil is present at Level II concentrations on residential parcels (see Sections 5.1.3.2.1 and 5.1.3.2.2 and Table 4 of this HRS documentation record). The Level I and II residential parcels where arsenic, lead, or both were detected in surface soil samples three times or more above background levels comprise 98 parcels with observed contamination (see Tables 3 and 4 of this HRS documentation record). The areas lying between observed contamination are not considered part of the AOC because of the presence of roads, sidewalks, commercial buildings, homes, and parcels excluded from the site (Ref. 1, Section 5.1.0) (see Figures 3 and 6 of this HRS documentation record). The parcels shaded in red in Figure 3 of this HRS documentation record meet the criteria for observed contamination (Ref. 1, Section 5.1.0). Parcels excluded from the AOC include: parcels with soil lead concentrations equal to or greater than the EPA Removal Management Level (RML) of 400 milligram per kilogram (mg/kg) (shaded in blue on Figure 3 of this HRS documentation record) because they are undergoing removal actions by EPA; parcels where a removal has been completed (shaded in yellow on Figure 3 of this HRS documentation record); and parcels not meeting the criteria for observed contamination or have not been sampled to date (unshaded on Figure 3 of this HRS documentation record).

The primary mode of deposition for the contamination is believed to be the use of foundry waste as fill as evidenced by slag and foundry sand observed on the ground surface, in piles, and in soil samples collected from the site (Refs. 5, p. 4; 6, p. 1; 10 pp. 8, 191; 12, pp. 11, 17, 18, 22; 16, pp. 5, 15, 16, 32, 33, 45, 70 to 76; 21, p. 4; 37, pp. 2, 5; 45, pp. 2 to 5, 8; 56, pp. 22, 28, 33, 37, 43, 51, 52, 133, 166 to 174; 58,

pp. 1, 2). Since the 1800s, various industries have utilized the areas north and east of the WSL site because of their proximity to an extensive railroad system. Those industries included foundries that generated foundry waste, slag, and metal-containing wastes (Ref. 45, pp. 3, 4, 5, 6). Waste, likely generated at these industrial facilities, may have been used as fill in the Westside neighborhood as this was a common practice (Refs. 25, p. 1; 27, p. 57). Foundry waste is known to contain arsenic and lead (Ref. 27, pp. 19, 24, 48, 52, 59, 60, 62, 99).

In 2018, Emory University collected soil samples from urban growing spaces and lawns in western Atlanta for analyses of heavy metals and bioavailability. A piece of slag was found near one of the sampling sites, and an empty lot near on Elm Street NW was identified as a slag dump (Ref. 6, p. 1). Slag samples were collected from the slag dump and analyzed for arsenic and lead using X-ray Fluorescence (XRF). The slag samples had mean arsenic concentration of 297 mg/kg, a maximum arsenic concentration of 683 mg/kg, a mean lead concentration of 2,741 mg/kg, and a maximum lead concentration of 6,133 mg/kg (Ref. 6, pp. 1, 2).

Photographs of foundry waste from foundry sites are similar to the photographs of slag and fill at WSL site as shown by slag and brown silty sand in soil samples and slag on the ground surface, as well as large pieces of slag on the ground surface (Refs. 16, pp. 47 to 76; 21, p. 4; 27, pp. 55, 56; 56, pp. 22, 28, 33, 37, 43, 51, 52, 133, 166 to 174; 58, pp. 1, 2). Foundry Street NW runs east-west along the southern boundary of the 2020 Study Area (see Figure 2 of this HRS documentation record). The origin of the street name has not been determined but may relate to the former existence of numerous foundries in the western Atlanta area.

Figure 2 of this HRS documentation record shows the study area where soil sampling is currently being conducted in the Westside neighborhood to identify parcels that meet the criteria for removal actions or pre-remedial actions. The number of removal and pre-remedial parcels will expand during the ongoing sampling activities (Refs. 16, p. 6; 17, p. 3; 32). None of the parcels used in the HRS scoring of the site have been part of a removal or cleanup action or are under consideration for a removal action. Figures 3 and 6 of the HRS documentation record identifies the locations of observed contamination and the approximate boundaries of the AOC.

SITE HISTORY

The site was discovered in 2018 when students from the Saikawa Laboratory at Emory University (Emory) were collecting samples from urban growing spaces and lawns in western Atlanta to test for heavy metal concentrations. The students identified a slag dump on a parcel located on Elm Street NW and collected samples of the slag. The analytical results of the slag sample detected lead concentrations up to 6,133 mg/kg (Refs. 6, pp. 1, 2; 37, pp. 1, 2). On October 31, 2018, the Emory data was sent to the Georgia Environmental Protection Division (GA EPD). On November 15, 2018, after reviewing the data, GA EPD requested that the EPA investigate the WSL site to determine whether further action was warranted. In response to GA EPD's request, EPA performed a Removal Site Evaluation (RSE) at the WSL site (Refs. 37, p. 2; 40, p. 2). The site was initially called Elm Street Lead and included about 60 0.1-acre to 0.3-acre residential parcels within the 300 to 400 block of Elm Street (Refs. 5, p. 4). The sampling conducted under the RSE started in March 2019 and based on the data the study area was expanded to 368 properties in July of 2019, again to 1,068 properties in February 2020, and to 2,097 properties in May 2021 (Refs. 7, p. 4; 38, p. 2; 40, p. 1; 43, pp. 1, 3; 57, p. 1; 70, p. 1). EPA began residential soil excavation in January 2020 (Ref. 40, p. 1).

Environmental site investigations at the WSL Study Area identified arsenic and lead concentrations in surface soil above the EPA RML for arsenic (68 mg/kg) and lead (400 mg/kg) in residential and other parcels within the community of Westside (Refs. 5, p. 4; 6, pp. 1, 2). RMLs are the criteria EPA uses to identify parcels requiring a removal action. The identification of arsenic and lead concentrations above RMLs led to an ongoing, time-critical removal action and soil investigations, including soil sampling, to

delineate the extent of soil contamination and to identify parcels requiring removal actions (Ref. 5, pp. 4, 5).

Sanborn Fire Insurance maps and historical aerial photographs show land use at and in the vicinity of the WSL site has been primarily residential since development of the land (Refs. 33, pp. 4 to 7, 11 to 14, 18 to 29, 33 to 36, 41 to 44, 48 to 51, 55 to 58, 62 to 65; 45, p. 5). A 1938 aerial photograph of the study area, the earliest aerial photograph available, shows the study area as primarily residential (Ref. 8, p. 17).

Based on historical topographic maps, ground elevations increased 10 feet above the ground surface at the WSL site and surrounding area between 1927 and 1981 (Refs. 13, pp. 3, 4, 5, 50, 51, 53; 55). Therefore, between 1927 and 1981, fill was likely brought into the WSL site and used to level the ground surface. Some areas may have been excavated and graded based on a review of topographic maps and aerial photographs (Refs. 8; 9; 13, pp. 50, 51, 53; 55). Based on the analytical results of soil samples collected from the WSL site, the fill is contaminated with arsenic and lead (see Table 4 of this HRS documentation record).

PREVIOUS INVESTIGATIONS AND REMOVAL ACTIONS

Investigations at and in the vicinity of the WSL site completed to date are summarized below.

City of Atlanta Investigations

In 2015, the City of Atlanta submitted a Voluntary Remediation Program Application to GA EPD that summarizes Phase I and II investigations completed in December 2012 at the 310 Vine Street Properties (also known as Mims Park), which included 68 parcels at or associated with 310 Vine Street, Atlanta, Georgia and within the WSL study area (Refs. 10, pp. 5, 20; 11, p. 6; 12, pp. 1, 2; 48, p. 1). The parcels are excluded from the AOC for HRS scoring purposes because the contaminated soil was removed by the City of Atlanta (see Figures 3 and 6 of this HRS documentation record). The Phase I and II investigations revealed lead-impacted soils resulting from historical placement of fill in the late 1940s to early 1950s, presumably to facilitate development of residential parcels during that time (Refs. 10, pp. 9, 10, 12, 22, 189 to 194; 12, pp. 9, 10 to 13).

One soil boring from the Phase II investigation contained 17 feet of fill (Ref. 10, pp. 8, 191). Soil samples contained lead up to 2,280 mg/kg (Ref. 10, pp. 10, 12). One soil sample contained arsenic at 6.81 mg/kg (Ref. 10, p. 10). Further investigations identified additional lead-contaminated soil. A total of 32,260.75 tons of soil were excavated, stockpiled, characterized, loaded, and transported off site for disposal (Ref. 48, p. 1).

Removal Site Evaluation, Time-Critical Removal Action, and Pre-Remedial Actions

On October 31, 2018, the Emory data was sent to the GA EPD. On November 15, 2018, after reviewing the data, GA EPD requested that the EPA investigate the WSL site to determine whether further action was warranted. In response to GA EPD's request, EPA performed a RSE at the WSL site (Ref. 37, p. 2). The RSE began on December 11, 2018, with site reconnaissance by EPA, local representatives, and EPA's Superfund Technical Assessment and Response Team (START) contractor, Oneida Total Integrated Enterprises (OTIE). Slag was observed on the ground surface and in soil piles (Refs. 32, p. 1; 37, p. 3; 38, p. 2). Visible slag was observed on the lawns of several parcels along Elm Street (Ref. 38, p. 2).

As part of the RSE, OTIE began soil sampling in March 2019 to assess the presence and extent of lead contamination (Refs. 7, pp. 3, 4, 9; 38, p. 2). The initial soil sampling investigation included two city blocks surrounding Elm Street NW composed of 60 parcels (Refs. 35, p. 2; 37, p. 4). Soil sampling at the site continues under the EPA pre-remedial program (Ref. 68, p. 1). The soil analytical results are used to identify observed contamination and are discussed in Section 5.0 of this HRS documentation record (Ref. 16, pp. 13, 14).

Westside Lead, Vine Street Staging Area, Sampling Investigation

In November 2019, EPA tasked OTIE to provide an assessment of lead concentrations at the planned soil staging area at three properties on Vine Street in Atlanta, Fulton County, Georgia (Ref. 46, pp. 3, 4). The purpose of the assessment was to determine whether the historical placement of industrial slag or incinerator ash on Vine Street resulted in soil lead concentrations above guidance concentrations, and if that contamination is present in subsurface soils down to eight feet in depth (Ref. 46, p. 4).

OTIE sampled the staging area using a Direct Push Technology (DPT) rig and hand augers to determine the extent of contamination. Due to the gravel and rock-like physical characteristics present across most of the area, collection of soil beyond two feet was unsuccessful. XRF screening results of surface (0 to 2 feet below ground surface [bgs]) soil samples identified lead contamination up to 2,405 mg/kg. On November 1, 2019, a track hoe was utilized to collect subsurface soil samples to a depth of 8 feet bgs at nine different locations in the staging area (Ref. 46, p. 4). A total of 42 soil samples were collected from the nine locations. For every 2 feet excavated, a sample was collected directly from the excavator bucket.

After the soil samples were dried and bagged, they were analyzed using the XRF. Soil samples contained lead up to 11,409 mg/kg. Sample results were highly variable due to the presence of slag encountered at various locations and depths across the area (Ref. 46, pp. 4, 5, 6).

2.2.1 SOURCE IDENTIFICATION

Number of Source: 1

Name of Source: Residential Soil

Source Type: Contaminated Soil

Description and Location of the Source:

Residential soil contamination is characterized in Section 5.0.1 of this HRS documentation record as an area of parcels containing observed contamination (collectively scored as AOC A) (see Figures 3 and 6 of this HRS documentation record).

5.0 SOIL EXPOSURE AND SUBSURFACE INTRUSION PATHWAY

SOIL EXPOSURE COMPONENT

5.1.0 General Considerations

According to the HRS, the soil exposure component of the soil exposure and subsurface intrusion pathway is based on observed contamination and AOC (Ref. 1, Section 5.1.0). All soil samples meeting the criteria for observed contamination at the WSL site were collected during EPA removal and pre-remedial investigations and were collected at a depth of 0 to 6 inches bgs as documented in Tables 1 and 3 of this HRS documentation record. All investigations followed the same sample collection and processing procedures and XRF methods (Refs. 5, pp. 1, 4 to 12; 7, pp. 4 to 11; 16, pp. 10 to 13; 18) (see Tables 1 to 4 of this HRS documentation record). Analytical results for soil samples indicate arsenic, lead, or both are present at concentrations equal to or greater than three times the designated background level and at concentrations greater than the corresponding sample quantitation limits (SQL) meeting the criteria for observed contamination (Ref. 1, Section 5.1.0 and Table 2-3) (see Tables 2 and 4 of this HRS documentation record).

Letter by which this area is to be identified: A

Name and description of the area: AOC A is composed of surface soils within residential parcels that meet the criteria for observed contamination for arsenic and/or lead in the residential neighborhood of Westside, Atlanta, Fulton County, Georgia (see Figures 3 and 6 of this HRS documentation record).

Type of the area: Contaminated soil

Location of the area, with reference to a map of the site:

Observed contamination has been documented on 98 residential parcels located in the Westside neighborhood of Atlanta, Fulton County, Georgia. Of the 98 residential parcels, arsenic and lead were detected on 69 parcels at Level II concentrations, and arsenic was detected on 29 parcels at Level I concentrations as documented in Tables 3 and 4 of this HRS documentation record. Figure 3 of this HRS documentation record shows the location of each residential parcel meeting the criteria for observed contamination, outlines the estimated AOC and identifies parcels where slag has been observed. Figure 6 of this HRS documentation record shows the locations of the Level I and Level II parcels. Contamination is not inferred between locations of observed contamination because the locations of observed contamination are not contiguous due to the presence of roads, sidewalks, commercial buildings, homes, and parcels excluded from the AOC. Parcels excluded from the AOC include parcels that have not yet been sampled, parcels with soil lead concentrations equal to or greater than the RML of 400 mg/kg, and parcels where contaminated soils have been removed. Exclusion of parcels that have not been sampled from scoring does not indicate an absence of contamination at these parcels. No removals will be scheduled for the parcels scored as subject to observed contamination within the AOC because they do not meet the criteria for a removal. Further delineation of arsenic and lead contamination will be investigated (Refs. 17, p. 2; 68, p. 1).

Surface soil samples that meet the observed contamination criteria were used to delineate the AOC (Ref. 1, Table 2-3 and Section 5.1.0) (see Figures 3 and 6 and Table 4 of this HRS documentation record). The soil samples documenting observed contamination were collected during the EPA RSE and Time-Critical Removal Action and continued and transitioned in June 2020 under the pre-remedial program (Refs. 5, p. 3;7, p. 4; 15, pp. 1, 2; 16, pp. 10 to 13; 37, p. 3; 38, p. 2; 40, p. 1; 41, p. 1). The soil sampling procedures, sample validation, detection limits, and analytical methods for all samples collected at the WSL site are documented below.

Sample Collection, Processing, and Screening Procedures for All Soil Samples

All soil samples were collected in accordance with the EPA-approved Quality Assurance Project Plans (QAPP) for sampling conducted under OTIE and Tetra Tech dated September 13, 2019 and June 26, 2020, respectively (Refs. 5, p. 1; 7, p. 1; 9; 16, pp. 10 to 13). The QAPPs reference standard operating procedures to be followed for sample collection, processing, analysis, and validation as approved by EPA Region 4, Laboratory Services and Applied Science Division (LSASD), formerly known as the Science and Ecosystem Support Division (SESD), Athens, Georgia (Refs. 5, pp. 6 to 14; 7, pp. 8 to 10, 12, 13, 15; 18; 19; 20; 22; 24; 28; 36; 51; 59). To avoid any possible contamination coming from historical use of lead-based paint on houses or vehicular traffic areas, drip lines from roofs were avoided and not sampled (Refs. 7, p. 6; 63; 69).

Tetra Tech and OTIE collected soil samples in accordance with the LSASD Operating Procedure for Soil Sampling, SESDPROC-300-R3, August 2014 (Refs. 5, p. 9; 7, p. 10; 9; 16, pp. 10 to 13; 28). The Incremental Sampling Methodology (ISM) was applied, which includes collecting 30-point increments of soil from a specified decision unit (DU) using a sampling tool and physically combining the increments into a single sample. Less than 30 points would be used if the parcels were too small for 30 sample points (Refs. 5, p. 5; 7, pp. 9, 10; 16, pp. 10, 11, 12). Soil samples were collected at 0 to 6 inches bgs from each DU on each parcel. DUs within each parcel were determined based on the physical features of the parcel, such as size, layout, and structures present. A parcel that includes a home with a front and back yard was considered two separate DUs, one as the front yard and the second as the back yard. A garden, playground, or significant sized side yard were considered an additional DU (Refs. 5, p. 5; 7, p. 6; 16, pp. 10 to 13). All incremental soil samples were collected on the property and within 200 feet of each residence based on the lot sizes shown on Figures 3 and 6 and the sample collection records, Reference 54 (see Tables 3 and 4 of this HRS documentation record). An example of the type of stainless-steel core sampling tool used for collecting the soil is shown in Reference 29, page 20.

Soil sample screening was conducted in accordance with the EPA Region 4 LSASD Operating Procedure for Field X-Ray Fluorescence Measurement, SESDPROC-107-R4, September 2017 (Refs. 5, p. 9; 7, p. 6; 16, pp. 11, 12; 18); the EPA Region 4 Superfund XRF Field Operations Guide (FOG) (Refs. 5, pp. 5, 6, 9; 7, p. 6; 16, pp. 11, 12; 36), and the EPA Office of Land and Emergency Management Directive 9200.1-128, Recommendations for Sieving Soil and Dust Samples at Lead Sites for Assessment and Incidental Ingestion, dated December 22, 2016 (Refs. 5, p. 5; 7, p. 20; 16, pp. 11, 12; 44).

Composite soil samples were dried, homogenized, and bagged for XRF screening of lead in accordance with the EPA Region 4 Superfund XRF FOG, SFDGUID-001-R0, July 2017 (Refs. 5, pp. 5, 9, 10; 7, pp. 9, 10; 9; 16, pp. 11, 12; 36). Laboratory analysis combined with XRF screening of soil samples is a methodology to collect XRF data for arsenic and lead (and other heavy metals) (Ref. 36, p. 5). Initially, samples found to exceed 400 mg/kg of lead via XRF screening were containerized in 4-ounce quality control (QC) jars and sent to the laboratory for analysis. All soil sample analytical results documented in the tables of this HRS documentation record and used in the scoring are from laboratory analysis only and not by XRF analysis (see Table 4 of this HRS documentation record).

The procedures followed in the field are as follows:

1. Samples with lead concentrations ranging between 280 and 399 parts per million (ppm) detected via XRF screening were sieved to a final particle size of 150 microns (µm) either by hand or by use of a motorized sieve shaker.
2. This 150 µm fraction was then screened with the XRF again, and then sent to the EPA Region 4 laboratory in Athens, Georgia for arsenic analysis via EPA Method 200.8 and lead analysis via Method 6010C (currently 6010D) regardless of result (Refs. 5, pp. 5, 6, 7; 7, pp. 9, 10; 37, p. 4; 61; 62, p. 1). (Reference 7, page 9, incorrectly states that samples were analyzed for arsenic and lead using Method 6010C for both arsenic and lead. The final analytical report provided in Reference 62 documents that EPA Method 200.8 was used to analyze for arsenic and Method 6010C was used to analyze for lead.)

Tetra Tech deviated from the QAPP: unsieved soil samples with XRF lead concentrations less than 400 mg/kg were sent directly to analytical laboratory, the sample was not sieved prior to sending the soil sample to the analytical laboratory (Ref. 69).

Field documentation and records were generated and maintained in accordance with the requirements presented in the EPA Region 4 LSASD FBQSTP guidance document for Logbooks, SESDPROC-010-R5, May 2013 (Refs. 5, p. 8; 16, pp. 10 to 12; 24). Sampling locations were located using a global positioning system (GPS) unit in accordance with the EPA Region 4 LSASD FBQSTP Global Positioning System, SESDPROC-110-R4, June 2015 (Refs. 5, pp. 9, 10; 16, pp. 10 to 12; 23). GPS coordinates were obtained at the center of each parcel during the sampling event. Sampling locations were photographed, and soil types were recorded (Refs. 5, p. 12; 7, pp. 6, 8, 9; 16, pp. 10 to 12).

Chain-of-custody records for the soil samples are provided in Reference 49. Soil sample location records (records) are generated from the information gathered for each soil sample collected during the sampling event and are provided in Reference 54. The records are equivalent to field logbooks (Ref. 63).

Sample Validation and Detection Limits for All Soil Samples

All data for the WSL site was verified based on the Laboratory Services Branch's Laboratory Operations and Quality Assurance Manual (LSB LOQAM) specifications and qualified by the Regional Laboratory if the applicable quality control criteria were not met (Refs. 47, pp. 1, 16, 52, 89, 139, 159, 186, 226, 253, 306, 330, 402, 432, 462, 487, 523, 557, 595, 626, 647, 663, 686, 714, 741, 760, 785, 817, 844; 59; 64). Field quality control samples were reviewed by Tetra Tech (Ref. 67). Data validation procedures are described in References 64 and 65. The minimum reporting limits (MRL) are analyte- and sample-specific and correspond to the lowest quantitative point on the calibration curve. The MRLs are adjusted for sample prepared and any dilutions performed, as well as for percent moisture (Ref. 50, p. 1). The MRLs in the LSASD Analytical Services Branch (ASB) data package are equivalent to SQLs as defined in the HRS, Section 1.1, Definitions (Refs. 1, Section 1.1; 50). All data used to identify the soil samples meeting the observed contamination criteria were validated by the LSASD ASB/Laboratory Support Branch (LSB) (Refs. 1, Table 2-3 and Section 5.1.0; 5, p. 14; 7, pp. 4, 5; 16, p. 12; 47, p. 1; 64).

Sample Laboratory Analytical Methods for All Soil Samples

All soil samples documenting observed contamination were sent to the EPA Region 4 laboratory in Athens, Georgia for arsenic and lead analysis using EPA Method 200.8 for arsenic and Method 6010C for lead (Refs. 5, pp. 6, 7; 7, pp. 9, 10; 37, p. 4; 61; 62) (see Table 4 of this HRS documentation record). These analytical results are used to identify soil samples meeting the observed contamination criteria (Ref. 1, Table 2-3 and Section 5.1.0).

Background Samples

As part of the removal and pre-remedial sampling efforts, background soil samples were collected from four residential parcels to establish background levels for arsenic and lead (Refs. 5, pp. 4, 6; 16, pp. 13, 14, 27) (see Figures 4 and 5 of this HRS documentation record). The background soil samples were collected from four residential parcels located about four to five miles south-southeast of the AOC (Refs. 16, pp. 13, 27; 52, pp. 2 to 11) (see Figure 5 of the HRS documentation record).

In March 2020, Tetra Tech START collected four background 30-point composite surface soil samples from similar settings as the residential parcels in AOC (Refs. 16, pp. 13, 30; 49, p. 1; 51, pp. 1 to 8; 52, p. 7) (see Figure 2 of this HRS documentation record). As documented above, all soil samples were collected using the same sample collection procedures, analytical methods, and validation procedures.

The background soil samples are considered comparable to the observed contamination soil samples for the following reasons:

- No slag was identified in the background soil samples (Ref. 51, pp. 1 to 8).
- The background soil samples were collected from residential parcels within the City of Atlanta, the same environmental (physical) setting as the observed contamination samples (see Figures 4 and 5 of this HRS documentation record).
- The background soil and observed contamination soil samples were collected from urban soils under the same type of environmental influences, such as traffic, roads, sidewalks, and anthropogenic activities (see Figures 4 and 5 of this HRS documentation record).
- The background and observed contamination soil samples were of similar composition and physical characteristics (see Tables 1 and 3 of this HRS documentation record).
- The background soil and observed contamination soil samples were collected in accordance with the same sample collection techniques and from the same depth interval (0 to 6 inches bgs) (Ref. 16, p. 13) (see *Sample Collection, Processing, and Screening Procedures for All Soil Samples* section of this HRS documentation record).
- The background soil and observed contamination soil samples were analyzed via the same analytical methods (Ref. 16, pp. 10 to 13) (see sections *Sample Validation and Detection Limits for All Soil Samples* and *Sample Laboratory Analytical Methods for All Soil Samples* of this HRS documentation record).
- The background soil and observed contamination soil samples were collected within the same relative time frame (see Tables 1 and 3 of this HRS documentation record).
- Background unprocessed soil was compared to release unprocessed soil concentrations and background processed (sieved) soil concentrations were compared to release processed soil (see Table 4 and Section *Observed Contamination Concentrations* of this HRS documentation record).

Background soil sample identifications, locations, physical characteristics, depths, and date sampled are documented in Table 1. Background soil sampling locations are composite samples from parcels shown on Figure 4 of this HRS documentation record, and the areas from which the samples were collected are identified in Reference 52, page 7 and referenced in Table 1. Logbook notes are provided in Reference 52 for the background soil samples. The chain-of-custody records and soil sample location records are provided in Reference 49, page 1; Soil Characterization Forms are provided in Reference 51, pages 1 to 8; and logbook notes are provided in Reference 52.

TABLE 1: Background Soil Sample Descriptions – Collected in March 2020

EPA Sample ID	Laboratory Sample ID	Sample Location	Physical Characteristics	Depth (inches bgs)	Date Sampled	Reference
WSL-01	WSL-BG-01-UP	Southeastern portion of Atlanta, on Pontiac Place	Reddish- brown silty clay, 50% silt, 40% clay, 10% sand	0 to 6	3/2/2020	51, p. 1; 52, pp. 6, 9, 11
WSL-01	WSL-BG-01-S	Southeastern portion of Atlanta, on Pontiac Place	Light brownish tan, dry and sieved, fine grained sandy silty clay	0 to 6	3/6/2020	51, p. 2; 52, pp. 6, 9, 11
WSL-02	WSL-BG-02-UP	Southeastern portion of Atlanta, on Pontiac Place	Red, slightly moist silty clay	0 to 6	3/6/2020	51, p. 3; 52, pp. 7, 10, 11

TABLE 1: Background Soil Sample Descriptions – Collected in March 2020						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**Reference**
WSL-02	WSL-BG-02-S	Southeastern portion of Atlanta, on Pontiac Place	Reddish tan, dry and sieved, fine-grained sandy silty clay	0 to 6	3/6/2020	51, p. 4; 52, pp. 7, 10, 11
WSL-03	WSL-BG-03-UP	Southeastern portion of Atlanta, on Pontiac Place	Red, brown silty clay, 50% clay, 40% silt, 10% sand	0 to 6	3/6/2020	51, p. 5; 52, pp. 7, 10, 11
WSL-03	WSL-BG-03-S	Southeastern portion of Atlanta, on Pontiac Place	Reddish brown, tanned, fine-grained sandy silty clay	0 to 6	3/6/2020	51, p. 6; 52, pp. 7, 10, 11
WSL-04	WSL-BG-04-UP	Southeastern portion of Atlanta, on Pontiac Place	Light brown/red clayey silt, 50% silt, 40% clay, 10% sand	0 to 6	3/6/2020	51, p. 7; 52, pp. 7, 8, 10, 11
WSL-04	WSL-BG-04-S	Southeastern portion of Atlanta, on Pontiac Place	Reddish tan, dry and sieved, fine grained sandy silty clay	0 to 6	3/6/2020	51, p. 8; 52, pp. 7, 8, 10, 11

Notes:

BG Background sample
bgs Below ground surface
ID Identification
S Sieved sample
UP Unprocessed sample
WSL Westside Lead

Background Concentrations

The background soil samples listed in Table 2 of this HRS documentation record were collected in March 2020 (Refs. 16, pp. 13, 30; 49, p. 1). The concentrations of arsenic and lead presented in Table 2 were used to establish background levels for AOC A (Refs. 16, pp. 13, 27; 49, p. 1). Background samples WSL-BG-01, WSL-BG-02, WSL-BG-03, and WSL-BG-04 were analyzed by the EPA Region 4 laboratory for arsenic using EPA Method 200.8 and lead using EPA Method 6010C (Refs. 5, p. 6; 47, p. 1; 49, p. 1; 61; 62; 63, p. 1) (see sections *Sample Collection, Processing*, and *Screening Procedures for All Soil Samples; Sample Validation and Detection Limits for All Soil Samples*; and *Sample Laboratory Analytical Methods for All Soil Samples* of this HRS documentation record).

Table 2: Background Soil Sample Concentrations – March 2020

Laboratory Sample ID	Hazardous Substance	Concentration (mg/kg)	MRL (mg/kg)	References
Unprocessed Background Samples				
WSL-BG-01-UP	Arsenic	0.51J	0.20	16, p. 31; 47, pp. 3, 4, 6; 49, p. 1; 50; 52, p. 7; 60, pp. 1, 2
	Lead	24	20	
WSL-BG-02-UP	Arsenic	0.91J	0.20	16, p. 31; 47, pp. 3, 4, 8; 49, p. 1; 50; 52, p. 7; 60, pp. 1, 2
	Lead	33	9.9	
WSL-BG-03-UP[1]	Arsenic	**1.1**	0.20	16, p. 31; 47, pp. 3, 4, 10; 49, pp. 1; 50; 52, p. 7
	Lead	35	9.9	
WSL-BG-04-UP[2]	Arsenic	0.97J	0.20	16, p. 31; 47, pp. 3, 4, 12; 49, p. 1; 50; 52, p. 7; 60, pp. 1, 2
	Lead	**41**	10	
Sieved Background Samples				
WSL-BG-01-S	Arsenic	0.49J	0.20	16, p. 31; 47, pp. 3, 4, 5; 49, p. 1; 50; 52, p. 7; 60, pp. 1, 2
	Lead	31	20	
WSL-BG-02-S	Arsenic	0.96J	0.20	16, p. 31; 47, pp. 3, 4, 7; 49, p. 1; 50; 52, p. 7; 60, pp. 1, 2
	Lead	45	9.9	
WSL-BG-03-S	Arsenic	0.69J	0.20	16, p. 31; 47, pp. 3, 4, 9; 49, p. 1; 50; 52, p. 7; 60, pp. 1, 3
	Lead	39	9.9	
WSL-BG-04-S[3]	Arsenic	**1.5**	0.20	16, p. 31; 47, pp. 3, 11; 49, p. 1; 50; 52, p. 7
	Lead	**47**	10	

Notes:

[1] Arsenic at 1.1 mg/kg in sample WSL-BG-03-UP was used as the background level for unprocessed samples because it is the highest arsenic concentration in the unprocessed background samples.
[2] Lead at 41 mg/kg in sample WSL-BG-04-UP was used as the background level for unprocessed samples because it is the highest lead concentration in the unprocessed background samples.
[3] Arsenic at 1.5 mg/kg and lead at 47 mg/kg in sample WSL-BG-04-S were used as the background level for sieved samples because they are the highest arsenic and lead concentrations in the sieved background samples.
BG Background sample
BOLD Background concentration chosen for use as the background level for each type of sample.
ID Identification number
J The identification of the analyte is acceptable; the reported value is an estimate. MRL verification recovery greater than upper control limits. The concentration is biased high (Refs. 47, p. 4; 60).
mg/kg Milligram per kilogram
MRL Method reporting limit
S Sieved sample
UP Unprocessed sample

Additional Supporting Information

From 2007 to 2010, the U.S. Geological Survey (USGS) collected 94 soil samples from Georgia. The mean concentration of lead was 13.2 mg/kg, the maximum concentration was 53 mg/kg (Refs. 29, pp. 1, 2; 42, p. 3). The mean concentration is lower than the site-specific background concentration of 47 mg/kg, and the maximum concentration provides evidence that the site-specific background concentration is within the range of lead background concentrations for Georgia.

Contaminated Samples - Observed Contamination Locations, AOC A, Residential Soils

The observed contamination soil sample identifications, locations, physical characteristics, depths, and date sampled are documented in Table 3. The soil sampling locations are composite samples from DUs on parcels shown on Figures 3 and 6, and the DUs from which the samples were collected are shown in Reference 54 and referenced in Table 3. The sample identifications in Table 3 include an abbreviated site name either ESL (Elm Street Lead) or WSL (Westside Lead), followed by a unique four number parcel identification and then followed by a letter. The letter identifies the DU from which the sample was collected, such as the entire yard (A), the front yard (B), or the backyard (C). Additional DUs, such as a garden (F), a playground (G), or significant sized side yards – left-side yard (D) and right-side yard (E) are also identified. If a sample is a duplicate sample, the sample is followed by the abbreviation "-DUP." Then the sample identification is followed by the date it was collected and then by "-S3" if the sample is sieved. The soil samples were collected from residential parcels in the Westside neighborhood within the WSL study area (see Figures 3 and 6 of this HRS documentation record). The soil samples were analyzed by the EPA Region 4 laboratory for arsenic using EPA Method 200.8 and lead using EPA Method 6010C (Refs. 5, p. 6; 7, pp. 9, 13, 15, 17; 16, p. 12; 47, p. 1; 62; 63, p. 1) (see sections *Sample Collection, Processing, and Screening Procedures for All Soil Samples*; *Sample Validation and Detection Limits for All Soil Samples*; *Sample Laboratory Analytical Methods for All Soil Samples*; and Table 4 of this HRS documentation record). The chain-of-custody records and soil sample location record are provided in References 49 and 54.

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
1033	ESL-1033B-DUP-041919-S3	Vine St NW	Reddish brown micaceous sandy silty clay; sieved fraction	0 to 6	04/19/19	16, p. 34; 47, p. 18; 51, p. 195; 54, p. 5; 66, p. 22
	ESL-1033B-041919-S3		Slightly reddish brown micaceous sandy silty clay; sieved fraction	0 to 6	04/19/19	16, p. 34; 47, p. 18; 51, p. 194; 54, p. 5; 66, p. 22
	ESL-1033C-041919-S3		Slightly reddish brown micaceous sandy silty clay; sieved fraction	0 to 6	04/19/19	16, p. 34; 47, p. 18; 51, p. 198; 54, p. 5; 66, p. 22
1049	ESL-1049B-040319-S3	Sunset Ave NW	Brown slightly reddish micaceous sandy silty clay, sieved fraction	0 to 6	04/03/19	16, p. 34; 49, p. 110; 51, p. 196; 54, p. 8; 66, p. 16
	ESL-1049C-040319-S3		Not available	0 to 6	04/03/19	16, p. 34; 49, p. 111; 54, p. 8; 66, p. 16
	ESL-1049D-040319-S3		Not available	0 to 6	04/03/19	16, p. 34; 49, p. 111; 54, p. 8; 66, p. 16
1010	WSL-1010B-DUP-080619	Jones Ave NW	Brown slightly sandy silty clay with red clay pieces	0 to 6	08/06/19	16, p. 34; 47, p. 92; 49, p. 2; 51, p. 10; 54, p. 1
	WSL-1010C-080619		Brown to dark drown clayey silt	0 to 6	08/06/19	16, p. 34; 47, p. 141; 49, pp. 68, 90; 51, p. 11; 54, p. 1
1011	WSL-1011C-091219	Jones Ave NW	Brown sandy silty clay with red clay pieces	0 to 6	09/12/19	16, p. 34; 47, p. 597; 49, p. 73; 51, p. 12; 54, p. 2
1019	WSL-1019B-082620	Elm St NW	Slightly reddish medium brown sandy silty clay	0 to 6	08/26/20	16, p. 34; 47, p. 161; 49, p. 11; 51, p. 13; 54, p. 3
	WSL-1019C-082620		Brown clayey silt, organic rich	0 to 6	08/26/20	16, p. 34; 47, p. 188; 49, p. 13; 51, p. 14; 54, p. 3
1036	WSL-1036C-082620	Vine St NW	Light brown silty clay with trash	0 to 6	08/26/20	16, p. 34; 47, p. 161; 49, p. 11; 51, p. 19; 54, p. 6
1078	WSL-1078B-082919	Jones Ave NW	Slightly reddish-brown silty clay	0 to 6	08/29/19	16, p. 34; 47, p. 91; 49, p. 2; 51, p. 22; 54, p. 9

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
1087	WSL-1087B-082819	Jones Ave	Reddish brown silty clay with red clay pieces	0 to 6	08/28/19	16, p. 34; 47, p. 91; 49, p. 2; 51, p. 24; 54, p. 10
	WSL-1087C-082819		Reddish brown sandy silty clay with red clay pieces and glass pieces	0 to 6	08/28/19	16, p. 34; 47, p. 525; 49, p. 69; 51, p. 25; 54, p. 10
1090	WSL-1090C-012820	Western Ave NW	Medium brown, slightly sandy silty clay with less than 10% red clay pieces	0 to 6	01/28/20	16, p. 34; 47, p. 649; 49, p. 78; 51, p. 26; 54, p. 11
1093	WSL-1093C-030920	Western Ave NW	Brown sandy clay silt, with red clay pieces	0 to 6	03/09/20	16, p. 34; 47, p. 787; 49, p. 83; 51, p. 29; 54, p. 13
1100	WSL-1100B-101320	Western Ave NW	Reddish brown silty clay; trace trash and concrete fragments	0 to 6	10/13/20	16, p. 34; 47, p. 188; 49, p. 13; 51, p. 30; 54, p. 14
1101	WSL-1101B-082620	Western Ave NW	Light reddish brown sandy clayey silt, micaceous	0 to 6	08/26/20	16, p. 34; 47, p. 161; 49, p. 11; 51, p. 31; 54, p. 15
1102	WSL-1102B-030920	Western Ave NW	Light to medium brown, micaceous slightly sandy silty clay	0 to 6	03/09/20	16, p. 34; 47, p. 787; 49, p. 83; 51, p. 32; 54, p. 16
	WSL-1102C-030920		Brown micaceous slightly sandy silty sand with red clay pieces	0 to 6	03/09/20	16, p. 34; 47, p. 787; 49, p. 83; 51, p. 33; 54, p. 16
1103	WSL-1103B-030920	Western Ave NW	Brown silty clay with reddish brown clay pieces with potential slag fragments	0 to 6	03/09/20	16, p. 34; 47, p. 787; 49, p. 83; 51, p. 34; 54, p. 17
	WSL-1103C-030920		Brown micaceous slightly sandy silty clay	0 to 6	03/09/20	16, p. 34; 47, p. 787; 49, p. 83; 51, p. 35; 54, p. 17
1105	WSL-1105C-082819	Jones Ave NW	Brown sandy silty clay with trace gravel	0 to 6	08/28/19	16, p. 34; 47, p. 91; 49, p. 3; 51, p. 36; 54, p. 18
1108	WSL-1108C-090519	Jones Ave NW	Reddish brown silty clay with red clay pieces	0 to 6	09/05/19	16, p. 34; 47, p. 665; 49, p. 79; 51, p. 37; 54, p. 19

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
1109	WSL-1109B-082619	Joseph E Boone Blvd	Brown micaceous slightly sandy silty clay	0 to 6	08/26/19	16, p. 34; 47, p. 91; 49, p. 3; 51, p. 38; 54, p. 20
	WSL-1109C-082619		Brown silty clay	0 to 6	08/26/19	16, p. 34; 47, p. 91; 49, p. 3; 51, p. 39; 54, p. 20
1118	WSL-1118C-020420	Western Ave NW	Brown sandy silty clay with red clay pieces and potential slag fragments	0 to 6	02/04/20	16, p. 34; 47, p. 787; 49, p. 83; 51, p. 40; 54, p. 21
	WSL-1118D-020420		Reddish brown micaceous sandy silty clay with red clay pieces	0 to 6	02/04/20	16, p. 34; 47, p. 255; 49, p. 17; 51, p. 41; 54, p. 21
1121	WSL-1121C-090519	Jones Ave NW	Brown micaceous sandy silty clay	0 to 6	09/05/19	47, p. 665; 49, p. 79; 51, p. 42; 54, p. 22
1123	WSL-1123B-082819	Jones Ave NW	Brown micaceous slightly sandy silty clay	0 to 6	08/28/19	16, p. 34; 47, p. 255; 49, p. 17; 51, p. 43; 54, p. 23
	WSL-1123B-DUP-082819		Brown micaceous slightly sandy silty clay	0 to 6	08/28/19	16, p. 34; 47, p. 255; 49, p. 17; 51, p. 43; 54, p. 23
	WSL-1123C-082819		Brown sandy silty clay with potential slag fragments	0 to 6	08/28/19	16, p. 34; 47, p. 91; 49, p. 3; 51, p. 44; 54, p. 23
1130	WSL-1130C-082819	Jones Ave NW	Brown sandy silt with trace gravel	0 to 6	08/28/19	16, p. 34; 47, p. 91; 49, p. 3; 51, p. 45; 5 4, p. 24
	WSL-1130G-082819		Dark brown sandy clayey silt	0 to 6	08/28/19	16, p. 34; 47, p. 91; 49, p. 3; 51, p. 46;54, p. 24
1131	WSL-1131B-090619	James P Brawley Dr	Brown silty clay	0 to 6	09/06/19	16, p. 34; 47, p. 559; 49, p. 71; 51, p. 47;5 4, p. 25
	WSL-1131C-090619		Dark brown to black clayey silt with trash and potential slag fragments	0 to 6	09/06/19	16, p. 34; 47, p. 559; 49, p. 71; 51, p. 48; 54, p. 25

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
1141	WSL-1141B-031820	John St NW	Brown sandy silty clay	0 to 6	03/18/20	16, p. 34; 47, p. 688; 49, p. 81; 51, p. 49; 54, p. 26
1142	WSL-1142B-012820	Elm St NW	Reddish brown micaceous slightly sandy silty clay	0 to 6	01/28/20	16, p. 34; 47, p. 91; 49, p. 4; 51, p. 50; 54, p. 27
	WSL-1142C-012820		Brown micaceous slightly sandy silty clay	0 to 6	01/28/20	16, p. 34; 47, p. 255; 49, p. 17; 51, p. 51; 54, p. 27
1144	WSL-1144C-090619	Kennedy St NW	Reddish brown sandy silty clay with red clay pieces	0 to 6	09/06/19	16, p. 34; 47, p. 92; 49, p. 4; 51, p. 53; 53, pp. 1, 4; 54, p. 28
1158	WSL-1158C-091019	Jett St NW	Dark brown sandy silty clay with red clay pieces and glass fragments	0 to 6	09/11/19	16, p. 35; 47, p. 597; 49, p. 73; 51, p. 55; 54, p. 30
1163	WSL-1163C-080719	Griffin St NW	Brown sandy silty clay	0 to 6	08/07/19	16, p. 35; 47, p. 308; 49, p. 36; 51, p. 56; 54, p. 31
1173	WSL-1173B-080619	Jones Ave NW	Reddish brown micaceous sandy silty clay	0 to 6	08/06/19	16, p. 35; 47, p. 308; 49, p. 36; 51, p. 57; 54, p. 32
1175	WSL-1175B-030920	Jones Ave NW	Brown sandy silty clay with red clay pieces	0 to 6	03/09/20	16, p. 35; 47, p. 787; 49, p. 84; 51, p. 58; 54, p. 33
1177	WSL-1177B-102919	Jones Ave NW	Brown sandy silt, micaceous	0 to 6	10/29/19	16, p. 35; 47, p. 628; 49, p. 91; 51, p. 60; 54, p. 34
1179	WSL-1179C-080619	Jones Ave NW	Brown micaceous slightly sandy silty clay with potential slag fragment	0 to 6	08/06/19	16, p. 35; 47, p. 141; 49, p. 68; 51, p. 63; 54, p. 35

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
1182	WSL-1182B-080719	Griffin St NW	Brown micaceous sandy silty clay with red clay pieces and potential slag fragments	0 to 6	08/07/19	16, p. 35; 47, p. 308; 49, p. 36 (date incorrect); 51, p. 65 (date incorrect); 54, p. 36
	WSL-1182B-DUP-080719		Brown sandy silty clay with red clay pieces	0 to 6	08/07/19	16, p. 35; 47, p. 308; 49, p. 36 (date incorrect); 51, p. 64 (date incorrect); 54, p. 36
	WSL-1182C-080719		Brown sandy silty clay with clay pieces	0 to 6	08/07/19	16, p. 35; 47, p. 308; 49, p. 36; 51, p. 66; 54, p. 36
1183	WSL-1183B-090419	Jones Ave NW	Brown sandy silty clay with clay pieces	0 to 6	09/04/19	16, p. 35; 47, p. 665; 49, p. 79; 51, p. 67; 54, p. 37
	WSL-1183C-090419		Brown sandy silty clay	0 to 6	09/04/19	16, p. 35; 47, p. 559; 49, p. 71; 51, p. 68; 54, p. 37
	WSL-1183F-090419		Brown micaceous sandy silty clay	0 to 6	09/04/19	16, p. 35; 47, p. 665; 49, p. 79; 51, p. 69; 54, p. 37
1184	WSL-1184B-090619	Jones Ave NW	Reddish brown sandy silty clay with red clay pieces	0 to 6	09/06/19	16, p. 35; 47, p. 559; 49, p. 71; 51, p. 70; 54, p. 38
	WSL-1184C-090619		Brown sandy silty clay with clay pieces	0 to 6	09/06/19	16, p. 35; 47, p. 559; 49, p. 71; 51, p. 71; 54, p. 38
1189	WSL-1189B-082719	Jones Ave NW	Reddish brown sandy silty clay with red clay pieces	0 to 6	08/27/19	16, p. 35; 47, p. 92; 49, p. 4; 51, p. 72; 54, p. 39
1191	WSL-1191C-072220	Jones Ave NW	Brown silty clay	0 to 6	07/22/20	47, p. 333; 49, p. 41; 51, p. 74; 54, p. 40
1194	WSL-1194B-082719	James P Brawley Dr	Brown silty clay	0 to 6	08/27/19	16, p. 35; 47, p. 525; 49, p. 69; 51, p. 75; 54, p. 41
1198	WSL-1198B-082719	Griffin St NW	Brown micaceous sandy silty clay with red clay pieces	0 to 6	08/27/19	16, p. 35; 47, p. 91; 49, p. 4; 51, p. 76; 54, p. 42

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
1210	WSL-1210B-091019	James P Brawley Dr	Brown sandy clayey silt	0 to 6	09/10/19	16, p. 35; 47, p. 91; 49, p. 4; 51, p. 77; 54, p. 43
	WSL-1210C-091019		Brown sandy silty clay with red clay pieces	0 to 6	09/10/19	16, p. 35; 47, p. 91; 49, p. 4; 51, p. 78; 54, p. 43
1211	WSL-1211B-071620	Jones Ave NW	Reddish brown silty clay	0 to 6	07/16/20	16, p. 35; 47, p. 333; 49, p. 41; 51, p. 79; 54, p. 44
	WSL-1211C-072220	Jones Ave NW	Brown silty clay with trace trash	0 to 6	07/22/20	16, p. 35; 47, p. 333; 49, p. 42; 51, p. 80; 54, p. 44
1215	WSL-1215C-090519	Griffin Ave NW	Reddish brown micaceous sandy silty clay with red clay pieces	0 to 6	09/05/19	16, p. 35; 47, p. 665; 49, p. 79; 51, p. 81; 54, p. 45
1221	WSL-1221B-080619	Jones Ave NW	Brown sandy silty clay	0 to 6	08/06/19	16, p. 35; 47, p. 308; 49, p. 36; 51, p. 82; 54, p. 46
	WSL-1221C-080619		Reddish brown micaceous sandy silty clay with red clay pieces with trace gravel	0 to 6	08/06/19	16, p. 35; 47, p. 141; 49, p. 68; 51, p. 83; 54, p. 46
1222	WSL-1222B-091119	Jett St NW	Brown micaceous sandy clayey silt	0 to 6	09/11/19	16, p. 35; 47, p. 597; 49, p. 74; 51, p. 84; 54, p. 47
	WSL-1222C-091119		Brown micaceous sandy silty clay with red clay pieces	0 to 6	09/11/19	16, p. 35; 47, p. 597; 49, p. 74; 51, p. 85; 54, p. 47
1227	WSL-1227B-102919	Griffin St NW	Brown sandy silty clay	0 to 6	10/29/19	16, p. 35; 47, p. 762; 49, p. 113; 51, p. 86; 54, p. 48
	WSL-1227C-102919		Brown sandy clayey silt	0 to 6	10/29/19	16, p. 35; 47, p. 628; 49, p. 76; 51, p. 87; 54, p. 48
1235	WSL-1235B-090419	Jones Ave NW	Reddish brown micaceous sandy silty clay	0 to 6	09/04/19	16, p. 35; 47, p. 91; 49, p. 5; 51, p. 89; 54, p. 50
1242	WSL-1242B-101320	Sunset Ave NW	Brown silty clay	0 to 6	10/13/20	16, p. 35; 47, p. 188; 49, p. 106; 51, p. 90; 54, p. 51

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
1264	WSL-1264B-070920	Sunset Ave NW	Reddish brown silty clay with glass pieces	0 to 6	07/09/20	16, p. 35; 47, p. 404; 49, p. 54; 51, p. 91; 54, p. 52
	WSL-1264C-070920		Brown silty clay with glass fragments	0 to 6	07/09/20	16, p. 35; 47, p. 404; 49, p. 54; 51, p. 92; 54, p. 52
1285	WSL-1285B-092319	Jett St NW	Slightly reddish brown micaceous sandy silty clay	0 to 6	09/23/19	16, p. 35; 47, p. 762; 49, p. 114; 51, p. 93; 54, p. 54
	WSL-1285C-092319		Brown sandy silty clay	0 to 6	09/23/09	16, p. 35; 47, p. 743; 49, p. 117; 51, p. 94; 54, p. 54
1288	WSL-1288B-071520	Kennedy St NW	Reddish brown silty clay with red clay pieces	0 to 6	07/15/20	16, p. 35; 47, p. 333; 49, p. 42; 51, p. 95; 53, pp. 1, 2; 54, p. 55
	WSL-1288C-071520		Medium brown slightly sandy silty clay	0 to 6	07/15/20	16, p. 35; 47, p. 333; 49, p. 42; 51, p. 96; 53, pp. 1, 2; 54, p. 55
1290	WSL-1290C-111119	Elm St NW	Reddish brown micaceous sandy silty clay with red clay pieces and trace gravel micaceous	0 to 6	11/11/19	16, p. 35; 47, p. 762; 49, p. 114; 51, p. 97; 54, p. 56
1318	WSL-1318B-070920	Sunset Ave NW	Reddish brown micaceous slightly silty clay	0 to 6	07/09/20	16, p. 35; 47, p. 434; 49, p. 61; 51, p. 100; 54, p. 58
	WSL-1318C-070920		Brown micaceous slightly sandy silty clay	0 to 6	07/09/20	16, p. 35; 47, p. 404; 49, p. 54; 51, p. 101; 54, p. 58
1325	WSL-1325B-091119	Jett St NW	Reddish brown micaceous sandy silty clay	0 to 6	09/11/19	16, p. 35; 47, p. 597; 49, p. 74; 51, p. 102; 54, p. 59
	WSL-1325C-091119		Brown sandy silty clay with red clay pieces	0 to 6	09/11/19	16, p. 35; 47, p. 597; 49, p. 74; 51, p. 103; 54, p. 59
1326	WSL-1326B-090519	Griffin St NW	Reddish brown micaceous sandy silty clay with red clay pieces	0 to 6	09/05/19	16, p. 36; 47, p. 91; 49, p. 5; 51, p. 104; 54, p. 60

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
1331	WSL-1331B-070920	Griffin St NW	Brown micaceous slightly sandy silty clay	0 to 6	07/09/20	16, p. 36; 47, p. 404; 49, p. 54; 51, p. 105; 54, p. 61
	WSL-1331C-070920		Brown silty clay	0 to 6	07/09/20	16, p. 36; 47, p. 404; 49, p. 54; 51, p. 106; 54, p. 61
1344	WSL-1344B-091019	Kennedy St NW	Brown sandy silty clay	0 to 6	09/10/19	16, p. 36; 47, p. 597; 49, p. 75; 51, p. 107; 54, p. 62
1352	WSL-1352B-022120	Sunset Ave NW	Reddish brown micaceous sandy silty clay	0 to 6	02/21/20	16, p. 36; 47, p. 665; 49, p. 80; 51, p. 110; 54, p. 63
	WSL-1352C-022120		Reddish brown micaceous sandy silty clay	0 to 6	02/21/20	16, p. 36; 47, p. 665; 49, p. 80; 51, p. 111; 54, p. 63
	WSL-1352G-022120		Reddish brown sandy silty clay with red clay pieces	0 to 6	02/21/20	16, p. 36; 47, p. 665; 49, p. 80; 51, p. 109; 54, p. 63
	WSL-1352O-022120		Reddish brown micaceous sandy silty clay	0 to 6	02/21/20	16, p. 36; 47, p. 665; 49, p. 80; 51, p. 108; 54, p. 63
1459	WSL-1459B-071520	Thurmond St NW	Slightly reddish medium brown, micaceous, slightly sandy silty clay	0 to 6	07/15/20	16, p. 36; 47, p. 434; 49, p. 61; 51, p. 112; 54, p. 64
1470	WSL-1470B-071620	Vine St NW	Medium brown, sandy silty clay	0 to 6	07/16/20	16, p. 36; 47, p. 332; 49, p. 43; 51, p. 113; 54, p. 65
1509	WSL-1509B-070920	Walnut St NW	Red sandy clay, slightly micaceous	0 to 6	07/09/20	16, p. 36; 47, p. 404; 49, p. 58; 51, p. 114; 54, p. 66
1549	WSL-1549C-070920	Walnut St NW	Reddish brown sandy silty clay, micaceous	0 to 6	07/09/20	16, p. 36; 47, p. 434; 49, p. 61; 51, p. 115; 54, p. 67
1581	WSL-1581C-052120	Tyler St NW	Reddish brown sandy silty clay with red clay pieces, micaceous	0 to 6	05/21/20	16, p. 36; 47, p. 464; 49, p. 100; 51, p. 116; 54, p. 68

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
1585	WSL-1585C-031920	Maple St NW	Reddish brown sandy silty clay with red clay pieces, micaceous	0 to 6	03/19/20	16, p. 36; 47, p. 255; 49, p. 18; 51, p. 117; 54, p. 70
1621	WSL-1621B-071020	Sciple Ter NW	Slightly reddish-brown silty clay and pieces of trash	0 to 6	07/10/20	16, p. 36; 47, p. 404; 49, p. 55; 51, p. 119; 54, p. 70
	WSL-1621C-071020		Medium brown silty clay	0 to 6	07/10/20	16, p. 36; 47, p. 434; 49, p. 61; 51, p. 120; 54, p. 70
1623	WSL-1623C-031820	Newport St NW	Brown sandy clayey silt	0 to 6	03/18/20	16, p. 36; 47, p. 688; 49, p. 81; 51, p. 121; 54, p. 71
1645	WSL-1645C-031920	James P Brawley Dr	Brown sandy silt with red clay pieces	0 to 6	03/19/20	16, p. 36; 47, p. 688; 49, p. 82; 51, p. 123; 54, p. 72
1661	WSL-1661B-071520	James P Brawley Dr NW	Brown silty clay with red clay pieces	0 to 6	07/15/20	16, p. 36; 47, p. 404; 49, p. 55; 51, p. 124; 54, p. 73
	WSL-1661C-071520		Brown clayey silt with organic material and red clay pieces	0 to 6	07/15/20	16, p. 36; 47, p. 434; 49, p. 61; 51, p. 125; 54, p. 73
1667	WSL-1667B-092320	Orr St NW	Medium brown silty clay with red clay pieces	0 to 6	09/23/20	16, p. 36; 47, p. 188; 49, p. 107; 51, p. 126;54, p. 74
	WSL-1667C-092320		Medium brown silty clay	0 to 6	09/23/20	16, p. 36; 47, p. 188; 49, p. 107; 51, p. 127; 54, p. 74
1711	WSL-1711C-051420	Griffin St NW	Brown sandy silty clay with red clay pieces	0 to 6	05/14/20	16, p. 36; 47, p. 716; 49, p. 115; 51, p. 131; 54, p. 76
1714	WSL-1714B-070920	Sunset Ave NW	Reddish brown silty clay	0 to 6	07/09/20	16, p. 36; 47, p. 404; 49, p. 55; 51, p. 132; 54, p. 77
	WSL-1714C-070920		Brown silty clay	0 to 6	07/09/20	16, p. 36; 47, p. 404; 49, p. 55; 51, p. 133; 54, p. 77
	WSL-1714F-070920		Reddish brown silty clay	0 to 6	07/09/20	16, p. 36; 47, p. 404; 49, p. 55; 51, p. 134; 54, p. 77

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
1749	WSL-1749D-051920	Griffin St NW	Reddish brown silty clay with red clay pieces	0 to 6	05/19/20	16, p. 36; 47, p. 464; 49, p. 100; 51, p. 135; 54, p. 78
1773	WSL-1773C-051920	Griffin St NW	Brown silty clay with red clay pieces	0 to 6	05/19/20	16, p. 36; 47, p. 464; 49, p. 100; 51, p. 136; 54, p. 79
1786	WSL-1786C-052120	Sunset Ave NW	Brown micaceous sandy silty clay with trace gravel	0 to 6	05/21/20	16, p. 36; 47, p. 464; 49, p. 100; 51, p. 137; 54, p. 80
1848	WSL-1848C-070820	Paines Ave NW	Medium brown silty clay with red clay pieces and glass	0 to 6	07/08/20	16, p. 36; 47, p. 308; 49, p. 37; 51, p. 143; 54, p. 83
1853	WSL-1853B-071020	Oliver St NW	Greyish brown clayey silt with some sand and mica	0 to 6	07/10/20	16, p. 36; 47, p. 434; 49, p. 66; 51, p. 144; 54, p. 84
1871	WSL-1871B-051920	English Ave NW	Brown sandy silty clay with red clay pieces	0 to 6	05/19/20	16, p. 36; 47, p. 464; 49, p. 100; 51, p. 145; 54, p. 85
	WSL-1871C-051920		Light brown sandy silty clay with red clay pieces	0 to 6	05/19/20	16, p. 36; 47, p. 464; 49, p. 100; 51, p. 146; 54, p. 85
1889	WSL-1889B-071520	Paines Ave NW	Brown clayey silt with tan clay pieces	0 to 6	07/15/20	16, p. 36; 47, p. 434; 49, p. 62; 51, p. 147; 54, p. 86
	WSL-1889C-071520		Greyish brown silt with glass	0 to 6	07/15/20	16, p. 36; 47, p. 434; 49, p. 62; 51, p. 148; 54, p. 86
1903	WSL-1903A-082620	Oliver St NW	Greyish tan clayey silt with trace gravel	0 to 6	08/26/20	16, p. 36; 47, p. 161; 49, p. 12; 51, p. 150; 54, p. 88
1907	WSL-1907B-051420	English Ave NW	Reddish brown sandy silty clay with red clay pieces with trace gravel and concrete	0 to 6	05/14/20	16, p. 36; 47, p. 716; 49, p. 115; 51, p. 151;5 4, p. 89
	WSL-1907C-051420		Brown sandy silty clay with red clay pieces	0 to 6	05/14/20	16, p. 36; 47, p. 716; 49, p. 116; 51, p. 152; 54, p. 89

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
1933	WSL-1933B-071620	Sunset Ave NW	Medium brown silty clay with red clay pieces	0 to 6	07/16/20	16, p. 36; 47, p. 332; 49, p. 44; 51, p. 153; 54, p. 90
	WSL-1933C-071620		Brown silty clay with red clay pieces, slag (partial) and glass fragments	0 to 6	07/16/20	16, p. 36; 47, p. 332; 49, p. 44; 51, p. 154; 54, p. 90
1944	WSL-1944B-071020	Griffin St NW	Brown, silty clay with red clay pieces and slag and glass	0 to 6	07/10/20	16, p. 36; 47, p. 434; 49, p. 62; 51, p. 155; 54, p. 91
	WSL-1944C-071020		Brown, silty clay	0 to 6	07/10/20	16, p. 36; 47, p. 434; 49, p. 62; 51, p. 156; 54, p. 91
1963	WSL-1963A-082720	English Ave NW	Medium brown sandy silty clay with red clay pieces and micaceous	0 to 6	08/27/20	16, p. 36; 47, p. 161; 49, p. 12; 51, p. 157; 54, p. 92
1983	WSL-1983C-080420	Sunset Ave NW	Medium brown silty clay with red clay pieces and glass fragments	0 to 6	08/04/20	16, p. 37; 47, p. 333; 49, p. 52; 51, p. 160; 54, p. 94
1986	WSL-1986B-042220	Sunset Ave NW	Light brown sandy silty clay with red clay pieces and glass pieces	0 to 6	04/22/20	16, p. 37; 47, p. 846; 49, p. 122; 51, p. 161; 54, p. 95
	WSL-1986C-042220		Brown micaceous sandy silty clay with red clay pieces	0 to 6	04/22/20	16, p. 37; 47, p. 846; 49, p. 122; 51, p. 162; 54, p. 95
2004	WSL-2004C-101420	Griffin St NW	Slightly reddish medium brown, micaceous sandy silty clay, organic material (leaves and small sticks)	0 to 6	10/14/20	16, p. 37; 47, p. 188; 49, p. 107; 51, p. 164; 54, p. 96
2015	WSL-2015B-051420	Griffin St NW	Light brown micaceous sandy silty clay	0 to 6	05/14/20	16, p. 37; 47, p. 716; 49, p. 116; 51, p. 166; 54, p. 97
	WSL-2015C-051420		Light brown sandy silty clay, micaceous with charcoal pieces	0 to 6	05/14/20	16, p. 37; 47, p. 716; 49, p. 116; 51, p. 167; 54, p. 97

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
2032	WSL-2032E-051320	Kennedy St NW	Reddish brown silty clay	0 to 6	05/13/20	16, p. 37; 47, p. 716; 49, p. 116; 51, p. 170; 54, p. 99
2039	WSL-2039C-092520	Vine St NW	Brown sandy silty clay, micaceous with red clay pieces	0 to 6	09/25/20	16, p. 37; 47, p. 188; 49, p. 108; 51, p. 171; 54, p. 100
2047	WSL-2047B-080420	Cameron M Alexander Blvd NW	Brown slightly micaceous, slightly sandy silty clay	0 to 6	08/04/20	16, p. 37; 47, p. 333; 49, p. 45; 51, p. 172; 54, p. 101
	WSL-2047C-080420		Brown sandy silty clay	0 to 6	08/04/20	16, p. 37; 47, p. 333; 49, p. 45; 51, p. 173; 54, p. 101
2056	WSL-2056B-070920	Neal St NW	Brown clayey silt	0 to 6	07/09/20	16, p. 37; 47, p. 333; 49, p. 46; 51, p. 174; 54, p. 102
	WSL-2056C-070920		Medium brown slightly sandy silty clay with red clay pieces	0 to 6	07/09/20	16, p. 37; 47, p. 333; 49, p. 46; 51, p. 176; 54, p. 102
2095	WSL-2095B-080420	English Ave NW	Brown silty Clay	0 to 6	08/04/20	16, p. 37; 47, p. 332; 49, p. 46; 51, p. 178;5 4, p. 104
	WSL-2095C-080420		Brown clay silt with red clay pieces	0 to 6	08/04/20	16, p. 37; 47, p. 332; 49, p. 46; 51, p. 179; 54, p. 104
2096	WSL-2096C-052020	James P Brawley Dr	Brown slightly sandy silty clay	0 to 6	05/20/20	16, p. 37; 47, p. 464; 49, p. 101; 51, p. 180; 54, p. 105
2116	WSL-2116B-052020	James P Brawley Dr NW	Brown clayey silt	0 to 6	05/20/20	16, p. 37; 47, p. 464; 49, p. 101; 51, p. 181;54, p. 106
	WSL-2116C-052020		Brown clayey silt	0 to 6	05/20/20	16, p. 37; 47, p. 464; 49, p. 101; 51, p. 182; 54, p. 106
2164	WSL-2164C-070820	Andrew J Hairston Blvd NW	Brown silty clay with trace mica	0 to 6	07/08/20	16, p. 37; 47, p. 308; 49, p. 37; 51, p. 183; 54, p. 107

TABLE 3: Contaminated Soil Sample Descriptions						
EPA Sample ID	**Laboratory Sample ID**	**Sample Location**	**Physical Characteristics**	**Depth (inches bgs)**	**Date Sampled**	**References**
2179	WSL-2179B-070820	Andrew J Hairston Blvd NW	Reddish brown silty clay	0 to 6	07/08/20	16, p. 37; 47, p. 308; 49, p. 37; 51, p. 184; 54, p. 108
	WSL-2179C-070820		Reddish brown silty clay	0 to 6	07/08/20	16, p. 37; 47, p. 308; 49, p. 37; 51, p. 185; 54, p. 108
2183	WSL-2183C-071620	Oliver St NW	Brown slightly sandy silty clay with glass fragments	0 to 6	07/16/20	16, p. 37; 47, p. 332; 49, p. 46; 51, p. 186; 54, p. 109
2221	WSL-2221B-052120	Andrew J Hairston Blvd NW	Reddish brown silty clay with red clay pieces	0 to 6	05/21/20	16, p. 37; 47, p. 464; 49, p. 101; 51, p. 188; 54, p. 110
	WSL-2221C-052120		Brown silty clay with red clay pieces and plastic pieces	0 to 6	05/21/20	16, p. 37; 47, p. 464; 49, p. 101; 51, p. 189; 54, p. 110
2235	WSL-2235C-07082020	Andrew J Hairston Blvd NW	Dry, reddish medium brown, slightly sandy silty clay	0 to 6	07/08/20	16, p. 37; 47, p. 308; 49, p. 37; 51, p. 190; 54, p. 111
2265	WSL-2265B-071020	North Ave NW	Medium brown silty clay with red clay pieces	0 to 6	07/10/20	16, p. 37; 47, p. 188; 49, p. 108; 51, p.191; 54, p. 112

Notes:

A	Entire yard surface soil sample (Ref. 16, p. 37)
Ave	Avenue
B	Front yard surface soil sample (Ref. 16, p. 37)
bgs	Below ground surface
Blvd	Boulevard
C	Back yard surface soil sample (Ref. 16, p. 37)
D	Left side-yard sample (Ref. 16, p. 37)
Dr	Drive
DUP	Duplicate
E	Right side-yard sample (Ref. 16, p. 37)
F	Garden sample (Ref. 16, p. 37)
G	Playground Sample (Ref. 16, p. 37)
ID	Identification number
NW	Northwest

O	Other sample
S3	Sieved Sample (Ref. 16, p. 37)
St	Street
Ter	Terrace
WSL	Westside Lead

Observed Contamination Concentrations

The observed contamination soil samples within AOC A are summarized in Table 4 of this HRS documentation record. The beginning of Section 5.0.1 of this HRS documentation record documents the sample collection and processing procedures, the analytical methods, and defines the MRL. The observed contamination samples summarized in Table 4 meet the criteria for observed contamination and equal or exceed three times the background concentration (Ref. 1, Sections 2.3 and 5.1.0). Background arsenic and lead soil concentrations are as follows:

- 3.3 mg/kg arsenic in unprocessed soil (highest unprocessed background soil sample concentration was 1.1 mg/kg, with three times background concentration established at 3.3 mg/kg)
- 4.5 mg/kg arsenic in sieved soil (highest sieved background soil sample concentration was 1.5 mg/kg, with three times background concentration established at 4.5 mg/kg)
- 123 mg/kg lead in unprocessed soil (highest unprocessed background soil sample concentration was 41 mg/kg, with three times background concentration established at 123 mg/kg)
- 141 mg/kg lead in sieved soil (highest sieved background soil sample concentration was 47 mg/kg, with three times background concentration established 141 mg/kg) (see Table 2 of this HRS documentation record).

The samples ending in "-S3" in Table 4 were sieved. All other samples are not sieved (unprocessed).

TABLE 4: Analytical Results for Contaminated Soil Samples

EPA Sample ID	Laboratory Sample ID	Hazardous Substance	Concentration (mg/kg)	MRL (mg/kg)	Background (Table 2)* (mg/kg)	References
1033	ESL-1033B Dup-041919-S3	Lead	160	2.5	47	47, p. 38; 49, p. 123; 54, p. 5
	ESL-1033B-041919-S3	Lead	190	2.5	47	47, p. 40; 49, p. 124; 54, p. 5
	ESL-1033C-041919-S3	Lead	340	5.0	47	47, p. 42; 49, p. 124; 54, p. 5
1049	ESL-1049B-040319-S3	Lead	170	2.5	47	47, p. 74; 49, p. 110; 54, p. 8
	ESL-1049C-040319-S3	Lead	330	2.5	47	47, p. 76; 49, p. 111; 54, p. 8
	ESL-1049D-040319-S3	Lead	210	2.5	47	47, p. 78; 49, p. 111; 54, p. 8
1010	WSL-1010B-082819	Lead	180	20	41	47, p. 127; 49, pp. 2, 7; 54, p. 1
	WSL-1010B-DUP-080619	Lead	150	20	41	47, p. 128; 49, pp. 2, 7; 54, p. 1
	WSL-1010C-080619**	Arsenic	4.8	0.20	1.1	47, p. 143; 49, p. 68; 54, p. 1
		Lead	290	4.0	41	
1011	WSL-1011C-091219**	Lead	330	10	41	47, p. 599; 49, p. 73; 54, p. 2
1019	WSL-1019B-082620	Lead	180	20	41	47, p. 163; 49, p. 11; 54, p. 3
	WSL-1019C-082620	Arsenic	3.3	0.20	1.1	47, p. 190; 49, p. 13; 54, p. 3
		Lead	220	20	41	

TABLE 4: Analytical Results for Contaminated Soil Samples						
EPA Sample ID	**Laboratory Sample ID**	**Hazardous Substance**	**Concentration (mg/kg)**	**MRL (mg/kg)**	**Background (Table 2)* (mg/kg)**	**References**
1036	WSL-1036C-082620	Lead	190	20	41	47, p. 165; 49, p. 11; 54, p. 6
1078	WSL-1078B-082619	Lead	220	20	41	47, p. 118; 49, pp. 2, 7; 54, p. 9
	WSL-1078C-082619**	Arsenic	4.5	0.20	1.1	47, p. 531; 49, p. 69; 54, p. 9
		Lead	380	9.9	41	
1087	WSL-1087B-082819	Lead	220	20	41	47, p. 112; 49, pp. 2, 7; 54, p. 10
	WSL-1087C-082819**	Lead	310	9.9	41	47, p. 539; 49, p. 69; 54, p. 10
1090	WSL-1090C-012820**	Lead	230	10	41	47, p. 659; 49, p. 78; 54, p. 11
1093	WSL-1093C-030920**	Lead	230	20	41	47, p. 790; 49, p. 83; 54, p. 13
1100	WSL-1100B-101320	Lead	220	20	41	47, p. 194; 49, p. 106; 54, p. 14
1101	WSL-1101B-082620	Lead	130	20	41	47, p. 167; 49, p. 11; 54, p. 15
1102	WSL-1102B-030920**	Lead	150J- (150)	20	41	30, p. 18; 47, p. 791; 49, p. 83; 54, p. 16; 60, pp. 1, 3
	WSL-1102C-030920**	Arsenic	4.6	0.20	1.1	47, p. 792; 49, p. 83; 54, p. 16
		Lead	240	20	41	
1103	WSL-1103B-030920**	Lead	250	20	41	47, p. 793; 49, p. 83; 54, p. 17
	WSL-1103C-030920**	Arsenic	4.9	0.20	1.1	47, p. 794; 49, p. 83; 54, p. 17
		Lead	370	20	41	
1105	WSL-1105C-082819	Arsenic	3.8	0.20	1.1	47, p. 121; 49, pp. 3, 8; 54, p. 18
		Lead	150	20	41	
1108	WSL-1108C-090519**	Lead	210	9.9	41	47, p. 668; 49, p. 79; 54, p. 19
1109	WSL-1109B-082619	Lead	170	20	41	47, p. 119; 49, pp. 3, 8; 54, p. 20
	WSL-1109C-082619	Arsenic	5.7	0.20	1.1	47, p. 120; 49, pp. 3, 8; 54, p. 20
		Lead	160	20	41	
1118	WSL-1118C-020420**	Lead	180	9.9	41	47, p. 795; 49, p. 83; 54, p. 21
	WSL-1118D-020420	Lead	130	20	41	47, p. 264; 49, pp. 17, 23, 31; 54, p. 21
1121	WSL-1121C-090519**	Lead	200	9.9	41	47, p. 671; 49, p. 79; 54, p. 22

TABLE 4: Analytical Results for Contaminated Soil Samples						
EPA Sample ID	**Laboratory Sample ID**	**Hazardous Substance**	**Concentration (mg/kg)**	**MRL (mg/kg)**	**Background (Table 2)* (mg/kg)**	**References**
1123	WSL-1123B-082819	Lead	230	20	41	47, p. 265; 49, p. 17, 23, 31; 54, p. 23
	WSL-1123B-DUP-082819	Lead	240	20	41	47, p. 266; 49, p. 17, 23, 31; 54, p. 23
	WSL-1123C-082819	Arsenic	4.5	0.20	1.1	47, p. 124; 49, pp. 3, 8; 54, p. 23
		Lead	220	20	41	
1130	WSL-1130C-082819	Lead	160	20	41	47, p. 114; 49, pp. 3, 8; 54, p. 24
	WSL-1130G-082819	Lead	300	20	41	47, p. 117; 49, pp. 3, 8; 54 p. 24
1131	WSL-1131B-090619**	Lead	280	9.9	41	47, p. 561; 49, p. 71; 54, p. 25
	WSL-1131C-090619**	Arsenic	4.8	0.20	1.1	30, pp. 8, 18; 47, p. 563; 49, p. 71; 54, p. 25
		Lead	320J+ (222)	6.0	41	
1141	WSL-1141B-031820	Lead	160	20	41	47, p. 691; 49, p. 81; 54, p. 26
1142	WSL-1142B-012820	Arsenic	3.8	0.20	1.1	47, p. 98; 49, pp. 4, 9; 54, p. 27
	WSL-1142C-012820	Lead	150	20	41	47, p. 267; 49, pp. 17, 23, 31; 54, p. 27
1144	WSL-1144B-090619**	Lead	360	9.8	41	47, p. 565; 49, p. 71; 54, p. 28
	WSL-1144C-090619**	Lead	160	20	41	47, p. 130; 49, pp. 4, 9; 54, p. 28
1158	WSL-1158C-091119**	Arsenic	8.3	0.20	1.1	47, p. 605; 49, p. 73; 54, p. 30
		Lead	390	9.9	41	
1163	WSL-1163C-080719	Lead	180J- (180)	20	41	30, pp. 8, 18; 47, p. 316; 49, pp. 36, 39; 54, p. 31; 60, pp. 1, 3
1173	WSL-1173B-080619	Lead	150	20	41	47, p. 325; 49, pp. 36, 39; 54, p. 32
1175	WSL-1175B-030920**	Lead	190	20	41	47, p. 799; 49, p. 84; 54, p. 33
	WSL-1175C-030920**	Arsenic	5.9	0.20	1.1	47, p. 800; 49, p. 84; 54, p. 33
		Lead	390	20	41	
1177	WSL-1177B-102919	Lead	320	9.9	41	47, p. 633; 49, p. 76; 54, p. 34
	WSL-1177C-102919	Arsenic	3.4	0.20	1.1	47, p. 634; 49, p. 76; 54, p. 34
		Lead	390	10	41	
1179	WSL-1179C-080619**	Lead	340	9.9	41	47, p. 145; 49, p. 68; 54, p. 35

TABLE 4: Analytical Results for Contaminated Soil Samples						
EPA Sample ID	**Laboratory Sample ID**	**Hazardous Substance**	**Concentration (mg/kg)**	**MRL (mg/kg)**	**Background (Table 2)* (mg/kg)**	**References**
1182	WSL-1182B-080719	Lead	150	20	41	47, p. 317; 49, pp. 36, 39; 54, p. 36
	WSL-1182B-DUP-080719	Lead	150	20	41	47, p. 318; 49, pp. 36, 39; 54, p. 36
	WSL-1182C-080719	Arsenic	3.4	0.20	1.1	47, p. 319; 49, pp. 36, 39; 54, p. 36
		Lead	180	20	41	
1183	WSL-1183B-090419**	Lead	190	9.9	41	47, p. 673; 49, p. 79; 54, p. 37
	WSL-1183C-090419**	Lead	330	10	41	47, p. 567; 49, p. 71; 54, p. 37
	WSL-1183F-090419**	Lead	190	9.9	41	47, p. 674; 49, p. 79; 54, p. 37
1184	WSL-1184B-090619**	Lead	260	20	41	47, p. 569; 49, p. 71; 54, p. 38
	WSL-1184C-090619**	Lead	240	20	41	47, p. 573; 49, p. 71; 54, p. 38
1189	WSL-1189B-082719	Lead	140	20	41	47, p. 133; 49, pp. 4, 9; 54, p. 39
1191	WSL-1191C-072220	Lead	220	20	41	47, p. 387; 49, pp. 41, 48; 54, p. 40
1194	WSL-1194B-082719**	Arsenic	4.4	0.20	1.1	47, p. 543; 49, p. 69; 54, p. 41
		Lead	370	9.9	41	
1198	WSL-1198B-082719	Lead	160	20	41	47, p. 106; 49, pp. 4, 9; 54, p. 42
1210	WSL-1210B-091019	Lead	240	20	41	47, p. 110; 49, pp. 4, 9; 54, p. 43
	WSL-1210C-091019	Lead	260	20	41	47, p. 111; 49, pp. 4, 9; 54, p. 43
1211	WSL-1211B-071620	Lead	190	20	41	47, p. 388; 49, pp. 41, 48; 54, p. 44
	WSL-1211C-072220	Lead	330	20	41	47, p. 389; 49, pp. 42, 49; 54, p. 44
1215	WSL-1215C-090519**	Lead	190	20	41	47, p. 675; 49, p. 79; 54, p. 45
1221	WSL-1221B-080619	Lead	150	20	41	47, p. 323; 49, pp. 36, 39; 54, p. 46
	WSL-1221C-080619**	Lead	270	10	41	47, p. 147; 49, p. 68; 54, p. 46
1222	WSL-1222B-091119**	Lead	310	9.9	41	47, p. 611; 49, p. 74; 54, p. 47
	WSL-1222C-091119**	Lead	370	10	41	47, p. 612; 49, p. 74; 54, p. 47
1227	WSL-1227B-102919**	Lead	160	10	41	47, p. 771; 49, p. 113; 54, p. 48
	WSL-1227C-102919	Arsenic	4.0	0.20	1.1	30, pp. 8, 18; 47, p. 636; 49, p. 76; 54, p. 48; 60, pp. 1, 3
		Lead	300J- (300)	10	41	

TABLE 4: Analytical Results for Contaminated Soil Samples						
EPA Sample ID	**Laboratory Sample ID**	**Hazardous Substance**	**Concentration (mg/kg)**	**MRL (mg/kg)**	**Background (Table 2)* (mg/kg)**	**References**
1235	WSL-1235B-090419	Lead	180	20	41	47, p. 125; 49, pp. 5, 10; 54, p. 50
1242	WSL-1242B-101320	Lead	130	20	41	47, p. 197; 49, p. 13; 54, p. 51
1264	WSL-1264B-070920	Lead	190	20	41	47, p. 418; 49, pp. 54, 58; 54, p. 52
	WSL-1264C-070920	Lead	260	20	41	47, p. 419; 49, pp. 54, 58; 54, p. 52
1285	WSL-1285B-092319**	Lead	180	20	41	47, p. 774; 49, p 114; 54, p. 54
	WSL-1285C-092319**	Lead	350	10	41	47, p. 749; 49, p. 117; 54, p. 54
1288	WSL-1288B-071520	Lead	150	20	41	47, p. 378; 49, pp. 42, 49; 54, p. 55
	WSL-1288C-071520	Lead	300	20	41	47, p. 379; 49, pp. 42, 49; 54, p. 55
1290	WSL-1290C-111119**	Lead	140	9.9	41	47, p. 775; 49, p. 114; 54, p. 56
1318	WSL-1318B-070920	Lead	170	20	41	47, p. 442; 49, pp. 61, 65; 54, p. 58
	WSL-1318C-070920	Lead	220	20	41	47, p. 417; 49, p. 54, 58; 54, p. 58
1325	WSL-1325B-091119**	Lead	380	20	41	47, p. 617; 49, p. 74; 54, p. 59
	WSL-1325C-091119**	Lead	290J+ (290)	20	41	30, pp. 8, 18; 47, p. 618; 49, p. 74; 54, p. 59; 60, pp. 1, 4
1326	WSL-1326B-090519	Lead	170	20	41	47, p. 96; 49, pp. 5, 10; 54, p. 60
1331	WSL-1331B-070920	Lead	250	20	41	47, p. 415; 49, p. 54; 54, p. 61
	WSL-1331C-070920	Lead	340	20	41	47, p. 416; 49, p. 54; 54, p. 61
1344	WSL-1344B-091019**	Lead	310	9.9	41	47, p. 619; 49, p. 75; 54, p. 62
1352	WSL-1352C-022120**	Lead	220	10	41	47, p. 679; 49, pp. 80, 80; 54, p. 63
	WSL-1352G-022120**	Arsenic	3.8	0.20	1.1	47, p. 680; 49, p. 80; 54, p. 63
		Lead	320	10	41	
1459	WSL-1459B-071520	Lead	180	20	41	47, p. 447; 49, pp. 61, 65; 54, p. 64
1470	WSL-1470B-071620	Lead	320	20	41	47, p. 338; 49, pp. 43, 50; 54, p. 65
1509	WSL-1509B-070920	Lead	140	20	41	47, p. 408; 49, p. 58; 54, p. 66
1549	WSL-1549C-070920	Arsenic	3.4	0.20	1.1	47, p. 437; 49, pp. 61, 65; 54, p. 67
		Lead	130	20	41	

TABLE 4: Analytical Results for Contaminated Soil Samples						
EPA Sample ID	**Laboratory Sample ID**	**Hazardous Substance**	**Concentration (mg/kg)**	**MRL (mg/kg)**	**Background (Table 2)* (mg/kg)**	**References**
1581	WSL-1581C-052120	Lead	170	20	41	47, p. 466; 49, pp. 100, 104; 54, p. 68
1585	WSL-1585C-031920	Lead	140	20	41	47, p. 272; 49, pp. 18, 24, 32; 54, p. 69
1621	WSL-1621B-071020	Lead	240	20	41	47, p. 413; 49, pp. 55, 59; 54, p. 70
	WSL-1621C-071020	Lead	190	20	41	47, p. 440; 49, pp. 61, 65; 54, p. 70
1623	WSL-1623C-031820	Arsenic	5.5	0.20	1.1	47, p. 699; 49, p. 81; 54, p. 71
		Lead	340	20	41	
1645	WSL-1645C-031920	Lead	210	10	41	47, p. 707; 49, p. 82; 54, p. 72
1661	WSL-1661B-071520	Lead	320	20	41	47, p. 409; 49, pp. 55, 59; 54, p. 73
	WSL-1661C-071520	Lead	310	20	41	47, p. 439; 49, pp. 61, 65; 54, p. 73
1667	WSL-1667B-092320	Lead	140	20	41	47, p. 206; 49, p. 14; 54, p. 74
	WSL-1667C-092320	Lead	140	20	41	47, p. 207; 49, p. 14; 54, p. 74
1711	WSL-1711C-051420	Lead	140	20	41	47, p. 726; 49, p. 115; 54, p. 76
1714	WSL-1714B-070920	Lead	180	20	41	47, p. 410; 49, pp. 55, 59; 54, p. 77
	WSL-1714C-070920	Lead	290	20	41	47, p. 411; 49, pp. 55, 59; 54, p. 77
	WSL-1714F-070920	Arsenic	7.9	0.20	1.1	47, p. 412; 49, pp. 55, 59; 54, p. 77
		Lead	260	20	41	
1749	WSL-1749D-051920	Lead	210	20	41	47, p. 469; 49, pp. 100, 104 54, p. 78
1773	WSL-1773C-051920	Lead	210	20	41	47, p. 470; 49, pp, 100, 104; 54, p. 79
1786	WSL-1786C-052120	Arsenic	4.9	0.20	1.1	47, p. 471; 49, pp. 100, 104; 54, p. 80
		Lead	180	20	41	
1848	WSL-1848C-07082020	Lead	270	20	41	47, p. 320; 49, pp. 37, 40; 54, p. 83
1853	WSL-1853B-071020	Lead	170	20	41	47, p. 446; 49, pp. 62, 66; 54, p. 84
1871	WSL-1871B-051920	Lead	170	20	41	47, p. 472; 49, pp. 100, 104; 54, p. 85
	WSL-1871C-051920	Lead	200	20	41	47, p. 473; 49, pp. 100, 104; 54, p. 85
1889	WSL-1889B-071520	Lead	260	20	41	47, p. 444; 49, pp. 62, 66; 54, p. 86
	WSL-1889C-071520	Lead	180	20	41	47, p. 445; 49, pp. 62, 66; 54, p. 86
1903	WSL-1903A-082620	Lead	140	20	41	47, p. 176; 49, p. 12; 54, p. 88

TABLE 4: Analytical Results for Contaminated Soil Samples						
EPA Sample ID	**Laboratory Sample ID**	**Hazardous Substance**	**Concentration (mg/kg)**	**MRL (mg/kg)**	**Background (Table 2)* (mg/kg)**	**References**
1907	WSL-1907B-051420	Lead	210	20	41	47, p. 727; 49, p. 115; 54, p. 89
	WSL-1907C-051420	Lead	200	20	41	47, p. 728; 49, p. 116; 54, p. 89
1933	WSL-1933B-071620	Lead	390	20	41	47, p. 367; 49, pp. 44, 51; 54, p. 90
	WSL-1933C-071620	Arsenic	4.3	0.20	1.1	47, p. 368; 49, pp. 44, 51; 54, p. 90
		Lead	360	20	41	
1944	WSL-1944B-071020	Lead	200	20	41	47, p. 448; 49, pp. 62, 66; 54, p. 91
	WSL-1944C-071020	Lead	300	20	41	47, p. 449; 49, pp. 62, 66; 54, p. 91
1963	WSL-1963A-082720	Lead	340	20	41	47, p. 177; 49, p. 12; 54, p. 92
1983	WSL-1983C-080420	Arsenic	17	0.20	1.1	47, p. 371; 49, pp. 45, 52; 54, p. 94
		Lead	180	20	41	
1986	WSL-1986B-042220	Arsenic	4.2	0.20	1.1	47, p. 860; 49, p. 122; 54, p. 95
		Lead	290	20	41	
	WSL-1986C-042220	Lead	270	20	41	47, p. 862; 49, p. 122; 54, p. 95
2004	WSL-2004C-101420	Lead	210	20	41	47, p. 209; 49, p. 14; 54, p. 96
2015	WSL-2015B-051420**	Lead	290	20	41	47, p. 732; 49, p. 116; 54, p. 97
	WSL-2015C-051420**	Arsenic	6.1	0.20	1.1	47, p. 733; 49, p. 116; 54, p. 97
		Lead	350	20	41	
2032	WSL-2032E-051320	Lead	130	20	41	47, p. 734; 49, p. 116; 54, p. 99
2039	WSL-2039C-092520	Lead	150	20	41	47, p. 211; 49, p. 15; 54, p. 100
2047	WSL-2047B-080420	Lead	190	20	41	47, p. 376; 49, pp. 45, 52; 54, p. 101
	WSL-2047C-080420	Lead	270	20	41	47, p. 377; 49, pp. 45, 52; 54, p. 101
2056	WSL-2056B-070920	Lead	260J- (260)	20	41	30, pp. 8, 18; 47, p. 391; 49, pp. 46, 53; 54, p. 102; 60, pp. 1, 4
	WSL-2056C-070920	Lead	210	20	41	47, p. 393; 49, pp. 46, 53; 54, p. 102
2095	WSL-2095B-080420	Lead	160	20	41	47, p. 355; 49, pp. 46, 53; 54, p. 104
	WSL-2095C-080420	Arsenic	3.5	0.20	1.1	47, p. 356; 49, pp. 46, 53; 54, p. 104
		Lead	310	20	41	
2096	WSL-2096C-052020	Arsenic	4.0	0.20	1.1	47, p. 479; 49, pp. 101, 105; 54, p. 105
		Lead	160	20	41	

TABLE 4: Analytical Results for Contaminated Soil Samples						
EPA Sample ID	**Laboratory Sample ID**	**Hazardous Substance**	**Concentration (mg/kg)**	**MRL (mg/kg)**	**Background (Table 2)* (mg/kg)**	**References**
2116	WSL-2116B-052020	Lead	220	20	41	47, p. 480; 49, pp. 101, 105; 54, p. 106
	WSL-2116C-052020	Arsenic	4.1	0.20	1.1	47, p. 481; 49, pp. 101, 105; 54, p. 106
		Lead	370	20	41	
2164	WSL-2164C-07082020	Lead	230	20	41	47, p. 314; 49, pp. 37, 40; 54, p. 107
2179	WSL-2179B-07082020	Lead	250	20	41	47, p. 312; 49, pp. 37, 40; 54, p. 108
	WSL-2179C-07082020	Lead	220	20	41	47, p. 313; 49, pp. 37, 40; 54, p. 108
2183	WSL-2183C-071620	Lead	220	20	41	47, p. 346; 49, p. 46, 53; 54, p. 109
2221	WSL-2221B-052120	Arsenic	3.6	0.20	1.1	47, p. 482; 49, pp. 101, 105; 54, p. 110
		Lead	170	20	41	
	WSL-2221C-052120	Arsenic	5.3	0.20	1.1	47, p. 483; 49, pp. 101, 105; 54, p. 110
		Lead	260	20	41	
2235	WSL-2235C-07082020	Lead	200	20	41	47, p. 315; 49, pp. 37, 40; 54, p. 111
2265	WSL-2265B-071020	Lead	140	20	41	47, p. 220; 49, p. 15; 54, p. 112

Notes:

*	Background concentrations are from Table 2 of this HRS documentation record.
**	The sample date at the end of the Laboratory Sample ID is from Reference 54; the analytical data sheets in Reference 47 do not include the date at the end of the Laboratory Sample ID.
( )	Concentration was adjusted in accordance with References 30 and 60.
[1]	Sample results should be considered estimated with a potential unknown bias. The value presented parenthetically is the concentration obtained by applying EPA fact sheet *Using Qualified Data to Document and Observed Release and Observed Contamination* (November 1996) (Refs. 30, pp. 8, 18; 60).
A	Entire yard sample (Ref. 16, p. 41)
B	Front yard sample (Ref. 16, p. 41)
bgs	Below ground surface
C	Back yard sample (Ref. 16, p. 41)
D	Left side-yard sample (Ref. 16, p. 41)
DUP	Duplicate sample
E	Right side-yard sample (Ref. 16, p. 41)
ESL	Elm Street Lead
F	Garden sample (Ref. 16, p. 41)
G	Playground sample (Ref. 16, p. 41)
ID	Identification number
J-	For Sample IDs WSL-1102B, 1227C, 1325C, and 2056B, the identification of the analyte is acceptable; the reported value is an estimate. Matrix Spike Recovery less than method control limits (Refs. 47, pp. 334, 391, 598, 618, 629, 636, 788, 791; 60, p. 1). The concentration is biased low (Refs. 30, p. 8; 60).
J+	For Sample ID WSL-1131C the identification of the analyte is acceptable; the reported value is an estimate. Matrix Spike Recovery greater than method control limits (Refs. 47, pp. 560, 563; 60, p. 1). The concentration is biased high (Refs. 30, pp. 3, 8; 60).
mg/kg	Milligram per kilogram
MRL	Minimum reporting limit
S3	Sieved Sample (Ref. 16, p. 37)
WSL	Westside Lead

Attribution

Since the 1800s, various industries have utilized the areas north and east of the WSL site because of their proximity to an extensive railroad system. Those industries included foundries that generated foundry waste, slag, and metal-containing wastes (Refs. 35, p. 2; 45, pp. 1 to 5). Slag is generated from waste sands used in metal casting molds (Ref. 26, pp. 1, 5). Slag is a term used to describe the metal impurities which float to the top during smelting and includes refractories, sands, metal oxides, and coke ash (Ref. 26, pp. 3, 6). Metal casting involves creation of a mold into which molten metal is poured and cooled. Materials used to make the molds depend on the type of metal being cast and the desired shape of the final product. Sand is the most common molding material (Ref. 26, p. 1). Green sand molds are used in about 85 percent of foundries. Green sand is a mixture of sand, clay, carbonaceous material, and water. The sand provides the structure for the mold, the clay binds the sand together, and the carbonaceous material prevent rust. Water is applied to activate the clay. The green-sand mixture is packed around a pattern of the metal piece and allowed to harden. The mold is carefully removed from the pattern and prepared for the molten metal. Sand molds are used only once. After the molten metal has cooled, the sand mold is broken away from the metal piece in a process called "shakeout" (Ref. 26, pp. 1, 2). Most of the sand is reused to make future molds; however, fine sands are generated with reuse. These particles are too small to be effective in molds and must be removed from the process (Ref. 26, pp. 1, 5).

Waste sand and slag generated from the above process may have been used as fill at the WSL site. As documented in Table 3 of this documentation record, the fill material at the WSL site contains large quantities of sand. Slag, characteristic of foundry slag, has been observed in fill at the WSL site and in the piles originally identified in 2018 (Refs. 6, p. 1; 56, pp. 22, 28, 33, 37, 43, 51, 52, 133, 166 to 174; 58, pp. 1, 2). Slag is generated from waste sands used in molds at ferrous (iron and steel) and non-ferrous (brass) foundries that specialize in melting and casting metal into desired shapes. Foundry waste may be hazardous because of lead, zinc, cadmium, and other metals present in the waste (Refs. 26, pp. 1, 4, 5, 6; 27, p. 24). Until the advent of the Resource Conservation and Recovery Act (RCRA) in 1976, facilities discarded their foundry waste on their own parcels, at local landfills, or gave it away for use as fill or topsoil on other parcels. Many parcels in older industrial areas were built on top of foundry waste, which was considered an excellent fill because it provided strong structural support. These practices came to a halt with the enactment of RCRA (Ref. 25, p. 1).

Photographs of soil samples collected at the WSL site during the removal action show slag present in the soil samples. Based on photographs of the soil samples, the slag fill has become co-mingled with the soils, and site soils are more characteristic of slag fill than native soils. Large pieces of slag have been observed throughout the site and surrounding area (Refs. 16, pp. 45, 70 to 76; 21; 56, pp. 22, 28, 33, 37, 43, 51, 52, 133, 166 to 174; 58, p. 2).

Slag can be readily distinguished in the field from natural rock by its notable characteristics. Slag is not uniform and is noted for its heterogenous appearance relative to natural rock. Slag frequently has a rusty color due to its iron content, which can be seen in photographs of slag taken at the site. There are often spherical voids in slag from gasses that were released when the parent ore material was molten. Slag can also form glassy surfaces as the molten material is cooled (Refs. 56, pp. 22, 28, 33, 37, 43, 51, 52, 133, 166 to 174; 58, p. 1). A typical piece of slag from the WSL site is shown in Reference 58, page 2, Figure 1.

The fill material at WSL was confirmed to be slag through consultation with EPA Region 4 geologists, and additional confirmation was provided by geologists at Emory University. The visual and geologic verification was supported by historical evidence that various foundries and smelters operated near the neighborhoods where slag has been identified (Refs. 45, p. 2; 58, pp. 1, 2). Foundries in the area date as far back as the early 1800s (Ref. 45, pp. 560, 564, 566, 606). The waste material (slag) from these historical operations appears to have been used as a convenient, low-cost fill material that was placed in nearby residential yards, roadbeds, utility excavations, and other areas (Ref. 58, pp. 1, 2).

In 2018, Emory collected soil samples from urban growing spaces and lawns in western Atlanta for analyses of heavy metals. A piece of slag was found near one of the sampling sites, and an empty lot near on Elm Street NW was identified as a slag dump (Ref. 6, p. 1). Slag samples were collected from the slag dump and analyzed for arsenic and lead. The slag samples contained an average arsenic concentration of 297 mg/kg, a maximum arsenic concentration of 683 mg/kg, an average lead concentration of 2,741 mg/kg, and a maximum lead concentration of 6,133 mg/kg (Ref. 6, pp. 1, 2).

The English Avenue neighborhood in the Westside of Atlanta was developed in the late 1880s through the first half of the 20th Century. During that time, several foundries operated in the Atlanta area, and the slag generated as a byproduct was reportedly available for use as fill. Based on subsequent investigation, slag appears to underlie not only large areas spanning multiple properties, but also in smaller, discrete locations where the owner or contractor needed to fill in low areas or reinforce driveways and alleyways with a readily available source of road bed (Refs. 7, p. 4; 35, pp. 1, 5; 37, pp. 3, 5; 55).

The slag used in English Avenue has high concentrations of lead. Portions of the slag pulverized and analyzed by Emory University, showed lead concentrations in the slag over 6,100 mg/kg. The slag is intermixed with a range of smaller sized particles, forming a soil layer that is, in places, at least 10 feet thick. This soil layer has lead concentrations greater than 400 mg/kg in the particle size range smaller than 150 microns (Refs. 6, p. 2; 37, pp. 1, 2).

During study area reconnaissance on December 11, 2018, slag was observed by EPA, local representatives, and OTIE on the ground and in soil piles (Refs. 37, pp. 1, 3, 4, 5; 38, p. 2). During the RSE, slag was observed throughout the neighborhood, and universally in areas where the parcels sloped away from the roadways. Slag was found on downslopes in decreasing abundance as the parcel sloped away from the roadway. On parcels where slag was observed, slag was present under a thin layer of topsoil. In some places, topsoil was completely eroded, and large pieces of slag were exposed. Slag pieces ranged from sand-sized particles to cobbles (Refs. 35, p. 4; 37, p. 5). Visible slag was observed on the lawns of several parcels along Elm Street within the area of the WSL site (Refs. 21, p. 4; 35, p. 4; 37, p. 5; 38, p. 2). Photographs and soil logs from the WSL site consistently show the presence of slag in the soil (sand in soil borings) (Refs. 16, pp. 70 to 76; 21, p. 4; 37, p. 5; 56, pp. 22, 28, 33, 37, 43, 51, 52, 133, 166 to 174; 58, p. 2).

In November 2019, during the assessment of the planned soil staging area located on Vine Street in Atlanta, Fulton County, Georgia, sample results were highly variable due to the presence and/or absence of slag encountered at various locations and depths across the study area (Ref. 46, pp. 4, 5). The purpose of the assessment was to determine whether the historical placement of industrial slag or incinerator ash at a property resulted in soil lead concentrations above guidance concentrations, and if that contamination is present in subsurface soils down to eight feet in depth (Ref. 46, p. 3). Soil samples collected from the area contained lead up to 11,409 mg/kg (Ref. 46, p. 5).

The presence of lead contamination from fill in the Westside neighborhood has been documented at the 310 Vine Street Properties, Atlanta, Fulton County, Georgia located within the WSL site (see Figures 2 and 3 of this HRS documentation record). The City of Atlanta submitted a 2015 Voluntary Remediation Program Application to GA EPD that summarizes Phase I and II investigations completed in December 2012 at the 310 Vine Street Properties, which included 68 parcels at or associated with 310 Vine Street, Atlanta, Fulton County, Georgia and within the approximate boundaries of the WSL AOC (Refs. 10, pp. 5, 20; 12, pp. 5, 20). The parcels are not part of the WSL site for HRS purposes because they have been remediated (see Figures 3 and 6 of this HRS documentation record). The Phase I and II investigations revealed lead-impacted soils resulting from historical placement of fill in the late 1940s to early 1950s, presumably to facilitate development of residential parcels during that time (Refs. 10, pp. 9, 10, 12, 189 to 195; 12, pp. 9, 10 to 13).

A soil boring from within the boundaries of the AOC from that investigation contained 17 feet of fill (Ref. 10, pp. 8, 191). Soil samples contained lead up to 2,280 mg/kg (Ref. 10, pp. 10, 12). One soil sample contained arsenic at 6.81 mg/kg (Ref. 10, p. 10).

According to the December 2018 Semi-Annual Status Report for the 310 Vine Street Properties, also known as Mims Park, remediation of contaminated soils began in December 2017. As of December 14, 2018, a total of 32,260.75 tons of soil was excavated from the study area, stockpiled, characterized, loaded, and transported off site for disposal (Ref. 48, p. 1).

Hazardous Substance in the Release

Arsenic
Lead

Area of Contamination Hazardous Waste Quantity

2.4.2.1.1 Hazardous Constituent Quantity

The total hazardous constituent quantity for AOC A could not be adequately determined according to the HRS requirements; that is, the total mass of all Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances in AOC A is not known and cannot be estimated with reasonable confidence (Ref. 1, Section 2.4.2.1.1). Contaminant concentrations are not uniform throughout the AOC and insufficient historical and current data (manifests, potentially responsible party [PRP] records, State records, permits, waste concentration data, etc.) are available to adequately calculate the total or partial mass of all CERCLA hazardous substances associated with AOC A. Therefore, there is insufficient information to calculate a total or partial Hazardous Constituent Quantity estimate for AOC A with reasonable confidence. Scoring proceeds to the evaluation of Tier B, Hazardous Wastestream Quantity (Ref. 1, Section 2.4.2.1.1, Table 5-2).

Hazardous Constituent Quantity Assigned Value: NS
Hazardous Constituent Quantity Complete? No

2.4.2.1.2 Hazardous Wastestream Quantity

The total hazardous wastestream quantity for AOC A could not be adequately determined according to the HRS requirements; that is, the total mass of all hazardous wastestreams and CERCLA pollutants and contaminants in AOC A is not known and cannot be estimated with reasonable confidence (Ref. 1, Section 2.4.2.1.2). Contaminant concentrations are not uniform throughout the AOC and insufficient historical and current data (manifests, PRP records, State records, permits, waste concentration data, annual reports, etc.) are available to adequately calculate the total mass of all hazardous wastestreams and CERCLA pollutants and contaminants in AOC A. Therefore, there is insufficient information to adequately calculate the total or partial mass of the wastestream in the AOC. Therefore, there is insufficient information to evaluate the hazardous wastestream quantity for AOC A with reasonable confidence. Scoring proceeds to the evaluation of Tier C, Volume (Ref. 1, Section 2.4.2.1.2, Table 5-2).

Hazardous Wastestream Quantity Assigned Value: NS

2.4.2.1.3 Volume

The information available on the depth of AOC A is not sufficiently specific to support a volume of contaminated soil with reasonable confidence; therefore, it is not possible to assign a volume (Tier C) in cubic yards (yd^3) for Source No. 1 (Ref. 1, Section 2.4.2.1.3). Source No. 1 has been assigned a value of 0 for the volume measure (Ref. 1, Section 2.4.2.1.3). As a result, the evaluation of hazardous waste quantity proceeds to the evaluation of Tier D, Area (Ref. 1, Sec. 2.4.2.1.4, Table 5-2).

Volume Assigned Value: 0
Are the data complete for volume quantity for this area? No

2.4.2.1.4 Area

The area of AOC A is not adequately determined. AOC A is composed of contaminated soil in 101 residential parcels that contain concentrations of arsenic, lead, or both that are equal to or greater than three times background levels (see Table 4 of this HRS documentation record). The approximate area of observed contamination, excluding impervious surfaces, on each property was not estimated because of the large number of parcels that comprise AOC A and unknown extent of impermeable surfaces within those parcels. In addition, contamination is not inferred between sampling locations because there are properties within the AOC undergoing removal which is ongoing (Refs. 17, p. 3; 32). However, the area is greater than 0 square feet.

Sum (ft2): >0
Equation for Assigning Value (Ref. 1, Table 5-2): Area (A)/34,000

Area Assigned Value: >0

Area Hazardous Waste Quantity Value: >0

5.1 RESIDENT POPULATION THREAT

The resident population threat is evaluated if there is an AOC within the residential property boundary and within 200 feet of the respective residence. The soil samples collected from each respective residential property were within 200 feet of the residence because the parcel sizes are less than 200 feet in length and width (Refs. 1, Section 5.1; 35, p. 5; 54). All the observed contamination samples summarized in Tables 7 and 8 are on residential parcels.

5.1.1.1 LIKELIHOOD OF EXPOSURE

As documented in Section 5.1 of this HRS documentation record, observed contamination has been established on residential properties; therefore, a value of 550 is assigned to the resident population threat likelihood of exposure factor category.

Resident Population Threat Likelihood of Exposure Factor Category Value: 550
(Ref. 1, Section 5.1.1.1)

5.1.1.2 WASTE CHARACTERISTICS

5.1.1.2.1 Toxicity

The toxicity values for the hazardous substances detected in the AOC A samples are summarized in Table 5 of this HRS documentation record.

TABLE 5: Soil Exposure Toxicity		
Hazardous Substance	**Toxicity Factor Value**	**Reference**
Arsenic	10,000	2, p. 1
Lead	10,000	2, p. 2

Arsenic and lead are the only hazardous substances evaluated for this HRS documentation record. The toxicity factor value for arsenic and lead is 10,000 (Refs. 1, Section 2.4.1.1; 2, pp. 1, 2).

Toxicity Factor Value: 10,000
(Ref. 1, Section 5.1.1.2.1)

5.1.1.2.2 Hazardous Waste Quantity

TABLE 6: Hazardous Waste Quantity		
Area of Observed Contamination Letter	**Type**	**Area Hazardous Waste Quantity**
A	Contaminated Soil	Undetermined but greater than zero

The hazardous constituent quantity for AOC A is not adequately determined. AOC A is composed of contaminated soil at 98 occupied residential parcels that contain elevated concentrations of arsenic, lead, or both (see Tables 3 and 4 of this HRS documentation record). The approximate area of observed contamination, excluding impervious surfaces, on each property was not estimated due to the number of parcels included in AOC A. Also, contamination was not inferred between sampling points. However, the area is greater than 0 square feet. Per HRS Section 2.4.2.2, the hazardous waste quantity (HWQ) factor value is assigned a default factor value of 10 for the soil exposure component of the soil exposure and subsurface intrusion pathway (Ref. 1, Table 2-6).

Hazardous Waste Quantity Factor Value: 10
(Ref. 1, Sections 2.4.2.2 and 5.1.1.2.2)

5.1.1.2.3 Calculation of Waste Characteristics Factor Category Value

Both arsenic and lead have a toxicity factor value of 10,000 (Ref. 2, pp. 1, 2). The waste characteristics factor category was obtained by multiplying the toxicity and HWQ factor values. Based on this product, a value was assigned in accordance with Reference 1, Table 2-7.

Toxicity Factor Value (see Table 5 of this HRS documentation record): 10,000
Hazardous Waste Quantity Factor Value: 10
Toxicity Factor Value × Hazardous Waste Quantity Factor Value: 1×10^5

Waste Characteristics Factor Category Value: 18
(Ref. 1, Table 2-7)

5.1.1.3 TARGETS

Only those individuals whose residence or workplace is both on the property and within 200 feet of documented contamination that meet observed contamination criteria are included as resident population threat targets (Ref. 1, Section 5.1.1.3). All Level I and II concentration parcels within AOC A are occupied (Refs. 34; 54) (see Tables 7 and 8 of this HRS documentation record).

5.1.1.3.1 Resident Individual

Area of Observed Contamination Letter: A
Level of Contamination (Level I/Level II): I and II

As presented in Section 5.1.1.3.2.1, arsenic meets the criteria of Level I contamination, and as presented in Section 5.1.1.3.2.2, lead meets the criteria for Level II contamination (see Figure 5 and Tables 7 and 8 of this HRS documentation record).

Resident Individual Factor Value: 50
(Ref. 1, Section 5.1.1.3.1)

5.1.1.3.2.1 Level I Concentrations

Arsenic was detected at Level I concentrations in surface soil samples collected from within 200 feet of occupied homes (see Tables 3 and 4 of this HRS documentation record). Analysis from residential surface soil samples indicates the presence of arsenic at levels meeting the HRS observed contamination criteria (see Table 4 of this HRS documentation record and Reference 1, Table 2-3 and Section 5.1.0), and exceeding the applicable arsenic health-based benchmark of 0.772 mg/kg (Cancer Risk Screening Concentration [CRCS]) (Ref. 2, p. 1) at 29 residences. All samples are within AOC A (see Figure 5 of this HRS documentation record). When known, the actual number of occupants per parcel was used to determine the Level I population. If the actual number of occupants of a parcel was not known, the Fulton County, Georgia persons per household value of 2.44 was used (Ref. 31).

TABLE 7: Level I Concentrations – Population AOC A

EPA Sample ID	Laboratory Sample ID	Arsenic Concentration (mg/kg)	Property Type	Living Units	Total Number of Residents	References
1010	WSL-1010C-080619*	4.8	Single Family	1	1	34, p. 2; 47, p. 143
1019	WSL-1019C-082620	3.3	Single Family	1	1	34, p. 2; 47, p. 654
1078	WSL-1078C-082619*	4.5	Single Family	1	3	34, p. 2; 47, p. 531
1102	WSL-1102C-030920*	4.6	Single Family	1	1	34, p. 2; 47, p. 792
1103	WSL-1103C-030920*	4.9	Single Family	1	4	31, p. 1; 34, p. 2; 47, p. 794
1105	WSL-1105C-082819	3.8	Single Family	1	2	34, p. 2; 47, p. 121
1109	WSL-1109C-082619	5.7	Single Family	1	2	34, p. 2; 47, p. 120

TABLE 7: Level I Concentrations – Population AOC A						
EPA Sample ID	**Laboratory Sample ID**	**Arsenic Concentration (mg/kg)**	**Property Type**	**Living Units**	**Total Number of Residents**	**References**
1123	WSL-1123C-082819	4.5	Single Family	1	2	34, p. 2; 47, p. 124
1131	WSL-1131C-090619*	4.8	Single Family	1	2	34, p. 3; 47, p. 563
1142	WSL-1142B-012820	3.8	Single Family	1	2	34, p. 3; 47, p. 98
1158	WSL-1158C-091119	8.3	Single Family	1	1	34, p. 3; 47, p. 605
1175	WSL-1175C-030920*	5.9	Single Family	1	4	34, p. 3; 47, p. 800
1177	WSL-1177C-102919	3.4	Multi Family	2	2	34, p. 3; 47, p. 634
1182	WSL-1182C-080719	3.4	Single Family	1	2	34, p. 3; 47, p. 319
1194	WSL-1194B-082719*	4.4	Single Family	1	1	34, p. 3; 47, p. 543
1227	WSL-1227C-102919	4.0	Single Family	1	1	31, p. 1; 34, p. 3; 47, p. 636
1352	WSL-1352G-022120*	3.8	Single Family	1	4	34, p. 4; 47, p. 680
1549	WSL-1549C-070920	3.4	Single Family	1	1	34, p. 4; 47, p. 437
1623	WSL-1623C-031820	5.5	Single Family	1	5	34, p. 5; 47, p. 699
1714	WSL-1714F-070920	7.9	Single Family	1	2	34, p. 5; 47, p. 412
1786	WSL-1786C-052120	4.9	Single Family	1	2	31, p. 1; 34, p. 5; 47, p. 471
1933	WSL-1933C-071620	4.3	Single Family	1	2	31, p. 1; 34, p. 6; 47, p. 368
1983	WSL-1983C-080420	17	Single Family	1	1	34, p. 6; 47, p. 371
1986	WSL-1986B-042220	4.2	Single Family	1	2	34, p. 6; 47, p. 860
2015	WSL-2015C-051420*	6.1	Single Family	1	4	34, p. 6; 47, p. 733
2095	WSL-2095C-080420	3.5	Single Family	1	3	34, p. 6; 47, p. 356
2096	WSL-2096C-052020	4.0	Single Family	1	9	34, p. 6; 47, p. 479
2116	WSL-2116C-052020	4.1	Single Family	1	1	34, p. 7; 47, p. 481

TABLE 7: Level I Concentrations – Population AOC A						
EPA Sample ID	**Laboratory Sample ID**	**Arsenic Concentration (mg/kg)**	**Property Type**	**Living Units**	**Total Number of Residents**	**References**
2221	WSL-2221B-052120	3.6	Single Family	1	5	34, p. 7; 47, pp. 482, 483
	WSL-2221C-052120	5.3				

Notes:

*	The sample date at the end of the Laboratory Sample ID is from Reference 54; the analytical data sheets in Reference 47 do not include the date at the end of the Laboratory Sample ID.
A	Entire yard sample (Ref. 16, p. 41)
B	Front yard sample (Ref. 16, p. 41)
C	Back yard sample (Ref. 16, p. 41)
D	Left side-yard sample (Ref. 16, p. 41)
DUP	Duplicate sample
E	Right side-yard sample (Ref. 16, p. 41)
ESL	Elm Street Lead
F	Garden sample (Ref. 16, p. 41)
G	Playground sample (Ref. 16, p. 41)
ID	Identification
O	Other sample (Ref. 16, p. 41)
WSL	Westside Lead

Table 3 of the HRS documentation record documents the property and sample identifications.

The total population subject to Level I concentrations is 72. For individuals subject to Level I contamination, the appropriate factor value is determined by multiplying by 10 (Ref. 1, Section 5.1.1.3.2.1), yielding a total factor value of 720.

Level I Concentrations Factor Value: 720 persons

5.1.1.3.2.2 Level II Concentrations

In addition to the residences that have Level I contamination on the property and within 200 feet of the residence, 69 residences are exposed to Level II contamination (see Table 8 of this HRS documentation record). When known, the actual number of occupants per parcel was used to determine the Level II population. If the actual number of occupants of a parcel was not known, the Fulton County, Georgia persons per household value of 2.44 was used. Analysis from residential surface soil samples indicates the presence of lead at levels meeting the HRS observed contamination criteria (see Table 4 of this HRS documentation record and Reference 1, Table 2-3, and Section 5.1.0). All samples are located within AOC A (see Figure 5 of this HRS documentation record).

TABLE 8: Level II Contamination – Population AOC A					
EPA Sample ID	**Laboratory Sample ID**	**Property Type**	**Living Units**	**Total Number of Residents**	**References**
1033	ESL-1033B Dup-041919-S3	Single Family	1	1	34, p. 2; 47, pp. 38, 40, 42
	ESL-1033B-041919-S3				
	ESL-1033C-041919-S3				
1049	ESL-1049B-040319-S3	Single Family	1	2	34, p. 2; 47, pp. 74, 76, 78
	ESL-1049C-040319-S3				
	ESL-1049D-040319-S3				
1011	WSL-1011C-091219*	Single Family	1	4	34, p. 2; 47, p. 599
1036	WSL-1036C-082620	Single Family	1	2	34, p. 2; 47, p. 165
1087	WSL-1087B-082819	Single Family	1	1	34, p. 2; 47, p. 112, 539
	WSL-1087C-082819*				
1090	WSL-1090C-012820*	Single Family	1	2	34, p. 2; 47, p. 659
1093	WSL-1093C-030920*	Single Family	1	6	34, p. 2; 47, p. 790
1100	WSL-1100B-101320	Single Family	1	1	34, p. 2; 47, p. 194
1101	WSL-1101B-082620	Single Family	1	1	34, p. 2; 47, p. 167
1108	WSL-1108C-090519*	Single Family	1	2	34, p. 2; 47, p. 668
1118	WSL-1118C-020420*	Single Family	1	1	34, p. 2; 47, pp. 264, 795
	WSL-1118D-020420				
1121	WSL-1121C-090519*	Single Family	1	1	34, p. 2; 47, p. 671
1130	WSL-1130C-082819	Single Family	1	1	34, p. 2; 47, pp. 114, 117
	WSL-1130G-082819				
1141	WSL-1141B-031820	Single Family	1	7	34, p. 3; 47, p. 691
1144	WSL-1144B-090619*	Single Family	1	4	34, p. 3; 47, pp. 130, 565
	WSL-1144C-090619*				
1163	WSL-1163C-080719	Single Family	1	2	34, p. 3; 47, p. 316
1173	WSL-1173B-080619	Single Family	1	1	34, p. 3; 47, p. 325
1179	WSL-1179C-080619	Single Family	4	4	34, p. 3; 47, p. 145

TABLE 8: Level II Contamination – Population AOC A					
EPA Sample ID	**Laboratory Sample ID**	**Property Type**	**Living Units**	**Total Number of Residents**	**References**
1183	WSL-1183B-090419*	Single Family	1	3	34, p. 3; 47, pp. 567, 673, 674
	WSL-1183C-090419*				
	WSL-1183F-090419*				
1184	WSL-1184B-090619*	Single Family	1	2	34, p. 3; 47, pp. 569, 573
	WSL-1184C-090619*				
1189	WSL-1189B-082719	Single Family	1	1	34, p. 3; 47, p. 133
1191	WSL-1191C-072220	Single Family	1	1	34, p. 3; 47, p. 387
1198	WSL-1198B-082719	Single Family	1	2	34, p. 3; 47, p. 106
1210	WSL-1210B-091019	Single Family	1	1	34, p. 3; 47, pp. 110, 111
	WSL-1210C-091019				
1211	WSL-1211B-071620	Single Family	1	1	34, p. 3; 47, pp. 388, 389
	WSL-1211C-072220				
1215	WSL-1215C-090519*	Single Family	1	1	31, p. 1; 34, p. 3; 47, p. 675
1221	WSL-1221B-080619	Single Family	1	2	34, p. 3; 47, pp. 147, 323
	WSL-1221C-080619*				
1222	WSL-1222B-091119*	Single Family	1	1	31, p. 1; 34, p. 3; 47, pp. 611, 612
	WSL-1222C-091119*				
1235	WSL-1235B-090419	Single Family	1	3	34, p. 3; 47, p. 125
1242	WSL-1242B-101320	Multi Family	5	8	34, p. 3; 47, p. 197
1264	WSL-1264B-070920	Single Family	2	4	34, p. 3; 47, pp. 418, 419
	WSL-1264C-070920				
1285	WSL-1285B-092319*	Single Family	1	1	31, p. 4; 34, p. 3; 47, pp. 749, 774
	WSL-1285C-092319*				
1288	WSL-1288B-071520	Single Family	1	1	34, p. 4; 47, pp. 378, 379
	WSL-1288C-071520				
1290	WSL-1290C-111119*	Single Family	1	2	31, p. 1; 34, p. 4; 47, p. 775
1318	WSL-1318B-070920	Multi Family	2	6	34, p. 4; 47, pp. 417, 442
	WSL-1318C-070920				
1325	WSL-1325B-091119*	Single Family	1	2.44**	31, p. 1; 34, p. 4; 47, pp. 617, 618
	WSL-1325C-091119*				

TABLE 8: Level II Contamination – Population AOC A					
EPA Sample ID	**Laboratory Sample ID**	**Property Type**	**Living Units**	**Total Number of Residents**	**References**
1326	WSL-1326B-090519	Single Family	1	1	31, p. 1; 34, p. 4; 47, p. 96
1331	WSL-1331B-070920	Single Family	1	1	34, p. 4; 47, pp. 415, 416
	WSL-1331C-070920				
1344	WSL-1344B-091019*	Multi Family	7	10	31, p. 1; 34, p. 4; 47, p. 619
1459	WSL-1459B-071520	Multi Family	6	6	34, p. 4; 47, p. 447
1470	WSL-1470B-071620	Single Family	1	3	34, p. 4; 47, p. 338
1509	WSL-1509B-070920	Single Family	1	2	31, p. 1; 34, p. 4; 47, p. 408
1581	WSL-1581C-052120	Single Family	1	2	34, p. 4; 47, p. 466
1585	WSL-1585C-031920	Single Family	1	2	34, p. 5; 47, p. 272
1621	WSL-1621B-071020	Multi Family	4	2	34, p. 5; 47, pp. 413, 440
	WSL-1621C-071020				
1645	WSL-1645C-031920	Single Family	1	2	34, p. 5; 47, p. 705
1661	WSL-1661B-071520	Single Family	1	2	34, p. 5; 47, pp. 409, 439
	WSL-1661C-071520				
1667	WSL-1667B-092320	Single Family	1	2.44**	31, p. 1; 34, p. 5; 47, pp. 206, 207
	WSL-1667C-092320				
1711	WSL-1711C-051420	Single Family	1	2	34, p. 5; 47, p. 726
1749	WSL-1749D-051920	Single Family	1	1	34, p. 5; 47, p. 469
1773	WSL-1773C-051920	Single Family	1	1	34, p. 5; 47, p. 470
1848	WSL-1848C-07082020	Single Family	1	3	34, p. 6; 47, p. 320
1853	WSL-1853B-071020	Single Family	1	2	34, p. 6; 47, p. 446
1871	WSL-1871B-051920	Single Family	1	1	34, p. 6; 47, pp. 472, 473
	WSL-1871C-051920				
1889	WSL-1889B-071520	Single Family	1	5	34, p. 6; 47, p. 444, 445
	WSL-1889C-071520				
1903	WSL-1903A-082620	Multi Family	2	2	34, p. 6; 47, p. 176
1907	WSL-1907B-051420	Single Family	1	2	34, p. 6; 47, p. 727, 728
	WSL-1907C-051420				

TABLE 8: Level II Contamination – Population AOC A					
EPA Sample ID	**Laboratory Sample ID**	**Property Type**	**Living Units**	**Total Number of Residents**	**References**
1944	WSL-1944B-071020	Single Family	1	1	34, p. 6; 47, p. 448, 449
	WSL-1944C-071020				
1963	WSL-1963A-082720	Single Family	1	4	34, p. 6; 47, p. 177
2004	WSL-2004C-101420	Single Family	1	1	34, p. 6; 47, p. 209
2032	WSL-2032E-051320	Single Family	1	1	34, p. 6; 47, p. 734
2039	WSL-2039C-092520	Single Family	1	3	34, p. 6; 47, p. 211
2047	WSL-2047B-080420	Single Family	1	5	34, p. 6; 47, pp. 376, 377
	WSL-2047C-080420				
2056	WSL-2056B-070920	Single Family	1	5	34, p. 6; 47, pp. 391, 393
	WSL-2056C-070920				
2164	WSL-2164C-07082020	Single Family	1	5	34, p. 7; 47, p. 314
2179	WSL-2179B-07082020	Single Family	1	2	34, p. 7; 47, pp. 312, 313
	WSL-2179C-07082020				
2183	WSL-2183C-071620	Single Family	1	6	31, p. 1; 34, p. 6; 47, p. 346
2235	WSL-2235C-07082020	Single Family	1	5	34, p. 7; 47, p. 315
2265	WSL-2265B-071020	Multi Family	4	4	34, p. 4; 47, p. 220

Notes:

*	The sample date at the end of the Laboratory Sample ID is from Reference 54; the analytical data sheets in Reference 47 do not include the date at the end of the Laboratory Sample ID.
**	No population data available for parcel; population calculated using persons per household for Fulton County, Georgia, multiplied by living units (Ref. 31, p. 1).
A	Entire yard sample (Ref. 16, p. 41)
B	Front yard sample (Ref. 16, p. 41)
C	Back yard sample (Ref. 16, p. 41)
D	Left side-yard sample (Ref. 16, p. 41)
DUP	Duplicate sample
E	Right-side yard sample (Ref. 16, p. 41)
ESL	Elm Street Lead
F	Garden sample (Ref. 16, p. 41)
G	Playground sample (Ref. 16, p. 41)
ID	Identification
WSL	Westside Lead (formerly known as Elm Street Lead)

Sum of individuals subject to Level II concentrations: 181.88 persons (Refs. 31; 34).

Level II Concentrations Factor Value: 181.88 persons
(Ref. 1, Section 5.1.1.3.2.2)

5.1.1.3.3 Workers

Workers were not scored (NS).

Workers Factor Value: NS
(Ref. 1, Table 5-4)

5.1.1.3.4 Resources

Description of Resource(s): No resources as stated in the HRS, Section 5.1.1.3.4, have been documented on AOC A.

Resources Factor Value: NS

5.1.1.3.5 Terrestrial Sensitive Environments

No terrestrial sensitive environments have been documented on AOC A.

Terrestrial Sensitive Environments Factor Value: NS

5.1.2 NEARBY POPULATION THREAT

The nearby population threat was not scored because the area of observed contamination is located on residential properties which do not provide public access (Ref. 1, Table 5-6) (see Figures 3 and 6 of this HRS documentation record). However, the nearby population threat is of concern to EPA and may be considered during a future evaluation. The EPA is continuing work in the WSL site and surrounding area, which may include sampling of additional residential parcels in the areas that comprise the WSL site.