Former West Point Stevens Mill Opelika, Alabama

ADEM VCP Site- 461-081-050

Fact Sheet

A Voluntary Cleanup Program (VCP) Cleanup Plan has been found to be technically adequate by the Alabama Department of Environmental Management (ADEM) for the former WestPoint Stevens Mill. The applicant is Holland Homes LLC. This fact sheet has been prepared to briefly advise the public of the principal legal and policy issues of the Risk Assessment Plan.

I. VCP PROCESS

The VCP provides a mechanism for the implementation of a cleanup program that encourages applicants to voluntarily assess, remediate, and reuse rural and urban areas of actual or perceived contamination. The program does not relieve any "responsible person" for the liability for administrative, civil, or criminal fines or penalties which are otherwise authorized by law and imposed as a result of the illegal or unpermitted disposal of solid waste, hazardous waste, hazardous constituents, hazardous substances, petroleum products, and/or pollutants to the land, air, or waters of the State on an identified property. The program is designed to expedite the voluntary cleanup process and has been designed for entry at any stage of the cleanup process as long as all applicable criteria have been met up to the point of entry.

II. PROCEDURES FOR REACHING A FINAL DECISION

The ADEM is proposing to issue Holland Homes LLC., a final decision for the site remediation.

ADEM Admin Code R. 335-15-6-.02 requires that the public be given a 30- day comment period from the date of the notice. The comment period will begin on September 16th, 2025, which is the date of publication of the public notice in major local newspaper(s) of general circulation and will end on October 15th, 2025.

All persons wishing to comment on any of the conditions of the VCP Remediation should submit their comments in writing to the Alabama Department

of Environmental Management, Permits and Services Division, 1400 Coliseum Blvd. (Zip 36110). P.O. Box 301463 (Zip 36130-1463) Montgomery, Alabama, ATTENTION: Mr. Russell

Kelly. Written comments on the VCP activities should be submitted to the Alabama Department of Environmental Management and be received by 5:00 p.m. on September 4th, 2025.

ADEM will consider all written comments received during the comment period while making a final decision on this issue. When the Department makes its final decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final decision.

III. FACILITY DESIGN

Holland Homes, LLC. has completed Site Investigation activities under the VCP program at the Former West Point Stevens Mille site located at 2401 First Avenue, Opelika, Lee County, Alabama 36611. The site consists of 18 acres. Coordinates for the site are 32.63164948441062, -85.41471176682757

The contaminants found on the site are the following examples: PCE's in soil gas include Arsenic and Hexavalent chromium. The site is currently vacant with only a water tower and one 1 industrial type building still standing. The site was undeveloped wooded land until the 1950's when it was developed as a textile mill. West Point Stevens, also known as WestPoint Home operated the mill until operations ceased in the early 2020's

IV. Technical Contact

Jackson Jones, Project Manager

Redevelopment Section

Industrial Hazardous Waste Branch

Land Division

Alabama Department of Environmental Management

1400 Coliseum Boulevard (36110)

P.O. Box 301463 (36130-1463)

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VOLUNTARY CLEAN-UP PROGRAM PROPERTY CLEAN-UP PLAN

FORMER WEST POINT STEVENS MILL SITE 2401 FIRST AVENUE OPELIKA, LEE COUNTY, ALABAMA 36801

ADEM VCP SITE No.: 461-081-050 LABELLA PROJECT No.: 2242252

PREPARED FOR:

HOLLAND HOMES, LLC 421 OPELIKA ROAD AUBURN, ALABAMA 36830

PREPARED BY:

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August 12, 2025

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1.0 INTRODUCTION

On behalf of Holland Homes, LLC (Holland Homes), LaBella Associates, D.P.C. (LaBella) has prepared this Voluntary Clean-up Program (VCP) Property Clean-Up Plan for the Former West Point Stevens Mill facility located at 2401 First Avenue in Opelika, Lee County, Alabama (Site). The Site location is shown in Figure 1 provided in the Figures Section. This report has been prepared based on the Alabama Department of Environmental Management's (ADEM) approval of the Alabama Land Recycling and Economic Recovery (ALRERA) *Voluntary Cleanup Program (VCP) Property Assessment Report* dated November 21, 2024 (LaBella) and the subsequent ADEM-approved *Preliminary Alabama Risk Based Corrective Action Assessment Report* (LaBella April 24, 2025) for the above mentioned Site. This Clean-Up Plan was prepared in general accordance with ADEM Administrative Code R. 335-15-4-.04 *Voluntary Cleanup Plans*.



2.0 SITE DESCRIPTION AND LAND USE

The Site is located at 2401 1st Avenue in Opelika, Lee County, Alabama, and consists of five parcels totaling approximately 35 acres (parcel numbers include: 43-09-06-14-3-000-136.000, 43-09-06-14-3-000-137.000, 43-09-06-14-3-000-074.000, and 43-09-06-14-4-000-071.000). As of the date of the May - July 2024 assessment (performed by LaBella), the Site consisted of large parking areas and limited building foundations associated with the former West Point Stevens Mill facility. The only remaining structures included a pump house on the northeastern corner of the Site, a water tower, and an engine room building with an associated smokestack (Figure 2). None of the onsite structures were operational at the time of LaBella's 2024 assessment.

The Site is located in a residential and commercial area of Opelika, Alabama and is bordered to the north by 2nd Avenue followed by Pepperell Baptist Church, Alabama Rural Ministry, and residential development; to the east by North 24th Street followed by medical offices and Mingledorff's Distributers; to the south by train tracks, followed by a former water treatment plant; and, to the west by Cunningham Drive, followed by Alabama Math, Science, and Technology Initiative (AMSTI) and residential development. An Area Land Use Map is provided as Figure 3.0 site Assessment and VCP History

The following sections summarize previous assessments for the Site, including Site activities conducted under the Alabama VCP.

SynTerra Phase I Environmental Site Assessment, January 2013

An Environmental Site Assessment was conducted by SynTerra Corporation dated January 21, 2013. The assessment indicated the following recognized environmental conditions (RECs):

- The previous textile production activities involved the use and storage of hazardous chemicals;
 however, there were no records indicating a release.
- A review of the Former West Point Stevens Opelika Mill Phase II Site Assessment Report (Phase II ESA; Harmon Engineering and Contracting [Harmon], 2011; provided on ADEM's eFile system) indicated Alabama Risk-Based Corrective Action (ARBCA) Preliminary Screening Level (PSL) exceedances of several target constituents. The Phase II ESA report concluded that the ARBCA PSL exceedances "would be expected to be lower than ADEM Corrective Action Levels when calculated".
- A review of the Phase II ESA concluded that coal was reportedly stored on the ground near the boiler room and used to fire the facility boilers.



- The Phase II ESA indicated the former presence of a 1,000 gallon underground storage tank (UST)
 as a historical REC. According to the Phase II ESA, the UST was removed in 1988, with no soil or
 groundwater samples collected during removal.
- A review of the Phase II ESA also indicated the adjoining property to the west of the Site utilized various hazardous materials that may have impacted the Site.

LaBella Phase I Environmental Site Assessment, February 2022

An Environmental Site Assessment was conducted by LaBella Associates dated February 21, 2022. The assessment indicated the following recognized environmental conditions (RECs):

- Seven USTs were formerly located on-Site and have reportedly been closed based on available information. However, no UST Closure Reports were available for review.
- A Contamination Assessment completed in 2011 by Harmon Engineering & Contracting Co. Inc, did not include sampling and analytical results for polychlorinated biphenyls (PCBs) that may have been associated with electrical transformers removed from the Site by others based on available information.
- The *Contamination Assessment* completed in 2011 identified constituents that exceeded their respective screening levels in soil and/or groundwater and included: benzo(a)pyrene, arsenic, cadmium, chromium, and lead.

Voluntary Cleanup Program: 2022 - Present

- LaBella, on behalf of Holland Homes, submitted an application for participation in the VCP to the
 Alabama Department of Environmental Management (ADEM) on March 11, 2022. The March 11,
 2022, application was a modification to an application previously submitted by Saucier
 Investments, LLC dated February 6, 2013. As a result of the earlier application, the Site was
 assigned VCP Site number 461-081-050.
- Following ADEM acceptance of the March 2022 VCP modification application, LaBella on behalf of Holland Homes, submitted a VCP Property Assessment Plan to ADEM in April 2022 which was approved by ADEM in correspondence dated May 2, 2022.
- Implementation of the approved VCP assessment activities were originally scheduled to be performed in April 2022; however, due to contractual arrangements between Holland Homes and the current property owner at that time, it was determined the assessment be postponed until further notice. Holland Homes contracted with LaBella again in April 2024 and field assessment activities began in May 2024. Site investigation results were submitted to ADEM by LaBella in the November 2024 VCP Property Assessment Report. Findings of the 2024 assessment activities



included the following:

- The Site was divided into four sampling areas with Area 1 located on the northern half of the Site, Area 2 located on the southwest portion of the Site, Area 3 located on the south-central portion of the Site, and Area 4 located on the southeastern portion of the Site (Figure 4);
- Volatile organic compounds (VOCs) were not detected above applicable USEPA Regional Screening Levels (RSLs) in any of the soil borings or incremental sampling methodology (ISM) soil samples collected from the Site;
- Limited PAHs were detected above the USEPA RSL for industrial soil in Area 2-3 and Area 3-1
 ISM samples.
- Limited PAHs were detected above the USEPA RSL for residential soils in ISM samples for Area
 Area 3, and Area 4 sampling units (SUs).
- Limited PCBs were detected above the USEPA RSL for industrial soils in Area 3-1 of the Site;
- Background arsenic concentrations for the Site exceeded USEPA RSLs for residential and industrial soils. Concentrations of arsenic detected at the Site were generally consistent with naturally elevated background concentrations for the region, with the exception of Area 4-2, which had concentrations of arsenic significantly higher than background levels.
- The only constituents detected above USEPA MCLs in groundwater included tetrachlorethene (PCE) in the sample collected from monitoring well MW-6 (Area 2) and benzo(a)anthracene in samples collected from MW-5 (Area 2) and MW-7 (Area 3).

The November 2024 Property Assessment Report concluded that cleanup efforts would be necessary to mitigate impacts to soil in select areas of the Site and would be performed based on the future site plans.

- ADEM provided comments to the November 2024 Property Assessment Report on January 8, 2025. ADEM comments approved the proposed cleanup strategy, but indicated that cleanup measures should also be applied to Area 1 of the Site due to the elevated concentrations of arsenic and hexavalent chromium (CRVI) detected in relation to the background results. LaBella corresponded with ADEM following their comment and in a subsequent discussion, it was determined that a Preliminary ARBCA could be completed for Area 1.
- LaBella submitted the Preliminary ARBCA for Area 1 to ADEM on April 24, 2025. The ARBCA included a Risk Management-1 (RM-1) evaluation for arsenic and CRVI concentrations in subsurface soils of Area 1. Representative concentrations were selected from the highest detected



concentration of arsenic in the ISM samples collected from Area 1 and the highest detected concentration of CRVI collected from the background samples. Results from the RM-1 evaluation indicated that the maximum detected constituent of concern (COC) concentrations in Area 1 soils do not pose an unacceptable risk for any complete current or likely future direct human exposure pathway. Additionally, the RM-1 evaluation indicated that cumulative risks associated with the COCs in Area 1 were within acceptable levels. Following the Preliminary ARBCA results, LaBella recommended that Area 1 of the Site be allowed to be developed residentially without use restrictions except for a Site-wide groundwater use restriction to be included in a forthcoming environmental covenant.

 ADEM approved the Preliminary ARBCA evaluation for Area 1 in correspondence dated July 10, 2025. The approval letter indicated a draft environmental covenant that addresses groundwater contamination and land use controls for the Site should be provided to the Department for review.

The following sections of this report detail the proposed cleanup actions and institutional controls recommended for COC-impacted areas of the Site.



3.0 SITE CHARACTERIZATION

3.1 TOPOGRAPHY

Topography at the Site has a general slope towards the south. The elevation at the Site is approximately 720 feet above mean sea level (amsl). There were no suspect topographic features, such as sinkholes in the immediate area surrounding the Site as noted on the topographic map or during LaBella's February 2022 Site inspection nor the May – July 2024 field investigation (performed by LaBella).

3.2 SITE GEOLOGY

According to Special Map 232 prepared by the Alabama Geologic Survey, the Site is underlain by the Precambrian- to Paleozoic-aged Auburn Gneiss Formation. This formation consists of fine-grained biotite-oligoclase gneiss intermixed with coarse-grained muscovite-biotite schist; locally contains muscovite-rich pegmatite. Site geology conditions mimicked the above referenced articles observed during the May – July 2024 Site assessment. A Geologic Map is provided as Figure 5.

3.3 SITE HYDROGEOLOGY

According to the Geohydrology and Susceptibility of Major Aquifers to Surface Contamination in Alabama; Area 5, 2000, prepared by the United States Geological Society (USGS), the Site is located within the Opelika Complex of the Southern Piedmont Upland in the Piedmont Upland Section and within the recharge area of metasedimentary and metavolcanic aquifers. The metasedimentary and metavolcanic aquifers have been classified as "phyllite slate and slate," "schist," metagraywacke," "dolomite marble," and "mylonite" hydrogeologic units. Higher yield zones for groundwater withdrawal are more common in the Southern Piedmont, southeast of the Brevard Fault zone. Rocks in the Opelika Complex are reported to not yield sufficient quantities of water for public use, but do however provide water for some domestic wells.

Site geology and shallow aquifer conditions generally mimicked the above referenced articles observed during the May – July 2024 Site assessment. Groundwater was measured at depths ranging from 7.20 feet below top of casing (ft-btoc) to 15.18 ft-btoc during the June 2024 groundwater sampling event. A potentiometric surface map for the June 2024 sampling event is included as Figure 6. Groundwater flow beneath the Site was calculated to be to the south-southwest.

3.4 SITE WATER USE

The Site is not currently using groundwater wells for public water supply. Public water supply is available to the Site from Opelika Utilities. Water supply wells were not observed by Site reconnaissance within 1,000 feet of the Site.



4.0 PROPOSED FUTURE SITE USE

Holland Homes's proposed Site development is provided in Figure 7. The following sections detail the planned use for each Site area.

4.1 Area 1 Future Land Use

Area 1 of the Site is planned to include a single-family residential development with associated roadways, community pool, and green spaces.

4.2 Area 2 Future Land Use

Area 2 of the Site is planned to include ground-floor commercial retail space, ground floor office space, second-story residential units and/or commercial retail space, clubhouse and amenity space to include a community pool and tennis courts, paved parking areas, and associated roadways. Additionally, Holland Homes has indicated that the northern boundary of Area 2 could include portions of ground-floor residential townhomes slightly overlapping from Area 1.

4.3 Area 3 Future Land Use

Area 3 of the Site is planned to include ground-floor office and retail space, second-story residential units and/or commercial retail space, community green space, a plaza area with amenity space, and paved parking areas.

4.4 AREA 4 FUTURE LAND USE

Area 4 of the Site is planned to include ground-floor retail space, second-story residential units and/or commercial space, and paved parking areas.



5.0 DISTRIBUTION OF CONSTITUENTS OF CONCERN

The 2024 Site investigation strategy subdivided the Site into four discrete sampling areas (Area 1, Area 2, Area 3, and Area 4) in order to assess possible impacts to soil and groundwater resulting from historical operations onsite and/or adjacent properties.

The site investigation included the advancement of sixteen borings, with nine borings converted to permanent Type II monitoring wells, background sample collection, and ISM soil sampling in the four sampling areas. For the ISM soil sampling effort, LaBella subdivided the Site areas into multiple SUs with the western portion of Area 1 comprised of two SUs (denoted as Area 1-1 and Area 1-2), Area 2 comprised of four SUs (denoted as Area 2-1, Area 2-2, Area 2-3, and Area 2-4), Area 3 comprised of 2 SUs (denoted as Area 3-1 and Area 3-2), and Area 4 comprised of two SUs (denoted as Area 4-1 and Area 4-2); each with two vertical decision units (VDUs) per SU. VDU-A (denoted as "DA") was selected as the 0.0 to 0.5 feet below ground surface (ft-bgs) interval and VDU-B (denoted as "DB") was selected as the 3.5 to 4.0 ft-bgs interval.

The following sections summarize the COCs distributed on the Site as identified through analytical testing during the May - June 2024 Site investigation of the sampling areas. The full findings of the 2024 assessment are presented in the ADEM-approved *VCP Property Assessment Report* (LaBella November 2024) for the Site.

5.1 AREA 1 SOIL

Based on the analytical soil results from the May - June 2024 investigation of Area 1, constituents of potential concern (COPCs) from former industrial activities in Areas 2, 3, and 4 of the Site appear to have not impacted soil in Area 1. As per the ADEM-approved ARBCA Evaluation for Area 1, this area is suitable to be used for residential development as previously planned by Holland Homes. Out of an abundance of caution, the only recommendation for Area 1 will be an environmental covenant restricting groundwater use to be provided at the completion of the Site's cleanup efforts.

5.2 AREA 2 SOIL

A summary of the Area 2 ISM soil analytical table is provided below.



ISM Area 2 Soil Results - USEPA Screening Level Exceedances Only

	RES.	IND	IND. RSL Background Screening Level	Area 2-1		Area 2-2	
Analyte	RSL			A2-1-DA	A2-1-DB	A2-2-DA	A2-2-DB
Arsenic	0.68	3	4.77	3.8	4.5 J	5 J	4.5 J
Cr (VI)	0.3	6.3	3.59	0.92	1	1.5	0.99
1-Methylnaphthalene	0.018	0.077	NA	-	-	-	0.046 J
Benzo[a]anthracene	1.1	21	NA	-	-	-	-
Benzo[a]pyrene	0.11	2.1	NA	0.34	-	0.49	0.81
Benzo[b]fluoranthene	1.1	21	NA	-	-	-	-
Indeno[1,2,3-cd]pyrene	1.1	21	NA	-	-	-	-

ISM Area 2 Soil Results – USEPA Screening Level Exceedances Only (continued)

	RES. IND.		Background	Area 2-3		Area 2-4	
Analyte	RSL RSL	Screening Level	A2-3-DA	A2-3-DB	A2-4-DA	A2-4-DB	
Arsenic	0.68	3	4.77	4 J	8.6 J	9.5 J	10 J
Cr (VI)	0.3	6.3	3.59	1.4	0.92	1.0 J	1.0 J
1-Methylnaphthalene	0.018	0.077	NA	0.094 J	0.16 J	-	-
Benzo[a]anthracene	1.1	21	NA	6.6	6.6	-	-
Benzo[a]pyrene	0.11	2.1	NA	6.2	5.4 J	0.45	-
Benzo[b]fluoranthene	1.1	21	NA	8.5	6.7	-	-
Indeno[1,2,3-cd]pyrene	1.1	21	NA	3.2	2.7	-	-

Notes:

Screening Levels - US Environmental Protection Agency (EPA) Regional Screening Levels (RSL) for Residential (Res.) and Industrial (Ind.) Soils - November 2024 (THQ0.1) Results presented in milligrams per kilogram (mg/kg)

Off-bgs interval

Detected concentration exceeds EPA Industrial RSL
Detected concentration exceeds EPA Residential RSL

Detected concentration exceeds background value if the background value is above the USEPA industrial RSL

Analytical results from the 2024 soil investigation of Area 2 was provided in the November 2024 VCP Assessment report and indicated the following:

- Arsenic was detected above the USEPA RSL for industrial soil and the calculated background screening level in ISM samples from Area 2-3-DB, Area 2-4-DA, and Area 2-4-DB; however, the detected concentrations were generally consistent with background concentrations for the Site area.
- PAHs 1-methylnapthalene and benzo(a)pyrene were detected above the USEPA RSL for industrial soil in ISM samples from Area 2-3-DA and Area 2-3-DB.
- No other COCs were detected above USEPA RSLs for industrial soil. However; PAHs were detected above the USEPA RSL for residential soil in the ISM samples for Area 2-1, Area 2-2, Area 2-3, and Area 2-4.
- Discrete soil sample analysis for select constituents from ISM sample results indicated benzo(a)pyrene was detected at concentrations above USEPA residential RSLs in sixteen discrete samples collected from Area 2-1-DA.
- Benzo(a)pyrene was detected at concentrations above the USEPA residential RSL in 20 discrete samples collected from Area 2-2-DA, two of which exceeded the USEPA industrial RSL. Constituent 1-methylnaphthalene was detected at concentrations above USEPA residential RSLs in only two discrete samples collected from Area 2-2-DA. Note that the two samples with detected

J - Result is less than reporting limit but greater or equal to MDL. Concentration approximate.

BOLD - constituent detected above laboratory reporting limit

⁻ Either non-detect at or above the laboratory MDL or detected concentration below USEPA Residential RSLs

NA - Not applicable

DA - 0 to 0.5 ft-bgs interval DB - 3.5- 4.0 ft-bgs interval



- concentrations of 1-methylnaphthalene above the USEPA residential RSL also had benzo(a)pyrene analytical results above USEPA residential RSLs.
- Discrete samples were collected and analyzed for select PAHs based on the ISM results for Area
 2-3. A total of five discrete soil samples from Area 2-3-DA had detected concentrations of one of these PAHs above the USEPA industrial RSLs.

Discrete analytical results for Area 2 are spatially represented in Figure 8.

5.3 AREA 3 SOIL

A summary of the Area 3 ISM soil analytical table is provided below.

ISM Area 3 - Soil Results - Screening Level Exceedances Only

Sing and Sin							
	RES. IND.		Background	Area 3-1		Area 3-2	
Analyte	RSL	RSL Screening Level		Area 3-1-DA	Area 3-1-DB	Area 3-2-DA	Area 3-2-DB
Arsenic	0.68	3	4.77	8.5	5.0	5.0	4.4
Cr (VI)	0.3	6.3	3.59	1.7	1.0	0.79H	0.68H
1-Methylnaphthalene	0.018	0.077	NA	0.018J		-	-
Benzo[a]anthracene	1.1	21	NA	11	1.4 J	-	-
Benzo[a]pyrene	0.11	2.1	NA	10	1.4J	1.0	0.21J
Benzo[b]fluoranthene	1.1	21	NA	14	1.7	1.5	-
Indeno[1,2,3-cd]pyrene	1.1	21	NA	4.3		-	
PCB-1254	0.12	0.97	NA	2	1.3	_	-

Notes:

Screening Levels - US Environmental Protection Agency (EPA) Regional Screening Levels (RSL) for Residential (Res.) and Industrial (Ind.) Soils - November 2024 (THQ0.1) Results presented in milligrams per kilogram (mg/kg)

NA = Not applicable

DA = 0 to 0.5 ft-bgs interval DB = 3.5- 4.0 ft-bgs interval

Detected concentration exceeds USEPA Industrial RSL Detected concentration exceeds USEPA Residential RSL

Detected concentration exceeds background value if the background value is above the USEPA Industrial RSL

Analytical results from the 2024 soil investigation of Area 3 was provided in the November 2024 VCP Assessment report and indicated the following:

- Arsenic was detected above the USEPA RSL for industrial soil and the calculated background screening level in ISM samples from Area 3-1-DA and Area 3-1-DB; however, the detected concentrations were generally consistent with naturally elevated background concentrations for the Site area.
- Polychlorinated Biphenyl (PCB)-1254 was detected above the USEPA RSL for industrial soil in the ISM samples collected from Area 3-1-DA and Area 3-1-DB.
- PAH benzo(a)pyrene was detected above the USEPA RSL for industrial soil in the ISM sample from Area 3-1-DA.
- No other COCs were detected above USEPA RSLs for industrial soil. However; PAHs were detected above the USEPA RSL for residential soil in the ISM samples for Area 3-1 and Area 3-2.

J- Result is less than reporting limit but greater or equal to MDL. Concentration approximate.

H – constituent analyzed beyond the analyte's applicable holding time.

BOLD – constituent detected above laboratory reporting limit - Not detected above the USEPA Residential RSL

⁻ Not detected above the USEPA Resident



Discrete soil sample analysis for select constituents from ISM sample Area 3-1-DA were submitted for analysis of benzo(a)pyrene and PCB-1254. Discrete analytical results from Area 3-1-DA indicated eleven locations with benzo(a)pyrene concentrations above the USEPA RSLs for industrial soil. Discrete analytical results from Area 3-1-DA indicated nine locations with PCB-1254 concentrations above the USEPA RSLs for industrial soil.

Discrete analytical results for Area 3 are spatially represented in Figure 8.

AREA 4 SOIL 5.4

A summary of the Area 4 ISM soil analytical table is provided below.

ISM Area 4 - Soil Results - Screening Level Exceedances Only

IOINI / II OO II IX	004.00	00.00.		10004411000	O <i>y</i>		
	RES.	IND.	Background	Area	4-1	Area 4-2	
Analyte	RSL	RSL	Screening Level	Area 4-1-DA	Area 4-1-DB	Area 4-2-DA	Area 4-2-DB
Arsenic	0.68	3	4.77	1.6		65.0	110
Lead	100	800	21.70	-		1100	1700
Mercury	1.10	4.60	0.16			1.1	3.9
Benzo[a]pyrene	0.11	2.1	NA	1.4	0.41	0.48 J	0.086 J
Benzo[b]fluoranthene	1.1	21	NA	1.8		-	

Notes:

Screening Levels - US Environmental Protection Agency (EPA) Regional Screening Levels (RSL) for Residential (Res.) and Industrial (Ind.) Soils - November 2024 (TH00.1) Results presented in milligrams per kilogram (mg/kg)

J - Result is less than reporting limit but greater or equal to MDL. Concentration approximate. **BOLD –** constituent detected above laboratory reporting limit

Not detected above the USEPA Residential RSL

NA = Not applicable

DA = 0 to 0.5 ft-bgs interval

DB = 3.5- 4.0 ft-bgs interval

Detected concentration exceeds EPA Industrial RSI Detected concentration exceeds EPA Residential RSL

Detected concentration exceeds background value if the background value is above the USEPA Industrial RSL

Analytical results from the 2024 soil investigation of Area 4 was provided in the November 2024 VCP Assessment report and indicated the following:

- Arsenic was detected significantly above the USEPA RSL for industrial soil and the calculated background screening level in ISM samples from Area 4-2-DA and Area 4-2-DB.
- Lead was detected significantly above the USEPA RSL for industrial soil and the calculated background level screening level in ISM samples from Area 4-2-DA and Area 4-2-DB.
- No other COCs were detected at concentrations exceeding USEPA RSLs for industrial soils in ISM samples collected from Area 4 of the Site.

5.5 SITE GROUNDWATER

Analytical results from the site-wide 2024 groundwater sampling event indicated the following:

No constituents were detected above applicable USEPA RSLs in Area 1 (i.e., upgradient) monitoring wells MW-1 and MW-3.



- PCE was detected in Area 2 of the Site in only one well, monitoring well MW-6, at a concentration slightly above the USEPA RSL.
- Benzo(a)anthracene was detected in Area 2 from the sample collected from monitoring well MW-5 and in Area 3 from the sample collected from monitoring well MW-7 and reported at concentrations slightly above the USEPA RSL.
- No other constituents were detected above USEPA MCLs, or tapwater RSLs if no MCL is available, in the groundwater samples collected from MW-1 through MW-9 during the June 2024 sampling event.

Analytical results for Site groundwater sampling are spatially represented in Figure 9.

5.6 VAPOR INTRUSION SCENARIOS

The highest detected concentrations of PCE and benzo(a)anthracene from the June 2024 groundwater sampling event were compared to the target groundwater vapor intrusion screening levels (VISLs) calculated using the latest version of the USEPA VISL Calculator on the USEPA website. The highest detected concentration of PCE was from the sample collected from monitoring well MW-6 installed in Area 2 of the Site. The highest detected concentration of benzo(a)anthracene was from the sample collected from monitoring well MW-5, also in Area 2 of the site. The VISL calculation was conducted utilizing the commercial-use scenario since the planned use in the vicinity of and downgradient of these wells is for ground floor commercial use or open air parking areas and recreational space. The results of the VISL calculation screening are provided in Table 5.6 below.

Table 5.6: Vapor Intrusion Screening Levels- Commercial Scenario

Constituent	Representative Groundwater Concentration (µg/L)	Target Groundwater Concentration (µg/L)	Carcinogenic Risk (CR)
Benzo(a)anthracene	0.11 (MW-5)	4,170	2.64E-10
Tetrachloroethylene (PCE)	6.1 (MW-6)	24.2	9.36E-08

Notes: Target Risk = 1x10-6

The detected concentration of benzo(a)anthracene in MW-5 and PCE in MW-6 are well below the target concentration for groundwater in the commercial scenario. Additionally, the results of the VISL calculator indicated that the representative groundwater concentrations for benzo(a)anthracene and PCE did not exceed the vapor intrusion carcinogenic risk (CR) in the commercial scenario. Of note, PCE was not detected in any other groundwater samples collected during the 2024 monitoring event and it is understood that the detected occurrence of PCE in groundwater will likely naturally attenuate



overtime at the Site. The full VISL calculation pages are provided in Appendix A. Therefore, based on this evaluation, LaBella is not recommending any cleanup efforts as a result of the VISL calculations.



6.0 PROPOSED CLEANUP ACTIVITIES

The proposed cleanup plan has been designed to prevent exposure to COCs remaining in soil and groundwater at the Site and to support the Site's intended future use. Proposed cleanup actions include targeted excavations, extensive-area excavations, capping, soil management during construction activities, and an environmental covenant for the Site.

6.1 TARGETED EXCAVATIONS

Targeted soil excavations are proposed within Area 2 and Area 3 in order to prevent exposure to concentrations of COCs above either residential or USEPA industrial RSLs for its respective intended use area/boundaries. The proposed excavations are detailed below.

6.1.1 AREA 2 TARGETED EXCAVATION AREAS

Discrete sampling results from the 2024 VCP Assessment indicate locations of soil in Area 2 with COC concentrations above USEPA residential and/or industrial RSLs.

The future intended use of Area 2 is mixed-use and is primarily commercial, which includes ground-floor commercial space with second story residential, paved recreation space, and parking areas, with the northern border of Area 2 containing overlapping residential space from Area 1. Given the planned use, LaBella proposes targeted excavations to remove the soils identified with COC concentrations above USEPA industrial RSLs in the paved, recreational, and ground-floor commercial areas.

Additionally, provided site plans indicate that the northern border of Area 2 may contain overlapping residential space at the southern border of Area 1. LaBella proposes targeted excavations to remove soils with identified COC concentrations above USEPA residential RSLs in locations currently identified in the direct proximity of the potential residential overlap. Of note, current identification of the residential overlap area is based on rendered drawings of future Site plans. Targeted excavations in residential overlap areas are subject to change based on final site plans and/or land surveys for the Site. Additional or fewer targeted excavations may ultimately be required to achieve the designated future use and subsequent confirmation sampling (where warranted) will be performed accordingly. Final determination of necessary excavations will be discussed in the forthcoming Voluntary Property Cleanup Implementation Report. See Figure 10 for a depiction of the areas planned for excavation.

Area 2: Planned Residential Area Overlap

Based on the discrete soil sample analytical results, LaBella identified five areas of concern in the potential residential overlap spaces of Area 2 with limited PAHs detected at concentrations above



USEPA residential RSLs. The contaminants and discrete sampling locations in the potential residential overlap areas are provided below.

Area 2-1 (2024 VCP Assessment Results): USEPA RSL Exceedances in Discrete Sample(s) in Planned Residential Area Overlap

Analyte	USEPA Residential RSL	Area 2-1-B05-DA
Benzo(a)pyrene	0.11	0.66

Notes:

Highlighted- Exceeds US Environmental Protection Agency (EPA) Residential Regional Screening Level (RSL) (November 2024,THQ 0.1)

B05 - Individual boring number five

DA - 0 to 0.5 feet below ground surface (ft-bgs) interval Results presented in milligrams per kilogram (mg/kg)

As indicated in Section 6.2 above, the 2024 VCP Assessment subsurface Area 2-1 ISM sample (with sample ID A2-1-DB) did not indicate any COCs above the calculated Site-specific background concentrations or USEPA residential RSLs. Therefore, the horizontal extent of this excavation will be approximately 20 feet in width by 20 feet in length, and the vertical extent will be approximately 1.0 foot below ground surface. The boring indicated in the above table will be located via GPS using coordinates collected during the 2024 VCP Assessment. Excavations will be advanced until confirmation samples indicate the COCs identified in the above table are below the USEPA residential RSLs.

Area 2-2 (2024 VCP Assessment Results): USEPA RSL Exceedances in Discrete & ISM Sample(s) in Planned Residential Area Overlap

Anglido	USEPA Residential	Discrete	Discrete	ISM
Analyte	RSL	Area 2-2-B01-DA	Area 2-2-B23-DA	A2-2-DB
1-Methylnapthalene	0.018	0.046	< 0.071	0.046 J
Benzo(a)pyrene	0.11	0.39	0.29	0.81

Notes:

Highlighted- Exceeds US Environmental Protection Agency (EPA) Residential Regional Screening Level (RSL) (November 2024,THQ 0.1)

B01 - Individual boring number one

ISM - incremental sampling methodology

DA - 0 to 0.5 feet below ground surface (ft-bgs) interval

DB - 3.5 - 4.0 feet bgs interval

Results presented in milligrams per kilogram (mg/kg)

As indicated in Section 6.2 above, the 2024 VCP Assessment subsurface Area 2-2 ISM sample (with sample ID A2-2-DB) indicated limited COCs above the USEPA residential RSLs, but below the calculated Site-specific background concentrations. With that, the horizontal extent of these excavations will be approximately 20 feet in width by 20 feet in length, and the vertical extent will be approximately 4.5 feet below ground surface. The borings indicated in the above table will be located via GPS using coordinates collected during the 2024 VCP Assessment. Excavations will be advanced until confirmation samples indicate the COCs identified in the above table are below the USEPA residential RSLs.



Area 2-3 (2024 VCP Assessment Results): USEPA RSL Exceedances in Discrete & ISM Sample(s) in Planned Residential Area Overlap

Analyta	USEPA Residential	Discrete	Discrete	ISM	
Analyte	RSL	Area 2-3-B08-DA	Area 2-3-B28-DA	A2-3-DB	
Benzo(a)pyrene	0.11	0.46	0.29	5.4 J	

Notes:

L- Exceeds US Environmental Protection Agency (EPA) Residential Regional Screening Level (RSL) (November 2024,THQ 0.1) Highlighted - Exceeds US Environmental Protection Agency (EPA) Industrial Regional Screening Level (RSL) (November 2024,THQ 0.1)

B08 - Individual boring number eight

ISM - incremental sampling methodology

DA - 0 to 0.5 feet below ground surface (ft-bgs) interval

DB - 3.5 - 4.0 feet bgs interval

Results presented in milligrams per kilogram (mg/kg)

As indicated in Section 5.2 above, the 2024 VCP Assessment subsurface Area 2-3 ISM sample (with sample ID A2-3-DB) indicated the same COC benzo(a)pyrene above the USEPA industrial RSLs, but below or similar to the calculated Site-specific background concentrations. With that, the horizontal extent of these excavations will be approximately 20 feet in width by 20 feet in length, and the vertical extent will be approximately 4.5 feet below ground surface. The borings indicated in the above table will be located via GPS using coordinates collected during the 2024 VCP Assessment. Excavations will be advanced until confirmation samples indicate the COCs identified in the above table are below the USEPA residential RSLs.

The total estimated volume of soil to be excavated in the five targeted excavations in Area 2 is approximately 280 cubic yards (cy3).

Area 2: Planned Mixed-Use Commercial Area Excavation

Based on the discrete soil sample analytical results, LaBella was able to delineate areas of contamination in surficial soils above USEPA industrial RSLs within Area 2-2 and Area 2-3. The contaminants and discrete sampling locations are provided below.

Area 2-2 (2024 VCP Assessment Results): USEPA RSL Exceedances in Discrete Sample(s) In Planned Mixed-Use Commercial Area

Analyte	USEPA Industrial RSL	Area 2-2-B20-DA	Area 2-2-B26-DA
Benzo(a)pyrene	2.1	3.4	2.7

Highlighted- Exceeds US Environmental Protection Agency Industrial Regional Screening Level (RSL) (November 2024,THQ 0.1)

B20 - Individual boring number twenty

DA - 0 to 0.5 feet below ground surface (ft-bgs) interval

Results presented in milligrams per kilogram (mg/kg)

As indicated in Section 5.2 above, the 2024 VCP Assessment subsurface Area 2-2 ISM sample (with sample ID A2-2-DB) did not indicate any COCs above the calculated Site-specific background concentrations, or any concentrations above the USEPA industrial RSL. Therefore, the horizontal extent of this excavation will be approximately 20 feet in width by 20 feet in length, and the vertical extent will be approximately 1.0 foot deep below ground surface. The borings indicated in the above table



will be located via GPS using coordinates collected during the 2024 VCP Assessment. Excavations will be advanced until confirmation samples indicate the COCs identified in the above table are below the USEPA industrial RSLs.

The total estimated volume of soil to be excavated in the planned mixed-use commercial area of Area 2-2 is approximately 30 cy3. Figure 10 provides a depiction of the approximate proposed excavation locations and extents.

6.1.2 AREA 3 TARGETED EXCAVATION AREA

The future intended use of Area 3 includes ground-floor commercial space, green space, paved recreation space, and parking areas. Given the planned use, LaBella identified one targeted excavation location in Area 3-1 with PAHs and PCBs detected above USEPA industrial RSLs. The contaminants and discrete sampling location with its associated subsurface ISM sample results (as applicable) are provided below.

Area 3-1 (2024 VCP Assessment Results): USEPA RSL Exceedances in Discrete Sample(s) In Planned Mixed-Use Commercial Area

Analyte	USEPA Ind.	Discrete	ISM
Analyte	RSL	Area 3-1-B01-DA	Area 3-1-DB
PCB-1254	0.97	1.4	1.3
Benzo(a)pyrene	2.1	18	1.4 J

lighlighted- Exceeds US Environmental Protection Agency (EPA) Residential Regional Screening Level (RSL) (November 2024,THQ 0.1) Highlighted - Exceeds US Environmental Protection Agency (EPA) Industrial Regional Screening Level (RSL) (November 2024,THQ 0.1)

B01 - Individual boring number one

ISM – incremental sampling methodology DA - 0 to 0.5 feet below ground surface (ft-bgs) interval

DB - 3.5 - 4.0 feet bgs interval

Results presented in milligrams per kilogram (mg/kg)

As indicated in Section 5.3 above, the 2024 VCP Assessment subsurface Area 3-1 ISM sample (with sample ID A3-1-DB) indicated COCs at or slightly above the calculated Site-specific background concentrations, with one COC identified at a concentration above the USEPA industrial RSL. Therefore, the horizontal extent of this excavation will be approximately 20 feet width by 20 feet in length, and the vertical extent will be approximately 4.5 feet deep below ground surface. The boring indicated in the above table will be located via GPS using coordinates collected during the 2024 VCP Assessment. The excavation will be advanced until confirmation samples indicate the COC identified in the above table are below the USEPA industrial RSLs.

The total estimated volume of soil to be excavated in the planned mixed-use commercial area of Area 3-1 is approximately 67 cy³.



6.1.3 TARGETED EXCAVATIONS CONFIRMATION SAMPLING

Confirmation samples for the targeted excavation areas in Area 2 and Area 3 (outlined above) will be conducted by discrete samples collected from the sidewalls and base of the excavation. Samples will be collected at a minimum of every 20 feet from the sidewalls and one base sample per 20 linear feet of base area.

The confirmation soil samples will be placed in laboratory supplied containers and will be maintained at 4° Celsius and delivered under proper chain of custody to a laboratory for analysis. The soil samples will be analyzed for select COCs to include benzo(a)pyrene, 1-methylnapthalene, and PCB-1254 (location A3-1-B01-DA only) by USEPA Methods 8270C-SIM and USEPA Method 8082. For each targeted excavation, confirmation samples will be analyzed for only the COCs identified during the 2024 discrete sampling event that exceeded the applicable USEPA RSL for that area.

6.2 EXTENSIVE EXCAVATIONS

Discrete soil sampling results from the 2024 VCP Assessment previously delineated widespread areas containing COC concentrations above USEPA industrial RSLs in soils in Area 2-3 and Area 3-1 of the Site. In order to prevent exposure to future receptors, two extensive area excavation activities are proposed. The planned excavations are detailed below.

6.2.1 EXTENSIVE EXCAVATION AREAS

Discrete sampling results indicated two extensive areas of contamination with concentrations of COCs above USEPA industrial RSLs in soils and include one in Area 2-3 and another in Area 3-1. The sampling locations in the two areas and their COCs with USEPA commercial RSL exceedances are provided below.

Area 2-3 (2024 VCP Assessment Results): USEPA Industrial RSL Exceedances in Discrete Sample(s) In Planned Mixed-Use Commercial Area

	USEPA	Discrete	Discrete	Discrete	Discrete	Discrete	ISM
Analyte	Ind.	Area 2-3-	A2-3-DB				
	RSL	B14-DA	B15-DA	B20-DA	B21-DA	B26-DA	AZ-3-DD
1-Methylnaphthalene	0.077	<0.18	<0.19	0.81	<0.39	<2.0	0.16 J
Benzo[a]anthracene	21	4.6	6.3	32	3.3	44	6.6
Benzo[a]pyrene	2.1	4.4	6.5	31	2.4	46	5.4 J
Benzo[b]fluoranthene	21	5.9	8.4	41	3.9	61	6.7
Indeno[1,2,3-cd]pyrene	21	2.1	2.8	14	1.3	30	2.7

Notes:

Highlighted - Exceeds US Environmental Protection Agency (EPA) Industrial Regional Screening Level (RSL) (November 2024,THQ 0.1)

B14 - Individual boring number fourteen

ISM - incremental sampling methodology DA - 0 to 0.5 feet below ground surface (ft-bgs) interval Results presented in milligrams per kilogram (mg/kg)



As indicated in Section 6.2 above, the 2024 VCP Assessment subsurface Area 2-3 ISM sample (with sample ID A2-3-DB) indicated COCs at or slightly above the calculated Site-specific background concentrations, with two COCs identified at concentrations above the USEPA industrial RSL. Therefore, the approximate excavation extent for Area 2-3 is 55 feet in width by 110 feet in length by 4.5 feet below ground surface. The borings indicated in the above table will be located via GPS using coordinates collected during the 2024 VCP Assessment. The excavation will be advanced until confirmation samples indicate the COC identified in the above table are below the USEPA industrial RSLs.

The total estimated volume of soil to be excavated in the extensive excavation of Area 2-3 is approximately 1,008 cy³.

Area 3-1 (2024 VCP Assessment Results): USEPA Industrial RSL Exceedances in Discrete Sample(s) In Planned Mixed-Use Commercial Area

	USEPA	Discrete	Discrete	Discrete	Discrete	ISM	
Analyte	Ind.	Area 3-1-	Area 3-1-	Area 3-1-	Area 3-1-	Area 3-1-DB	
	RSL	BO4-DA	B09-DA	B10-DA	B11-DA		
PCB-1254	0.97	1	<0.017	1.1	0.68	1.3	
Benzo(a)pyrene	2.1	14	42	6.4	5.1	1.4 J	

Area 3-1 (2024 VCP Assessment Results): USEPA Industrial RSL Exceedances in Discrete Sample(s) In Planned Mixed-Use Commercial Area (Continued)

	USEPA	Discrete	Discrete	Discrete	Discrete	Discrete	Discrete	ISM
Analyte	Ind.	Area 3-1-						
	RSL	B12-DA	B13-DA	B17-DA	B18-DA	B19-DA	B20-DA	DB
PCB-1254	0.97	4.3	1.8	12	3.6	6.7	7.9	1.3
Benzo(a)pyrene	2.1	15	11	38	31	30	4.1	1.4J

Notes:

Highlighted - Exceeds US Environmental Protection Agency (EPA) Industrial Regional Screening Level (RSL) (November 2024,THQ 0.1)

B12 – Individual boring number twelve

ISM – incremental sampling methodology DA - 0 to 0.5 feet below ground surface (ft-bgs) interval

DA - 0 to 0.5 feet below ground surface (ft-bgs) interva Results presented in milligrams per kilogram (mg/kg)

As indicated in Section 5.3 above, the 2024 VCP Assessment subsurface Area 3-1 ISM sample (with sample ID A3-1-DB) indicated COCs at or slightly above the calculated Site-specific background concentrations, with one COC identified at concentrations above the USEPA industrial RSL. Therefore, the approximate excavation extent for Area 3-1 is 100 feet in width by 220 feet in length by 4.5 feet below ground surface. The borings indicated in the above table will be located via GPS using coordinates collected during the 2024 VCP Assessment. The excavation will be advanced until confirmation samples indicate the COC identified in the above table are below the USEPA industrial RSLs.



The total estimated volume of soil to be excavated in the extensive excavation of Area 3-1 is approximately 3,666 cy³.

Figure 10 depicts the proposed excavation extents for widespread excavations in Area 2-3 and Area 3-1.

For each excavation, confirmation samples will be analyzed for only the COCs identified during the 2024 discrete sampling event that exceeded the applicable USEPA industrial RSL for that area.

6.2.2 EXTENSIVE AREA CONFIRMATION SAMPLING

LaBella will collect confirmation samples from the extensive excavation areas via ISM (i.e., the previously approved sampling method performed during the 2024 assessment. ISM is a structured composite sampling and is conducted by collecting equal volume increments in an unbiased manner from a decision unit (DU), according to guidance from the Interstate Technology Regulatory Council (ITRC) Technical and Regulatory Guidance, Incremental Sampling Methodology (February 2012; updated October 2020).

Guidance from the ITRC and the AEIRG recommends 30 sample aliquots collected from a systematic grid in the DU. For the excavation area in Area 2-3, LaBella proposes one DU to encompass the base and sidewalls of the excavation pit. Given the larger expanse of the excavation area for Area 3-1, LaBella proposes two DUs, defined as Area 3-1 East and Area 3-1 West, which will encompass the base and sidewalls in their respective zone.

The sampling grid for each DU will be generated using Visual Sampling Plan (VSP) software available from the Department of Energy (DOE). The DOE VSP software incorporates a defensible sampling plan that selects locations based on optimal sampling design and statistical analysis strategies. The DOE VSP has been implemented by the ADEM for soil characterization purposes in various state-directed site assessment projects. For this project, LaBella selected the systematic random sampling/systematic grid sampling with a random start (serpentine) approach. This approach subdivides each DU into 30 equally sized grids and uses the VSP software to randomly generate the placement of the sample point within one grid, which is then repeated within each of the remaining 29 grids within each DU.

The proposed sampling grids are provided in Figure 11; however, sampling grids may be modified following evaluation of the final shape and extent of the excavations.



The aliquots will be collected from a Terra Core® sampler and placed into an appropriate container. Additionally, two replicate samples will be collected from the DU in Area 2-3 in order to confirm the representativeness of the incremental sampling.

Following sample collection, the combined sample increments will be processed in a laboratory environment and subsampled to provide the final aliquot to be submitted for analysis.

The primary soil sample and two replicate samples will be maintained at 4° Celsius and delivered under proper chain of custody to a laboratory for analysis. The ISM soil samples will be analyzed for PAHs by USEPA Method 8270C-SIM and PCBs by USEPA Method 8082 based on previous discrete sampling results. For each excavation, confirmation samples will be analyzed for only the detected constituents with concentrations identified from the previous discrete sampling event that exceeded the applicable USEPA industrial RSL to meet the future intended use of that area. The confirmation COCs for each for the widespread excavation areas are provided below.

Area 2-3 Excavation

- 1-Methylnaphthalene
- Benzo[a]anthracene
- Benzo[a]pyrene
- Benzo[b]fluoranthene
- Dibenz(a,h)anthracene
- Indeno[1,2,3-cd]pyrene

Area 3-1 Excavation

- PCB-1254
- Benzo(a)pyrene

A discrete soil sample will also be collected from each incremental aliquot location in the DU. The samples will be held for analysis, pending the results of the incremental sampling. If necessary, up to 30 discrete samples per DU will be submitted for analysis of the select aforementioned PAHs and PCBs per the ISM sampling results.



6.2.3 EXCAVATION BACKFILL

Following receipt of confirmation samples indicating COCs have been removed to concentrations below the applicable Area's appropriate COC USEPA RSLs (i.e., Residential or Industrial depending on the details outlined in the above Sections), the excavations can be backfilled. Excavations completed in residential use areas may be backfilled with fill material from Area 1 or clean fill from an off-site location of no known environmental impact.

Excavations completed in planned commercial use areas may be backfilled with fill material from Area 1, from an off-site source of no known environmental impact, or from soils in Area 2, Area 3, or Area 4-1 with COC concentrations below USEPA industrial RSLs in soils.

6.2.4 EXCAVATION WASTE MANAGEMENT

Soils excavated from areas containing COCs with concentrations above USEPA industrial RSLs will be directly loaded into roll-offs, dump-truck, or other suitable container for transport, or temporarily stockpiled on-site on 10-mil polyethylene sheeting for subsequent disposal at an ADEM approved landfill and in accordance with state and federal regulations. The excavated areas will be documented including the depths of each excavation.

Prior to removal from the site, excavated soil will be analyzed for waste characteristics. Composite soil samples will be collected for laboratory analysis in accordance with ADEM regulations and delivered under chain-of-custody to an approved laboratory for analysis. Following receipt of analytical results, a Solid Waste Profile Sheet ADEM Form 300 will be completed and submitted to ADEM for review and approval. The ADEM approved landfill will be provided a copy of the ADEM Waste Certification prior to transport of the contaminated soils to the landfill. A Bill of Lading (BOL) will accompany each load of contaminated soil to the landfill and will include the ADEM waste certification number and signature of the owner or owner representative. All loading, transport, and disposal activities will conducted in accordance with local and state requirements.

Soils excavated from areas containing COC concentrations above USEPA residential RSLs, but below USEPA industrial RSLs may be moved, pushed, or distributed to Area 2, Area 3, or Area 4 of the Site in the planned commercial use or capped areas (Area 4-2). Excavated soils not relocated on the Site will be managed for disposal utilizing the procedures detailed in the above paragraphs.

6.3 BEST MANAGEMENT PRACTICES DURING CONSTRUCTION ACTIVITIES

On-site personnel must be informed of the soil management requirements prior to any soil disturbance activities. Additionally, the Health and Safety Plan prepared for workers by their respective employer



should be made available prior to and during the periods in which site soil may be disturbed or excavated. At minimum, on-site personnel should don Level D personal protective equipment (PPE) to minimize contact with potentially impacted soil. Any contaminated PPE generated during site activities will be disposed of following applicable State disposal guidelines.

Proper stormwater control measures will be implemented during soil disturbance and excavation activities. To LaBella's knowledge, Holland Homes or their designated grading contractor will apply for any necessary NPDES permits as applicable.

A survey will be completed to define Site areas in order to ensure soils in Area 1 are not impacted by construction in Area 2, Area 3, or Area 4 and to guarantee soils in Area 4-2 remain in their respective area. In order to facilitate soil distribution controls during construction activities, Area 1 will be designated Zone 1, Area 2, Area 3, and Area 4-1will be designated Zone 2, and Area 4-2 will be designated Zone 3 (Figure 12). The following Zone requirements will be maintained during all construction and or grading activities for the Site:

- Soils removed during grading activities in Zone 1 shall be allowed to be moved, pushed, or distributed to Zone 2 of the Site for grading or backfill purposes.
- No excavated or removed soils from Zone 2 will be moved, pushed, or distributed into Zone 1 of the Site.
- Soils removed for grading purposes from Zone 3 of the Site may be used to fill low-lying areas of Zone 3 or will be loaded directly into rolloffs or onto 10-mil polyethylene sheeting for subsequent proper characterization and disposal at an ADEM approved landfill as previously described in Section 6.2.4 above. Soils from Zone 3 will remain in Zone 3 only or will be properly disposed of at an ADEM approved landfill.
- Other than soils with identified USEPA industrial RSLs planned for offsite disposal, soils removed from Zone 2 may be utilized to backfill low-lying areas, or areas to be capped in Zone 2 or 3 of the Site. Soils removed from Zone 2 not utilized for grading or backfill purposes will be loaded directly into rolloffs or onto 10-mil polyethylene sheeting for subsequent proper characterization and disposal at an ADEM approved landfill as previously described in Section 6.2.4 above
- Equipment utilized during site grading and excavation activities will be monitored for excessive mud, dust, or debris accumulation in order to prevent incidental transfer of soil between Site areas.
 Excessive particulate matter will be manually brushed from the affected equipment. In addition, equipment will be brushed with soap and water then washed with a high-pressure steam-cleaner before entering Zone 1 from Zones 2 and 3 of the Site. All equipment will undergo the above



decontamination procedure following any soil disturbance in Zone 3 of the Site and following any impacted soil excavations in Zone 2. Residue removed from equipment will remain in the Zone it was accumulated in and will not be distributed to other Zones of the Site.

Figure 12 is provided depicting soil distribution practices during construction.

6.3.1 Area 4-2 Dust and Particulate Mitigation

Soil disturbance activities, to include any excavation, grading, or soil distribution in Area 4-2 of the site will be monitored for dust accumulation. Soil disturbance activities will include the application of water or moisture control practices in order to suppress dust and soil particles during dry conditions.

6.4 CAPPING

Current Site plans include a parking area, and ground floor commercial space with potential second story commercial or residential usage for Area 4-2 of the Site, LaBella recommends that exposure for potential receptors to COCs in Area 4-2 soils be restricted through use of a permanent asphalt or concrete cap or capped with clean fill. Areas designated for structures in Area 4-2 will be capped with concrete foundations. Soils in landscaped areas of Area 4-2 will be capped with a minimum of two feet of clean fill material. The remaining space in Area 4-2 will be paved and utilized for parking spaces.

Should soil disturbance activities be required in Area 4-2 as part of either construction or grading activities (i.e., prior to installation of permanent cover/capping) excess soils will be stockpiled, characterized, and properly disposed in accordance with state and federal regulations. Construction workers will follow their employers health and safety plan and don a minimum of Level D PPE to minimize contact with any impacted soil.



7.0 CONCLUSIONS AND RECOMMENDATIONS

Impacts to soil and groundwater have been identified through analytical testing and USEPA RSL evaluation in select areas of the Site. Based on the future intended Site use, LaBella recommends remedial corrective actions to include the following:

- Targeted excavations of soils with concentrations of COCs exceeding USEPA residential RSLs in the residential overlap section of Area 2. Proposed excavation locations are based on rendered plans for the Site. Additional or fewer excavations may ultimately be required based on final Site plans or land surveys for the Site.
- Targeted excavations of soils with concentrations of COCs exceeding USEPA industrial RSLs in Area
 2-2 and Area
 2-3 of the Site.
- Extensive area excavations of soils with concentrations of COCs exceeding USEPA industrial RSLs in Area 2-3 and Area 3-1 of the Site.
- Implementation of best practices during construction activities to include soil distribution controls, dust mitigation, and equipment decontamination.
- Prevention of exposure to COCs remaining in Area 4-2 of the Site through capping via hardscaping and two feet of certified clean fill in landscaped areas.

Following completion of cleanup activities and as certain COC concentrations will remain on-site above applicable USEPA RSLs, LaBella recommends recording a Class I environmental covenant with appropriate soil and/or groundwater deed restrictions which will include Area 1, Area 2, Area 3 and Area 4 of the Site. The proposed use restrictions for the environmental covenant will include:

- The use of groundwater for potable or irrigation purposes is prohibited.
- The Site shall be restricted to ground-floor commercial use only in Area 2, Area 3, and Area 4.
- Exposure to site soils shall be restricted in Area 4-2, through the implementation of paving or capping to include building foundations and paved parking areas. Soils in the landscaped areas will be capped with a minimum of two feet of certified clean fill material.

LaBella can initiate cleanup activities upon approval of this Cleanup Plan by ADEM and following the public notice period. Following completion of cleanup activities, LaBella will submit a Voluntary

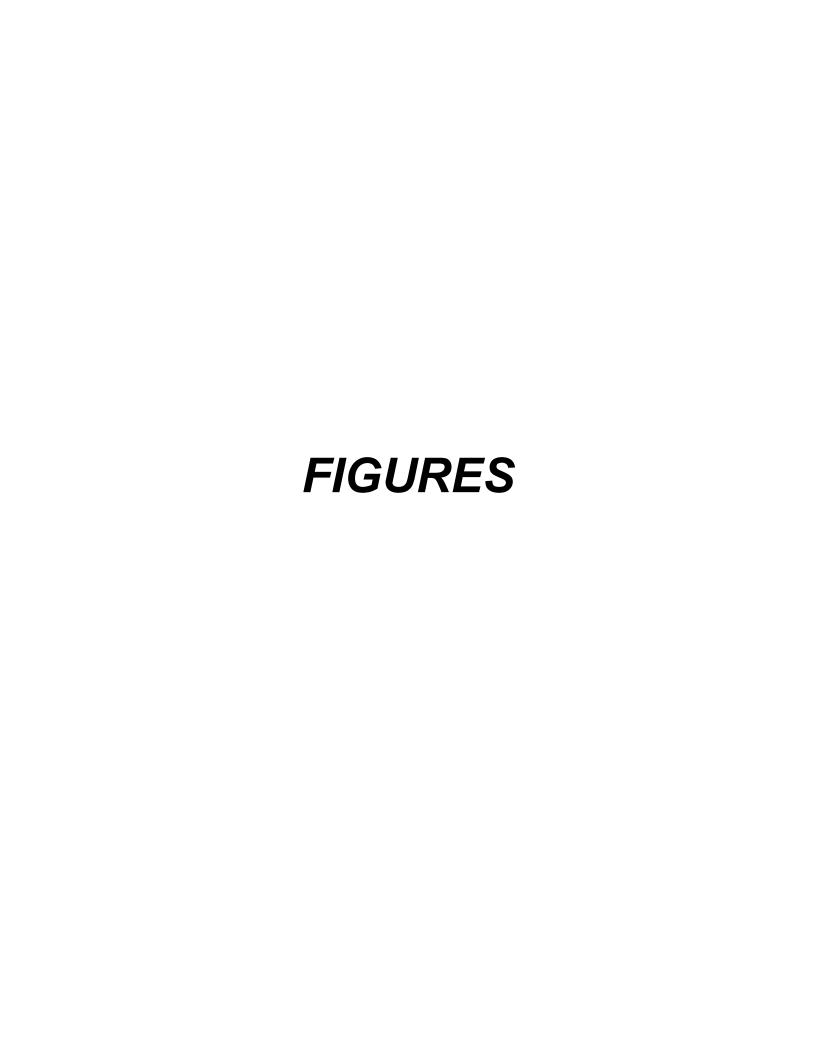


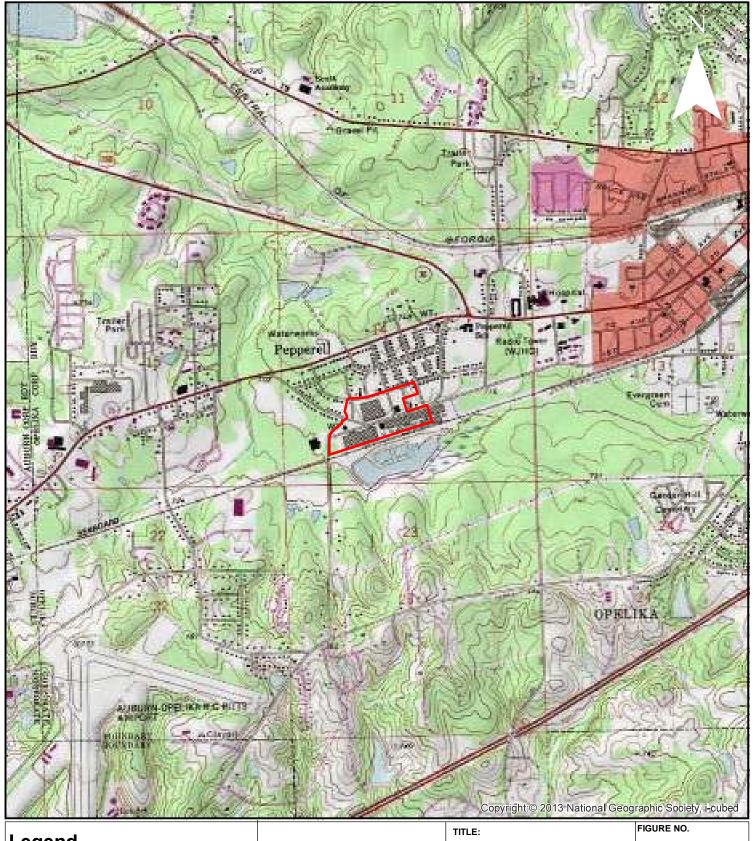
Property Cleanup Implementation Report with a draft environmental covenant to ADEM for approval under separate cover.



8.0 REFERENCES

- Alabama Department of Environmental Management, Alabama Environmental Investigation and Remediation, Revision 4.0, February 2017.
- Alabama Department of Environmental Management, Former West Point Stevens Mill Property Voluntary Cleanup Program Property Assessment Plan approval letter. May 2, 2022.
- Geological Survey of Alabama, Special Map 220, Geologic Map of Alabama, 1988.
- Harmon Engineering & Contracting Co. Inc., Contamination Assessment Report, October 2011.
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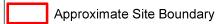














528 MINERAL TRACE HOOVER, AL 35244 (205) 985-4874 Site Map

VCP Cleanup Plan Former West Point Stevens Mill Opelika, Alabama 36801 FIGURE NO.
2
PROJECT NO.
2242252

DRAWN BY

DW

DATE DRAWN 03-17-2022

SCALE: 0 175 350 1 inch = 350 feet





Approximate Site Boundary



528 MINERAL TRACE HOOVER, AL 35244 (205) 985-4874

Area Land Use

VCP Cleanup Former West Point Stevens Mill Opelika, Alabama 36801

1 inch = 500 feet

500

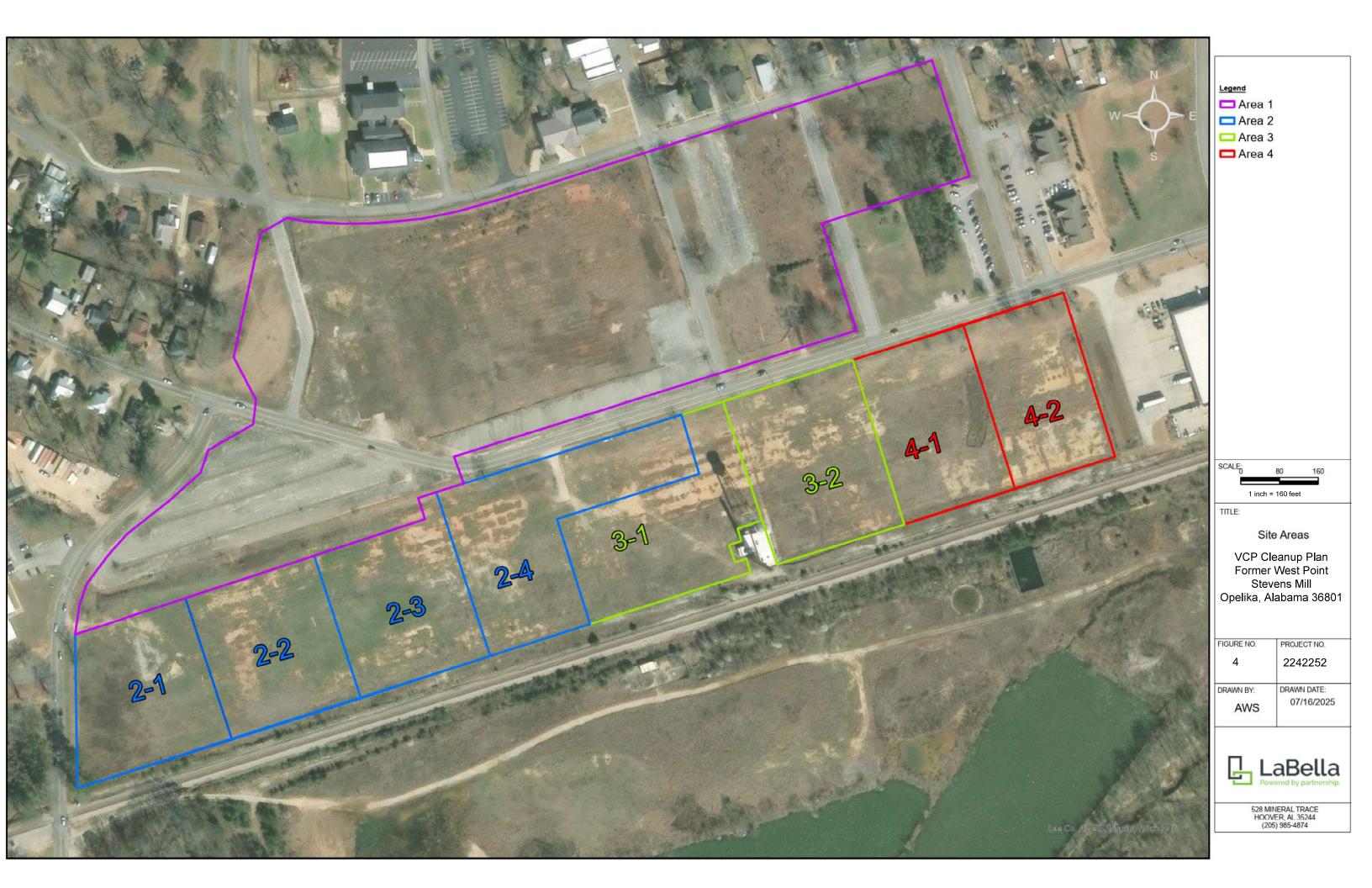
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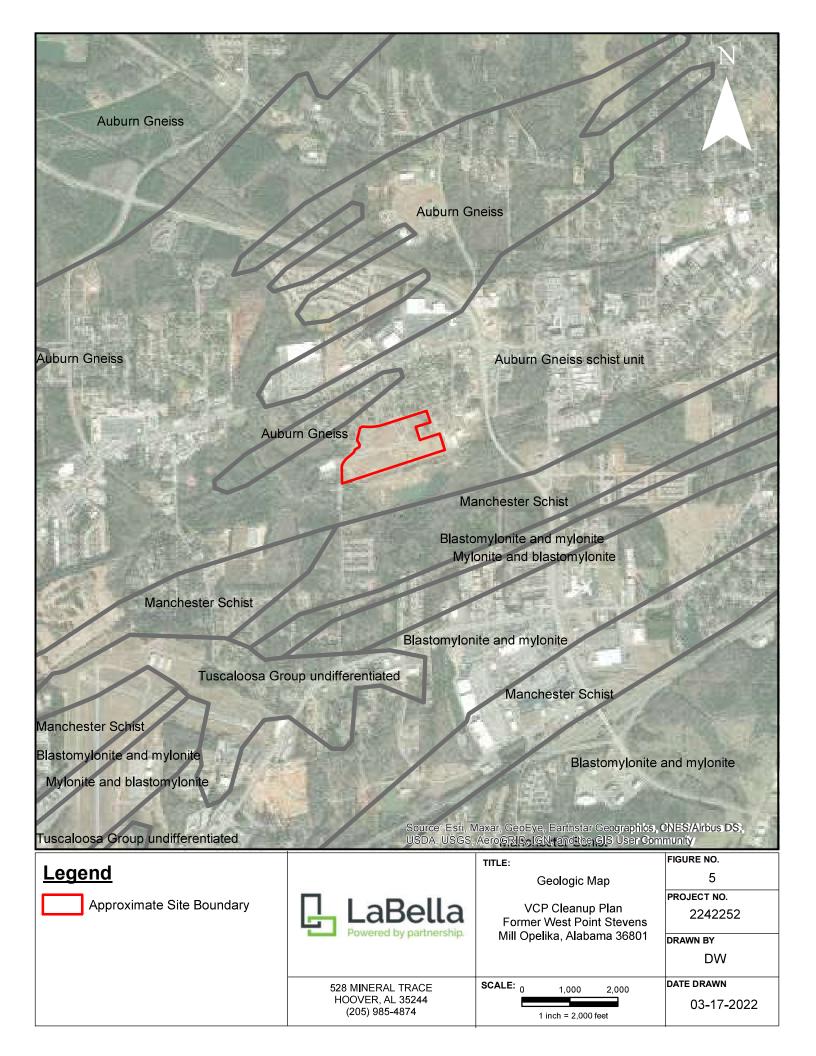
3 PROJECT NO. 2242252

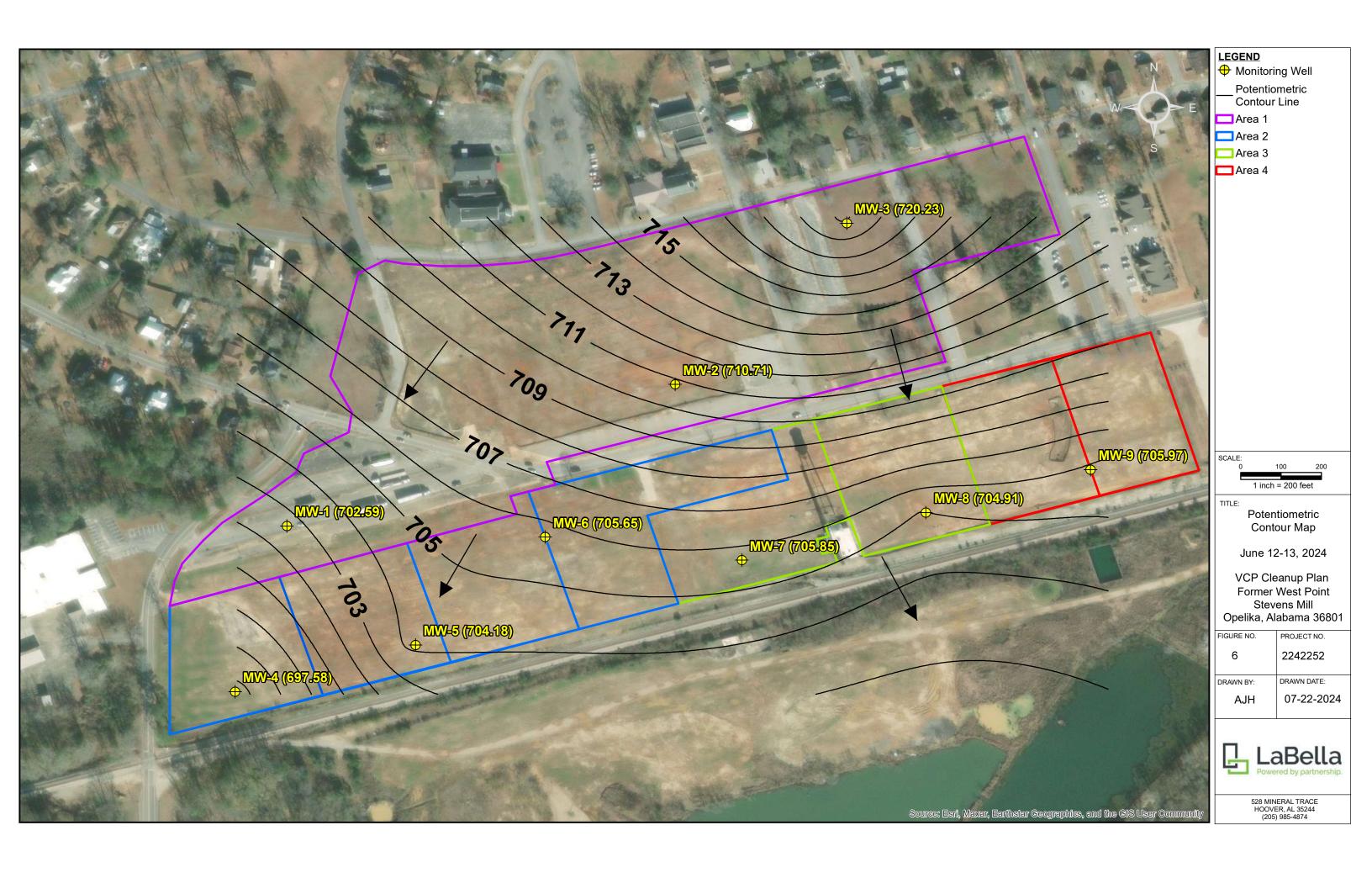
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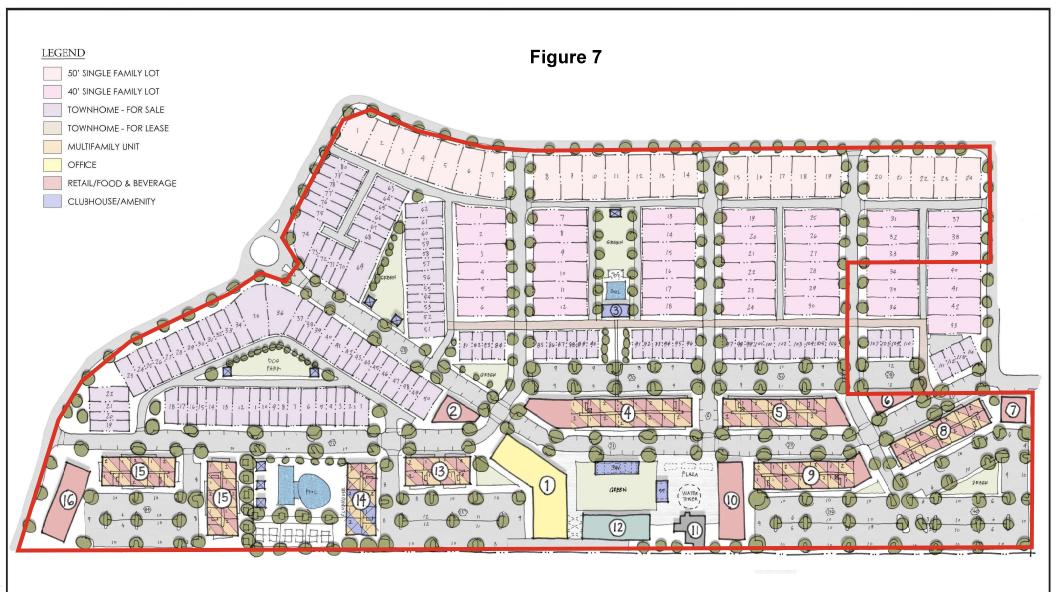
DATE DRAWN

03-17-2022









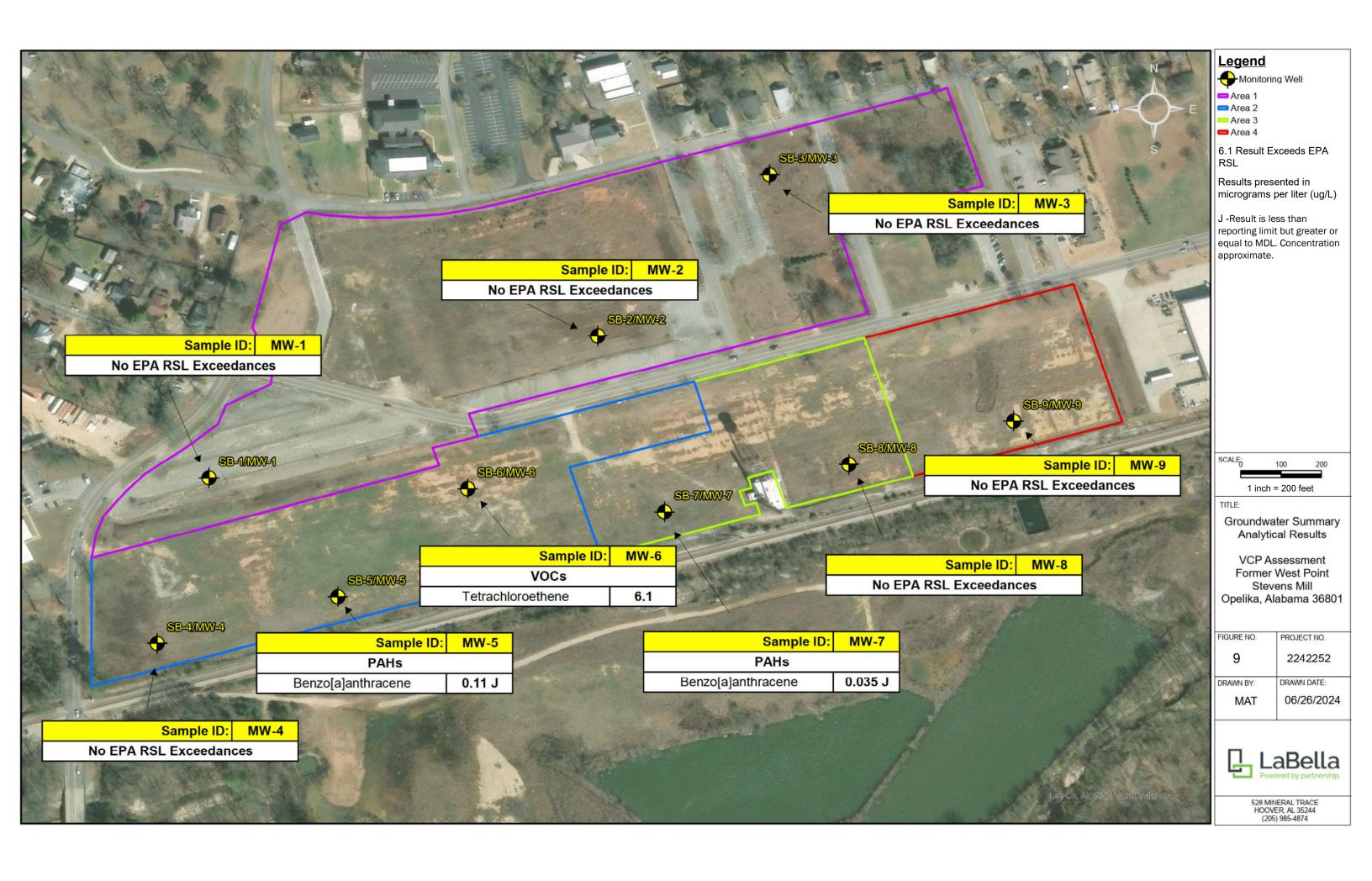
Site Boundary



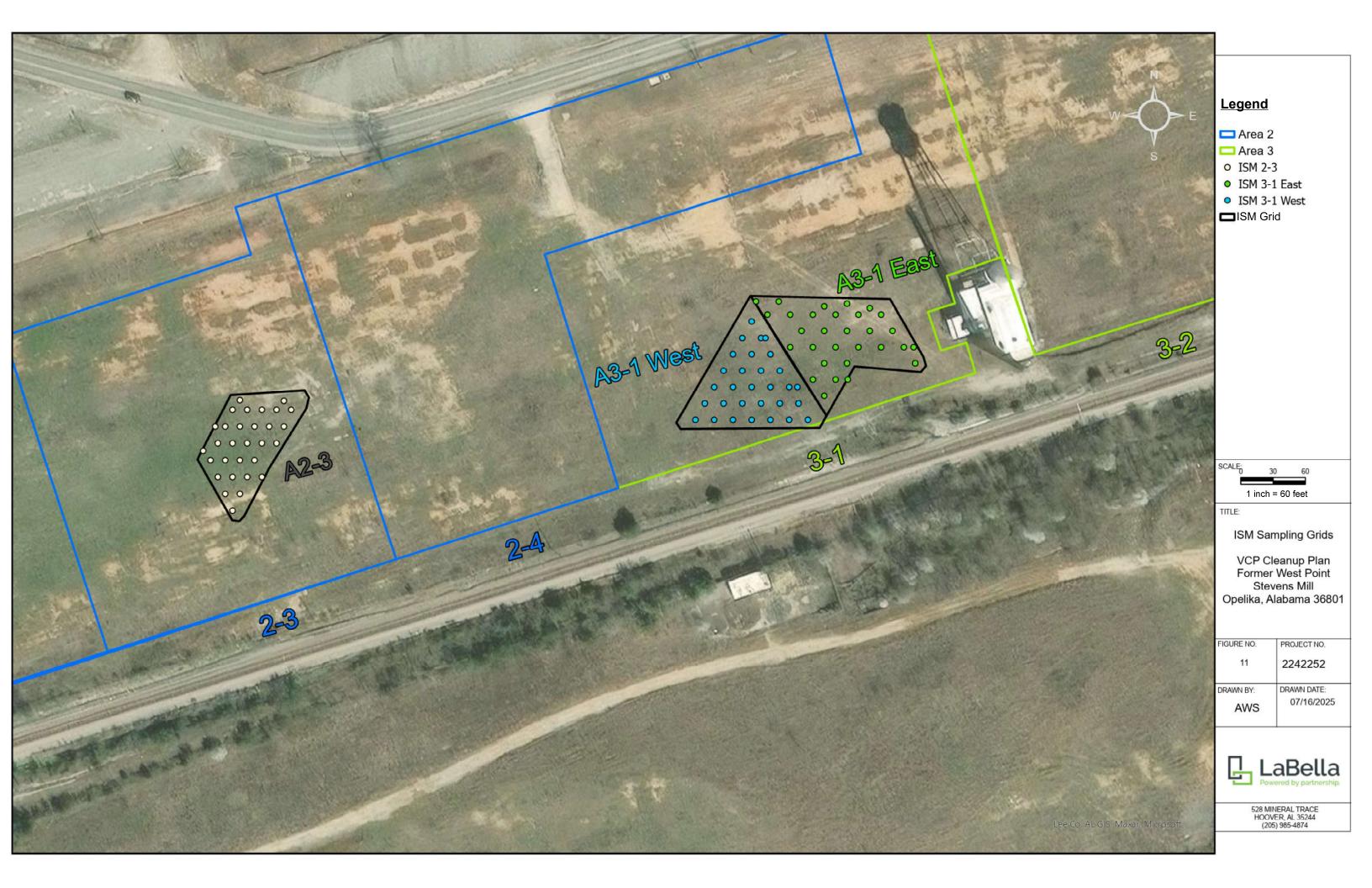




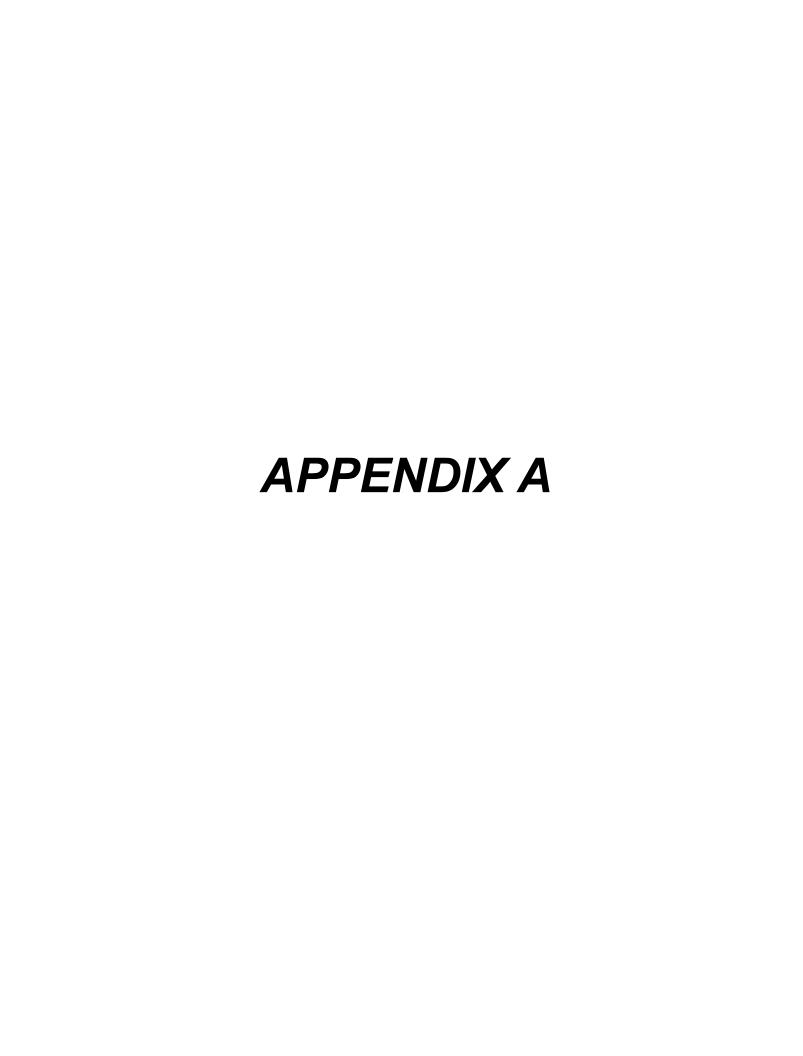












Variable	Commercial Air Default Value	Site-Specific Value
AF _{mu} (Attenuation Factor Groundwater) unitless	0.001	0.001
AF (Attenuation Factor Sub-Slab) unitless	0.03	0.03
AT _{com} (averaging time - composite worker)	365	365
ED (exposure duration - composite worker) yr	25	25
EF _{com} (exposure frequency - composite worker) day/yr	250	250
ET _{com} (exposure time - composite worker) hr	8	8
THQ (target hazard quotient) unitless	0.1	0.1
LT (lifetime) yr	70	70
TR (target risk) unitless	1.0E-06	1.0E-06

Commercial Vapor Intrusion Screening Levels (VISL)

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = DWSHA; W = TEF applied; E = RPF applied; U = user provided; G = see RSL User's Guide Section 5; CA = cancer; NC = noncancer.

Chemical	CAS Number	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1)	chemical have inhalation toxicity data? (IUR	Via Vapor Intrusion from Soil Source?	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Groundwater Source? (C _{hc} > C _{i,a} , Target?)	Target Indoor Air Concentration (TCR=1E-06 or THQ=0.1) MIN($C_{ia,c}$, $C_{ia,nc}$) ($\mu g/m^3$)	Toxicity Basis	(TCR=1E-06 or THQ=0.1)	Target Groundwater Concentration (TCR=1E-06 or THQ=0.1) C _{gw} ,Target (μg/L)
Benz[a]anthracene	56-55-3	Yes	Yes	Yes	Yes	2.04E-01	CA	6.81E+00	4.17E+02
Tetrachloroethylene	127-18-4	Yes	Yes	Yes	Yes	1.75E+01	NC	5.84E+02	2.42E+01

Is Target Groundwater Concentration < MCL? (C _{gw} < MCL?)	Pure Phase Vapor Concentration C_{ν_p} \ (25 °C)\ (μ g/m³)	Maximum Groundwater Vapor Concentration C _{hc} \ (μg/m³)	Temperature for Maximum Groundwater Vapor Concentration (°C)	Lower Explosive Limit LEL (% by volume)	LEL Ref	IUR (ug/m³)-1	IUR Ref	RfC (mg/m³)		Mutagenic Indicator	Carcinogenic VISL TCR=1E-06 C _{ia,c} (μg/m³)	Noncarcinogenic VISL THQ=0.1 C _{ia,nc} (μg/m³)
	2.58E+00	4.61E+00	25	-		6.00E-05	Ε	-		Mut	2.04E-01	=
No (5)	1.65E+08	1.49E+08	25	_		2.60E-07	1	4.00E-02	J	No	4.72E+01	1.75E+01

Commercial Vapor Intrusion Risk

Chemical	CAS Number	$\begin{tabular}{ll} Site \\ Groundwater \\ Concentration \\ C_{gw} \\ (\mu g/L) \end{tabular}$		VI Carcinogenic Risk CDI (μg/m³)	VI Carcinogenic Risk CR	VI Hazard CDI (mg/m³)	VI Hazard HQ	IUR (ug/m³) ⁻¹	IUR Ref
Benz[a]anthracene	56-55-3	0.11	5.40E-05	4.40E-06	2.64E-10	1.23E-08	-	6.00E-05	Е
Tetrachloroethylene	127-18-4	6.1	4.41E+00	3.60E-01	9.36E-08	1.01E-03	2.52E-02	2.60E-07	I
*Sum		-	-	-	9.38E-08	-	2.52E-02	-	

Chronic RfC (mg/m³)	RfC Ref	Temperature (°C)\ for Groundwater Vapor Concentration	Mutagen?
-		25	Mut
4.00E-02	I	25	No
-		-	

Chemical Properties

Chemical		Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1)	chemical have inhalation toxicity data? (IUR	MW	MW Ref	Vapor Pressure VP (mm Hg)	VP	S (mg/L)	S Ref	MCL (ug/L)	HLC (atm-m³/mole)
Benz[a]anthracene	56-55-3	Yes	Yes	228.30	PHYSPROP	2.10E-07	PHYSPROP	9.40E-03	PHYSPROP	-	1.20E-05
Tetrachloroethylene	127-18-4	Yes	Yes	165.83	PHYSPROP	1.85E+01	PHYSPROP	2.06E+02	PHYSPROP	5	1.77E-02

Henry's Law Constant (unitless)	H` and HLC Ref	Henry's Law Constant Used in Calcs (unitless)	Normal Boiling Point BP (K)	BP Ref	Critical Temperature T _c \ (K)	T _c \ Ref	Enthalpy of vaporization at the normal boiling point $\Delta H_{v,b} \setminus (cal/mol)$	$\Delta H_{v,b} \$ Ref	Lower Explosive Limit LEL (% by volume)	LEL Ref
4.91E-04	PHYSPROP	4.91E-04	710.75	PHYSPROP	9.79E+02	YAWS	16000.00	Weast	-	
7.24E-01	PHYSPROP	7.24E-01	394.45	PHYSPROP	6.20E+02	YAWS	8288.72	CRC	-	