CORRECTIVE ACTION PLAN
(COST PROPOSAL NO. 19)

RIVER PARK ENTERPRISES, LLC
FORMER RIVER PARK GROCERY
10563 COUNTY ROAD 48
FAIRHOPE, ALABAMA

FACILITY I.D. NO. 14102-003-001420
UST INCIDENT NO. UST21-09-07

PPM PROJECT NO. 20145002.CAP DEV

SEPTEMBER 24, 2025

PPM
CONSULTANTS

CORRECTIVE ACTION PLAN
(COST PROPOSAL NO. 19)

FOR

FORMER RIVER PARK GROCERY
10563 COUNTY ROAD 48
FAIRHOPE, ALABAMA

FACILITY I.D. NO. 14102-003-001420
UST INCIDENT NO. UST21-09-07

PREPARED FOR:

RIVER PARK ENTERPRISES, LLC
859 FAIRHOPE AVENUE
FAIRHOPE, ALABAMA 36532

PPM PROJECT NO. 20145002.CAPDEV

SEPTEMBER 24, 2025

PREPARED BY:

RODNEY KILGORE, P.G.
PROJECT MANAGER

REVIEWED BY:

STEVE T. GRAMMAS, P.G.
SENIOR GEOLOGIST

PPM CONSULTANTS, INC.
30704 SERGEANT E.I. "BOOTS" THOMAS DRIVE
SPANISH FORT, ALABAMA 36527
(251) 990-9000

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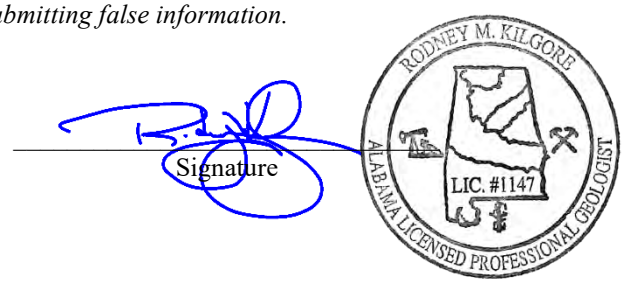
CERTIFICATION

I, certify under penalty of law, that I am a Geologist experienced in hydrogeologic investigations. The investigation described in this report was performed by a Geologist experienced in hydrogeologic investigations. The information submitted herein, to the best of my knowledge and belief, is true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information.



Signature

Rodney M. Kilgore, P.G.
License No. 1147

09/24/2025
Date

UST RELEASE FACT SHEET

GENERAL INFORMATION:

SITE NAME: Former River Park Grocery

ADDRESS: 10563 County Road 48, Fairhope, AL

FACILITY I.D. NO.: 14102-003-001420

UST INCIDENT NO.: UST21-09-07

RESULTS OF EXPOSURE ASSESSMENT:

How many private drinking water wells are located within 1,000 ft. of site?	0
How many public water supply wells are located within 1 mile of the site?	2
Have any drinking water supply wells been impacted by contamination from this release?	No
Is there an imminent threat of contamination to any drinking water wells?	{ } Yes {X} No
Have vapors or contaminated groundwater posed a threat to the public?	{ } Yes {X} No
Are any underground utilities impacted or imminently threatened by the release?	{ } Yes {X} No
Have surface waters been impacted by the release?	{ } Yes {X} No
Is there an imminent threat of contamination to surface waters?	{ } Yes {X} No
What is the type of surrounding population?	Residential

CONTAMINATION DESCRIPTION:

Type of contamination at site: {X} Gasoline, { } Diesel, { } Waste Oil
{ } Kerosene, { } Other _____

Free product present in wells? {} Yes {X} No Maximum thickness measured:

Maximum BTEX concentrations measured in soil: Soil Boring SB-2/S-1 (0'-1') @ 851.6 mg/kg

Maximum BTEX concentrations measured in groundwater: 26.5 mg/L in MW-2 on 5/2/22

ADEM UST Form - 001 (04/22/93)

ADEM GROUNDWATER BRANCH

UST SITE CLASSIFICATION SYSTEM

CHECKLIST

Please read all of the following statements and mark either yes or no if the statement applies to your site. If you have conducted a Preliminary or Secondary Investigation, all questions should be answered. Closure site assessment reports may not provide you with all the necessary information, but answer the statements with the knowledge obtained during the closure site assessment.

SITE NAME:	Former River Park Grocery
SITE ADDRESS:	10563 County Road 48
	Fairhope, AL
FACILITY I.D. NO.:	14102-003-001420
UST INCIDENT NO.:	UST21-09-07
OWNER NAME:	River Park Enterprises, LLC
OWNER ADDRESS:	859 Fairhope Avenue
	Fairhope, AL 36532
NAME & ADDRESS OF PERSON COMPLETING THIS FORM:	Rodney M. Kilgore PPM Consultants
	30704 Sgt. E.I. "Boots" Thomas Drive
	Spanish Fort, AL 36527

CLASSIFICATION	***DESCRIPTION***	***YES***	***NO***
CLASS A	IMMEDIATE THREAT TO HUMAN HEALTH, HUMAN SAFETY OR SENSITIVE ENVIRONMENTAL RECEPTOR		
A.1	Vapor concentrations at or approaching explosive levels that could cause health effects, are present in a residence or building.	☐	☒
A.2	Vapor concentrations at or approaching explosive levels are present in subsurface utility system(s), but no buildings or residences are impacted.	☐	☒
CLASS B	IMMEDIATE THREAT TO HUMAN HEALTH, HUMAN SAFETY OR SENSITIVE ENVIRONMENTAL RECEPTOR		
B.1	An active public water supply well, public water supply line, or public surface water intake is impacted or immediately threatened.	☐	☒
B.2	An active domestic water supply well, domestic water supply line or domestic surface water intake is impacted or immediately threatened.	☐	☒
B.3	The release is located within a designated Wellhead Protection Area I.	☐	☒
CLASS C	IMMEDIATE THREAT TO HUMAN HEALTH, HUMAN SAFETY OR SENSITIVE ENVIRONMENTAL RECEPTOR		
C.1	Ambient vapor/particulate concentrations exceed concentrations of concern from an acute exposure, or safety viewpoint.	☐	☒
C.2	Free product is present on the groundwater, at ground surface, on surface water bodies, in utilities other than water supply lines, or in surface water runoff.	☐	☒

CLASSIFICATION	*DESCRIPTION*	*YES*	*NO*
CLASS D	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
D.1	There is a potential for explosive levels, or concentrations of vapors that could cause acute effects, to accumulate in a residence or other building.	☐	☒
D.2	A non-potable water supply well is impacted or immediately threatened.	☐	☒
D.3	Shallow contaminated surface soils are open to public access, and dwellings, parks, playgrounds, day care centers, schools or similar use facilities are within 500 feet of those soils.	☐	☒
CLASS E	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
E.1	A sensitive habitat or sensitive resources (sport fish, economically important species, threatened and endangered species, etc.) are impacted and affected.	☐	☒
CLASS F	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
F.1	Groundwater is impacted and a public well is located within 1 mile of the site.	☒	☐
F.2	Groundwater is impacted and a domestic well is located within 1,000 feet of the site.	☐	☒
F.3	Contaminated soils and/or groundwater are located within designated Wellhead Protection Areas (Areas II or III).	☐	☒
CLASS G	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
G.1	Contaminated soils and/or groundwater are located within areas vulnerable to contamination from surface sources.	☒	☐
GLASS H	SHORT TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
H.1	Impacted surface water, stormwater or groundwater discharges within 500 feet of a surface water body used for human drinking water, whole body water-contact sports, or habitat to a protected or listed endangered plant and animal species.	☐	☒
CLASS I	LONG TERM THREAT TO HUMAN HEALTH, SAFETY, OR SENSITIVE ENVIRONMENTAL RECEPTORS		
I.1.	Site has contaminated soils and/or groundwater but does not meet any of the above mentioned criteria.	☐	☒

ADDITIONAL COMMENTS:

Complete the classification evaluation questions listed above. Upon completion, determine the highest rank of the site (A.1 is the highest rank) based on the statements answered with a yes.

Enter the determined classification ranking:	F.1

ADEM GROUNDWATER BRANCH, SITE CLASSIFICATION CHECKLIST, (5/8/95)

1.0 INTRODUCTION

On behalf of River Park Enterprises, LLC, PPM Consultants, Inc. (PPM) has prepared the following Remediation by Natural Attenuation (RNA) with Mobile Enhanced Multi-Phase Extraction (MEME) Corrective Action Plan (CAP) for the former River Park Grocery located at 10563 County Road 48 in Fairhope, Baldwin County, Alabama. Based on conditions at the site, monthly 8-hour MEME events along with quarterly RNA groundwater monitoring were recommended as the most effective and cost-efficient method of corrective action in the CAP Evaluation submitted to ADEM on April 24, 2025. The RNA/MEME CAP (under Cost Proposal Number 19) was approved by ADEM in a letter dated June 30, 2025.

2.0 BACKGROUND

2.1 SITE LOCATION

The former River Park Grocery is located at the northeast corner of the intersection of County Road 48 and Blueberry Lane in Fairhope, Baldwin County, Alabama. Geographically, the site is located in the southwest ¼ of the northeast ¼ of Section 14, Township 6 South, Range 2 East of the Silverhill, Alabama Quadrangle at approximate Longitude 87° 50' 36.70"W and Latitude 30° 31' 26.13"N. The site location is shown in **Figure 1, Site Location Map, Figures**.

2.2 SITE DESCRIPTION

The site property is rectangular in shape and occupies an area of approximately 79,000 square feet (1.8 acres) and is generally flat, with an approximate elevation of 90 feet above mean sea level (AMSL). The site is currently inactive but served as a former gas station, convenience store, pool supply, and auto repair. The site is currently improved with an approximate 22 foot by 150 foot building, with a 22 foot by 85 foot canopy attached to the north side of the building. A second canopy, measuring approximately 20 foot by 25 foot was attached to the south side of the building and covered the former fuel dispensers.

The former underground storage tank (UST) system consisted of five USTs ranging in size from a 500-gallon (unregistered) UST believed to contain diesel to 6,000 gallons storing varying grades of unleaded gasoline and diesel fuel. The former USTs supplied fuel to four double sided fuel dispensers located on the south central side of the store building. The exact ages of the four registered USTs are unknown but ADEM records indicate that the tanks were approximately 44 years old. The age of the unregistered tank is also unknown. The five USTs were constructed of steel. The product piping was both steel and flex piping.

Underground utilities at the site include water, sewer, natural gas, and fiber optic/telephone that traverse the north right of way (ROW) of County Road 48 and a sanitary sewer located on the south ROW of County Road 48. A water line also travels along the east ROW of Blueberry Lane and enters the store building at the northwest corner. The utilities were located by local line locate companies and through a ground penetrating radar (GPR) survey, prior to the High Resolution Site Characterization (HRSC) that was conducted in the fall of 2021. The locations of the site improvements, former UST system, and all known utilities are shown in **Figure 2, Site Map with Proposed Extraction Well Locations**.

2.3 SURROUNDING AREA

The site is located in a predominately residential area of Fairhope, Alabama. Existing residential properties adjoin the property to the north, east, and west, and River Mill Subdivision and Overton Townhomes are located south of the site (across County Road 48).

3.0 REMEDIAL OBJECTIVES

This RNA/MEME CAP is based on achieving the following objectives:

1. Reduce the potential for further migration of dissolved COCs;
2. Reduce COC concentrations in soil and groundwater to below SSCALs both onsite and offsite; and
3. Accomplish site objectives in a safe, timely, and cost-effective manner.

4.0 PROPOSED SCOPE OF WORK

The proposed scope of work for the RNA/MEME CAP will consist of the following:

- Installation of four 4-inch diameter Type II extraction wells [to a depth of approximately 20 feet below ground surface (BGS)], for the purpose of conducting MEME events;
- Conduct monthly 8-hour MEME events (three) during each quarterly period. A PPM technician will be on site during each event to observe the MEME activities;
- Conduct a groundwater elevation survey at the end of each quarterly period to determine the presence and thickness of free product (if encountered), groundwater elevation, groundwater flow direction, and hydraulic gradient;

- Collect groundwater samples from select monitoring wells for analysis of benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tertiary butyl ether (MTBE), and naphthalene per Environmental Protection Agency (EPA) Method 8260B; and
- Preparation and submittal of quarterly Corrective Action reports that present findings and conclusions from the MEME and groundwater monitoring events as well as recommendations for any further actions.

All field activities will be conducted in accordance with PPM's **Quality Assurance/Quality Control** (QA/QC) Plan (**Appendix A**) for groundwater sampling consistent with EPA/ADEM protocol. No deviation from the proposed scope of work will be made without approval from ADEM. Details of the scope of work listed above are discussed below in **Section 5.0**.

5.0 FIELDWORK METHODOLOGY

5.1 EXTRACTION WELL CONSTRUCTION

PPM proposes to advance by hollow-stem auger four 4-inch diameter extraction wells. Proposed extraction well PEW-1 will be installed in the area of the former UST pit, while proposed extraction wells (PEW-2, PEW-3, and PEW-4) will be in an east-west line at the south end of the property (see **Figure 2**). The recovery wells will be advanced to a total approximate depth of 20 feet BGS based on the depth to groundwater encountered during previous field activities.

Construction shall consist of a 15-foot section of 4-inch outer diameter, 0.010-inch factory slotted PVC screen with sufficient 4-inch outer diameter PVC riser to reach the surface. The annulus of the borehole shall be filled with 20/40-sieve quartz sand to approximately 1 to 2 feet above the top of each well screen. A 1 to 2-foot layer of bentonite pellets shall then be gravity fed into the annulus of the borehole. This layer of bentonite pellets shall then be hydrated with water to form a seal on top of the sand pack. Following hydration of the bentonite pellets, sufficient Portland cement grout shall be gravity fed into the annulus of the borehole until 3 to 4 inches of the PVC riser pipe is left exposed. A 12-inch diameter manhole style cover with a 12-inch apron shall be placed over the borehole. This manhole cover shall be grouted into place in a 2-by-2-foot by 4-inch-thick pad of Portland cement.

Soil cuttings generated during field activities will be contained in 55-gallon drums and staged on site pending pickup by Erwin Remediation, Inc. (Erwin) of Pensacola, Florida and transported to the Ecosouth Landfill in Axis, Alabama for proper disposal. Prior to disposal, the soil cuttings will be properly profiled by the Alabama Department of Environmental Management (ADEM) Waste Division.

5.2 WELL DEVELOPMENT

The extraction wells shall be developed with a submersible pump until produced waters are relatively clear and free of fines. All produced development and purge waters will be containerized for proper disposal. Development water will be transported by Erwin to Oil Recovery Company, Inc. (ORC) in Mobile, Alabama for disposal.

5.3 WELL SURVEY

Land surface and top of casing (TOC) elevations for the newly installed wells will be surveyed using a level transit and rod to determine their horizontal and vertical geographic placement in relation to the existing wells onsite.

Groundwater depths will be measured using an oil/water interface probe from the same point on the well casing (north side) from which the elevation was obtained. The well casing elevation and groundwater depth will be used to calculate groundwater elevations in each well. The groundwater elevation in each well will be used to prepare a groundwater elevation map indicating groundwater flow direction.

5.4 MEME EVENTS

PPM proposes monthly 8-hour FPR (MEME) events (three) to be conducted each quarter. The MEME events will be conducted by PPM Logistics under the observance of a PPM technician. PPM will utilize the four extraction wells during each MEME event.

Groundwater levels and free product thicknesses (if encountered) will be measured prior to each MEME event. A 1.5-inch diameter, Schedule 40 PVC pipe (stinger) will be inserted in each extraction point. A vacuum gauge will be attached in line at the wellhead and connected to the vacuum truck via flexible 3-inch hoses. Check valves will control the applied vacuum to the extraction point(s). PPM Logistics personnel will record water levels, vacuum influence, vacuum pressures, vapor flow rates, extracted vapor concentrations, phase separated hydrocarbon mass removal and the total volume of recovered liquids. Off-gases will be treated using a thermal oxidizer prior to release to the atmosphere. Petroleum contacted water will be disposed at ORC in Mobile, Alabama. Field measurements will be used to determine the site response to treatment and to calculate pounds of hydrocarbons removed throughout the operating periods.

Volatile organic compounds (VOC) concentrations, applied and induced vacuum readings, and airflow measurements will be collected every 30 minutes for the first four hours, then every hour thereafter during the event.

PPM will request pre-approval from the ADEM Air Division prior to performing the MEME events.

5.5 NATURAL ATTENUATION MONITORING

Following the third MEME event in each quarter, PPM will conduct RNA groundwater sampling to determine the effectiveness of the MEME events.

5.5.1 Groundwater Elevation Survey

During each sampling event, site groundwater elevation and flow direction will be determined through a groundwater elevation survey. Groundwater depths will be measured using an oil/water interface probe from the same point on the well casing (north side) from which an elevation has been obtained. The well casing elevation and groundwater depth will be used to calculate groundwater elevations in each well. The groundwater elevations will be used to prepare a groundwater elevation map indicating groundwater flow direction and hydraulic gradient.

5.5.2 Groundwater Sampling

During each quarterly groundwater sampling event, monitoring wells and extraction wells will be sampled in general accordance with PPM's internal **Quality Assurance/Quality Control (QA/QC) Plan** provided in **Appendix A**. Prior to sampling, each well will be purged of approximately three well-casing volumes (or to near dryness) in an effort to obtain samples representative of subsurface conditions. Single use, disposable PVC bailers, and nylon rope will be used to purge each well and to facilitate sample collection.

Each sample will be transferred from the bailer into 40-millilliter (ml) glass vials containing hydrochloric acid (HCl) as a preservative. Each container will be filled with the sample, promptly capped, and appropriately labeled to indicate the sample origin. Containers will be subsequently placed in an iced cooler for preservation during shipment to the laboratory. A duplicate sample will be collected from one monitoring well in accordance with QA/QC protocol.

Purge water from the monitoring wells will be contained in 55-gallon drums and transported to PPM's Spanish Fort, Alabama office to be picked up and transported by Erwin to ORC in Mobile, Alabama. The volume of purge water and all associated disposal documentation will be provided in each quarterly report.

Disposable nitrile gloves will be worn during each well purge and sample collection in an effort to reduce the potential for cross-contamination. Gloves will be changed and discarded between each sample acquisition.

Field parameters including temperature, pH, conductivity, and dissolved oxygen will be measured in each groundwater sample to aid in determining if site conditions are conducive for natural attenuation to occur.

5.5.3 Sample Preservation and Dispatch

Each sample collected for laboratory analysis will be immediately placed on ice and preserved at approximately 4°C. The samples will be labeled to document the appropriate project number, well number, project, project location, date, time sampled, sampler(s), and analysis requested. Samples will be packed within individual plastic protective envelopes (bubble pack) to avoid breakage during shipment. The samples will be subsequently sealed within insulated coolers and shipped via common courier to a certified laboratory.

Each cooler will be submitted with a chain of custody form. Chain of custody forms will include the same information included on sample labels as well as container size, collector's signature, and signature of persons who maintained custody of the samples.

5.5.4 Laboratory Analysis

Laboratory analysis will be conducted by an independent laboratory that maintains a quality assurance and quality control program which utilizes spike and duplicate analysis. All groundwater samples will be analyzed for BTEX, MTBE, and naphthalene per EPA Test Method 8260B.

6.0 REPORTS

PPM will prepare the quarterly Corrective Action reports that will include a detailed description of the work performed during the preceding three month period and the effectiveness of the Corrective Action events. Each report will be prepared under the direction of an Alabama-registered, professional geologist experienced in conducting subsurface environmental investigations.

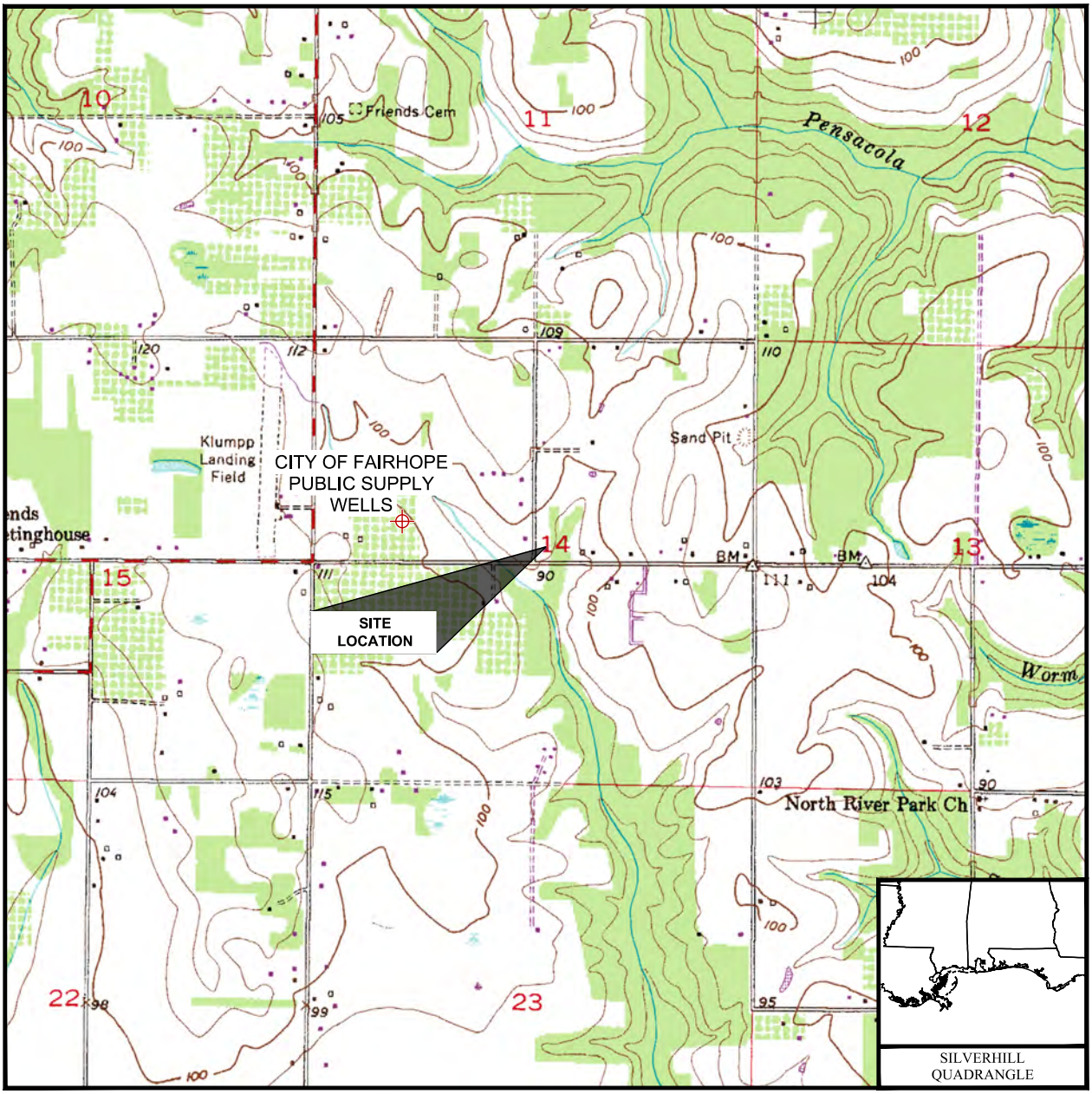
7.0 PROJECT SCHEDULE

PPM proposes to conduct the Corrective Action events on a quarterly basis until site conditions warrant a No Further Action (NFA), in which case the monitoring and extraction wells will be properly abandoned.

8.0 COST ESTIMATE

Cost proposals for four quarters of RNA/MEME events will be prepared and uploaded to the Alabama Environmental Permitting and Compliance System (AEPACS).

FIGURES



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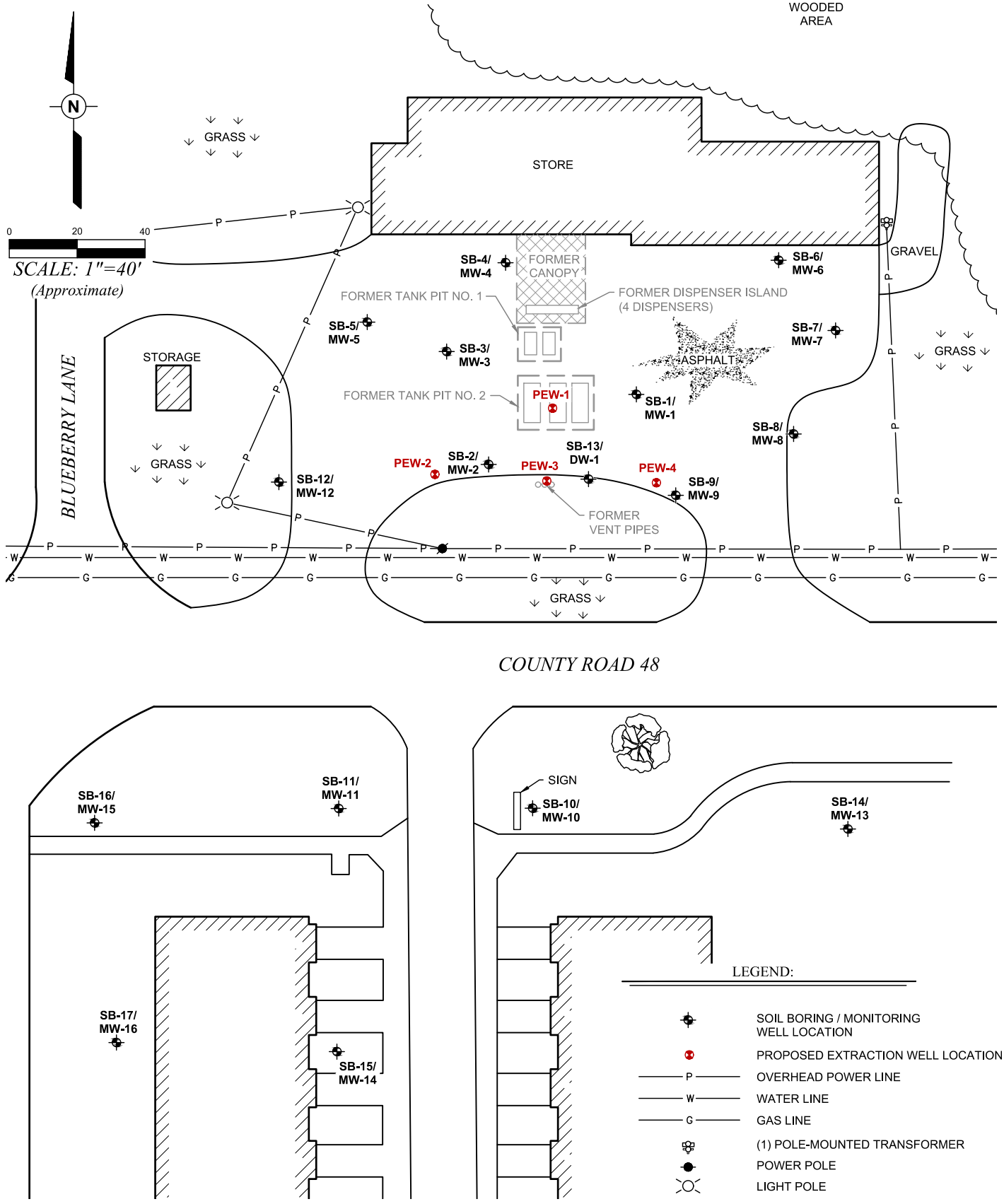
PPM CONSULTANTS, INC. www.ppmco.com		RIVER PARK ENTERPRISES, LLC **FORMER RIVER PARK GROCERY** 10563 COUNTY ROAD 48 FAIRHOPE, ALABAMA	SITE LOCATION MAP
DRAWN BY: MRS	DRAWN DATE: 09/19/25		FIGURE NUMBER 1
PROJECT NUMBER: 20145002	PHASE: CAPDEV		



PPM CONSULTANTS, INC. www.ppmco.com		RIVER PARK ENTERPRISES, LLC **FORMER RIVER PARK GROCERY** 10563 COUNTY ROAD 48 FAIRHOPE, ALABAMA	SITE MAP WITH PROPOSED EXTRACTION WELLS
DRAWN BY: MRS	DRAWN DATE: 09/19/25		FIGURE NUMBER 2
PROJECT NUMBER: 20145002	PHASE: CAPDEV		

APPENDIX

APPENDIX A - QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) PLAN

PPM CONSULTANTS, INC.

1.0 TECHNICAL SAMPLING AND ANALYSIS PLAN FOR GROUNDWATER MONITORING

1.1 PURPOSE

This Technical Sampling and Analysis (TS&A) Plan describes the methods and procedures to be followed during groundwater monitoring activities at leaking underground storage tank sites. Any modification to the sampling process will be addressed and described within in the monitoring reports.

1.2 LIQUID GAUGING PROCEDURES

Prior to groundwater sampling, liquid levels are measured in each well to determine the groundwater elevation and flow direction. Liquid levels inside the wells are measured with a Solinst, ORS, or Keck interface probe from the top of the well casing using the same reference point from which the survey elevations determined during the assessment were recorded, Groundwater elevations at the site are calculated to a common datum. Calculations for determining the water table elevations are as follows:

$$GE = ETC - DTW$$

Where:
GE = Groundwater elevation
ETC = Elevation of top of casing
DTW = Depth to water

For wells containing measurable quantities of free product, groundwater elevations were calculated using the following equation:

$$WTE = ETC - [DTW - SG\ product\ (PT)]$$

Where:
WTE = Adjusted water table elevation (ft)
ETC = Elevation of top of casing
DTW = Depth to water
PT = Product Thickness (ft)
SG = Specific Gravity
SG gasoline = 0.755
SG diesel = 0.844

Groundwater flow direction at the site is determined through groundwater contouring based on water table elevations calculated from the monitoring wells installed at the site.

1.3 GROUNDWATER SAMPLING PROCEDURES

After the depth to water is measured, each well is purged of at least three well volumes of liquid prior to sampling using a submersible pump or bailer. Purged water is contained in sealed 55- gallon drums and disposed of at an approved disposal facility. Groundwater samples are collected using disposable bailers and immediately transferred into 40 ml glass VOA vials. The vials are immediately sealed and placed on ice inside coolers. The samples are shipped with chain-of custody forms via common courier to an independent testing laboratory for analysis. One trip blank and one duplicate sample are submitted per event for QA/QC purposes.

1.4 LABORATORY ANALYSES

Laboratory analyses are performed by an independent testing laboratory. The laboratory used will maintain a Quality Assurance/Quality Control (QA/QC) program which utilizes spike and duplicate analysis. Groundwater samples will be analyzed for benzene, toluene, ethylbenzene, and xylenes (BTBX), methyl tertiary butyl ether (MTBE), and naphthalene per EPA SW-846, Test Method 8260B (or other approved method), and other parameters that may be applicable to the constituents of concern. Results of the internal QA/QC program used by the laboratory are included in each report.

2.0 QUALITY ASSURANCE/QUALITY CONTROL PLAN

2.1 PURPOSE

This QA/QC Plan describes the procedures followed by personnel during the project to ensure that all data generated is accurate and representative of conditions encountered.

2.2 GROUNDWATER SAMPLING

2.2.1 Well Purging

Groundwater is purged from monitoring wells prior to sampling to ensure each sample is representative of existing subsurface conditions. At a minimum, three well volumes of standing water are purged using a submersible pump or bailer. Only water inside the upper column of the well is purged. Each well is purged at a minimal rate to avoid aeration through cascading action of groundwater in the screened interval. When the bailing method is employed, the bailer is slowly lowered and retrieved from the groundwater to minimize aeration inside the well. Groundwater in wells is allowed to recover to near static water level before sampling.

2.2.2 Sample Collection

Groundwater samples are collected using disposable bailers. Procedures for sampling groundwater are described below:

1) The bailer is lowered into the well slowly to avoid aeration of the sample;

2) The bailer is filled from the top of the water column and retrieved; and

3) The first bailer of water is transferred from the bottom of the bailer into 40 ML, prepared VOA vials or applicable containers specific to the analyte. The sample container is filled completely to the top and tightly sealed. Samples are placed on ice immediately following collection.

2.2.3 Decontamination

Disposable vinyl gloves are worn during well purging and sample collection. During well purging, the gloves are changed between each well. Gloves are also changed between each sample acquisition during the sampling process. When a pump is used, all downhole equipment is decontaminated between each use by circulating clean water and phosphate-free detergent. Disposable bailers are used for collecting samples; therefore, no additional decontamination procedures are employed.

2.2.4 Sample Dispatch

Groundwater samples are packed in individual plastic protective envelopes (bubble pack) inside a cooler to avoid breakage during shipment. The coolers used are insulated to maintain sample temperature near 4 C. Each cooler is sealed with tape to discourage tampering. The samples are shipped to the laboratory via common courier.

2.3 SAMPLE CUSTODY

A traceable link is established from the time samples are obtained until submission of analytical results. The following section describes chain-of-custody (COC) procedures which are adhered to during the project to establish that traceable link.

2.3.1 Documentation

Protocols for documentation are used to ensure appropriate sample identification and transfer. This documentation includes sample labels, seals, and COC forms. Labels and seals will be filled out using water-proof ink. Information to be supplied on COC forms consists of the following:

- Project number and location of the site.
- Sample identification/location.
- Sample point (depth).
- Signature of collector.
- Date and time of sample collection,
- Sample matrix (water).
- Method of preservation (HC1),
- Number of containers per sample location.
- Analytical method requested.
- Name of person(s) in possession of the COC and samples.
- Applicable remarks.

Custody seals are placed on coolers in such a manner that the container cannot be opened without breaking the seal. At least two seals are used, (one on either side of the cooler).

2.3.2 Custody Procedures

COC procedures implemented during the project are as follows:

- Each sample collected for the project is entered on the COC record.
- The original COC record accompanies the sample containers during transport to document their custody.
- The shipping` package is sealed with strapping tape and a custody seal affixed. The seal is placed on the package in such a manner that the package cannot be opened without breaking the seal. The seal documents that the samples remained unaltered during shipment through the common parcel carrier.
- The laboratory assumes custody of the sample upon receipt and a designated sample custodian is charged with sample care and receipt.
- The laboratory retains custody of the sample

2.4 QUALITY CONTROL CHECKS

The following quality control checks are implemented during the project to verify the adherence to the QA/QC plan, and to provide measurement for method and samplers performance.

2.4.1 Trip Blanks

Trip blanks are used to determine the QA/QC of sample handling procedures. The trip blanks are filled with distilled water in the laboratory and will accompany the cooler to and from the project site. One trip blank is sent per cooler.

2.4.2 Duplicate Samples

Duplicate groundwater samples are collected to provide a check on sampling techniques as well as laboratory equipment. Duplicate samples are collected simultaneously from the same well and labeled with a different well designation number. Duplicate samples are collected at a frequency of one per 10 samples submitted for laboratory analysts.
s in a secure area for a minimum of one month following the date of receipt. At that time, the samples are disposed of in accordance with appropriate disposal procedures.

- The sampler maintains the final copy of the COC to verify that the samples were collected and sent to the laboratory.

Simplifying the Complex

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