The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 2

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1736767
Procurement Type: Central Purchase Order
Vendor ID: VS0000048070
Legal Name: SYNTERRA CORPORATION
Alias/DBA:
Total Bid: $0.00
Response Date: 09/10/2025
Response Time: 13:13
Responded By User ID: jbryant@synterra
First Name: Jerry
Last Name: Bryant
Email: jbryant@synterracorp.com
Phone: 304-687-4115

SO Doc Code: CEOI
SO Dept: 0313
SO Doc ID: DEP2600000002
Published Date: 8/19/25
Close Date: 9/10/25
Close Time: 13:30
Status: Closed
Solicitation Description: OER- EOI SEMS Evaluations
Total of Header Attachments: 2
Total of All Attachments: 2

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Solicitation Response

Proc Folder:	1736767
Solicitation Description:	OER- EOI SEMS Evaluations
Proc Type:	Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2025-09-10 13:30	SR 0313 ESR09102500000001802	1

VENDOR

VS0000048070
SYNTERRA CORPORATION

Solicitation Number: CEOI 0313 DEP2600000002

Total Bid: 0 **Response Date:** 2025-09-10 **Response Time:** 13:13:23

Comments:

FOR INFORMATION CONTACT THE BUYER
Joseph (Josh) E Hager III
(304) 558-2306
joseph.e.hageriii@wv.gov

Vendor
Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	EOI - Professional engineering services				

Comm Code	Manufacturer	Specification	Model #
81100000			

Commodity Line Comments: EOI Only

Extended Description:

EOI- Professional engineering services

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Expression of Interest
Architect/Engr

Proc Folder:	1736767
Doc Description:	OER – EOI SEMS Evaluations
Proc Type:	Central Purchase Order

Reason for Modification:

Date Issued	Solicitation Closes	Solicitation No	Version
2025-08-19	2025-09-10 13:30	CEOI 0313 DEP2600000002	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code: VS0000048070

Vendor Name : SynTerra Corporation **FEIN# 570962660**

Address : 148 River St. #220

Street :

City : Greenville

State : SC **Country : USA** **Zip : 29601**

Principal Contact : Jerry Bryant

Vendor Contact Phone: 304-687-4115 **Extension:**

FOR INFORMATION CONTACT THE BUYER

Joseph (Josh) E Hager III
(304) 558-2306
joseph.e.hageriii@wv.gov

Vendor Signature X Jerry Bryant **FEIN#** 570962660 **DATE** 09/10/2025

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

The Acquisitions and Contract Administration Section of the Purchasing Division is soliciting Expression(s) of Interest for the West Virginia Department of Environmental Protection Office of Environmental Remediation , from qualified firms to provide environmental work including, but not limited to: file reviews, executive summaries, Preliminary Assessments, environmental media sampling, sampling reports, Hazard Ranking System ("HRS") QuickScore score generation, data validation, document and/or figure generation, site visits, investigation-derived waste ("IDW") characterization and disposal, oversight activities, or any other necessary activity per the attached specifications and

INVOICE TO	SHIP TO
DIVISION OF NATURAL RESOURCES	STATE OF WEST VIRGINIA
112 CALIFORNIA AVENUE	VARIOUS LOCATIONS AS INDICATED BY ORDER
BLDG 4	84 OSAGE RD
CHARLESTON WV 25305	No City WV 99999
US	US

Line	Comm Ln Desc	Qty	Unit Issue
1	EOI - Professional engineering services		

Comm Code	Manufacturer	Specification	Model #
81100000			

Extended Description:
EOI – Professional engineering services

SCHEDULE OF EVENTS

Line	Event	Event Date

	Document Phase	Document Description	Page 3
DEP2600000002	Final	OER – EOI SEMS Evaluations	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

Expression of Interest
SEMS Evaluation
Professional Engineering Services
Solicitation No.: CEOI 0313 DEP2600000002

Submitted To:
State of West Virginia Department of Environmental Protection
Office of Environmental Remediation

Submittal Date: September 10, 2025

synTerra
Science & Engineering Consultants

synTerra
Science & Engineering Consultants
511 Keisler Dr # 102, Cary, NC 27518 | 919.858.9898

September 10, 2025

Joseph (Josh) E. Hager III
West Virginia Department of Environmental Protection
Office of Environmental Remediation
601 57th St. SE
Charleston, WV 25304

SUBJECT: EOI SEMS Evaluations

Dear Mr. Hager,

SynTerra appreciates the stewardship responsibilities that come with managing West Virginia's resources. We are cognizant of the diverse challenges posed by environmentally affected sites, and we are poised to provide response services to the West Virginia Department of Environmental Protection (WVDEP) Office of Environmental Remediation. The attached information corresponds with the request for qualifications pertaining to the expression of interest.

The primary contact person that we would commit to for this opportunity is Mr. Jerry Bryant, Senior Engineer, who is based out of West Virginia. Mr. Bryant has more than 19 years of experience conducting and managing environmental projects. His professional experience includes a broad range of environmental site analysis, permitting, and interpreting geohydrologic data.

As an employee-owned business, we understand the importance of prudent spending to protect human health and the environment. We also understand budgetary concerns that come with complex projects. Project assignments vary from monitoring of current, safe conditions to assessment of lesser-known situations to implementation of "right-sized" solutions. SynTerra often works with state agencies and understands how to collaborate effectively to balance competing priorities while meeting state and federal objectives. This collaborative approach helps streamline the process of defining scope, schedule, budgets, and other essential project elements.

The information you have requested is attached. SynTerra also offers other project-related services, including:

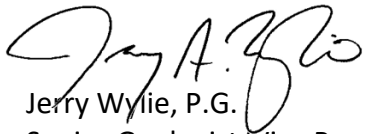
- Groundwater flow and transport modeling
- Geochemical evaluations
- Mining expertise
- Drone surveys
- PFAS compounds assessment and remediation
- Advanced statistical evaluation

If you have questions or seek additional information, please contact Jerry Bryant at jbryant@synterracorp.com or 304.687.4115. We look forward to hearing from you.

All the best,

SYNTERRA

Jerry Bryant
Project Manager



Jerry Wylie, P.G.
Senior Geologist/Vice President

Attachments:

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SECTION 1 - COMPLETED CONSULTANT QUALIFICATIONS QUESTIONNAIRE

EXPRESSION OF INTEREST

SEMS Evaluations

SECTION FIVE: TERMS AND CONDITIONS

Terms and conditions begin on the next page.

GENERAL TERMS AND CONDITIONS:

1. CONTRACTUAL AGREEMENT: Issuance of an Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance by the State of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid, or on the Contract if the Contract is not the result of a bid solicitation, signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. DEFINITIONS: As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

2.1. "Agency" or **"Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

2.2. "Bid" or **"Proposal"** means the vendors submitted response to this solicitation.

2.3. "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

2.4. "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

2.9. "Vendor" or **"Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☐**Term Contract**

Initial Contract Term: The Initial Contract Term will be for a period of _____ _____. The Initial Contract Term becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as _____), and the Initial Contract Term ends on the effective end date also shown on the first page of this Contract.

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to _____successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

> ☐**Alternate Renewal Term** – This contract may be renewed for _____ successive _____year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

☐**Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within _____days.

☐**Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within _____days. Upon completion of the work covered by the preceding sentence, the vendor agrees that:

☐the contract will continue for _____years;

☐the contract may be renewed for _____successive _____year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's Office (Attorney General approval is as to form only).

☐**One-Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

☑**Construction/Project Oversight:** This Contract becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as _____), and continues until the project for which the vendor is providing oversight is complete.

☐ **Other:** Contract Term specified in _____

4. AUTHORITY TO PROCEED: Vendor is authorized to begin performance of this contract on the date of encumbrance listed on the front page of the Award Document unless either the box for "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked in Section 3 above. If either "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked, Vendor must not begin work until it receives a separate notice to proceed from the State. The notice to proceed will then be incorporated into the Contract via change order to memorialize the official date that work commenced.

5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☐ **Open End Contract:** Quantities listed in this Solicitation/Award Document are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☐ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☑ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One-Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

☐ **Construction:** This Contract is for construction activity more fully defined in the specifications.

6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One-Time Purchase contract.

7. REQUIRED DOCUMENTS: All of the items checked in this section must be provided to the Purchasing Division by the Vendor as specified:

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.

☐

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☐

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications regardless of whether or not that requirement is listed above.

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether that insurance requirement is listed in this section.

Vendor must maintain:

☑ **Commercial General Liability Insurance** in at least an amount of: $1,000,000.00 per occurrence.

☑ **Automobile Liability Insurance** in at least an amount of: $1,000,000.00 per occurrence.

☑ **Professional/Malpractice/Errors and Omission Insurance** in at least an amount of: $1,000,000.00 per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.

☐ **Commercial Crime and Third Party Fidelity Insurance** in an amount of: _____ per occurrence.

☐ **Cyber Liability Insurance** in an amount of: _____ per occurrence.

☐ **Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.

☐ **Pollution Insurance** in an amount of: _____ per occurrence.

☐ **Aircraft Liability** in an amount of: _____ per occurrence.

☐

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[ ]

☐

[ ]

☐

9. WORKERS' COMPENSATION INSURANCE: Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

10. VENUE: All legal actions for damages brought by Vendor against the State shall be brought in the West Virginia Claims Commission. Other causes of action must be brought in the West Virginia court authorized by statute to exercise jurisdiction over it.

11. LIQUIDATED DAMAGES: This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

☐ _____ for _____.

☐ Liquidated Damages Contained in the Specifications.

☐ Liquidated Damages Are Not Included in this Contract.

12. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

13. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

14. PAYMENT IN ARREARS: Payments for goods/services will be made in arrears only upon receipt of a proper invoice, detailing the goods/services provided or receipt of the goods/services, whichever is later. Notwithstanding the foregoing, payments for software maintenance, licenses, or subscriptions may be paid annually in advance.

15. PAYMENT METHODS: Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

16. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

17. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia, included in the Contract, or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

18. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available. If that occurs, the State may notify the Vendor that an alternative source of funding has been obtained and thereby avoid the automatic termination. Non-appropriation or non-funding shall not be considered an event of default.

19. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

20. TIME: Time is of the essence regarding all matters of time and performance in this Contract.

21. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code, or West Virginia Code of State Rules is void and of no effect.

22. COMPLIANCE WITH LAWS: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

> **SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

23. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

24. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

25. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

26. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

27. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.

28. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

29. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

30. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in www.state.wv.us/admin/purchase/privacy.

31. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

32. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

> **SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

33. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

34. VENDOR NON-CONFLICT: Neither Vendor nor its representatives are permitted to have any interest, nor shall they acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

35. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

36. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

37. NO DEBT CERTIFICATION: In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State. By submitting a bid, or entering into a contract with the State, Vendor is affirming that (1) for construction contracts, the Vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, neither the Vendor nor any related party owe a debt as defined above, and neither the Vendor nor any related party are in employer default as defined in the statute cited above unless the debt or employer default is permitted under the statute.

38. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

39. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☐Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.division@wv.gov.

40. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check. Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

41. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.

b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.

c. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

    1. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars ($2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

    2. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

42. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars ($50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

43. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE: W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least $1 million, the Vendor must submit to the Agency a disclosure of interested parties prior to beginning work under this Contract. Additionally, the Vendor must submit a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-work interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

44. PROHIBITION AGAINST USED OR REFURBISHED: Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.

45. VOID CONTRACT CLAUSES: This Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

46. ISRAEL BOYCOTT: Bidder understands and agrees that, pursuant to W. Va. Code § 5A-3-63, it is prohibited from engaging in a boycott of Israel during the term of this contract.

ADDITIONAL TERMS AND CONDITIONS
(Architectural and Engineering Contracts Only)

1. PLAN AND DRAWING DISTRIBUTION: All plans and drawings must be completed and available for distribution at least five business days prior to a scheduled pre-bid meeting for the construction or other work related to the plans and drawings.

2. PROJECT ADDENDA REQUIREMENTS: The Architect/Engineer and/or Agency shall be required to abide by the following schedule in issuing construction project addenda. The Architect/Engineer shall prepare any addendum materials for which it is responsible, and a list of all vendors that have obtained drawings and specifications for the project. The Architect/Engineer shall then send a copy of the addendum materials and the list of vendors to the State Agency for which the contract is issued to allow the Agency to make any necessary modifications. The addendum and list shall then be forwarded to the Purchasing Division buyer by the Agency. The Purchasing Division buyer shall send the addendum to all interested vendors and, if necessary, extend the bid opening date. Any addendum should be received by the Purchasing Division at least fourteen (14) days prior to the bid opening date.

3. PRE-BID MEETING RESPONSIBILITIES: The Architect/Engineer shall be available to attend any pre-bid meeting for the construction or other work resulting from the plans, drawings, or specifications prepared by the Architect/Engineer.

4. AIA DOCUMENTS: All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the attached AIA documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein. The terms and conditions of this document shall prevail over anything contained in the AIA Documents or the Supplementary Conditions.

5. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with West Virginia Code § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title): Jerry Bryant, Project Manager
(Address) 336 Town Mountain Rd. Ste. 4, Pikeville, KY 41501
(Phone Number) / (Fax Number) 304-687-4115
(email address) jbryant@synterracorp.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through *wv*OASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

SynTerra Corporation
(Company)

(Signature of Authorized Representative)
Jerry A. Wylie, Vice President, September 10, 2025
(Printed Name and Title of Authorized Representative) (Date)
(864) 527-4604 – n/a
(Phone Number) (Fax Number)
jwylie@synterracorp.com
(Email Address)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

☐	Addendum No. 1	☐	Addendum No. 6
☐	Addendum No. 2	☐	Addendum No. 7
☐	Addendum No. 3	☐	Addendum No. 8
☐	Addendum No. 4	☐	Addendum No. 9
☐	Addendum No. 5	☐	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

SynTerra Corporation
Company

Authorized Signature

September 10, 2025
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CONSULTANT QUALIFICATION QUESTIONNAIRE

PROJECT NAME	DATE (DAY, MONTH, YEAR)	FEIN
	4, September 10, 2025	57-0962660

1. FIRM NAME	2. HOME OFFICE BUSINESS ADDRESS	3. FORMER FIRM NAME (IF APPLICABLE)
SynTerra Corporation	148 River Street, Suite 220 Greenville, SC 29601	

4. HOME OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OF OWNERSHIP	6a. WV REGISTERED DBE (DISADVANTAGED BUSINESS ENTERPRISE)
864-421-9999	1992	☐ INDIVIDUAL ☒ CORPORATION ☐ PARTNERSHIP ☐ JOINT-VENTURE	☐ YES ☒ NO

7. PRIMARY OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. (name particular type) PERSONNEL IN EACH OFFICE

Jerry Bryant
Project Manager
304-687-4115
336 Town Mountain Rd. Ste. 4
Pikeville, KY 41501

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM	8a. NAME, TITLE, & TELEPHONE NUMBER – OTHER PRINCIPALS
Travis Waters, President Jerry Wylie, Vice President - Sciences Andrea Kehn, Vice President - Engineering & Secretary Craig Miller, Treasurer	

9. KEY PERSONNEL (Check mark key personnel below that you have on staff and will work on project)

☒ADMINISTRATION	☒GEOLOGIST	☒QA/QC OFFICER
☒CHEMIST	☒HYDRO-GEOLOGIST	☐TECHNICIAN
☐ENVIRONMENTALIST	☐LABORER	☒CADD OPERATOR
☒FIELD OPERATIONS MANAGER	☒PROJECT MANAGER	OTHER:

10. If submittal is by joint-venture, list participating firms & outline specific areas of responsibility (including administrative, technical & financial) for each firm. Each participating firm must complete a "Consultant Qualification Questionnaire".

n/a

10a. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? ☐YES ☐NO

11. OUTSIDE KEY CONSULTANTS/ SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "Consultant Qualification Questionnaire" for each.

NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE?
Cascade Drilling, L.P. 905 South Main St. New Ellenton, SC 29809	Drilling and well installation	☑YES ☐NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE?
Geologic Exploration, Inc. 176 Commerce Blvd. Statesville, NC 28625	Drilling and well installation	☑YES ☐NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE?
Summit Drilling 81 Chimney Rock Road Bridgewater, NJ 08807	Drilling and well installation; remediation	☑YES ☐NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE?
Pace Analytical 120 Halton Road, Suite 13 Greenville, SC 29607	Analytical Testing	☑YES ☐NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE?
Eurofins Built Environment Testing 2752 Pleasant Road, Suite 100A Fort Mill, SC 29708	Analytical Testing	☑YES ☐NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE?
Waypoint Analytical 449 Springbrook Road Charlotte, NC 28217	Analytical Testing	☑YES ☐NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE?
UES (Formerly Summit Environmental) 1059 Old Stage Road, Suite D Simpsonville, SC 29681	Geotechnical Engineering	☑YES ☐NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE?
		☐YES ☐NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE?
		☐YES ☐NO

12a. Identify each individual supporting this project and their assigned tasks.

Jerry Bryant - Project Manager
Jerry Wylie, P.G. - Geologist (Assessment and Remediation Manager)
Howard Frank, P.G. - Geologist
Dave Duncklee, P.G. - Geologist
Chris Suttell, P.G. - Geologist
John Sherrill, P.G. - Geologist
Rebecca Bass - Data Validator (CLP Manager)
Jeff Coleman - CAD Operator
Christina Newell - CAD Operator
Bobby Taylor - CAD Operator
Trevor White - CAD Operator
Kristi Sheck - Administration
Andy Willis - Engineer
Richard Jacobs - Field Operations Manager

12b. Are the individuals supporting this project experienced in performing environmental site assessments according to USEPA Guidance for Performing Preliminary Assessments under CERCLA, Site Inspection (SI) Guidance Manual, Risk Assessment Guidelines for Superfund (RAGS), Hazard Ranking System (HRS) Guidance Manual, and using Dynamic Field Activities for On-Site Decision Making?

☑ **YES** Identify the project(s) and describe work performed that relates directly to the question:

SynTerra staff have extensive experience in environmental site assessments under CERCLA. SynTerra's technical senior leadership has been involved with executing CERCLA-regulated projects since the program's inception in the 1980s. Although not all projects were completed by our technical staff while employed with SynTerra, our technical leaders have implemented elements of each of the guidance/approaches described (*e.g.*, PA, RAGS, SI, HRS) for multiple CERCLA sites in Region 3 and 4 including those listed below. Detailed project descriptions for several of these sites, as well as other CERCLA-related projects, are included as a separate attachment.

Region 3
Heleva Landfill (PA)
Fort Eustis (VA)

Region 4
Aberdeen Pesticide Dumps (NC)
FCX Inc (Statesville) (NC)
Geigy Chemical Corp (NC)
Admiral Home Appliances (SC)
Brewer Gold Mine (SC)
Elmore Waste Disposal (SC)
Medley Farm Drum Dump (SC)
Palmetto Wood Preserving (SC)
Para-Chem Southern (SC)
US Finishing/Cone Mills (SC)
Savannah River Site (USDOE) (SC)

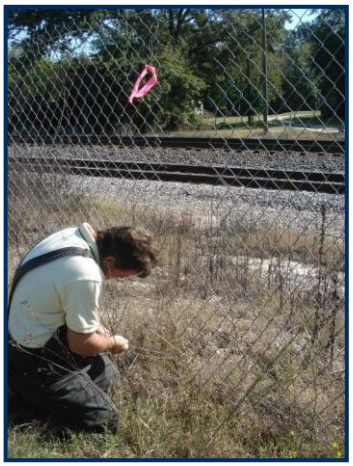
☐ NO

PALMETTO WOOD PRESERVE SITE – ANNUAL PERFORMANCE MONITORING DIXIANA, SOUTH CAROLINA

Annual Performance Monitoring

The Palmetto Wood Preserve Site (PWP) is a former wood preserving facility that operated from 1963 until 1985. The South Carolina Department of Health and Environmental Control (SCDHEC) [now known as the South Carolina Department of Environmental Services (SCDES)] and the U.S. Environmental Protection Agency (USEPA) determined that the groundwater beneath the site contained arsenic, chromium, and copper at concentrations greater than applicable standards. Based on the 1987 Record of Decision (ROD), a pump and treat system operated from 1997 to 2004. Thereafter, in situ action zone reduction treatment methods were conducted from January 2009 to March 2009, followed by quarterly post-treatment monitoring through June 2010. Annual performance monitoring began in 2011.

SynTerra has conducted the annual performance monitoring and site maintenance at this site since 2011. In 2014, SynTerra oversaw the installation and development of two new monitoring wells, installed as a result of an apparent shift in the groundwater flow direction for the deep aquifer. Water levels and groundwater chemistry were monitored for 13 existing wells using low-flow sampling techniques. The groundwater samples were analyzed for total chromium, methane, total organic carbon, sulfate, and ferrous iron. Chromium concentrations have decreased to less than reporting limits at the site wells, with the exception of deep monitoring wells GMW-8 and MW-18. To reduce project costs and move toward closure, groundwater samples are only collected from the six existing deep monitoring wells (GMW-6, GMW-8, GMW-14D, MW-16, MW-18, and MW-19). The 2020 groundwater results indicated chromium at GMW-8 was only detected at a concentration greater than its maximum contaminant level (MCL).



RUTLEDGE PROPERTY SUPERFUND SITE – REMEDIAL DESIGN (RD)/REMEDIAL ACTION (RA), GROUNDWATER REMEDIATION, AND OPERATIONS AND MAINTENANCE MONITORING ROCK HILL, SOUTH CAROLINA

Remedial Design/Remedial Action

SynTerra has conducted the RD/RA and groundwater remediation associated with a Region IV Superfund site located in Rock Hill, South Carolina. Currently site maintenance, operations, and monitoring are underway until groundwater concentrations meet the ROD requirements. The USEPA determined that trichloroethene, 1,2-dichloroethene, vinyl chloride, and manganese required groundwater cleanup. SynTerra's scope of work included determining the vertical extent of volatile organic compounds (VOCs) in the bedrock aquifer; defining the saprolite and bedrock aquifer characteristics; and designing the remediation system.

SynTerra designed a groundwater recovery system focused on the transition zone and upper bedrock. The system was designed with a cyclical pumping pattern to partially re-saturate the saprolite aquifer with every pump cycle to increase the rate of desorption and mobilization to the recovery well. The design was effective in reducing concentrations in the area. In a separate area, in situ bioremediation was used where the VOCs were primarily in the transition zone (above bedrock) and was also effective in a short period of time. Neither area has experienced rebounding.

Groundwater Remediation and Operations and Maintenance (O&M) Monitoring

SynTerra conducted routine O&M of the recovery well through remote telemetry. Currently, annual groundwater monitoring, reporting, and general site maintenance are performed.

SIGNET MILLS SITE – ENVIRONMENTAL CONSULTING SERVICES, GROUNDWATER REMEDIATION, AND O&M MONITORING SPARTANBURG, SOUTH CAROLINA

SynTerra provides environmental consulting services to Signet Mills, a specialty textiles business located in Spartanburg, South Carolina. SynTerra professionals are involved in a number of environmental-related efforts at a former industrial dry-cleaning operation site. Environmental effects on soil and groundwater from chlorinated solvents have resulted in a dissolved and non-aqueous phase liquid (NAPL) plume in the saprolite and fractured bedrock aquifer. Completed and ongoing project elements include developing and implementing assessment strategies, designing a remedial approach and selecting remedial technologies, negotiating regulatory requirements, periodic groundwater monitoring/reporting, and a groundwater/surface water interaction assessment.

Current project efforts are focused on pilot studies to identify and select a robust remedial technology/strategy for site clean-up. Dense non-aqueous phase liquid (DNAPL) (primarily tetrachloroethane) has affected soil, shallow groundwater, and bedrock groundwater. SynTerra has designed and implemented a bench-scale treatability study and field-scale pilot studies to evaluate the effectiveness of a soil vapor extraction (SVE) remedy coupled with in situ chemical oxidation (ISCO). The enhanced SVE approach is being pilot tested in the source area where SVE is used to remove vapors from subsurface soils and to increase the distribution of hydrogen peroxide and Fenton's reagent injected into nearby wells. This aggressive approach of integrating ISCO with SVE is expected to reduce the time necessary to achieve remediation goals.

ON-CALL ENVIRONMENTAL CONSULTING SERVICES
CITY OF ROCK HILL, SOUTH CAROLINA

Environmental Assessment and Remediation

As part of an indefinite delivery contract with the City of Rock Hill (City), SynTerra has been assisting the City with numerous Brownfields projects involving:

- Phase I/II Environmental Site Assessments (ESAs)
- Groundwater/soil/air/surface water sampling
- Voluntary Cleanup Contract (VCC) assistance
- Site characterization activities
- Underground storage tank closures
- Asbestos testing, lead-based paint (LBP) testing
- Vapor intrusion assessment

- Media management, site management, and soil management plans

SynTerra has worked with the City of Rock Hill for 16 years and has successfully completed a wide range of projects for the City. Projects have included Phase I and II ESAs, site remediation/segregated source removal, and site redevelopment. We have assisted the City with several Brownfields Program projects from preparing VCC applications, through the assessment and various management plans, to receipt of a final Certificate of Completion.

Several current Brownfields projects are being conducted under the USEPA Brownfields Assessment Grant recently awarded to the City. Those projects involve additional requirements beyond those typically required under a South Carolina VCC. Some of the requirements involve development of a QAPP and working with the USEPA Brownfields manager in addition to the SCDES Project Manager and the City.

PESTICIDE MANUFACTURING FACILITY – REMEDIAL INVESTIGATION (RI)/FEASIBILITY STUDY (FS), RISK ASSESSMENT, AND GROUNDWATER MONITORING MEMPHIS, TENNESSEE

SynTerra is in the process of conducting an RI inclusive of a Human Health and Ecological Risk Assessment for a former pesticide manufacturing facility in Memphis, Tennessee. The RI is being conducted pursuant to the State Site Commissioner's Order. The site is an industrial area in downtown Memphis. Historical operations at the site include formulation of agricultural chemicals.

SynTerra has performed site investigations and data collection activities using a phased approach that interjects data review and analysis phases after completion of certain data collection phases. This approach allows data collection phases to be designed for maximum efficiency using the results from previous phases. SynTerra initially identified 80 constituents of potential concern (COPCs) at the site. SynTerra performed multiple soil and groundwater investigations during the phased investigations. Analytical results from those investigations have resulted in an initial refinement of COPCs to approximately 40 constituents. A preliminary Conceptual Site Model (CSM) was developed during the RI planning process to identify and evaluate potential risks associated with the constituents present, their distribution in environmental media, their migration pathways, and the resulting potential exposure routes to human and environmental receptors.

SynTerra conducted a human health risk assessment for the Site in accordance with USEPA Risk Assessment Guidance for Superfund (RAGS). This process includes preparation of a Risk Assessment Work Plan detailing the major components of data evaluation and COPC refinement, exposure assessment, toxicity assessment, risk characterization, and uncertainty analyses. The Risk Assessment Work Plan provides an effective communication tool for risk assessors and risk managers in order to facilitate the risk process. SynTerra completed the human health risk assessment and submitted the final report to the Tennessee Department of Environment and Conservation (TDEC).

Concurrently with the RI and human health risk assessment, SynTerra performed an ecological site evaluation and developed an ecological CSM for the Site. SynTerra performed the ecological evaluation consistent with USEPA's Ecological Risk Assessment Guidance for Superfund (ERAGS) eight-step ecological risk process.

HOLLIS ROAD SITE – REMEDIAL INVESTIGATION/FEASIBILITY STUDY

LEXINGTON, SOUTH CAROLINA

The Hollis Road Site is a large area with dissolved VOCs in groundwater south of the town of Lexington, South Carolina. Residential water wells supplied most of the drinking water in the area. An SCDHEC investigation began after a resident on Hollis Road reported a gasoline odor and taste in well water.

SynTerra initially developed an RI/FS to assess and monitor the VOCs and evaluate potential groundwater remediation alternatives. The RI included resampling private wells to confirm concentrations, assess the depth of transport, and determine groundwater flow direction; and installing temporary (GeoProbe) wells to assess the vertical and horizontal extent. Assessment activities conducted by SynTerra from 1998 to 2002 indicated concentrations of trichloroethylene (TCE) and gasoline breakdown products. SCDHEC collected almost 200 water samples. TCE in samples from some water wells and monitoring wells was at concentrations greater than the MCL.. Additional groundwater monitoring was conducted from 2005 to 2015.

In January 2018, as requested by SCDHEC, SynTerra reviewed historical analytical data and updated site maps to identify potential data gaps or areas that may warrant further investigation. Based on this review, several monitoring wells located east of the area, along Freedom Drive, were abandoned and several additional temporary and permanent monitoring wells were installed along Two Notch Road and Hollis Road to provide a more refined delineation of the VOCs in groundwater. SynTerra also collected surface water samples and conducted a screening level assessment of possible vapor intrusion risk to nearby commercial and residential structures using USEPAs Vapor Intrusion Screening Level (VISL) online calculator.

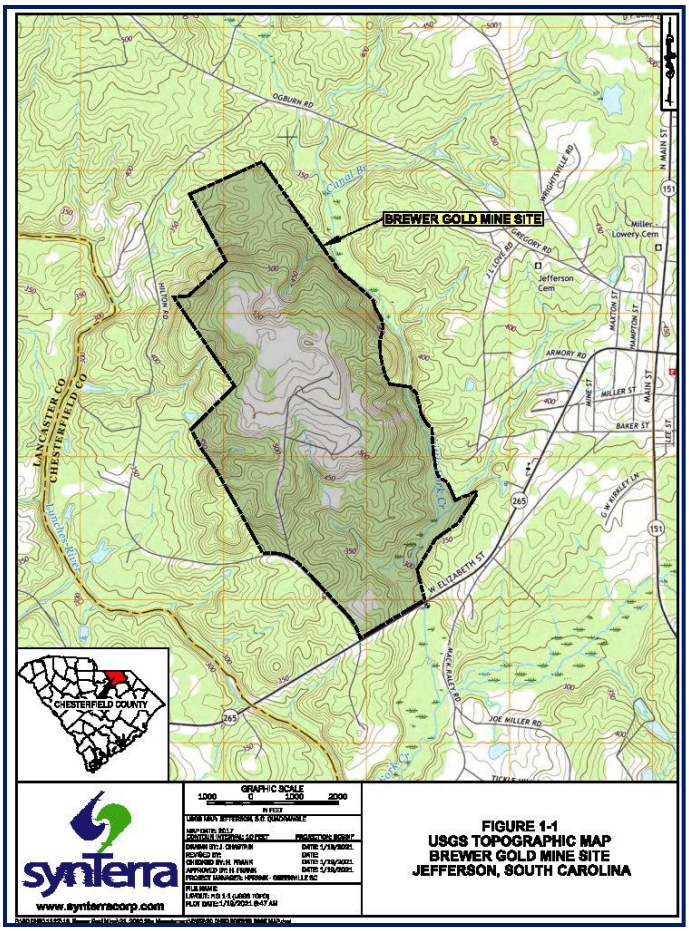
BREWER GOLD MINE – SITE MANAGEMENT
JEFFERSON, SOUTH CAROLINA

The Brewer Gold Mine (Brewer), located in Jefferson, South Carolina, operated as an active gold mine from 1828 through 1995. In 1995, the State of South Carolina was notified of Brewer Gold's intent to stop operations at the Site. As part of the closure activities, a wastewater treatment plant was constructed early in 1995 to treat water removed from the pits. Reclamation activities began in August 1995. Activities included dewatering the Brewer and B-6 pits, rinsing leach heaps, dismantling unnecessary facilities, backfilling the pits, installing a geosynthetic clay liner across the pit area, and continuing to operate an on-site water treatment plant.

The USEPA was the lead agency for site operations until SCDHEC assumed the role as lead agency in June 2020. SCDHEC requested SynTerra assist with continued site management in accordance with the Interim Remedial Action plan.

In addition to management of site operations and coordination with Gemini Services (the site operator), SynTerra also conducted a site-wide groundwater sampling event to evaluate current groundwater conditions. The purpose of the evaluation was to compare current water quality conditions with the latest data from 2006/2007.

In addition, due to increased flow at a seep location, SynTerra is in the process of conducting an investigation to determine the source of the water (former mine pit(s), native material outside of the mine pit(s), or a combination of both). The analytical results will be evaluated to establish water quality signatures for differentiating water sources contributing to the seep.



ABERDEEN PESTICIDE DUMPS SUPERFUND SITE
ABERDEEN, NORTH CAROLINA

SynTerra conducted an RI/FS pertaining to groundwater and soils and an RD/RA for groundwater affected by pesticides (toxaphene and BHC isomers) at the Route 211 Area.

During those investigations, SynTerra conducted the following activities:

- Work plan development
- Site investigations of soil, surface water, sediment, and groundwater
- Private well assessments (more than 30 residents)
- Treatability testing
- Flow and transport modeling
- Conceptual and detail design
- Construction of an extraction and carbon treatment system
- Performance standards verification plan
- Public meetings
- Database management and allocation
- Operation and maintenance

SynTerra developed an agency-approved site exit strategy for groundwater at the Route 211 Area.

SynTerra also performed an RI/FS for groundwater and soils and an RD/RA for groundwater affected by pesticides at the McIver Dump Area. More than 12,000 tons of soil were excavated and treated by a thermal desorption unit and returned as clean fill. A phytoremediation system was constructed consisting of more than 700 hybrid poplar trees that extract groundwater at a rate of 6,000 gallons per day. Project elements at the McIver Dump Area included work plans, site investigation of soil, surface water, sediment, and groundwater, feasibility study, performance standards verification plan/technical impracticability demonstration, public meetings, database management and allocation system, and negotiations with the USEPA and State.

JERRY BRYANT

PROJECT MANAGER

- 336 Town Mountain Road, Suite 4, Pikeville, KY 41501
- jbryant@synterracorp.com
- 304.687.4115

EXPERTISE

- Surface and underground coal mine planning
- Environmental permitting (including SMCRA and NPDES)
- 401/404 Permitting
- Environmental site analysis
- Blasting and groundwater inventories
- AutoCAD

EDUCATION

- B.S., Biological Science, Marshall University, Minor: Chemistry 2002

REGISTRATIONS/CERTIFICATIONS

- WV Office MHST, Experienced Miner Surface Safety Training

EXPERIENCE SUMMARY

Mr. Bryant is an experienced project manager/scientist in the State of West Virginia. After graduating from Marshall University, he began his career as a middle/high school teacher and coach. In 2006, he began environmental and mining permitting as a project manager with ECSI, LLC. Mr. Bryant became proficient in environmental and mining permitting in West Virginia, preparing WV State 401 permits, U.S. Army Corps of Engineers (USACOE) 404 permitting, and conducting reserve analyses. Mr. Bryant also has experience performing site inspections and evaluations; preparing mapping; interpreting geohydrologic data; preparing and developing mine plans; designing reclamation plans; preparing incremental boundary revisions (IBR), amendments, revisions, renewals; phases and types of releases; prospecting; preparing National Pollutant Discharge Elimination System (NPDES) applications, NPDES reissuances, and NPDES modifications; and building relationships with clients and state and federal agencies to obtain approval of environmental, mining, and water permits expeditiously.

SELECTED KEY PROJECTS

FRASURE CREEK MINING, LLC: SPRING FORK NO. 2 SURFACE MINE; SURFACE MINING CONTROL AND RECLAMATION ACT (SMCRA), NPDES, WV STATE 401, AND USACOE 404 PERMITS APPROVED – MINGO COUNTY, WEST VIRGINIA:
As Senior Project Manager, Mr. Bryant led a team of engineers, scientists, surveyors, and AutoCAD technicians and coordinated with the client and state and federal agencies to gain approval of the necessary permits to allow the pursuit of mining operations in Mingo County, West Virginia.

FRASURE CREEK MINING, LLC: TAYLOR BRANCH SURFACE MINE: SMCRA, NPDES, WV STATE 401, AND USACOE 404 PERMITS APPROVED – FAYETTE COUNTY, WEST VIRGINIA:
As Senior Project Manager, Mr. Bryant led a team of engineers, scientists, surveyors, and AutoCAD technicians and coordinated with the client and state and federal agencies to gain approval of the necessary permits to allow the pursuit of mining operations in Mingo County, West Virginia.

HAMPDEN COAL, LLC: HARRY'S BRANCH POND CREEK DEEP MINE: SMCRA, NPDES, WV STATE 401, AND USACOE 404 PERMITS APPROVED – MINGO COUNTY, WEST VIRGINIA:
As Senior Project Manager, Mr. Bryant led a team of engineers, scientists, surveyors, and AutoCAD technicians and coordinated with the client and state and federal agencies to gain approval of the necessary permits to allow the pursuit of mining operations in Mingo County, West Virginia.

HAMPDEN COAL, LLC: HARRY'S BRANCH PEERLESS DEEP MINE: SMCRA, NPDES, WV STATE 401, AND USACOE 404 PERMITS APPROVED – MINGO COUNTY, WEST VIRGINIA:
As Senior Project Manager, Mr. Bryant led a team of engineers, scientists, surveyors, and AutoCAD technicians and coordinated with the client and state and federal agencies to gain approval of the necessary permits to allow the pursuit of mining operations in Mingo County, West Virginia.

LOGAN COUNTY MINE SERVICES: DAVY'S BRANCH DEEP MINE: SMCRA AND NPDES PERMITS APPROVED – LOGAN COUNTY, WEST VIRGINIA:
As Senior Project Manager, Mr. Bryant led a team of engineers, scientists, surveyors, and AutoCAD technicians and coordinated with the client and state and federal agencies to gain approval of the necessary permits to allow the pursuit of mining operations in Logan County, West Virginia.

REFLECTANCE ENERGY, LLC: SKILLET CREEK SURFACE MINE: SMCRA, IBR, AND NPDES MODIFICATION PENDING APPROVAL– MINGO COUNTY, WEST VIRGINIA:
As Senior Project Manager, Mr. Bryant led a team of engineers, scientists, surveyors, and AutoCAD technicians and coordinated with the client and state and federal agencies to gain approval of an IBR to bring the permit up to current environmental standards for both SMCRA and NPDES to allow the pursuit of mining operations in Mingo County, West Virginia.

JERRY WYLIE, P.G

SENIOR GEOLOGIST

- 148 River Street, Suite 220, Greenville, SC 29601
- Jwylie@synterracorp.com
- 864-421-9999

EXPERTISE

- Site assessment/ remediation
- CERCLA RI/FS
- Chlorinated solvent assessment/remediation
- Coal ash assessment/remediation/ regulatory compliance
- Fractured bedrock hydrogeology
- Hydrogeologic studies

EDUCATION

- M.S., Geology, Auburn University, 1987
- B.S., Geology, Clemson University, 1984

REGISTRATIONS / CERTIFICATIONS

- Professional Geologist – SC, NC, TN

EXPERIENCE SUMMARY

As a Company Principal, Senior Geologist, and Project Manager at SynTerra, Mr. Wylie leads projects that focus on site assessment and environmental remediation. Mr. Wylie has professional consulting experience in a variety of geologic and hydrogeologic studies, site assessments, regulatory compliance issues, litigation support, and site remediation projects dealing with a variety of groundwater constituents of concern including chlorinated solvents, metals, and organo-chlorine pesticides.

SELECTED KEY PROJECTS

COAL COMBUSTION RESIDUALS (CCR) – SITE ASSESSMENT / REMEDIATION / REGULATORY COMPLIANCE – NC:
Project Manager/Technical Site Lead for comprehensive site assessment and corrective action plan development at power-generating facilities. Associated technical/regulatory projects included monitoring plan development, execution, and reporting in compliance with state regulations and the federal CCR Rule; inspection, sampling, and reporting of seeps and surface water associated with basin dams/dikes; designing and implementing a detailed hydrogeological investigation for coal ash basin(s) and CCR landfills to evaluate the nature and extent of impact in fractured bedrock. Investigation methods included well installation, pumping test design/ implementation, packer testing, downhole/surface geophysics, and extensive technical research review. Investigation results were used to design, build, and support predictive flow and transport groundwater and geochemical models.

SYNGENTA CROP PROTECTION, ABERDEEN PESTICIDE DUMPS SITES SUPERFUND SITE – ABERDEEN, NC:
Project Manager/Senior Geologist for RI/FS/RD/RA of groundwater and soils at several OUs affected by pesticides. Project elements included investigation of soil, surface water, and groundwater; private well assessments; treatability testing; fate and transport modeling; performance standards verification plan; database management; allocation; regulatory negotiations; and O&M of treatment facility. Developed statistical, agency-approved alternative to a Technical Impracticability alternative.

SIGNET MILLS INDUSTRIAL DRY CLEANER SITE – SPARTANBURG, SC:
Project Manager/Senior Geologist for developing and implementing assessment strategies; designing remedial approach and selecting remedial technologies; negotiating regulatory requirements; and performing groundwater-surface water interaction assessment for former industrial dry-cleaning operation and DNAPL-affected site. Soil/Vapor extraction and chemical oxidation groundwater remediation approach designed, implemented, optimized, and monitored long-term. Litigation support was provided.

SYNGENTA AGRO, SA – FIGHIERA, SANTA FE, ARGENTINA:
Project Manager/Senior Consultant responsible for development and implementation of a pesticide/herbicide soil/groundwater assessment at this agrichemical formulation and production facility. Additional project elements included a comprehensive audit of site operations, waste and raw product handling/disposal practices, and identification of potential environmental concerns. Risk evaluation was applied to develop a plan for future monitoring/constituent control and abatement.

SYNGENTA CROP PROTCTION, LLC – FORMER PESTICIDE FORMULATION FACILITY – MEMPHIS, TN:
Project Manager/Senior Consultant for RI/FS at a former formulation facility associated with soil and groundwater effects from chlorinated VOCs and pesticides. Project elements included comprehensive assessment of soils, soil gas, and groundwater using a variety of assessment techniques. An assessment of risk pertaining to on-site and off-site soils was completed. The REMChlor model was used as a preliminary screening tool to estimate flow and transport of constituents detected in groundwater and predict the downgradient distance and time required to achieve concentrations less than regulatory limits. A feasibility study to address affected soils is in preparation.

HOWARD FRANK, P.G.

SENIOR HYDROGEOLOGIST

- 148 River Street, Suite 220, Greenville, SC 29601
- hfrank@synterracorp.com
- 864.527.4648

EXPERTISE

- Soil and groundwater assessment and remediation
- Petroleum and chlorinated hydrocarbon assessment and remediation
- Vapor intrusion assessments
- Phase I Environmental Site Assessments
- Phase II Environmental Site Assessment

EDUCATION

- M.S., Geology, Boston College, 1994
- B.S., Geology, University of Massachusetts, 1991

REGISTRATIONS / CERTIFICATIONS

- Professional Geologist – SC, NC, AR, FL, GA, AL, V
- OSHA 40-hour HAZWOPER training

EXPERIENCE SUMMARY

Howard is a senior geologist, project manager, and registered professional geologist. He has extensive experience conducting and managing assessment activities. This experience includes oversight during monitoring well installation, Phase I and II Environmental Site Assessments, underground storage tank closures and assessments, risk-assessment screening, and air, soil, and groundwater investigations. Mr. Frank is also experienced in computer modeling used to evaluate soil, groundwater, and vapor intrusion. He has used multiple groundwater and risk-assessment models on more than 100 projects. This experience has included the delineation of protection areas around municipal water supplies and fate and transport modeling of chemicals of concern in soil and groundwater, and evaluation of vapor migration to indoor air.

SELECTED KEY PROJECTS

CITY OF NEWBERRY – USEPA ASSESSMENT GRANT, ADMINISTRATION AND ENVIRONMENTAL CONSULTING ASSISTANCE – NEWBERRY, SC

Assistant Project Manager and Technical Lead. Assisting the City of Newberry with their Assessment Grant. Primary activities have included preparation of required documents and reports, selection of prospective Brownfield properties for Phase I and Phase II Environmental Site Assessments, routine scheduled meetings with the City, USEPA, and South Carolina regulatory officials, and preparation of quarterly status reports for submittal to USEPA.

SCDHEC STATE SUPERFUND – SITE ASSESSMENT AND REMEDIATION PROGRAM – MULTIPLE LOCATIONS, SC:

Assistant Program Manager and Project Manager. Project manager for several Superfund Sites throughout South Carolina. Projects have ranged from coordination with laboratory and SCDHEC sampling personnel to environmental assessment, data evaluation, and screening level risk assessment.

CONFIDENTIAL CLIENT – GROUNDWATER FLOW AND TRANSPORT MODELING – FORMER PESTICIDE FACILITY, MEMPHIS, TN

Technical Lead. Used REMChlor model as a preliminary screening tool to estimate the flow and transport of constituents of concern (CoCs) detected in groundwater. The goal of the modeling was to predict the downgradient distance and time required to achieve CoCs concentrations less than applicable regulatory limits. The modeling results were accepted by TDEC without comment.

DAVID DUNCKLEE, P.G./L.G., R.S.M

SENIOR HYDROGEOLOGIST

- 511 Keisler Dr., Suite 102, Cary, NC 27518
- ddduncklee@synterracorp.com
- 919-858-9898

EXPERTISE

- Expert witness and litigation support
- Soil and groundwater assessment and remediation
- Phase I and II Environmental Site Assessments
- Technical writing
- Senior project management
- Environmental regulation
- Contaminant hydrogeology

EDUCATION

- B.S., Geology, North Carolina State University, 1983
- Graduate Study, Geophysics, North Carolina State University, 1983
- A.A.S Business Data Processing, Wake Technical College, 1981

REGISTRATIONS / CERTIFICATIONS

- Licensed Geologist, NC 1017
- NCDEQ, Superfund Branch, Registered Site Manager
- Registered Professional Geologist, GA 1709
- Association of Environmental & Engineering Geologists, Carolinas Section
- Member Carolina Geologic Society

EXPERIENCE SUMMARY

Mr. Duncklee has more than 35 years of experience as an environmental consultant with 32 of those as a licensed geologist working on environmental assessment and remediation projects across North Carolina. He is certified by the North Carolina Department of Environmental Quality, Division of Waste Management, Superfund Section as a Registered Site Manager under the Inactive Hazardous Sites Program. Mr. Duncklee is Qualified as an Expert in Environmental Cleanup Costs by the North Carolina Superior Court. His project experience includes sites in North Carolina, South Carolina, Virginia, Texas, Pennsylvania, Michigan, Indiana, Massachusetts, West Virginia, Maryland, Delaware, Georgia, Alabama, Tennessee, Kentucky, Florida, Utah, Nevada, the United Kingdom, and South Africa. He co-founded and served as president of Duncklee & Dunham, PC for more than 24 years.

SELECTED KEY PROJECTS

PROGRAM MANAGER FOR ENVIRONMENTAL SERVICES FOR THE CITY OF RALEIGH'S ACQUISITION OF OVER 300 ACRES FOR DOROTHEA DIX PARK:

Key aspects of this ongoing brownfields project have been the performance of a Phase I ESA, the design and implementation of brownfields rules and guidelines for the acquisition, identification and remediation of RECs, the assessment and remediation of a waste dump area, the evaluation of a landfill included in the transaction, other soil and groundwater assessment tasks, asbestos and lead paint issues, assist in negotiations with seller, assist city attorneys, develop and implement remedial work plans, and assist City planners and park development consultants to estimate environmental costs and implement the design of the Park.

EXPERT WITNESS FOR DEFENDANT IN FEDERAL CASE:
Litigation support and expert testimony were provided almost continuously over a 4 ½ year period (2016-2020). Opinions and documents prepared included six expert reports, two depositions totaling three days of testimony, and two declarations. Assisted defense counsel in the analysis of 9 depositions and multiple environmental reports by plaintiff's experts. Attended depositions by three of the plaintiff's experts to assist in technical analysis and critique for defense counsel. Led the design and implementation of site investigation activities including the design of soil and groundwater assessment tasks that identified a significant VOC plume beneath a former electronics manufacturing facility. Tasks included analysis of a surface water basin and whether it caused infiltration of accumulated rainwater into the shallow aquifer, thereby exacerbating the contaminant plume. Analysis of documents found in former plant prior to demolition and the review of more than 500 documents and tens of thousands of document pages related to environmental issues dating back to the 1960s. Remedial cost analyses and critique of similar calculations by plaintiff's experts. Provided opinion on compliance with National Contingency Plan. Case settled before trial.

PROJECT MANAGER FOR METALS IMPACTED SITE IN THE NORTH CAROLINA REC PROGRAM (STATE VOLUNTARY):
Site has been affected by releases of metals from recycling operations. In its tenth year, this soil and groundwater assessment and remediation project has involved assessment of soil and groundwater using standard and innovative techniques. One major portion of the site has been remediated and closed by soil removal with groundwater monitoring. Another has been controlled with a fixation containment remedy. Major work tasks performed on this project include the use of hydraulic profiling tools, two remedial investigations and remedial action plans, multiple bench scale treatability tests, groundwater modeling utilizing PHREEQC, MODFLOW and MT3D, an injection pilot test utilizing different combinations of sodium hydroxide, ferrous sulfate, and magnesium hydroxide along with air sparging, public notice, and community relations activities.

CHRIS SUTTELL, P.G.

PRINCIPAL PROFESSIONAL

- 148 River Street, Suite 220, Greenville, SC 29601
- csuttell@synterracorp.com
- 864-527-4621

EXPERTISE

- Project/Program management
- Site assessment/remediation
- Federal CCR Rule compliance
- NC CAMA compliance
- CCR site assessment and corrective action
- NPDES permit management and compliance optimization

EDUCATION

- B.S., Geology, SUNY Fredonia, 1998

REGISTRATIONS / CERTIFICATIONS

- Professional Geologist – SC, NC
- OSHA HAZWOPER Trained

EXPERIENCE SUMMARY

Mr. Suttell is a registered professional geologist in North and South Carolina. He began his professional environmental consulting career in Florida in 1999 and has served clients from Alaska to Puerto Rico. Mr. Suttell has broad experience in geologic and hydrogeologic characterization, development and implementation of remedial strategies, regulatory compliance management, landfill construction and monitoring, environmental monitoring optimization, industrial health and safety process management, and litigation support for several clients on diverse environmental matters. Chris has led projects involving NPL sites, CERCLA Remedial Actions, RCRA Corrective Action, industrial landfills, mine tailings, wastewater lagoons, coal combustion residual (CCR) units, affected waterways, and dozens of state-funded chlorinated compounds and underground storage tank (UST) sites, targeted Brownfield sites, and a variety of voluntary cleanup projects.

SELECTED KEY PROJECTS

COAL COMBUSTION RESIDUALS (CCR) – SITE ASSESSMENT / REMEDIATION / REGULATORY COMPLIANCE – NORTH CAROLINA AND SOUTH CAROLINA:

Technical site lead and project manager for comprehensive site assessment (CSA) and corrective action plan (CAP) development for compliance with state and federal CCR regulations at several power-generating facilities. Mr. Suttell developed conceptual site models used for site assessment planning and implementation, data evaluation, and corrective action design. CSA investigation results were used to establish soil, groundwater, and surface water background values; evaluate human health and ecological risk; build predictive flow and transport groundwater and geochemical models; establish optimized groundwater and surface water monitoring programs; and design and implement robust CAPs for regulatory compliance. The results of the CAPs allowed the client to settle ongoing litigation regarding the CCR impoundments and their effects on the environment and implement measures to improve the environment. Mr. Suttell has also worked closely with ash basin closure teams to provide on-site landfill design optimization and implementation support.

PROJECT MANAGEMENT OF ASSESSMENT AND REMEDIATION ACTIVITIES FOR STATE HAZARDOUS WASTE SITE/DRY-CLEANING SOLVENT CLEANUP PROGRAM – FLORIDA:

Mr. Suttell was the project manager and hydrogeologist for several dry-cleaning and hazardous waste site investigations for the Florida Department of Environmental Protection (FDEP). He developed project budgets and work plans, conducted field investigations to complete site assessments, including monitoring well installations and sampling, wrote site assessment reports, and teamed with engineers to develop site-specific remedial strategies. During his time, Mr. Suttell developed and supported the establishment and acceptance of the innovative Color-Tec method for soil and groundwater field screening as part of implementing the USEPA's triad approach for efficient and effective assessment of constituents in the environment.

PETROLEUM PREAPPROVAL CLEANUP PROGRAM – FLORIDA:

Mr. Suttell was a member of FDEP's Team 6, responsible for providing program administration support to the FDEP's Bureau of Petroleum Storage Systems, essentially acting as a state regulator while working as a private consultant. He provided site management and coordination at more than 50 UST sites in accordance with FDEP laws, guidance, and standard operating procedures. His responsibilities included reviewing proposals, negotiating scopes of work with designated contractors, issuing work orders to contractors, and reviewing reports to verify the completeness of tasked activities. Mr. Suttell reviewed invoices and change orders, performed site visits and site inspections, and entered site-specific data into FDEP tracking systems. He handled sensitive situations between site owners and consultants, often acting as the diplomatic arm of FDEP to resolve conflicts.

OTHER SITE INVESTIGATIONS – FLORIDA:

Under other programs for FDEP, Mr. Suttell worked on several CERCLA SARA and Brownfield sites and high-profile site screening sites, such as the Wingate Road Landfill, St. Marks Refinery, and Purdom Power Plant sites where dioxins were a concern. He investigated groundwater within the Lake Mary Well Field where chlorinated solvents were discovered in public supply wells. Similarly, under the FDEP's Site Investigation Section, Mr. Suttell conducted assessment activities at the Escambia County Utilities Authority site to determine the extent and source of affected groundwater that infiltrated several public supply wells that supplied the city of Pensacola with drinking water. Under the FDEP's groundwater contract, he completed several subsurface investigations of land owned by the State, discovering and documenting previously unknown sources of affected groundwater. Mr. Suttell also conducted site reconnaissance and assessment at approximately 20 UST sites throughout the state while further developing the Color-tec technology to detect petroleum compounds in soil and groundwater, which resulted in more rapid and higher density characterization of constituents in groundwater that supported remedial strategies.

PINEWOOD SITE CUSTODIAL TRUST (PSCT) - ENVIRONMENTAL PERMIT COMPLIANCE MANAGER AS TRUSTEE OF THE PSCT – SOUTH CAROLINA:

Mr. Suttell managed environmental permit (RCRA, NPDES, and air quality) requirements and corrective action activities as Trustee of the PSCT, a closed Subtitle C (hazardous waste) landfill in central South Carolina. Tasks included preparing RCRA Part A & B and NPDES Permit Renewal Applications; management of permit compliance monitoring and optimization; management of groundwater corrective action and site improvement projects; management of leachate collection and treatment systems; waste characterization and profiling for transportation and disposal; procurement and performance management of technical service providers who implemented routine operations and improvement projects; and negotiations with local and state regulators.

LARGE MANUFACTURING FACILITY – RCRA PERMIT APPLICATION EVALUATION AND NEGOTIATION – NEW YORK:

Mr. Suttell assisted the client in negotiations with state regulators concerning their RCRA Part B Permit renewal application. Regulators were attempting to impose a cost-prohibitive increase in financial assurance requirements for the RCRA permit to be renewed. Mr. Suttell performed a detailed review of site conditions and regulatory correspondence to develop cost estimates for optimized environmental monitoring programs and feasible risk-based remedial strategies that demonstrated financial assurance requirements could be met at nearly two orders of magnitude less than what regulators requested.

JOHN L. SHERRILL, P.G./L.G.

PROFESSIONAL GEOLOGIST

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- 919-858-9898

EXPERTISE

- Soil and groundwater assessment and remediation
- Phase I and Phase II Environmental Site Assessments
- Underground Storage Tank (UST) assessments and closures
- Brownfields assessments

EDUCATION

- B.S., Geology, East Carolina University

REGISTRATIONS / CERTIFICATIONS

- Professional Geologist, NC 2547
- First Aid / CPR Certified
- HAZWOPER-40 Hour
- Member Carolina Geological Society

EXPERIENCE SUMMARY

Mr. Sherrill is a licensed professional geologist with over 10 years of experience in the environmental industry. In his career, Mr. Sherrill has worked on a variety of projects in both the private and public sector across North Carolina, South Carolina, and Louisiana. Mr. Sherrill earned his North Carolina Professional Geologist license in 2018.

SELECTED KEY PROJECTS

MUNICIPAL BROWNFIELD PROPERTY – CHARLOTTE, NC:

Key aspects of this brownfields project have been the performance of a Phase I ESA, identification and remediation of RECs, preparation and execution of the Brownfields Assessment Work Plan, including soil, groundwater, and sub-slab vapor assessment tasks, reporting, and preparation of the Environmental Management Plan (EMP).

UST CLOSURES – VARIOUS SITES, NC AND SC:

Mr. Sherrill has conducted numerous closures of USTs ranging from non-commercial, non-regulated tanks such as home heating oil tanks, to commercial, regulated tanks at petroleum stations, hospitals, and industrial facilities. Tasks consisted of initial locating of the USTs, cost estimates associated with the removal, and provide oversight, sampling, and reporting in accordance with state regulations.

FORMER SLUDGE LANDFILL – GASTON COUNTY, NC

Project consisted of the installation of approximately 50 soil test pits to characterize and delineate the extents of a former sludge landfill associated with a nearby textile manufacturing facility. Additional field activities consisted of the installation and sampling of monitoring wells and measuring the thickness of cover soil above the sludge channels. Remedial actions were taken on two surface water retention ponds with concentrations of metals above state standards.

SITE ASSESSMENTS – VARIOUS SITES THROUGHOUT NC, SC, AND LA

Conduct Phase I Environmental Site Assessments (ESAs) under the ASTM E1527-13 and AST E1527-21 standard on a variety of sites including, but not limited to, undeveloped lots, former gas stations, former drycleaners, industrial facilities, and agricultural properties.

REBECCA BASS

DATA VALIDATION SPECIALIST

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- 864-421-9999

EXPERTISE

- Level II laboratory data validation
- Water quality monitoring
- Stormwater Pollution Prevention Plans
- Stormwater Master Plans
- Phase I Environmental Site Assessments
- UST and AST petroleum tank systems

EDUCATION

- B.S., Biology/Ecology, Pennsylvania State University

REGISTRATIONS/CERTIFICATIONS

- 40-hour OSHA HAZWOPER

EXPERIENCE SUMMARY

Rebecca graduated with a Bachelor of Science degree in Biology with an emphasis in Ecology from Penn State University. She started her career working for environmental analytical laboratories specializing in PCB, semi-volatile, and wet chemistry analyses. Rebecca spent several years auditing hundreds of petroleum storage facilities in northeast Florida, specializing in bulk facilities and marinas. She also managed the cleanup of approximately 40 petroleum-affected sites under the State of Florida's Petroleum Pre-Approval Program.

After moving to upstate South Carolina, Rebecca's experience focused primarily on stormwater projects, including inspecting construction projects as a Certified Erosion Prevention and Sediment Control Inspector, creating Stormwater Master Plans, conducting Phase I Environmental Site Assessments (ESAs), preparing Stormwater Pollution Prevention Plans (SWPPPs), and maintaining continuous water quality monitoring equipment. Additional skills include performing water quality data corrections and analysis using AQUARIUS and map creation using ESRI ArcGIS. Her fieldwork experience includes groundwater sampling, surface water sampling, soil sampling, industrial hygiene air monitoring, wastewater treatment plant sample collection, petroleum facility inspections, CEPSCI inspections, Phase I ESAs, and calibrating and maintaining water quality monitoring equipment with specific expertise in nitrate and ortho-phosphate analyzers.

During her time with SynTerra, Rebecca has become proficient in Level II Laboratory Data Validation per USEPA's National Functional Guidelines for Organic/Inorganic Superfund Methods Data Review.

JEFF COLEMAN

SENIOR DESIGNER

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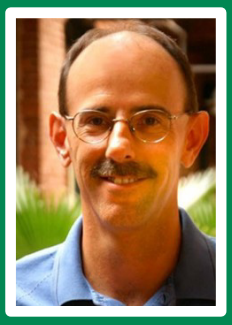

EXPERTISE

- Civil design
- 3-D design and volume determinations
- Water/Wastewater treatment plant design
- Precast-prestressed concrete design
- Structural steel design
- Project management
- AutoCAD/Infraworks/Plant 3D/ Civil 3D (CADD Software)

EDUCATION

- A.S., Engineering Graphics Technology, Greenville Technical College, 1984
- BET, Civil Engineering, Southern Institute of Technology, (Course Work)

REGISTRATIONS / CERTIFICATIONS

- Autodesk Civil 3D Certificate
- Autodesk Land Development Desktop Certificate
- MSHA Part 46 Miner Training
- OSHA 10-hour General Industry Training
- American Red Cross Certified for
- First Aid, CPR, and AED

EXPERIENCE SUMMARY

Mr. Coleman's professional civil engineering consulting experience primarily includes landfill, water, and wastewater treatment projects. He has worked on a number of small- and large-scale soil and groundwater assessments/remediation projects. Mr. Coleman's work in the civil design area has included preparing landfill final grading plans, erosion and sediment control plans, grading plans, sanitary sewer plans, stormwater drainage and detention plans, water and wastewater treatment design, and construction inspection. Mr. Coleman has extensive experience in structural design/drafting and project management in the precast-prestressed concrete field.

SELECTED KEY PROJECTS

HOLCIM (US) INC. – MINE PLANNING AND EXPANSION – HOLLY HILL, SC:

Lead Designer for a wide range of projects at one of the largest cement and quarry complexes in North America. Examples include: reserve calculations, mine planning for quarry expansion, new solid waste landfill, quarry sump project, channel grading and volume calculations.

INTERNATIONAL PAPER – LANDFILL AND MILL OPERATIONS – COURTLAND, AL:

Lead Designer for a broad range of environmental and civil engineering projects. Examples include major redesign involving regrading of a 66-acre landfill to alleviate unstable conditions, staking plans for construction operations, and NPDES permit plans. Also designed a landfill closure with fiber sludge cap, provided drawings for SPCC plans, landfill 3-D design and volume determinations, and landfill life projection.

ALABAMA RIVER CELLULOSE – LANDFILL DESIGN – PERDUE HILL, AL:

Lead Designer for multiple projects at this pulp and paper mill. Efforts included design of new solid waste landfill, 3-D growth design, and 3-D volume determinations.

MEADWESTVACO / MAHRT MILL – LANDFILL DESIGN – COTTONTON, AL:

Lead Designer for multiple efforts at this pulp and paper mill. Projects included the design of a new solid waste landfill, 3-D design and volume determinations, and landfill life projections.

CONFIDENTIAL PULP AND PAPER CLIENT – LANDFILL DESIGN – OK:
Lead Designer for projects at major mill. Efforts were design of new solid waste landfill, landfill life projection, volume determinations, and 3-D design.

CONFIDENTIAL FOREST PRODUCTS CLIENT – VARIED PROJECTS – SOUTHEAST US:
Lead Designer for a broad range of environmental and civil engineering projects. Examples include staking plans for construction operations, NPDES permit plans, Design and Operations (D&O) plans, landfill closure plans, SPCC plans, landfill 3-D design and volume determinations, and landfill life projections.

RIPLEY COVE – SITE AND INFRASTRUCTURE – CHARLESTON, SC:
Lead Designer for a mixed-use development that contained single family homes, townhouses, and condominiums. Design included lot layouts, water quality structures, roads, sewer, and water plans and profiles. Also performed harbor dredging volume calculations and prepared wetland mitigation drawings.

DUKE WATER – WATER TREATMENT PLANT – CITY OF ANDERSON, SC:
Designer for an addition to a 6.0 MGD water treatment plant. Project included cast-in-place concrete and reinforcing design.

Structural

Summary: Mr. Coleman has experience in precast-prestressed concrete design for parking structures, prison facilities, and industrial buildings. This experience includes the production drafting of placement drawings, steel connection details, reinforcing bar bend schedules, and shop cards for double-tees, inverted tee-girders, columns, shear walls, precast cell modules, and insulated wall panels. Jeff has produced plans and managed projects for many clients in the Southeast.

CASINO MAGIC / GRAND CASINO – STEEL AND CONCRETE DESIGN – BILOXI, MS:
Designer for the plans, shop cards, and steel connection details of a seven-level parking structure. Serving as the Project Manager responsible for coordination between the two projects' architect and the precast pre-stressed concrete supplier were additional duties.

TURNER COUNTY DETENTION CENTER – CONCRETE DESIGN – TURNER COUNTY, GA:
Civil designer responsible for preparation of placement drawings and shop cards for precast concrete cell modules and insulated wall panels.

HAYWOOD MALL – DILLARD'S PARKING STRUCTURE – GREENVILLE, SC:
Designer for the plans, shop cards, and steel connection details of a four level parking structure. Serving as the Project Manager responsible for coordination between the project's architect and the precast pre-stressed concrete supplier were additional duties.

MORGAN ADVANCED MATERIALS – CONCRETE DESIGN – GREENVILLE, SC:
Lead Civil Designer responsible for preparation of placement drawings and shop cards for precast pre-stressed concrete wall panels and columns.

Mining

Summary: Mr. Coleman has experience in mine permitting, developing mine operation and reclamation plans, determining the life of mines, and developing wetland restoration plans. He has developed several SWPPP, SPCC, and BMP plans for mining clients.

VULCAN MATERIALS COMPANY – OPERATIONS AND PERMITTING – SC:
Lead Designer experience includes mine plans, wetlands delineation plans, and stormwater pollution prevention plans. Also developed master mine land use and bonding maps, 10-year erosion and sediment control maps, and reclamation maps for

permitting and operations of several rock quarries. Other efforts included sedimentation pond designs for treatment of runoff waters on the mine property.

HOLCIM (US) INC. – SITE EXPANSIONS AND OPERATIONS – HOLLY HILL, SC:
Lead Designer for a wide range of projects at one of the largest cement and quarry complexes in North America. Examples include reserve calculations and mine planning for quarry expansion, new solid waste landfill, quarry sump project, channel grading/volume calculations, water distribution system, closure of CKD spoils area, and wetland fringe restoration. Other responsibilities included preparation of SWPPP, SPCC, and BMP plans for a 500-acre quarry and processing plant.

CONFIDENTIAL GYPSUM PRODUCTS CLIENT – OPERATIONS COMPLIANCE PLANS – US:
Designer responsible for preparation of permits, residuals management and closure plans, and designs for gypsum material stockpiles. Also provided plans of gypsum wallboard rejects piles, groundwater monitoring wells, stormwater management, and E&S control.

CHEMICAL LIME – KILN PILE PLANS – MONTEVELLO, AL:
Lead Designer responsible for development of a reclamation plan and closure plan for a 42-acre lime kiln dust pile.

Mechanical / HVAC

Summary: Mr. Coleman has experience in mechanical design and drafting of projects for various manufacturing clients. Jeff has developed several Process and Instrumentation Diagrams (P&ID's) and ventilation plans.

MEDICAL DEVICE MANUFACTURER – MECHANICAL ON-SITE – GA:
On-Site Leader for assessing and updating modified processes. Responsibilities were coordinating with process, environmental, and safety staff to properly diagram process areas and create "as-built" P&ID's in CADD.

PNEUMAFIL – DUST FILTRATION – SALISBURY, NC:
Lead Designer for combustible dust filtration system in a textile manufacturing operation. The design was governed by NFPA and included explosion protection.

VLS RECOVERY SERVICES – AIR SCRUBBER – MAULDIN, SC:
Lead Designer for air scrubber system at a commercial wastewater treatment / waste recovery facility. Additional design responsibilities included P&IDs for the operation's various treatment processes.

CHRISTINA NEWELL

SENIOR CAD DESIGNER

- 148 River Street, Suite 220, Greenville, SC 29601
- cnewell@synterracorp.com
- 864-421-9999

EXPERTISE

- AutoCAD – Microstation – GIS–Civil 3D – AutoTurn
- Mining operations and reclamation design
- Pulp & paper landfill volume and life determinations
- Water and sewer line design
- Site design

EDUCATION

- Drafting Course, R.D. Anderson Vocational School, 1985 – 1987

REGISTRATIONS / CERTIFICATIONS

- 900–hour Drafting Course Certificate
- Autodesk Land Development Desktop Certificate

EXPERIENCE SUMMARY

Christina has more than 34 years of civil and design consulting experience. She is primarily involved with work in the civil design area, and her work has included preparing erosion and sediment control plans, sanitary sewer plans, stormwater drainage plans, grading plans, and water and wastewater treatment design. She has been heavily involved in developing mine operation and reclamation plans. As well as various remediation projects. She has also prepared design drawings for landfill projects, landfill volume calculations, Isopach comparisons and various remediation projects.

SELECTED KEY PROJECTS

HOLCIM (US) INC. – MINING – HOLLY HILL, SC:
Designer for various efforts at one of the largest cement and quarry complexes in North America. Key efforts included: mine planning for quarry expansion, land use map, land use aerial map, mine map, and reclamation map.

ROCKTENN CP, LLC – BANK STABILIZATION – FLORENCE, SC:
Designer for an effluent basin dam project in which sections of the existing dam were being relocated. Responsible for producing relocation drawings, staking plan, proposed dam construction sequence, various detail sheets, discharge structure plans, and discharge structure relocation construction sequence plans.

VULCAN – MINING – SC:
Primary Designer for a quarry complex's expansion. Project included developing quarry expansion planning documents, mine land use map, erosion and sediment control map, and reclamation map for eight South Carolina quarries. Also acquired surrounding property owner information and data for client's zoning assessment.

CONFIDENTIAL PULP & PAPER – RAW MATERIALS AND MINING DESIGN –GA:
Designer for the borrow pit, haul road, and surface mine permit drawings. Also assisted in compiling information for the permits and the Erosion, Sedimentation & Pollution Control Plan Checklist.

CONFIDENTIAL FOREST PRODUCTS – PLYWOOD OPERATIONS – FL:
Designer for updates and modifications to a construction level package for design improvements of a storm water management system. Design included reconstruction of an existing stormwater pond. Designer challenges included displaying and laying out a complicated design instruction.

HIDDEN RIVER – DEVELOPMENT – CLAY COUNTY, N.C:
Designer for a subdivision development in a mountainous area. Efforts were lot layouts, storm drain design, roads, sewer, and water plans and profiles.

BOBBY TAYLOR

AUTOCAD / ENGINEERING TECHNICIAN

- 170 Turner Commons Way, Suite 120, Lexington, KY 40511
- btaylor@synterracorp.com
- 864-421-9999

EXPERTISE

- AutoCAD Design work on coal mine waste disposal facilities
- Geotechnical drilling/testing/sampling
- Construction material testing on soil, rock, and concrete
- Underground coal mine subsidence site investigations

EDUCATION

- Harrison County Vocational School - Drafting
- Kentucky Vocational Training Center AutoCAD

REGISTRATIONS/CERTIFICATIONS

- AutoCAD Design and Drafting
- Home Inspection
- Certified Surface Miner
- MSHA Impoundment Inspector
- Troxler Nuclear Gauge Operator
- Radiation Safety Officer (RSO) Certification
- HazMat Certification
- ACI Level I Certified Concrete Technician

EXPERIENCE SUMMARY

Mr. Taylor has worked in geotechnical consulting since 1983. As an engineering technician, he has supported numerous coal waste refuse, slurry, and impoundment designs. On various Abandoned Mine Lands (AML) projects, he has designed and prepared construction drawings. He also worked as a construction monitor/site inspector on these projects and performed materials testing. He has been responsible for preparing construction drawings on multiple projects using his AutoCAD skills. Mr. Taylor has worked concurrently as an engineering technician/quality control testing and construction material laboratory technician in support of various manufacturing, government, and residential projects. He has performed more than 500 residential/commercial underground coal mine subsidence site investigations.

Mr. Taylor has experience in assisting on property surveys including farms, residential property, and various land divisions. He has worked under the direction of a professional land surveyor as a rodman and instrument man. As a draftsman, he was responsible for preparing survey plats and final drawings.

Mr. Taylor designs coal mine waste slurry impoundment/combine refuse facilities, prepares construction drawings, and conducts construction inspection and testing. He is responsible for construction material testing and CMT laboratory soil, rock, and concrete testing on various projects.

SELECTED KEY PROJECTS

MSHA CLASS "C" AND CLASS II SURFACE IMPOUNDMENT CONSTRUCTION QUALITY ASSURANCE INVESTIGATIONS, MONTHLY INSPECTION AND QUARTERLY SITE INSPECTION

Assisted in the design of numerous proposed refuse disposal/slurry impoundments including the geologic/foundation investigation phase leading to development of the soil and rock profile, etc. Supervised foundation drilling, rock sampling, and pressure testing. Responsibilities included on-site quality assurance observation of numerous embankments (*i.e.*, nuclear moisture density testing, sampling, and testing of concrete). Provided supervision for installation and quality control of HDPE pipes at many impoundments.

Performed and supervised weekly and monthly inspections of slurry impoundments. Weekly monitoring tasks included slope observation for instability, water-level measurement in piezometers, instrumentation reading such as extensometers and inclinometers, discharge from weirs, and pool water-level readings. Evaluation of the data collected regarding unique conditions at each site and documentation are significant tasks.

Supervised installation of various instrumentation for monitoring phreatic surface, settlement, and subsidence including inclinometers used to monitor slope stability in numerous dam embankments in Indiana, Ohio, Kentucky, and West Virginia. Monitored and interpreted data regarding dam safety.

CONSTRUCTION MONITORING AND QUALITY CONTROL

Performs various duties relative to site preparation and foundation/building construction including deep foundations or caisson inspections. Performed concrete quality control including field testing and laboratory strength testing at various sites throughout Kentucky, Ohio, and West Virginia.

Assisted in the geologic data sampling/logging portion including geotechnical laboratory analysis of the various soil and rock samples associated with several projects throughout Eastern Kentucky.

Assisted in the design and preparation of construction plans for coal mine reclamation, which included various sites in eastern Kentucky. Worked as a construction inspector performing materials testing and quality control during construction. As surveyor, he installed control baselines and as-built cross-sections throughout construction and post-construction.

TREVOR WHITE

FIELD TECHNICIAN

- 336 Town Mountain Road, Suite 4, Pikeville, KY 41501
- twhite@synterracorp.com
- 864-421-9999

EXPERTISE

- Assisting customers
- Surveying
- AutoCad

EDUCATION

- Shelby Valley High School, 2017

REGISTRATIONS / CERTIFICATIONS

- KY surface miner
- KY non-coal Surface

EXPERIENCE SUMMARY

Trevor serves as a Field Technician for SynTerra. He assists with various jobs at the Pikeville office. While with SynTerra, He has gained experience in AutoCad, SedCad, Carlson, and field projects such as flagging and stockpiles. He also has experience with communication with clients, operating equipment, vehicle maintenance, and navigation for many different routes at previous employers.

SELECTED KEY PROJECTS

COAL MAC STOCKPILE SURVEY

Project involved drone flights and GPS surveys to get the elevation and overall size of the stockpiles compared to what it was prior. The volume of each stockpile was then measured for the company.

REFLECTANCE ENERGY

Helping with permitting using AutoCad, SedCad, and Slope Analysis for proposed areas on the permit and drainage areas for the runoff from storms. Inspected road sumps, drains, and ponds to ensure compliance with permits.

HANSON, TYRONE

Project involved a GPS survey in an underground limestone quarry with a team of engineers.

D. ANDY WILLIS, P.E., P.S.

MINING ENGINEERING GROUP LEADER/PRINCIPAL

- 336 Town Mountain Rd., Ste. 4
- awillis@synterracorp.com
- 606-432-2443

EXPERTISE

- Surface and underground coal/aggregates mine planning and design
- Environmental permitting
- Reclamation management and design
- Coal and aggregate reserve analysis and calculations
- Mine feasibility using geologic modeling
- Mine extraction and subsidence modeling
- Litigation support as expert witness for mining and environmental cases
- Environmental site analysis
- Construction inspection
- Inspection and certification of underground coal mine seals
- Mine surveying
- Certified operator FAA-approved unmanned aerial system (UAS)

EDUCATION

B.S., Mining Engineering, OSU

REGISTRATIONS / CERTIFICATIONS

- Professional Engineer: KY #18915, OH #E-62116, WV #12208, VA#034017, MD #37945, UT#12764765, AL#40541-E, IN#12100510, PA#097425
- Professional Surveyor: WV#1492
- MSHA Impoundment Instructor M86730288
- FAA UAS Pilot Certification #4056723
- WV Pre-Blast Surveyor #18-263

EXPERIENCE SUMMARY

Mr. Willis, a licensed engineer and surveyor, serves as the Mining Engineering Group Leader. Andy is responsible for managing operations in SynTerra's Pikeville, Kentucky, and Tuscaloosa, Alabama, offices where he serves as Senior Project Manager for selected projects. He has more than 30 years of experience throughout Appalachia and the Midwest.

Andy's experience includes design, construction monitoring, and certification of surface and underground facilities associated with a variety of mining projects. Andy has a long history of environmental permitting experience in the Appalachian coalfields and Midwest Aggregates, including NPDES and state water discharge permits.

Due diligence work performed by Mr. Willis includes Phase I Environmental Site Assessments, environmental and mine reclamation liability assessments, and regulatory research.

SELECTED KEY PROJECTS

AML RECLAMATION DESIGN - CLAY AND LESLIE CO., KY:

This project involved engineering design for the reclamation of five abandoned mine land sites located in Clay and Leslie Counties. SynTerra completed conceptual, preliminary, and final designs for each location. During the project, necessary permits were obtained and consent from landowners were gathered. Conditions found during site reconnaissance included open mine portals, disturbed surface areas, mine water discharge, substandard effluent flows, garbage piles, highwall instability, slope stability issues, backfill failure, and subsidence.

HORSEPEN CREEK STREAM RESTORATION - GILBERT, WV:

This project involved survey work and the design for the installation and eventual removal of two 120-inch diameter culverts following mining and the restoration of the stream channel and its riparian zone. It also included

documentation for a 401 Water Quality Certification application and a U.S. Army Corps of Engineers Section 404 Individual Permit application.

THE NATURE CONSERVANCY - EVALUATING SOLAR ENERGY DEVELOPMENT ON PREVIOUSLY MINED LANDS:
West Virginia, although having adequate solar insolation, has witnessed very little solar development to date. The reasons vary, but some of the obstacles to future development appear to be the absence of state-level policies and regulations promoting growth in the solar industry. This study involved a deep dive into evaluating these opportunities, barriers, and changes needed to promote the growth of solar energy development on previously mined lands. Some of the opportunities include access to large tracts of underused, inexpensive lands; the ability to repurpose existing infrastructure; an available displaced mine labor workforce; and large landowners looking for replacement revenue from their land holdings. Barriers include cultural resistance to change from a traditionally coal-powered economy, middle-range insolation values; state-regulated utility market; absence of a Renewable Portfolio Standard and no available state incentives; challenging aspects of existing regulations (PURPA, interconnection, net metering etc.), and historically low electricity rates.

Using data from the West Virginia Mine Permit Databases, mine sites were identified that could hold potential for solar development sometime in the future. The process used in this study involved the development of a site evaluation tool using Google Earth Pro™ to overlay mine permit maps, existing power lines, and substations onto current Google satellite imagery.

This project involved:

- Evaluation of state and federal energy policies
- Opportunities and barriers analysis
- Development of site evaluation tool using Google Earth Pro™
- High-level financial analysis of selected sites
- Preparation of final report

UNDERGROUND MINE SEAL INSTALLATION CERTIFICATION, VARIOUS LOCATIONS:
Since the MINER Act of 2006, more stringent regulations have been in place for the installation of mine seals. Serving as Project Manager, Andy assists operators in the plans needed to install mine seals and with the inspections and certifications of those seals. Over the past 15 years, Andy has provided services for various aspects of mine ventilation seals for a variety of clients in Alabama, Colorado, Kentucky, Ohio, Pennsylvania, Utah, Virginia, and West Virginia.

ASSOCIATIONS:
West Virginia Coal Association
Kentucky Coal Association
Kentucky Crushed Stone Association
National Society of Professional Engineers
Ohio Aggregates & Industrial Minerals Association
Society of Mining, Metallurgy & Exploration (SME)
Tug Valley Mining Institute
Metallurgical Coal Association

RICHARD JACOBS

FIELD SERVICES MANAGER

- 148 River Street, Suite 220, Greenville, SC 29601
- rjacobs@synterracorp.com
- 864-421-9999

EXPERTISE

- Coordination of field services company-wide
- Remediation system installation and maintenance
- Environmental site assessments
- Asbestos and lead-based paint inspections
- Gas vapor assessments

EDUCATION

- B.S., Mechanical Engineering, NC State University, 1993

REGISTRATIONS / CERTIFICATIONS

- SC & NC Asbestos Inspector
- Wastewater Treatment Operator Level B License
- OSHA HAZWOPER and MSHA Miner Training

EXPERIENCE SUMMARY

Richard Jacobs has performed sampling, landfill gas system operation and maintenance, and other landfill remedial activities and reporting. He has performed drilling oversight and groundwater sampling at various industrial landfills. He has also performed asbestos and lead-based paint inspections and performed construction oversight at mine sites. Mr. Jacobs has helped a quarry with NPDES compliance monitoring and currently coordinates SynTerra field activities including drilling, soil sampling, groundwater sampling, and surface water sampling throughout the southeast.

SELECTED KEY PROJECTS

POWER GENERATING UTILITIES – CAROLINAS

Managed coal ash sampling from coal ash basin for characterization. Conducted groundwater sampling associated with coal ash impoundment. Field service manager responsible for scheduling field sample teams for groundwater and surface water sampling events. Also provides real-time troubleshooting, equipment/supplies coordination, and maintenance coordination.

GREENVILLE COUNTY – LANDFILL MONITORING-SC:

Field Leader for managing the routine monitoring requirements for closed and operating municipal landfill facilities, which included methane monitoring, groundwater and surface water monitoring, leachate sampling, and greenhouse gas reporting.

EXIDE – FIELD SYSTEMS – GREER, SC:

Project Manager responsible for operation of the physical/chemical stormwater treatment system, maintenance of the groundwater recovery system, coordination of groundwater monitoring, and annual groundwater corrective action reports at the former lead-acid battery manufacturer.

RUTLEDGE PROPERTY SUPERFUND SITE – SAMPLING AND REPORTING – ROCK HILL, SC:

Field Leader and Project Manager for scheduling and managing annual field sampling, reporting, and maintaining the remediation system.

CONFIDENTIAL CLIENT (MANUFACTURING) – REMEDIATION AND REPORTING – DARLINGTON, SC:

Project manager responsible for the weekly performance monitoring and maintenance of the groundwater recovery systems and compliance reporting. The groundwater recovery systems operate at this 800-acre facility to control off-site groundwater migration.

12c. Are the individuals supporting this project experienced in USEPA *Guidance for Quality Assurance Project Plans* (EPA QA/G-5) and the WVDEP *Quality Assurance Program Plan for the WVDEP OER CERCLA (Superfund) Program*?

☑**YES** Identify the project(s) and describe the work performed that relates directly to the question:

SynTerra has developed and completed a number of Quality Assurance Program Plans for multiple client types and regulatory programs, including CERCLA. In 2022/2023, SynTerra completed a QAPP for Seymour Johnson Airforce Base in Goldsboro, North Carolina. That QAPP outlined procedures for a remedial investigation focusing on PFAS contamination. SynTerra followed USEPA guidelines to confirm data quality and consistency. The investigation aims to define the nature and extent of PFAS effects on soil, groundwater, surface water and sediment, understand PFAS behavior and migration, perform a source strength assessment, support risk assessments, and develop a conceptual site model. The findings are being used to prepare a Remedial Investigation Report per USEPA standards.

☐**NO**

12d. Are the individuals supporting this project experienced with the USEPA Contract Laboratory Program under the guidelines of Sample Submission Procedures for the *Laboratory and Technical Services Branch (LTSB/ASQA, August 2019), the EPA Region 3 Analytical Request Form 2.1 or current (and instructions), and the most recent Statement of Work (SOW SFAM01.1 or current)?*

☑**YES** Identify the project(s) and describe work performed that relates directly to the question:

SynTerra has analytical chemists, trained and experienced data validators, and database experts on staff. Together this team supports the data generation from field implementation, laboratory communication and coordination, data review and validation, database management, and data reporting. SynTerra performs Level II and, in conjunction with key teaming partners, Level IV data validation per USEPA Superfund Guidance, as needed. SynTerra routinely coordinates sampling program design and implementation details (*e.g.*, bottleware needs, turn-around times, quality sample requirements) directly with a number of commercial analytical laboratories. SynTerra can provide management of contracted laboratories to achieve project-specific data quality objectives (DQOs).

SynTerra staff do not have direct experience with USEPA Region 3 Analytical Request Form 2.1; however, our data professionals are familiar with and experienced with required sample submission procedures and the most recent SOW through previous project experience. Many of our projects with State-led Superfund/CERCLA programs (*e.g.*, South Carolina), have similar requirements for compliance with USEPA CLP guidance and requirements for data collection, submission, and reporting.

☐**NO**

12e. Are the individuals supporting this project experienced with the WVDEP OER SOPs?

☐**YES** Identify the project(s) and describe work performed that relates directly to the question:

SynTerra does not have direct experience with WVDEP OER SOPs. However, SynTerra has extensive experience complying with SOPs developed for and implemented by USEPA, the USACE, and multiple state regulatory agencies. Currently, SynTerra holds a Site Assessment and Remediation Contract with the South Carolina Department of Environmental Services to assess and remediate State-led hazardous waste sites. A number of those projects are highlighted under Item 12b.

☒**NO**

12f. Are the individuals supporting this project experienced with the Scribe software?

☐**YES** Identify the project(s) and describe work performed that relates directly to the question:

SynTerra does not have direct experience with Scribe software. However, SynTerra primarily uses EQuIS®, a software package for managing environmental data that interfaces with a number of data analysis applications, including mapping software such as GIS or CAD. This interconnectivity facilitates efficient and accurate production of maps, cross-sections, and other data deliverables. SynTerra stores data in a central repository on a protected, proprietary SQL Server or provides access to clients via a secure internet connection using a web-based GIS.

Beyond utilizing database-driven tools and thorough statistical analysis, SynTerra employs sophisticated machine-learning algorithms to process large, complex data to provide insights into environmental changes, predict future trends, and support decision-making processes.

☒**NO**

12g. Have field personnel completed an OSHA 40-hour HAZWOPER course and mandatory 8-hour refresher training (as applicable)? The training must cover the requirements in 29 CFR 1910.120 including, but not limited to: personal protective equipment (PPE), toxicological effects of various chemicals, hazard communication, handling of unknown tanks and drums, confined-space entry procedures, etc.?

☒**YES** Describe the training and list the name of the individual(s) certified who will be supporting this project:

SynTerra field employees have completed the OSHA 40-hour HAZWOPER training course and completed the annual 8-hour refresher. The training courses cover the required topics in 29 CFR 1910.120. SynTerra's Health and Safety training records and safety metrics are recorded and tracked using various third-party aggregators (*e.g.*, ISNetworld, Avetta) and are available for review upon request.

☐**NO**

12h. Are the individuals supporting this project experienced with the technical writing skills needed to meet the requirements of this project?

☒**YES** Attach an example of the writing (preferably a Sampling and Analysis Plan or equivalent; all reports will be kept confidential) :

SynTerra authors abide by strict internal quality standards. SynTerra documents undergo a senior peer review process, which includes an editorial review. During the editorial review, our technical editor removes technical jargon and confirms that written work products are clear, concise, and conform to Standard English. Additional elements, such as spacing, readability, and consistency, are also checked during the review. Technical reviews are also performed during the senior peer review process to verify the competency of technical work and conclusions. Through this collaborative effort, SynTerra authors deliver high-quality work products.

SynTerra strives to deliver fact-based documents to:

- Clearly communicate plans and results
- Provide rigorous, science-based context and support for conclusions
- Emphasize positive outcomes, where appropriate, and promote public perception

Two SynTerra field sampling plan examples are included as attachments Section 3.0.

☐**NO**

13a. PERSONAL HISTORY STATEMENT OF KEY PERSONNEL (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, MI):	Bryant, Jerry
Years & Type of Experience:	19 Years – Environmental site analysis, surface and underground coal mine planning, environmental permitting, 401/404 permitting, blasting and groundwater inventories

Brief Explanation of Responsibilities

Mr. Bryant will serve as our project manager.

EDUCATION (Degree, Year, Specialization)

B.S., 2002, Biological Science

MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)

WV Office MHST, Experienced Miner Surface Safety Training

PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)

13b. PERSONAL HISTORY STATEMENT OF KEY PERSONNEL (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, MI):	Wylie, Jerry
Years & Type of Experience:	39 Years - Site assessment/ remediation, CERCLA RI/FS, chlorinated solvent assessment/remediation, coal ash assessment/remediation/ regulatory compliance, fractured bedrock hydrogeology, hydrogeologic studies

Brief Explanation of Responsibilities

Senior Geologist, Senior Peer Reviewer, Assessment and Remediation Manager

EDUCATION (Degree, Year, Specialization)

M.S., 1987, Geology
B.S., 1984, Geology

MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State),

National Groundwater Association

PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)

Professional Geologist, South Carolina, 6/30/2027
Professional Geologist, North Carolina, 6/30/2026
Professional Geologist, Tennessee, 7/4/2026

13c. PERSONAL HISTORY STATEMENT OF KEY PERSONNEL (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, MI):	Frank, Howard
Years & Type of Experience:	32

Brief Explanation of Responsibilities

Geologist, SC State Assessment and Remediation Manager

EDUCATION (Degree, Year, Specialization)

M.S., 1994, Geology
B.S., 1991, Geology

MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)

PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)

Professional Geologist, Alabama, 4/30/2026
Professional Geologist, Arkansas, 6/30/2026
Professional Geologist, Florida, 7/31/2026
Professional Geologist, North Carolina, 6/30/2026
Professional Geologist, South Carolina, 6/30/2026
Professional Geologist, Virginia, 8/31/2027

13d. PERSONAL HISTORY STATEMENT OF KEY PERSONNEL (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, MI):	Suttell, Chris
Years & Type of Experience:	27, Project/Program management, site assessment/remediation, federal CCR Rule compliance, NC CAMA compliance, CCR site assessment and corrective action, NPDES permit management and compliance optimization

Brief Explanation of Responsibilities

Geologist

EDUCATION (Degree, Year, Specialization)

B.S., 1998, Geology

MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)

PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)

Professional Geologist, North Carolina, 6/30/2026
Professional Geologist, South Carolina, 6/30/2027

13e. PERSONAL HISTORY STATEMENT OF KEY PERSONNEL (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, MI):	Sherrill, John
Years & Type of Experience:	13 Years, Soil and groundwater assessment and remediation, Phase I and Phase II Environmental Site Assessments, underground storage tank (UST) assessments and closures, Brownfields assessments

Brief Explanation of Responsibilities

EDUCATION (Degree, Year, Specialization)

B.S., 2013, Geology

MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)

Carolina Geological Society, 2025, North Carolina, Member

PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)

Professional Geologist, North Carolina, 6/30/2026

13f. PERSONAL HISTORY STATEMENT OF KEY PERSONNEL (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, MI):	Willis, Andy
Years & Type of Experience:	Surface and underground coal/aggregates mine planning and design, environmental permitting, reclamation management and design, coal and aggregate reserve analysis and calculations, mine feasibility using geologic modeling, mine extraction and subsidence modeling, litigation support as expert witness for mining and environmental cases, environmental site analysis, construction inspection, inspection and certification of underground coal mine seals, mine surveying, certified operator FAA-approved unmanned aerial system (UAS)

Brief Explanation of Responsibilities

Engineer

EDUCATION (Degree, Year, Specialization)

B.S. 1987, Mining Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATION(S) & REGISTRATION STATUS (Type, Year, State)

PROFESSIONAL LICENSE(S) (Type, State, Expiration Date)

Professional Engineer, West Virginia, 6/30/2026, Professional Engineer, Alabama, 12/31/2025, Professional Engineer, Tennessee, 7/31/2027, Professional Engineer, Utah, 3/31/2027, Professional Engineer, Indiana, 7/31/2026, Professional Engineer, Pennsylvania, 9/30/2025, Professional Engineer, Maryland, 11/19/2025, FAA Remote Pilot, Professional Land Surveyor, West Virginia, 6/30/2026

14. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED CONSULTANT ON:			
PROJECT NAME, TYPE, AND LOCATION	NAME/TELEPHONE COMPANY CONTACT	NATURE OF YOUR FIRMS RESPONSIBILITY	PERCENT COMPLETE
USACOE – SJAFB- Remedial Investigation, Goldsboro, NC	Jeff Bauman 770-824-3139 1670 Oakbrook Drive, Suite 365, Norcross GA 30093	Prime	90
Duke Energy, CCR Assessment and Remediation, Various Locations in North Carolina and South Carolina	Edwin Sullivan 890-373-3719 EC13K/P.O. Box 1006 Charlotte, NC 28201-1006	Prime	Ongoing contract
South Carolina Department of Environmental Services Various Sites, Site Assessment and Remediation Contract	Gary Stewart 803-898-0778 2600 Bull Street Columbia, SC 29201	Prime	Ongoing contract
RI/FS, Risk Assessment, Groundwater Monitoring, Memphis, TN	Ken Rike, Syngenta Corp 713-450-6514 2239 Haden Rd Houston, TX 77015	Prime	Ongoing contract
Rutledge Property Superfund Site, RD/RA, Groundwater Remediation, O&M Monitoring, Rock Hill, SC	Michael Simpson, Celanese 704-798-4122 4600 US Highway 421 N. Wilmington, NC 28401	Prime	Ongoing contract

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED SUB-CONSULTANT ON:			
PROJECT NAME, TYPE AND LOCATION	NAME/TELEPHONE COMPANY CONTACT	NATURE OF YOUR FIRM'S RESPONSIBILITY	PERCENT COMPLETE
Genco Power Plant, Vapor Sampling, Battleboro, NC	David Revoir 252-972-7703 2137 Professional Drive Rocky Mount, NC 27804	Prime	95

16. COMPLETED WORK WITHIN THE LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A CONSULTANT TO:

PROJECT NAME, TYPE AND LOCATION	NAME/TELEPHONE COMPANY CONTACT	NATURE OF YOUR FIRM'S RESPONSIBILITY	YEAR COMPLETED
Royal Adhesives/Para-Chem Superfund Site Simpsonville, SC	Mark Masters (864) 967-7691	Prime	2019
Fawn Industries, Remedial Investigation, Middlesex, NC	Misti Hagi 141-235-4011 10235 US 264A Middlesex, NC 27557	Prime	2023
Kayser Roth, Remedial Investigation, Asheboro, NC	Ben Barson 336-906-4510 PO Box 2617 Asheboro, NC 27204	Prime	2020
Fruit of the Loom, Remedial Investigation – In Corrective Action (15 years), Rabun Gap, GA	Tim Brockman 706-746-5311 1585 Yorkhouse Road Rabun Gap, GA	Prime	2024

17. COMPLETED WORK WITHIN THE LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO:			
PROJECT NAME, TYPE AND LOCATION	NAME/TELEPHONE COMPANY CONTACT	NATURE OF YOUR FIRM'S RESPONSIBILITY	YEAR COMPLETED

18. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Department of Environmental Protection.

As an employee-owned business, we understand the importance of prudent spending to protect human health and the environment. We also understand budgetary concern while addressing multiple challenges. Project assignments vary from monitoring of current, safe conditions to assessment of lesser-known situations to implementation of "right-sized" solutions. Our firm has experience working with state agencies and understands how to collaborate effectively to balance competing priorities while meeting state objectives. This collaborative approach helps streamline the process of defining scope, schedule, budgets, and other essential project elements.

In addition to the requested information, SynTerra can also provide the following services:

- Groundwater flow and transport modeling
- Geochemical evaluations
- Mining expertise
- Drone surveys
- PFAS compounds
- Advanced statistical evaluation

19. The foregoing is a statement of facts. Should any information in this questionnaire be falsified or determined falsified at a later date, the West Virginia Department of Environmental Protection reserves the right to void any agreement or contract entered into between the undersigned and their respective firm and the WVDEP.

Signature: 

Title: Vice President

Printed Name: Jerry Wylie

Date: 9/10/2025

SECTION 2 - NON-CONFLICT-OF-INTEREST STATEMENT

Science & Engineering Consultants
148 River St., Suite 220, Greenville, SC 29601 | 864.421.9999

September 10, 2025

State of West Virginia
Department of Environmental Protection
Office of Environmental Remediation
601 57th Street SE
Charleston, WV 25304

SUBJECT: Certification of No Conflict of Interest

I, Jerry A. Wylie, as an authorized representative of SynTerra Corporation, hereby submit this non-conflict-of-interest certification and declare the following:

1. We have been provided with and have reviewed the requirements of Title 40 Code of Federal Regulations (CFR) Part 35.6550 regarding conflicts of interest for State of West Virginia-funded contracts.
2. Based on a thorough review of our records and to the best of our knowledge and belief, we have no actual, apparent, or potential conflicts of interest concerning the work to be performed under this contract.
3. We are not aware of existing or past financial or business relationships with Potentially Responsible Parties (PRPs) at sites within the recipient's jurisdiction that would affect our ability to serve the best interests of the recipient.
4. We do not have relationships with affiliates, subcontractors, or current clients that would result in a conflict of interest related to this project.
5. We certify that no collusion, as defined by federal and state antitrust laws, occurred during the preparation of this bid or proposal, and we have made an independent price determination.
6. We will immediately disclose to the State of West Virginia new information regarding an actual, apparent, or potential conflict of interest that may arise after the submission of this proposal or after the contract has been awarded.

This certification is made with the understanding that failure to provide full disclosure or misrepresentation of relevant information may result in our ineligibility for award and/or contract termination.

Jerry A. Wylie, Vice President
SynTerra Corporation

SECTION 3 - TECHNICAL WRITING EXAMPLE

Science & Engineering Consultants
synterracorp.com

RETENTION PONDS
SAMPLING AND ANALYSIS WORK PLAN

FIBER INDUSTRIES, LLC
1000 EAST MCIVER ROAD
DARLINGTON, SC
DARLINGTON COUNTY

NPDES PERMIT NUMBER
SC0004162

PREPARED FOR

SOUTH CAROLINA DEPARTMENT OF ENVIRONMENTAL SERVICES
BUREAU OF WATER
WATER FACILITIES PERMITTING DIVISION
2600 BULL STREET
COLUMBIA, SOUTH CAROLINA 29201

ON BEHALF OF:

FIBER INDUSTRIES, LLC
1000 EAST MCIVER ROAD
DARLINGTON SC 29532

SUBMITTED: AUGUST 7, 2025

Richard Jacobs
Project Manager

Andrea Kehn
Principal/Senior Peer Reviewer

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SECTION **PAGE**

LIST OF FIGURES

LIST OF ACRONYMS AND ABBREVIATIONS

FBQSTP	The Field Branches Quality System and Technical Procedures
Fiber	Fiber Industries, LLC
NPDES	National Pollutant Discharge Elimination System
Site	Fiber Industries site
SCDES	South Carolina Department of Environmental Services
SVOC	semi-volatile organic compounds
TAL	Target Analyte List
TCL	Target Compound List
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound
WWTP	wastewater treatment plant

1.0 INTRODUCTION

The Fiber Industries site (Site) is located at 1000 McIver Road in Darlington, Darlington County, South Carolina (**Figure 1**). The Site includes approximately 750 acres of land bordered by Black Creek to the north and northeast.

Fiber Industries, LLC (Fiber), leases the property from the owner Darlington Development, LLC. The National Pollutant Discharge Elimination System (NPDES) Permit for the Site has been renewed, effective March 6, 2025. As part of the renewal, the South Carolina Department of Environmental Services (SCDES) requested a plan for the recommended path forward regarding onsite Retention Ponds A, B and C (per permit condition V.E.7). To prepare this plan, the ponds need to be investigated, with respect to water, sludge, and soil quality.

1.1 Background

Darlington Development LLC owns a manufacturing facility in Darlington County, South Carolina (the Darlington Development Site or the Site). The Site was formerly owned and operated by Wellman, Inc. and prior to that, Hoechst Celanese Corporation. The Site is located on McIver Road, approximately three miles east of U.S. Highway 52, between Florence and Darlington, South Carolina. The Site includes approximately 750 acres of land bordered by Black Creek to the north and northeast. The facility was originally built as Celanese Fiber Industries in 1974. Wellman acquired the facility in 1989. Plant operations ceased in October 2008 and the property was acquired in 2009 by Darlington Development LLC, a redevelopment management group. Fiber operates and maintains the site and permits pursuant to the lease agreement with Darlington Development.

1.2 Previous Investigations

In 2011, as part of the NPDES permit renewal, a technical assessment report was prepared. The *Retention Pond Technical Assessment Report* was submitted February 3, 2012. The assessment information was used to evaluate alternatives for continued use or closure of Retention Ponds A, B and C.

The technical assessment included characterization of the sludge present in the retention ponds, and an evaluation of the relationship between the ponds and the groundwater.

SynTerra conducted an assessment of the volume and nature of the sludge in the wastewater retention ponds. Four sludge samples were collected from each wastewater retention pond, one sample from each quadrant of each pond, to assess potential variability within each basin. The approximate thickness and physical characteristics of the sludge at each location were noted. Samples were submitted for chemical analysis of the primary constituent of concern, 1,4 dioxane, plus nitrate, pH, total volatile solids and total percent solids. A hydrogeologic evaluation of the ponds and groundwater was also performed.

The assessment concluded that the ponds should remain to benefit the remediation of the 1,4 dioxane present in the groundwater at the Site.

1.3 Objective

The objective of this investigation is to evaluate the current water, sludge, and soil of Retention Ponds A, B and C at the Site. The data will be used to determine the path forward regarding Retention Ponds A, B and C.

2.0 SCOPE OF WORK

SynTerra will implement this Work Plan after its approval by SCDES. Activities will include collection and analysis of wastewater and sludge in each of the ponds, and soils beneath the ponds. Activities will be conducted in accordance with this Work Plan and U.S. Environmental Protection Agency (USEPA) Region IV, *The Field Branches Quality System and Technical Procedures* (FBQSTP).

Each pond will be divided into four quadrants. Wastewater, sludge, and soil samples will be collected from each quadrant **(Figure 2)** using a boat. Wastewater samples will be collected using a bailer. Sludge samples will be collected using a clam-shell dredge or sludge judge. Soils beneath the ponds will be sampled using a hand auger.

Wastewater samples: The sampling technician will lower the bailer to the bottom of the pond and then retrieve the bailer with a sample representative of the water column. The sample will be gently poured into sample containers provided by the laboratory and the sample containers will be placed in a clean cooler on ice. The wastewater sample will be collected prior to the collection of the soil sample at the same location. Field indicator parameters, pH and oxidation reduction potential (ORP) will be measured in the field using a multi-parameter meter on the sample collected from the bailer and readings recorded in sampling field logs.

Sludge samples: If sludge is present, samples will be collected from the bottom of the ponds at each of the wastewater sample locations (discussed above) using a clam-shell dredge (*US EPA Region IV FBQSTP-Sediment Sampling, April, 17, 2025)*. Following retrieval of the sample to the surface, the water will be allowed to drain from the collection device. The sludge sample will be collected from the dredge using a clean, stainless-steel spoon transferred into the laboratory-supplied container and the sample containers will be placed in a clean cooler on ice.

Soil samples: Will be collected from below the sludge layer of the ponds, if present, at each location using a hand auger that is capable of closing to keep the soil sample in the auger during retrieval. The ponds are five to ten feet in depth. The soil sample will be collected from the auger using a clean, stainless-steel spoon transferred into the laboratory-supplied container and the sample containers will be placed in a clean cooler on ice.

Sampling equipment will either be new, disposable equipment or will be decontaminated between samples to prevent possible cross-contamination.

Collected wastewater, sludge, and soil samples will be submitted to a South Carolina-certified laboratory for analysis of Target Compound List (TCL) volatile organic compounds (VOCs) by USEPA Method 8260B and TCL semi-volatile organic compounds (SVOCs) by USEPA Method 8270D.

3.0 PROJECT SCHEDULE

The overall schedule for completion of the work is summarized below. Significant activities, the anticipated duration of each, and the estimate of the completion date for each activity are provided.

Table 1 Project Schedule

Anticipated Assessment Performance Schedule	
Action Item	**Anticipated Completion Date**
Submittal of Work Plan	September 15, 2025
Approval of Work Plan	October 15, 2025 (Assumes 30 days for review and approval by SCDES)
Field Activities	14 Days following Work Plan Approval
Final Assessment Report	90 Days following Work Plan Approval

Prepared by: RHJ Checked by: HJF

4.0 REPORTING

After completion of the data collection activities detailed in this Work Plan, results will be summarized in a report. The report will be prepared in accordance with industry standards and will be signed and sealed by a Professional Engineer or Professional Geologist licensed in South Carolina.

The report will contain a discussion of investigative methods and deviations from the approved Work Plan. The report will also contain:

- Figures and tables to summarize the data
- A site map depicting sampling locations
- Documentation of field observations including sample descriptions and field screening results
- Laboratory analytical data
- Recommendations for proposed plans for Retention Ponds A, B and C.

After receipt of the analytical report from the laboratory, SynTerra will validate the data. The analytical results will be compared to the ecological screening values in USEPA Region 4 *Ecological Risk Assessment – Supplement to Risk Assessment Guidance for Superfund (RAGS)* (USEPA, 2018).

After Fiber's review and approval, three hard copies of the final report and one electronic copy will be submitted to SCDES.

5.0 REFERENCES

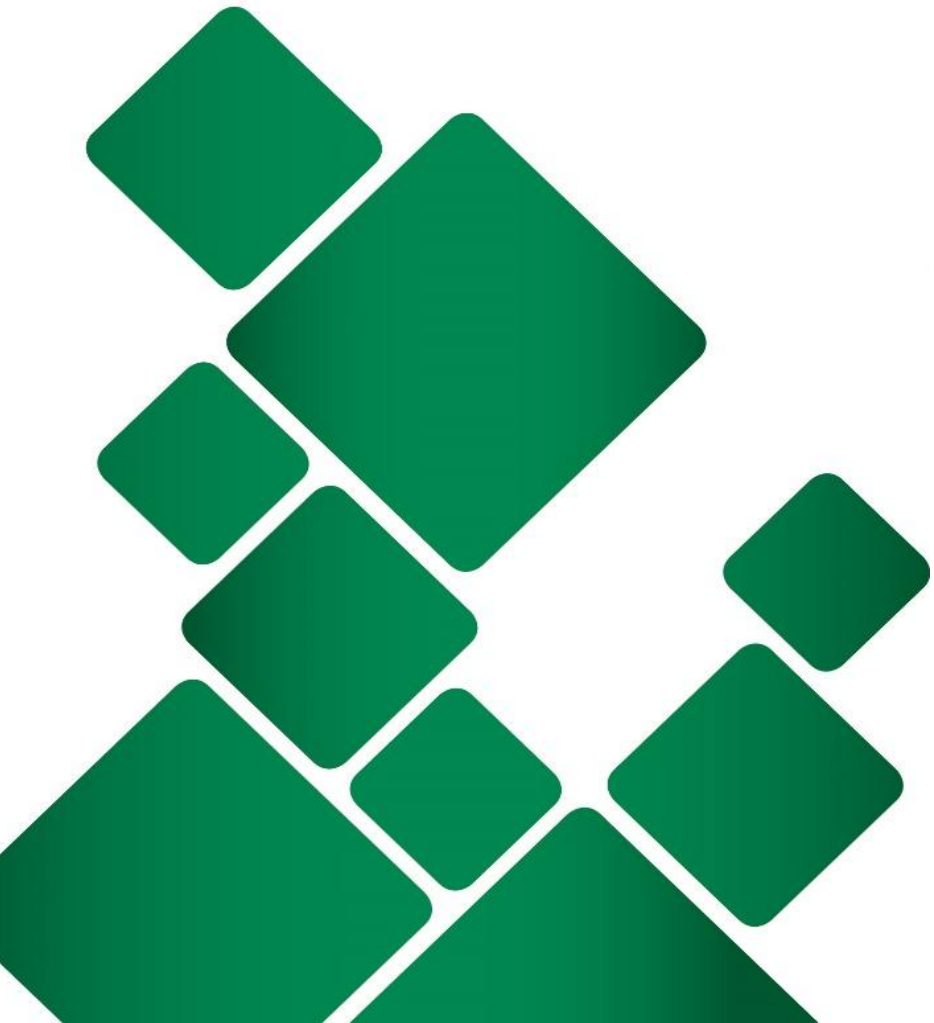
SynTerra, Retention Pond Technical Assessment Report, February 3, 2012, Darlington Development, LLC, Palmetto Plant, Darlington, SC

USEPA. (2018). Region 4 Ecological Risk Assessment Supplemental Guidance, March 2018 Update.

USEPA, Region IV, *Field Branches Quality System and Technical Procedures.* *https://www.epa.gov/quality/quality-system-and-technical-procedures-sesd-field-branches*

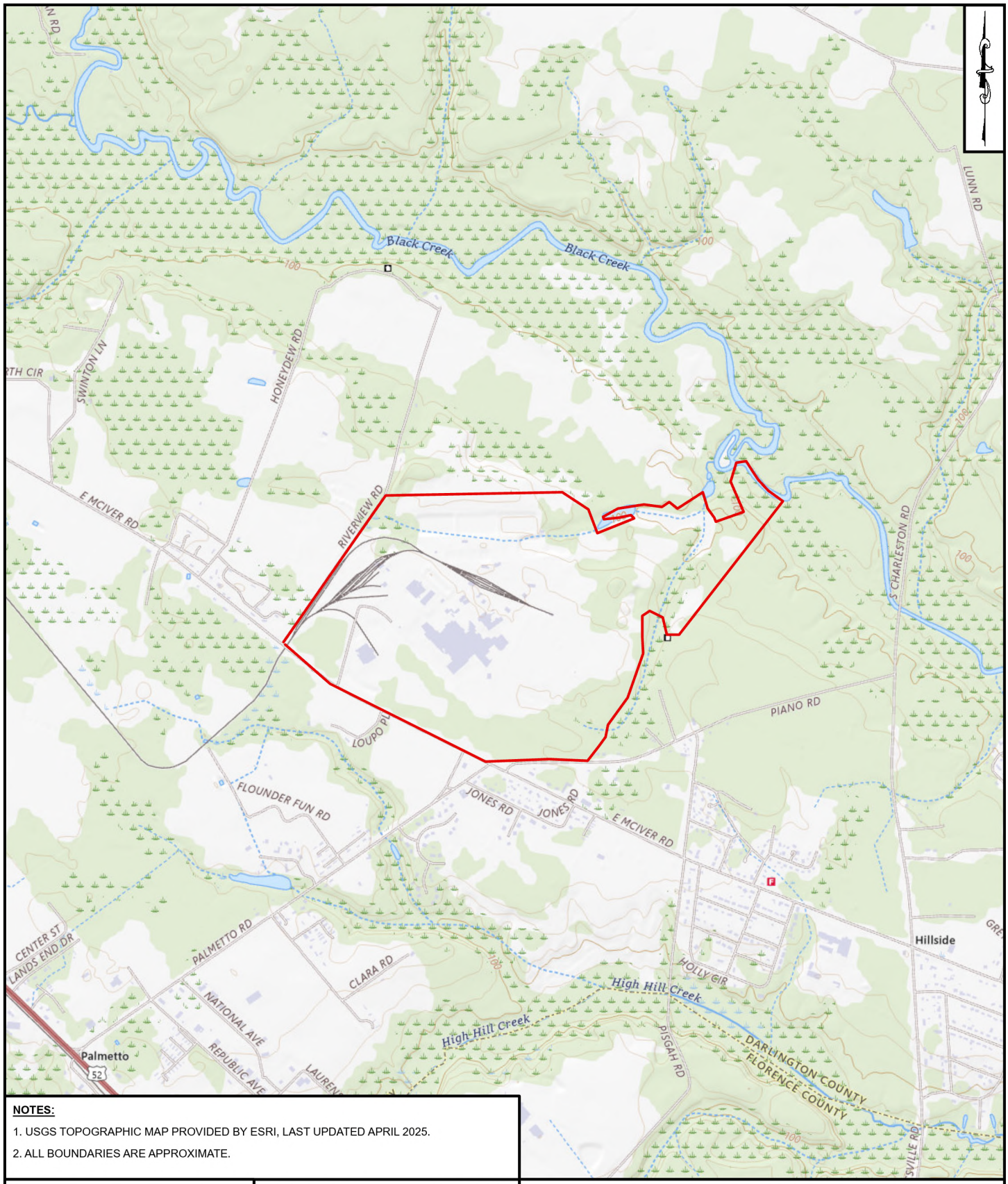
1. Field Equipment Cleaning and Decontamination, SESDPROC-205-R4, June 22, 2020.
2. Field Measurement of Dissolved Oxygen, SESDPROC-106-R5, April 22, 2023.
3. Field pH Measurement, SESDPROC-100-R6, April 22, 2023.
4. Field Specific Conductance Measurements, SESDPROC-101-R7, April 22, 2023.
5. Field Temperature Measurement, SESDPROC-102-R7, April 22, 2023.
6. Field Turbidity Measurement, SESDPROC-103-R6, April 22, 2023.
7. Sediment Sampling, LSASDPROC-200-R5, April 22, 2023.
8. Soil Sampling, LSASDPROC-300-R5, April 22, 2023.
9. Surface Water Sampling, LSASDPROC-201-R6, April 22, 2023.

FIGURES



synTerra

Science & Engineering Consultants



NOTES:

1. USGS TOPOGRAPHIC MAP PROVIDED BY ESRI, LAST UPDATED APRIL 2025.
2. ALL BOUNDARIES ARE APPROXIMATE.

synTerra

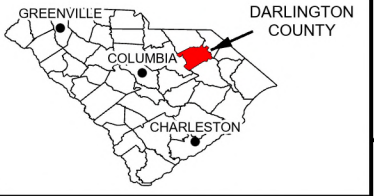


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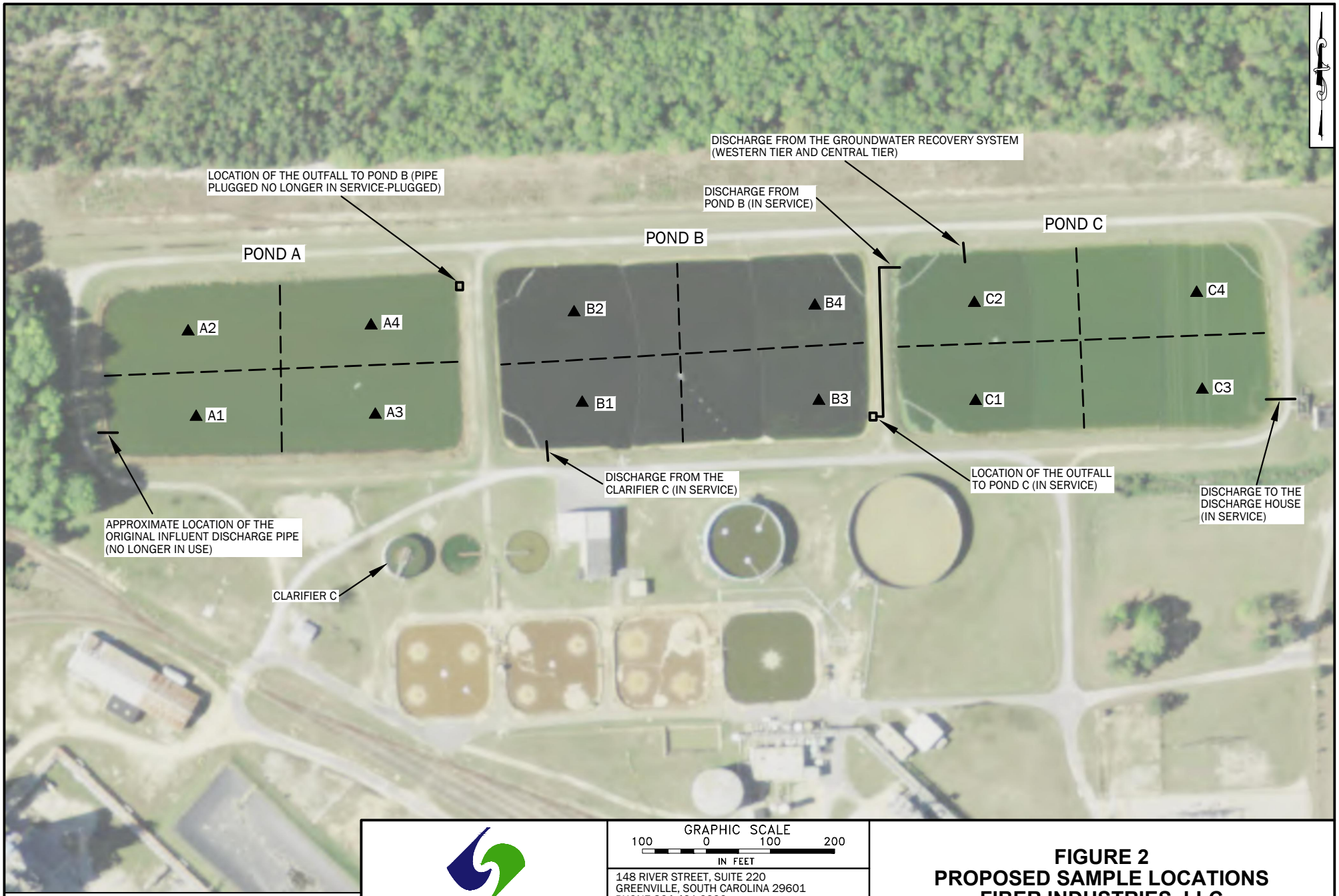
FIGURE 1
SITE TOPOGRAPHIC MAP
RETENTION POND EVALUATION
1000 EAST MCIVER ROAD
DARLINGTON, SOUTH CAROLINA

DRAWN BY: L. FOREMAN	DATE: 04/12/2023
REVISED BY: L. FOREMAN	DATE: 07/03/2025
CHECKED BY: R. JACOBS	DATE: 07/03/2025
APPROVED BY: R. JACOBS	DATE: 07/03/2025
PROJECT MANAGER: R. JACOBS	

GRAPHIC SCALE
750 0 750 1,500
(IN FEET)

G:\0 ARCGIS PRO PROJECTS\PROPERTY_SERVICES\PHASE1S\SOUTHCAROLINA\SOUTHCAROLINA_PHASE1.APRX



NOTES:
2009 NRCS AERIAL PHOTOGRAPH OBTAINED FROM THE NATURAL RESOURCES CONSERVATION SERVICE'S GEOSPATIAL DATA GATEWAY AT http://datagateway.nrcs.usda.gov/.

GRAPHIC SCALE
100 0 100 200
IN FEET

148 RIVER STREET, SUITE 220
GREENVILLE, SOUTH CAROLINA 29601
PHONE 864-421-9999
www.synterracorp.com

DRAWN BY: RICHARD JACOBS DATE: 07/21/2025
PROJECT MANAGER: KATHY WEBB
LAYOUT: SAMPLE LOCATIONS

07/21/2025 9:57 AM P:\Darlington Development.180\00.6720.00 Retention Pond Evaluation\POND SAMPLING.dwg

FIGURE 2
PROPOSED SAMPLE LOCATIONS
FIBER INDUSTRIES, LLC
DARLINGTON, SOUTH CAROLINA

APPENDIX B
Field Sampling and Analysis Plan

[redacted] [redacted] Site
Memphis, Shelby County, Tennessee
Site ID # [redacted]

Prepared by

SynTerra Corporation
Greenville, SC

March 2010

TABLE OF CONTENTS

ACRONYMS

cm	centimeters
COPCs	Constituents of Potential Concern
DoR	Department of Remediation
DQOs	Data Quality Objectives
EPA	Environmental Protection Agency
FBQSTP	Field Branches Quality System and Technical Procedures
FS	Feasibility Study
FSAP	Field Sampling and Analysis Plan
GPS	Global Positioning Satellite
HCI	hydrochloric acid
ID	Identification
IDW	Investigation Derived Waste
in.	inches
bgs	Below Ground Surface
ntu	Nephelometric Turbidity Units
PCBs	Polychlorinated Biphenyls
PID	Photoionization Detector
QAPP	Quality Assurance Project Plan
RI	Remedial Investigation
SVOC	Semivolatile Organic Chemical
TAL	Target Analyte List
TCL	Target Compound List
TDEC	Tennessee Department of Environment and Conservation
VOC	Volatile Organic Compound

1.0 Introduction

This Field Sampling and Analysis Plan (FSAP) describes the methods to be used while conducting Remedial Investigation (RI) and Feasibility Study (FS) field activities at the [redacted] Site (Site) in Memphis, Tennessee. This document will be used in conjunction with the project Quality Assurance Project Plan (QAPP) to conduct the assessment.

The purpose of the FSAP is to establish data collection activities, which are compatible with data quality objectives (DQOs) identified in the QAPP, and to provide a mechanism for planning and approving field activities. The RI/FS scope of work includes the delineation of surface soil, subsurface soil, sediment, surface water, and groundwater that may have been impacted by Site-related activities. The term "sediment" is used to describe soils in locally low lying areas such as a drainage ditch that is typically dry. The FSAP provides guidance for personnel overseeing or conducting field work by defining standard methods and procedures for conducting field measurements, sample collection, and sample management. Media that will be sampled may include surface and subsurface soils, surface and subsurface sediment, groundwater, and investigation derived waste (IDW) samples. Sampling methods, sample preservation, sample chain-of-custody, and sampling equipment decontamination procedures presented in this FSAP are based upon the procedures in the US Environmental Protection Agency (EPA) Region 4.

2.0 Sample Control, Field Records and Document Control

This section presents procedures for sample control, field records, and document control. Sample control includes sample identification and chain-of-custody procedures.

2.1 Sample Designation

Samples collected for specific field analyses or measurement data will be recorded directly in bound logbooks (field books) using a designated sample identification. Standard sample labels will be attached to the sample containers and the labels will carry the designated sample identification and sample analysis procedure.

All samples collected for analysis will be assigned a unique sample identifier. The identifier will link specific samples to the location and, if applicable, the depth from which the sample was collected, sample media, and sample type. The sample identifiers will be recorded on the sample label that is attached to the sample container, in a project field book and/or sample log, on sample chain-of-custody forms, and in the project database. The sample designation methodology can be divided into three main areas: 1) location, 2) sample specifics, and 3) qualifiers. Each of these areas is described below.

2.1.1 Sample Location

The first portion of the sample designation will identify the sample location. Each location will be assigned a two- to three-letter alphabetic code that will identify the type of sample location. The codes for waste characterization samples and investigation-derived waste samples will correspond to a particular container (i.e., drum, tank, etc) instead of a location.

- SB – soil boring (location where only surface or subsurface soil samples are collected)
- SD – sediment sample (location where material is collected from beneath standing water or where material is collected that is normally covered by water)
- WMW – [redacted] monitoring well (location of a "permanent" well where groundwater samples are collected, and can include soil samples collected during the well installation process). The W will be used in order to differentiate newly-installed wells from older monitoring wells installed at the Site.
- TMW – temporary monitoring well (same as monitoring well, only the well is not "permanent")
- WS – wipe sample (self explanatory)
- WC – waste characterization sample (sample to identify the contents of a container)
- IDW – investigation-derived waste sample (sample of waste generated by the RI activities)

The initial alphabetic code will be followed by a sequential numeric code for each of the above location types. For example, the first soil boring location will be designated SB-1, the second soil boring location SB-2, etc. This designation process allows all assessment samples to be associated with a particular horizontal location at the Site, and in turn, each horizontal location at the Site where samples are collected will be assigned a unique location identification (ID).

Waste characterization and investigation-derived waste sample designations will be copied onto the container being sampled using a weather-proof marker, paint, or label. This will allow the sample results to be traced back to the container that was sampled.

2.1.2 Sample Specifics

The sample location ID will be followed by an alpha-numeric field that will identify the type of sample (i.e., grab or composite, when applicable) and the sample depth. The procedures for assigning the appropriate codes are provided below.

Soil samples, whether from a soil boring or monitoring well, require additional information in the sample designation to distinguish the sample depth and to identify grab versus composite samples. A three to five character alpha-numeric code beginning with the letter "G" will be used when it is appropriate to indicate a grab sample from a specific depth range in inches below ground surface (in. bgs):

- G06 – grab, 0 to 6 in. bgs;
- G618 – grab, 6 to 18 in. bgs;
- G1836 – grab, 18 to 36 in. bgs.

Similarly, a four to six character alpha-numeric code beginning with the letters "AC" (areal composite) will be used when it is appropriate to indicate a composite sample depth range:

- AC06 – areal composite sample collected from 0 to 6 in. bgs

It should be noted that the sample designation for the areal composite sample submitted to the laboratory for analysis will be assigned a location ID as described in Section 2.1.1 of this document; however, this location ID will not correspond to an actual location at the Site. Therefore, field personnel who collect areal composite samples will record the sample designations and location information for the individual grab samples that comprise the areal composite.

No grab, composite, or depth codes will be used for groundwater samples (WMW or TMW), waste characterization samples, investigation derived waste samples, wipe samples, or equipment rinsate blanks.

2.1.3 Qualifiers

The final portion of the overall sample designation is used to identify quality assurance samples. Samples that are collected for routine analysis only (i.e., not for quality assurance purposes) will not have qualifiers appended. Additionally, samples with a qualifier included in the sample designation are considered secondary and will be used primarily for data quality assessment. The following qualifiers will be appended to the appropriate sample type:

- DP – duplicate sample
- SP – split sample
- MS/MSD – matrix spike/matrix spike duplicate

2.1.4 Special Sample Designations

Certain samples will require special sample designations. In general, the samples requiring special designations are quality control-related samples. These include trip blanks and equipment blanks. The procedures for assigning sample designations for these samples are as follows.

Trip blanks will accompany each shipping container that contains samples for volatile organic compound (VOC) analysis. The sample designation for trip blanks will be derived using the date the samples are shipped:

1. Begin the sample designation with "TB" followed by the numerical month, day, and year (e.g., TB-01152009 for January 15, 2009).

2. Add a media identifier code (e.g., S for soil or sediment, GW for water)

3. Add a sequential number if more than one trip blank by media is being shipped on a single day (e.g., 2 for the second of two water trip blanks shipped on the same day).

Equipment blanks will be collected from any equipment used in sample collection or processing that is re-used for more than one sample location. Equipment blanks will be designated using the same sample designation for the first sample taken after decontamination procedures. The qualifier "RB" will be appended to the sample designation to indicate an equipment rinsate blank. For example, for an equipment blank from a hand auger after decontamination and before sample SB-3-G06, the sample designation for the equipment blank will be SB-3-G06-RB. If an equipment blank is collected for more than one item prior to collecting a particular sample, a sequential number will be added after the "RB" (e.g., SB-3-G06-RB-2 for the second rinse blank before sample SB-3-G06).

Following are examples of the sample nomenclature:

SB-22-G618 Grab (G) soil sample collected from soil boring (SB) location 22 from a depth of 6 to 18 in. bgs.

SD-5-G1836 Grab (G) sediment sample (SD) collected from location 5 from a depth of 18 to 36 in. bgs.

SB-3-AC06 Areal composite (AC) soil sample collected from location 3 from a depth of 0 to 6 in. bgs.

SB-3-G06-RB Rinsate blank from sampling equipment taken prior to sample SB-3-G06.

WMW-1 Groundwater sample collected from monitoring well 1.

TMW-4 Groundwater sample collected from temporary monitoring well 4.

TB-01152009 GW Trip blank shipped on January 15, 2009 for water analysis.

Sampling information will be recorded directly in bound logbooks (field books) and/or referenced field forms using designated sample identification nomenclature. If a field form is used, a photocopy of the completed form will be taped into the bound logbook. Standard sample labels will be attached directly onto sample bottleware/containers immediately before or after sample collection. Information on sample labels will include:

- Unique sample designation;
- Date sample was collected;
- Laboratory analyses that will be conducted on the sample; and
- Sample preservative (if appropriate); and
- Initials of person collecting the sample.

2.2 Chain-of-Custody Procedures

Chain-of-custody forms must accompany all sample containers to document the transfer of the containers and samples from the originating laboratory, through the field collection, and to the laboratory receiving the samples for analyses. According to EPA Region IV Field Branches Quality System and Technical Procedures (found at http://www.epa.gov/region4/sesd/fbqstp), a sample container is under custody while any of the following apply:

- it is in the actual possession of an investigator;
- it is in the view of an investigator, after being in their physical possession;
- it was in the physical possession of an investigator and then the investigator secured it to prevent tampering; or
- it is placed in a designated secure area.

Chain-of-custody procedures are established to maintain and document proof of proper sample custody. Possession of a sample must be traceable from the time the sample is collected until the sample is received by the analytical laboratory. Chain-of-custody procedures shall follow procedures as outlined in the QAPP.

Unique sample designation numbers (Section 2.1) will be used on the chain-of-custody form to document the inclusion of specific samples within a sample shipment and to document sample information and handling instructions such as:

- Total number of sample containers for each unique sample;
- Date and time sample was collected;
- Analyses to be conducted; and
- Special handling instructions.

2.3 Field Records

Documentation of an investigative team's field activities serves as a basis for technical Site evaluation and report preparation. It is essential that field documentation provide a clear, unbiased picture of field activities. Aspects of sample collection, sample handling, and observations will be documented in field books or applicable field form. Bound field books will be used on work assignments requiring field activities. Entries into field books will be legibly written in indelible ink and provide a clear record of all field activities.

The following information will be provided on the inside front cover or the first page of the field book:

- Project Name and Project Manager,
- Site Location,
- Job Number,
- Date,
- Individual to whom the field notebook is assigned.

Instructions and procedures relating to the format and technique in which notebook entries are made are as follows:

1. Leave the first two pages blank. They will provide space for a table of contents to be added when the field notes are complete.
2. Entries will be made in waterproof ink.
3. Entries will be made in language that is objective, factual, and free of personal feelings or other terminology which might appear unclear or inappropriate.
4. Entries will be printed as neatly as possible.
5. Entries will be logged in military time format.
6. Errors in the field notes will be indicated by drawing a single line through the text, ensuring the text is still legible, and initialing and dating the errors.

7. A new page will be started at the beginning of each day's field activities and the remaining clear page at day's end will be marked out with a single initialed line at the day's end.
8. The person taking notes shall sign, number and date each page.
9. Later additions, clarifications, or corrections must be dated and signed.

Instructions and procedures providing guidance on the information to be recorded on field activities are provided below:

1. A new page will be used at the start of each day's activities. The date, time, on-site personnel, and observed weather conditions will be noted. Significant changes in weather conditions will be noted as they occur.
2. Sketches or maps to identify photo and/or sample locations will be included in the field book. Landmarks and/or direction of north will be included.
3. On-site health and safety meetings will be documented.
4. As part of the chain-of-custody procedure, in-situ sampling information will include sample number, date, time, sampling personnel, sample type, designation of sample as a grab or composite, and any preservative used. Sample locations will be referenced to sample numbers on a Site sketch or map.
5. Information for in-situ measurements will include a sample ID number, date, time, and personnel taking measurements.
6. If on-site interviews occur, relevant information obtained will be recorded. Names of persons interviewed, the interest group represented (if applicable), address, and phone number will be recorded.
7. Any other relevant information, which would be difficult to acquire at a later date, will be recorded.

Project field books are the property of SynTerra Corporation and will remain in their possession when the project has been concluded. None of the documents are to be destroyed or thrown away, even if they are illegible or contain inaccuracies.

3.0 Sampling Design and Procedures

A sampling goal is to collect samples that are representative of the media being investigated. Valid results require proper sample collection, sample handling, and sample preservation techniques; proper sample identification and documentation in permanent field records; proper sample chain-of-custody; and proper sample packing and transportation (shipping) to ensure they arrive at the laboratory intact and at the appropriate temperature. The following factors and procedures shall be considered and/or implemented in planning and conducting sampling operations:

- Safety of sampling personnel.
- Selection of representative sampling locations.
- Selection and preparation of proper sampling equipment.
- Selection of parameters to be measured/analyzed.
- Selection of sample fractions to be analyzed (e.g., total or dissolved metals in water samples).
- Required sample volumes.
- Selection and proper preparation of sample containers.
- Sample preservation.
- Sample holding times.
- Sample handling and mixing.
- Sample identification.
- Transportation and shipping of samples.
- Sample chain-of-custody.

3.1 Definitions

Following are definitions of key sampling terms:

- ***Grab Sample*** - An individual sample collected from a single location at a specific time or period of time.
- ***Composite Sample*** - A sample collected over a temporal or spatial range that typically consists of a series of discrete, equal samples, which are combined or "composited". Although there are several types of composite samples, the only type of composite sample that is anticipated for the [redacted] Site is an areal composite.
- ***Areal Composite*** - A sample composited from individual grab samples collected over an areal or horizontal cross-section basis. The grab samples are of equal volume and are collected in an identical manner.
- ***Split Sample*** - A sample that has been divided into two or more containers from a single sample container. Adequate mixing is performed such that the two portions of a split

sample are, for all practical purposes, identical. The primary purpose of a split sample is to measure sample handling variability.

- ***Duplicate Samples*** - Two or more samples collected consecutively over a short period of time (e.g., less than 10 minutes) from a common source under identical conditions and placed into separate but otherwise identical containers.
- ***Control or Background Samples*** - A sample taken in an area known or thought to be free of Site-related chemicals of concern.
- ***Sample Aliquot*** - A portion of a sample that is representative of the entire sample.
- ***Trip Blank*** - A sample that is prepared prior to the sampling event and is stored with the investigative samples throughout the sampling event. The trip blank is used as a quality control check for organic compound analyses.
- ***Field Blank*** - A sample that is prepared in the field to evaluate the potential for contamination of a sample by Site contaminants from a source not associated with the sample collected. The sample containers are filled with organic-free deionized water in the field. The deionized water is handled in the same manner as the sample (e.g., if sample is groundwater that has been filtered, the deionized water will be filtered). Field blanks contain the same preservatives as the subject samples.
- ***Rinsate Blank*** - A sample of organic-free deionized water that has been passed across the surface of sampling equipment after the equipment has been decontaminated. The rinsate blank is used to check for the effectiveness of the field decontamination procedure between samples.

3.2 Decontamination Procedures

Decontamination procedures are intended for use by field personnel for cleaning sampling and other equipment in the field. Sampling and field equipment cleaned in accordance with these procedures will meet the minimum requirements for DQO data collection as specified in the QAPP.

Proper decontamination of sampling equipment is essential to prevent cross-contamination of samples. All non-disposable sampling equipment will be decontaminated before sampling, between each sample collection event (unless samples are to be composited), and at the conclusion of sampling. Sampling equipment will be decontaminated according to the following procedures:

- Prepare temporary decontamination pad to collect decon liquids.
- Clean with tap water and laboratory detergent using a brush if necessary to remove particulate matter and surface films.
- Rinse thoroughly with tap water.
- Rinse thoroughly with deionized water.

- Rinse once with isopropanol if organic compounds are the constituents of concern. Rinse once with 0.1normal (N) hydrochloric acid (HCl) if inorganic compounds are the constituents of concern. If both organic and inorganic compounds are of concern, the isopropanol rinse will take precedence.
- Rinse thoroughly with organic-free water and allow to air dry.
- Wrap with plastic or aluminum foil or place in a clean, polyethylene bag to prevent contamination if equipment is going to be stored or transported.

During field investigations, large equipment such as drill augers, rods, bits, and/or backhoe equipment will be steam cleaned (soap and high pressure hot water). Sampling equipment such as split barrel samplers will be decontaminated according to the procedure described above. Tap water (potable) will be used for steam cleaning and will be obtained from the local public water supply.

Investigation-derived waste (i.e., decontamination fluids, purge water, soil cuttings, etc.) will be contained in steel 55-gallon drums. The drums will be labeled according to content, sampling media, location and date generated. Disposal of investigation-derived waste will be based on the results of the sample analyses.

4.0 Environmental Sampling

Use of proper sampling procedures is necessary to ensure that representative samples for analysis are collected. Samples collected for laboratory analyses will be collected using equipment that is properly decontaminated (Section 3.2). Samples collected for laboratory analyses will be collected according to the specifications of the analytical laboratory relative to containers, sample preservation, sample volume required, etc. Persons collecting samples for laboratory analyses will wear new, powder-free Nitrile® or latex gloves when collecting the sample. Each sample will be transferred to new, clean, containers supplied by the analytical laboratory. In general, sample collection priority is defined by the following order:

- Target Compound List (TCL) VOCs;
- TCL Semivolatile Organic Compounds (SVOCs);
- TCL Polychlorinated Biphenyls (PCBs) and Pesticides;
- Site Constituents of Potential Concern (COPCs); and
- Target Analyte List (TAL) Metals and Cyanide.

4.1 Groundwater Monitoring Well Installation

Intrusive investigation techniques and methods (e.g., test borings, monitoring well installation, etc.) will be performed by a qualified drilling company licensed by the State of Tennessee and approved by the Memphis and Shelby County Health Department. Field activities will be supervised by a Professional Geologist licensed in the State of Tennessee. Abandonment of soil borings or wells/piezometers will be conducted in accordance with procedures included in *TDEC Rule Chapter 1200-4-9-.16 Well Abandonment.* Well construction will be conducted in accordance with well construction standards outlined in *TDEC Rule Chapter 1200-4-9-.10 Well Construction Standards* and in accordance with *Rules and Regulations of Wells in Shelby County, which can be found at http://www.shelbycountytn.gov/FirstPortal/dotShowDoc/dotContent/Government/CountyServices/HealthServices/EnvironmentalHealth/water_remed.htm.*

4.1.1 Permanent Monitoring Wells

A variety of drilling methods (sonic, auger, direct push) may be used to install permanent monitoring wells. In general, permanent monitoring wells will be completed with the installation of 2-inch diameter, flush-threaded PVC well screen (0.010 inch slot size) at the target depth followed by Schedule 40 PVC casing to the ground surface. The well screen length and/or slot size may vary depending upon Site conditions and the primary purpose for the well installation. The selected well screen length will also account for historical water table fluctuations. A sand filter pack will be placed within the boring annulus to a depth of approximately two feet above the well screen. A two-foot, fine-grained sand filter pack will be placed above the sand pack. Bentonite will be placed within the boring annulus above the fine-grained sand filter pack. Neat cement grout will be added to the remaining annular space up to the ground surface. Well

completions will include construction of a concrete well pad (three feet by three feet) with a protective flush-mount vault or a lockable steel protective well casing, and a lock. Flush-mounted wells will be secured using a lockable compression well cap and the protective well vault will be secured with steel bolts or equivalent.

4.1.2 Well Development

Upon installation, groundwater wells will be developed by removing a sufficient amount of water to flush the filter pack and allow proper groundwater movement into the wells. Well development may be accomplished by employing a submersible pump, dedicated bailer, peristaltic pump, surge block, or by a combination of methods. Development will continue until groundwater representative of the aquifer is produced by the well. Representative conditions are defined as pH, temperature, and specific conductivity measurements that stabilize to within +/- 0.1 standard units, +/- 0.5ºC, and +/- 10%, respectively, and the water is relatively clear of suspended solids.

4.1.3 Temporary Piezometers

Temporary piezometers will be completed using direct push techniques/methods. If direct push methods are not successful, alternate drilling methods may be employed. In general, temporary piezometers will be constructed using 1-inch diameter (2-inch if alternate methods are used), flush-threaded Schedule 40 PVC casing and a five- or 10-foot section of 0.010-inch slotted PVC screen. The screen will be set to a depth that intercepts the water table and accounts for historical water level fluctuations. Filter sand will be used to fill the annular space surrounding the well screen. Filter sand will be emplaced to at least two feet above the screen. The remaining annular space above the filter pack will be filled with bentonite slurry. Temporary piezometers will be abandoned within 120 days of installation to allow for several rounds of water table elevation measurement.

4.2 Groundwater Sampling Procedures

The depth to water (water levels) will be measured at Site monitoring well installations within one week prior to groundwater sample collection. Measurements will be made using a decontaminated electronic water level indicator and the depth to groundwater will be recorded to an accuracy of one hundredth of a foot.

Groundwater sample collection will be initiated with the purging of three well volumes of groundwater from the monitoring well. If well recharge is slow and the well can be purged to dryness, no additional purging will be necessary, provided that recharged groundwater turbidity is equal to or less than 10 Nephelometric Turbidity Units (ntu). Field parameters including pH, temperature, specific conductivity, and turbidity will be measured on the first purge water from the well and periodically thereafter during the well purge process. A minimum of three well

volumes will be removed and the field indicator parameters will be stabilized prior to sample collection.

Pesticides, herbicides, SVOCs, and naturally-occurring metals are often adsorbed onto soil sediments in groundwater samples. Consequently, analysis of turbid groundwater samples may result in elevated concentrations in water samples following analytical laboratory extracting procedures. Purging and sampling methods that minimize turbidity will be employed. However, if groundwater turbidity below 10 ntu cannot be achieved prior to sampling, samples will be collected. Turbidity concerns will be noted in the field notebook and will be taken into account when interpreting analytical results. In this case, additional samples may be collected, filtered, and submitted for using the interpreting analytical results.

For samples collected for metals analyses, both unfiltered and field-filtered samples may be collected. However, only unfiltered sample results may be utilized for comparison against screening levels. Field-filtering will be accomplished using disposable 0.45 micron filters. Equipment used to monitor groundwater quality indicators during purging will be calibrated as described in the QAPP.

When possible, disposable or dedicated sampling equipment will be used to collect groundwater samples and to minimize the potential for sample cross-contamination. If non-disposable sampling equipment is used, the equipment will be decontaminated (Section 3.2) prior to and after sample collection from any single well. Groundwater purging and sampling may be conducted by any of the following methods:

- Disposable bailers suspended from new, clean nylon cord. This technique is recommended when sampling wells 2-inches or greater in diameter and when the total purge volume is 50 gallons or less. This sampling method will only be employed if the following sampling methods are not feasible or effective at collecting a groundwater sample.

- Peristaltic pump using new (unused) polyethylene tubing. This technique is recommended only when the depth to the water table is less than 20 feet from the ground surface and when the total well purge volume is 10 gallons or less.

- A dedicated Well Wizard® pneumatic pump may be used for periodically sampling relative deep permanent groundwater monitoring wells. The Well Wizard® groundwater sampling system is preferred when maximum control of the purge rate is important.

- A submersible pump may be used when purging and sampling permanent groundwater monitoring wells with a total well volume equal to or greater than 50 gallons and the well is not equipped with a dedicated Well Wizard® pneumatic pump. Thorough decontamination of the submersible pump is required prior to purging and collecting groundwater samples. Submersible pump discharge tubing can only be used once.

When well purging is completed, groundwater will be decanted or discharged, depending upon the sampling method used, directly into laboratory-supplied sample containers. The sample

containers will be placed in a cooler with wet ice as soon a possible after collection to chill the sample to 4°C.

4.3 Field Analytical Techniques-Groundwater

During groundwater sampling, field parameters including pH, temperature, specific conductivity, and turbidity will be monitored and recorded during well purging. Calibration of field instruments will be conducted daily in accordance with manufacturer's specifications and as specified in the QAPP. Calibration information and dates will be recorded in the field book.

4.4 Soil and Sediment Sampling Procedures

Soil and sediment samples will be collected from locations and depth intervals as specified in the RI/FS Work Plan. For Phase I, soil samples will be collected from grids in the former outside process area. Phase II will include sampling of the remainder of the Site. Manual sampling techniques involving the use of hand augers and hand shovels may be used when collecting surface or shallow subsurface samples. Alternatively, soil and sediment samples may be collected from any interval using direct push sampling techniques/equipment.

4.4.1 Surface Soil

Prior to sample collection, the ground surface will be prepared by clearing away any concrete, pavement, vegetation and/or debris. The soil boring will then be advanced through soil using a decontaminated stainless-steel hand auger or direct push equipment/techniques down to the target depth of 6 in. bgs. Upon reaching the target depth, the collected soil will either be transferred directly to the sample container (grab samples) or to a receptacle to be used for homogenization (composite samples). Samples collected for VOC analysis will be collected first. VOC sample collection is described in Section 4.4.5. A portion of the sample will also be placed into a sealable plastic bag for headspace monitoring. A description of the soil sample will be recorded in the field logbook. At locations requiring additional sample volume to satisfy laboratory volume specifications, an additional boring may be completed directly adjacent to the original boring.

4.4.2 Subsurface Soil

Subsurface soil samples will be collected using either a stainless steel hand auger or direct push techniques/equipment. The maximum depth to which hand augers will be employed will be determined in the field based on Site conditions. Soil samples collected from direct push borings will be retrieved from the subsurface in disposable acetate sleeves. Sample aliquots will then either be transferred directly to the sample container (grab samples) or to a receptacle to be used for homogenization (composite samples). Samples collected for VOC analysis will be collected first. VOC sample collection is described in Section 4.4.5. A portion of the sample will be

placed into a sealable plastic bag for headspace monitoring. A description of the soil sample will be recorded in the field logbook.

Samples collected for laboratory analyses during RI/FS activities will be either grab samples or composite samples. The type of sample collected will be recorded on the sample label and field sampling form/field logbook.

4.4.3 Sediment Samples

Sediment samples may be collected during the RI/FS. The term "sediment" is used to describe soils in locally low lying areas such as a drainage ditch where surface runoff is directed. Sediment samples from this Site will be collected and handled in the same manner as surface soil samples (Section 4.4.1).

4.4.4 Grab vs. Composite Samples

Both grab samples and areal composite samples will be collected during the RI. A grab sample is an individual sample collected from a single location at a specific time. An areal composite sample is a sample comprised of individual grab samples collected over an area or grid. Discrete grab samples of equal volume are collected in an identical manner from several locations over a defined area. The grab samples are subsequently combined to generate a composite sample.

Composite samples will be quartered and homogenized before being placed into the sample containers using the following procedure:

- Discrete grab samples that will comprise the composite sample are placed in a common glass or stainless steel container.
- When all discrete grab samples have been collected, the combined samples are divided into quarters and each quarter is mixed individually.
- Two adjacent quarters are combined to form halves and each half is mixed individually and thoroughly.
- The two halves are combined and mixed thoroughly to form a homogenous composite sample.

4.4.5 VOC Sampling Procedures

When collecting samples for analysis of VOCs, the sample will be collected prior to other samples. VOC samples will be collected directly from the sampling location using pre-preserved Terra Core™ samplers or equivalent sampling devices. The VOC concentration level in Site samples is unknown; therefore, vials/containers will be filled with both low and medium-level VOC analysis. Terra-Core samples will be immediately capped, locked and secured in a plastic bag. The custody seal will be placed on the plastic bag and samples will immediately be stored

in an ice chest and cooled. Samples will be collected in accordance with EPA Method SW-846 5035A and analyzed using Method 8260B.

In some cases, the specific location of the VOC sample will not be known until all sampling locations within a grid have been screened with a photoionization detector (PID). In this situation, the following procedure will be followed. Every effort will be taken to minimize the time between removing the soil sample from the ground and filling the Terra Core sample vials.

- Each of the two, three or four locations within the grid will be sampled using direct push technology. Soil cores will be withdrawn in acetate sleeves and immediately capped and set aside until each of the locations within the grid has been sampled.

- Each sample sleeve will then be opened and screened with a PID. The discrete location with the highest PID reading will be determined for each soil depth interval to be sampled.

- VOC samples will be collected using Terra Core samplers directly from soil contained within the acetate sleeves, transferred to the appropriate vials/containers, and immediately placed on ice.

4.5 Wipe Sampling Procedures

Wipe samples will be collected using cotton wiping material pre-wetted with analyte-free water. Three wipes will be collected for each sample. Each sample area will consist of a 10 centimeter (cm) wide by 10 cm high area. The sample area boundaries will be defined using a disposable template at each sample location. The samples will be collected using the following procedure:

- Attach or hold the area template to the surface to be sampled.
- Wipe the area within the template in "rows" proceeding from left to right with the wipe. The first row should be at the top and each subsequent row will be below the preceding row.
- Using the same wipe, wipe the area within the template in "columns" proceeding from top to bottom. The first column should be at the left and each subsequent column will be right of the preceding column.
- Place the wipe in the sample container.
- Repeat the wiping process above for each of the three wipes.
- Once all three wipes have been used, tightly close the sample container.

4.6 Surveying Procedures

Groundwater monitoring well installations will be surveyed by a surveyor licensed in the state of Tennessee. The horizontal location of each well installation will be defined using an appropriate datum. In addition, the top of well casing and ground surface elevations for each well will be surveyed to aid in analyzing Site data. The locations of soil and sediment samples may be recorded using a hand-held Global Positioning Satellite (GPS) device and positioned appropriately on a Site map.

4.7 Investigation Derived Materials (IDW)

IDW will be managed in general accordance with EPA Region IV procedures and relevant state and federal regulations and guidelines. Groundwater and decontamination water will be contained in appropriately labeled drums and characterized for determining disposal options. Soil cuttings from borings and well installation activities will be contained in appropriately labeled drums and characterized for determining disposal options. Disposal equipment, used PPE, and other Site trash will be collected and disposed as nonhazardous materials. Drums and other waste containers will be labeled with relevant information including contents, date of generation, and generator with a telephone contact number. Disposal of IDW will occur after the contents have been adequately characterized. Copies of any waste manifests will be provided to TDECs DoR.

SECTION 4 - SUMMARIES

Section 4.a - Corporate/Personal Experience

SynTerra professionals have extensive experience executing CERCLA/Superfund projects at both the federal and state level. SynTerra knows the projects for the WVDEP will require a multidisciplinary approach to staffing. SynTerra is able to rapidly staff projects with credentialed, experienced, and knowledgeable professionals. Our primary focus is to meet or exceed project requirements on time, on budget, and with minimal risk.

SynTerra's proposed project manager is Jerry Bryant. Resumes are provided for staff who will be assisting the WVDEP on this contract.

Section 4.b - Uniquely Qualifying Examples or Information

An attachment with project summaries has been provided in section 12b of the SEMS Questionnaire. Those summaries demonstrate our firm's ability to address complex environmental challenges through innovative approaches, adaptive methodologies, and tailored solutions unique to sites.

Section 4.c - Project Management Plan and Approach

Each client and each project has a unique set of goals. Our approach is to assemble a project management team specifically adapted to those requirements. This strategy is rooted in our staff's commitment to providing each client with the highest level of service and integrity. As a result, SynTerra strategically assigns project managers and support staff to projects based on the client's needs, project scope, and required expertise.

SynTerra's process begins with understanding our client's objectives during the project development/proposal phase. This includes the technical needs, staff, schedule, subcontractors, budget, and other important criteria. By focusing on those criteria, SynTerra can deliver the services that achieve the results our clients require and deserve.

SynTerra believes the quality of our services is of the utmost importance, exemplified by our stringent corporate policy that requires senior peer review of letters and reports issued to our clients and regulatory agencies. This review enhances the quality of our work product and provides a critical, objective perspective from a more senior staff member. Our open-door policy and floor plan fosters a collaborative work environment among different levels of experience and skillsets, which encourages the senior-level staff to work closely with junior and mid-level staff, while instilling quality control processes through each level of work-product development.

Innovative and creative thinking is an important part of our company's culture. SynTerra is dedicated to the use of innovative data-collection, analysis, and mitigation technologies when these methods can:

- Save costs and shorten schedules.
- Offer a more concise understanding of constituent distribution and dynamics.
- Achieve project objectives more effectively.

Project Scheduling

As part of SynTerra's standard operations, project managers are responsible for projects being completed on time and on budget. Timeliness is the most important aspect for many projects; therefore, our project managers diligently monitor the schedule established in the proposal or work plan.

SynTerra reviews and continually improves project methodology based on successes, lessons learned, and industry standards. We invest in industry-standard tools and adopt best practices for providing deliverables in a timely and cost-effective manner. Cost controls and schedules are critical components of a successful approach; therefore, we use internal project management tools, such as Vantagepoint [our Enterprise Resource Planning (ERP) and financial system], to access, review, and share project status across our team. Our use of Microsoft Teams® enhances internal collaboration and supports agile communication with clients to foster input that keeps projects on track and focused on the client's business objectives.

Our attentiveness to our projects has served us well. Client satisfaction and repeat business have fueled the growth of SynTerra from five individuals in Greenville, South Carolina, to the present staff of more than 80 employees located in seven states.

Health and Safety

SynTerra's greatest resource is our people. Protecting the safety of each worker is our first priority. If a job cannot be performed in a safe manner, we will not do the job until steps are taken to make each task safe to perform. Safety is the first item on the agenda of every meeting and the first topic of conversation on each job site.

A specific Health and Safety Plan is written for each project, which details the work to be performed, hazards expected to be encountered, engineering controls used to minimize the hazards, and appropriate personal protective equipment.

Daily tailgate safety meetings are conducted at the start of each workday.

SynTerra workers are proficient in safe work practices through strong safety training programs that cover Occupational Safety and Health Administration (OSHA) regulatory requirements. SynTerra also maintains compliant standing in both ISNetworld and Avetta platforms. We understand our safe work performance today allows us to earn your trust and work on projects in the future.

Section 4.d - Key Personnel Available

Office Location

SynTerra Corporation is a 100 percent employee-owned, full-service professional science and engineering consulting firm with five offices and approximately 80 employees throughout the Southeast. Established in 1992 in Greenville, South Carolina, SynTerra has been serving public and private sector clients for more than 30 years. Current fiscal year projections indicate ample resources and availability to staff projects and tasks as presented in this EOI. Our size and locations throughout the Southeast make us a fully responsive team that WVDEP-OER can depend on.

SynTerra is headquartered in Greenville, SC, with offices in Lexington and Pikeville, KY, two additional offices in Charlotte and Cary, NC, and remote offices in WV and TN.

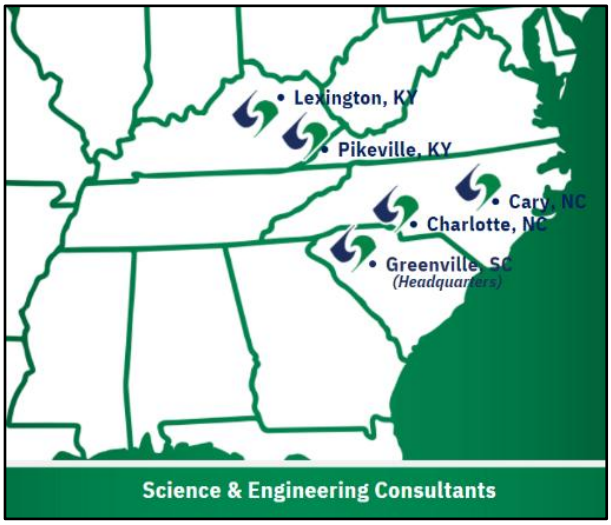
Cary, NC Office:
511 Keisler Drive, Suite 102
Cary, NC 27518
Phone: (919) 858-9898

Charlotte, NC Office:
5015 W WT Harris Blvd, Suite C
Charlotte, NC 28269
Phone: (980) 312-5999

Greenville, SC Office (HQ):
148 River Street, Suite 220
Greenville, SC 29601
Phone: (864) 421.9999

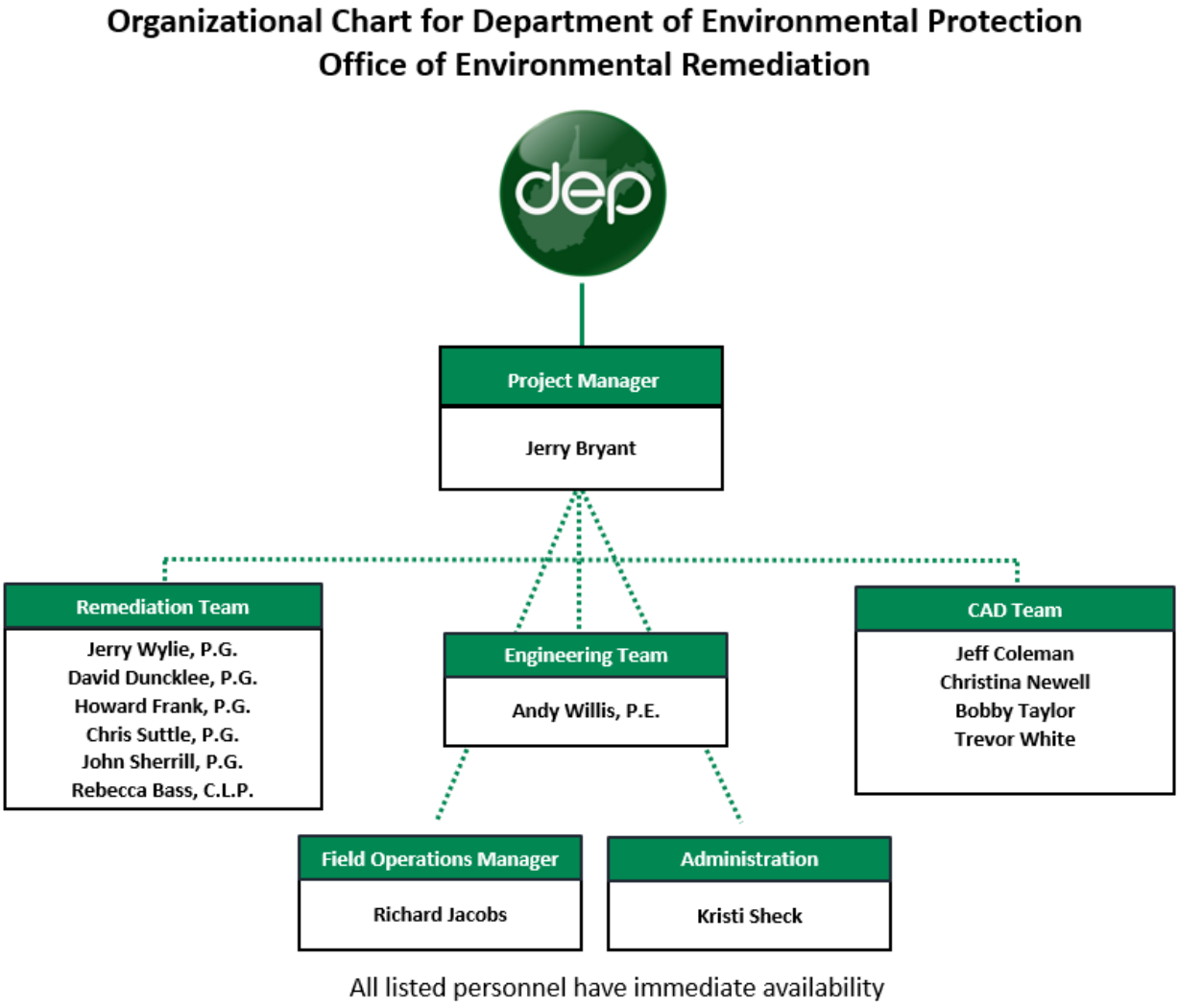
Lexington, KY Office:
170 Turner Commons Way, Suite 120
Lexington, KY 40511
Phone: (859) 233-2103 ext. 202

Pikeville, KY Office:
336 Town Mountain Road, Suite 4
Pikeville, KY 41501
Phone: (859) 810-2939



Organizational Chart

The organization chart below shows how SynTerra will organize our team to meet the needs of the state.



Recent, Current, and Projected Workload

Upon being awarded this contract, SynTerra will dedicate the appropriate personnel, time, and resources to meet West Virginia's technical, financial, and scheduling needs. Our environmental workload is typically medium-to-large assessment and remediation projects, which can be planned, or smaller projects that can be accommodated. The primary contact under this contract will have the authority to dedicate the staff and resources necessary to meet the needs of the WVDEP.

We know of no outstanding contracts or proposals that would jeopardize our ability to conduct projects requested by this contract.

As an employee-owned company, we are dedicated to being responsive, providing exemplary service, and delivering quality work products. Our structure provides the flexibility to accommodate special requests related to project staffing, schedules, and budgets to meet our client's objectives.

Section 4.e - Product Quality Control/Project Cost Control

Quality Program

Our business is built on relationships. We consider our provision of quality documents and deliverables a sacred part of those relationships. Quality means that the information presented is technically accurate and appropriate for use by our clients in the context of our work for them.

Quality Vision

- Continuous improvement of our work practices
- Meeting client expectations

Quality Goals

- Zero work-related accidents
- Zero errors in our work processes and products
- Zero cost overruns or insurance claims as a result of errors
- Continuous improvement

Quality control is everyone's job within SynTerra. Responsibility for seeing that we deliver quality work products lies with the creator, the reviewer, and team members who produce elements of the project or work product.

To fulfill our vision, our work product must be high-quality and produced with our clients' business objectives in mind. At the same time, we are compelled to conduct our business in a manner that makes SynTerra a sustainable business. SynTerra's management and staff members are committed to Continuous Improvement initiatives.

Quality Control of Technical Work

Project managers may assign elements and responsibilities to others to accomplish the objectives of the project, but those managers remain ultimately responsible for every aspect of work quality. That responsibility includes providing team members appropriate and complete information on the objectives of the project and determining that every aspect of the project has been reviewed for accuracy, completeness, and professionalism.

Checking Calculations

Calculations in spreadsheets and hand calculations are checked by a peer. Input data in spreadsheets are verified against the source to prevent transcription errors. A sufficient number of calculations are checked to determine that the calculations are consistent throughout the spreadsheet. Calculations are followed sequentially to determine that the overall calculation is both mathematically correct and that the technical concepts for the calculations are correct.

Review of Drawings

At a minimum, the creator's initials, the reviewer's initials, the date, and the source of external information are recorded on drawings created by SynTerra. Technical information, scale, and spelling are checked for accuracy, completeness, and aesthetic appearance by the creator and the technical reviewer. For drawings, technical information, or specifications prepared by others, a notation of the source information is made. The purpose of such notation is to identify the source of information, upon which we rely in our drawings and documents, for future review.

Verifying Model Outputs

Predictive groundwater modeling is a useful tool for focusing remedial efforts, reducing costs, and providing a clearer path to site closure. Computer models are simulations of conditions in the physical world based on systems of postulates, data, and inferences presented as a mathematical description of an entity or state of affairs; however, models are not substitutes for professional interpretation of data and prediction of effects. As a result, model set-up or input data are reviewed for accuracy and correct application within the context of the computer model. Model results are examined to determine that the model ran correctly and that the inputs were formatted consistent with the model basis. Once a model or simulation has generated predicted values, professional judgment is used to evaluate the reasonableness of the result with respect to the Conceptual Site Model (CSM). If, in the professional's judgment, the results are not consistent with their expectations and further modeling and hand calculations do not resolve the inconsistencies, the model limitations and discrepancies are discussed in the report along with the professional's interpretation of the data.

Section **4.f – 4.j - Experience**

SynTerra has extensive experience in delivering environmental and engineering services for a range of state and federal programs, including complex site assessments, remediation projects, and regulatory compliance. While we have not previously worked under WVDEP programs, we have successfully completed similar work in other states and at the federal level. We are experienced in navigating varying regulatory requirements and adapting our approach to meet project-specific needs. Our staff includes licensed professionals with considerable technical expertise and a hands-on understanding of the challenges associated with fieldwork, data quality, and stakeholder coordination. SynTerra is well-positioned to support the work being requested and confident in our ability to meet WVDEP expectations.

Please refer to section 12b of the SEMS Evaluation and sections 4a-4e of this document for examples of our experience.