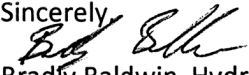


On all correspondence concerning this site, please reference UST Permit #11946. If there are any questions concerning this project, feel free to contact me by telephone at (803) 898-0605, by fax at (803) 898-0673, or by e-mail at baldwiba@dhec.sc.gov.

Sincerely,



Bradly Baldwin, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Corrective Action Solicitation Response Summary Form
Corrective Action Solicitation Responses received from 1 contractor

cc: Adam Looper, UST Management Division
Technical file (w/enc)

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA

Department of Health and Environmental Control

Underground Storage Tank Program

UST Permit # 11946

Facility Name Broad River Amoco, Release #2

1. Completed Corrective Action Solicitation Response Forms are attached from one contractor.

EnviroRisk

2. Based on a review of the corrective action responses, I select (please name):

I understand that except for the limitations specified in the solicitation, \$411,250 is the maximum amount the SUPERB Account will pay for this active corrective action.

3. Compensation from the SUPERB Account should be paid to: (please check one)

UST Owner/ Operator

SC Certified Site Rehabilitation Contractor named above in Item 2

4. List any anticipated changes to the site in the near future: (e.g. sale, UST removal, etc.)

5. Additional Comments: (Attach additional page(s) if required)

UST Owner/ Operator Name _____

Address _____

Telephone Number

() _____

FAX Number

() _____

Signature _____

Printed or Typed Name _____

Title _____

Date Signed _____

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

IV. CORRECTIVE ACTION SOLICITATION RESPONSE FORM

A. ACCEPTANCE and DELIVERY STATEMENT

In compliance with the solicitation and subject to all conditions thereof, the UST Site Rehabilitation Contractor agrees, if selected by the UST Owner/Operator within _____ days from the date of financial approval form submittal, to complete the corrective action as specified at the price set forth for the site as stated below. For the purpose of this submittal and possible acceptance of financial approval, I certify that this company understands the nature of the release(s) and the geologic conditions at the site as documented in the technical file and this solicitation. Any quantities listed in the corrective action method(s) below are estimates and changes to those quantities or to the listed method(s) will not affect the financial approval amount. Additionally, I certify that this company understands that acceptance is based on total cost to treat the area of concern.



Envirorisk Consultants, Inc.
UST Site Rehabilitation Contractor (Print)

428

UST Site Rehabilitation Contractor Certification #

Kenneth Summerour
Registered Professional Name (Print)

[Signature]

Registered Professional Signature (required)

P.G. [X] P.E. [] (check appropriate box)

Professional Certification # 3742

B. CORRECTIVE ACTION SOLICITATION RESPONSE

Please respond to the following questions for Broad River Amoco, UST Permit #11946, 4355 Broad River Rd., Columbia, SC:

1. PREVENT MIGRATION OF FREE PRODUCT ONTO PLAYPALS AND ADJACENT PROPERTIES

a. State and describe the corrective action method(s) or technology(ies) that will be discussed in detail in the CAP to effectively prevent migration of FPP onto Playpals and adjacent properties and achieve all reduction milestones in 90 days, should financial approval occur. Only method(s) and/or technology(ies) that will be implemented on site should be included. Attach an additional sheet if necessary.

In order to prevent further FPP migration, Envirorisk proposes to install 2 L-shaped hydraulic control

barriers on the SW and NW corners of the property. These barriers will be positioned near and overlapping

SCANNED

VERIFIED

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

the areas where FPP seepage was observed on the PlayPals property. The hydraulic barrier will be constructed after excavation and removing soils down to approximately 15' and backfilling with a low capillary pressure gravel based material. 4" vertical observation wells will be installed in the hydraulic barrier for FPP gauging and extraction, if needed. The areas will be backfilled and restored to grade with minimal disturbances to site operations. The downslope wall of the barrier on the west will be lined with an impermeable barrier to prevent further migration onto the PlayPals property.

- b. Please provide the two method(s), which will be discussed in detail in the CAP, used to verify that both the short term and long term migration prevention system meets the design objective and monitor the physical and/or chemical effectiveness of method(s) or technology(ies) listed in Section III.B.2.

The high permeability of the gravel hydraulic barrier and low capillary pressure relative to the surrounding water-bearing unit will provide a collection point to effectively halt FPP migration. Weekly gauging of the 15 vertical observation wells will be performed. During weekly gauging events, the exposed soil bank on the PlayPals property will be inspected and photographed. In addition, 1" temporary FPP gauging points may be installed on the downslope side of the trench to monitor the effectiveness of the barrier.

- c. The Corrective Action Cost for this component is \$99,500.00 , in whole dollars, regardless of the type, quantity, or duration of the permitted technology applied, to prevent the migration of the free phase product onto Playpals and adjacent properties; complete all associated monitoring and post-corrective action verification; prepare all plans, reports, and correspondence; obtain and meet all terms and conditions of all required permits and licenses; design, install, monitor, operate, maintain, and when completed, properly abandon and/or remove all assessment and corrective action components, if necessary; and complete other items outlined in this solicitation
-

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

- d. Please provide a cost breakdown and estimated timetable (as shown in Solicitation Section VIII.4.A) for implementation as well as attainment of contractual remediation goals pertaining to this specific component.

Please see attached table labeled "Section 1d."

2. FREE PRODUCT REMOVAL AT BROAD RIVER AMOCO PROPERTY

- a. Please provide detailed information as to how the active corrective action treatment techniques that will be discussed in the CAP will, in accordance with this solicitation, effectively remove free phase product to reach target SSTL values and achieve all performance milestones within the 5 year contract period. Please include the number of proposed injection points, proposed number of extraction points, proposed volume of excavated material, proposed volume of injected material, etc. Only method(s) and/or technology(ies) that will be implemented on site should be included. Attach an additional sheet if necessary.

A review of the file data indicates that numerous AFVR events have been conducted at the site with

minimal long term effectiveness. Envirorisk proposes to utilize surfactant/oxidant based desorption

and capture methods to complete remediation. Our process will entail the installation of up to 50

large gravel envelope injection/extraction wells in target areas. Treatment will be performed using

plant-based surfactants combined with low concentration oxidant mixtures to provide effective FPP

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

desorption. Extraction(s) will be performed using a series of pumps and and short term extraction events.

- b. The Corrective Action Cost, pertaining to this specific component, in whole dollars is \$280,000.00, regardless of the type, quantity, or duration of the permitted technology applied, to treat the area of concern shown in the Appendix such that FPP thickness does not exceed SSTLs at any point in the area of concern; complete all associated monitoring and post-corrective action verification; prepare all plans, reports, and correspondence; obtain and meet all terms and conditions of all required permits and licenses; design, install, monitor, operate, maintain, and when completed, properly abandon and/or remove all assessment and corrective action components; and complete other items outlined in this solicitation.
- c. Please provide how the corrective action costs stated in Item #1b will be allocated for the ~~corrective action activities listed in item #2a to include, but not limited to,~~ ~~sampling/analyses over the entire duration of the contract, corrective action system installation, site restoration, etc.~~ Attach an additional sheet if necessary.

Please see attached tables labeled "Section 1d and 2e."

- d. The CACT, in months, to achieve all performance milestones from the date of CAP Implementation until the final corrective action performance milestone have been achieved and maintained for 2 consecutive quarters is 36 months. All activities must be completed within 5 years of the effective date. Any request for an extension beyond the 5 year time frame must be made in writing by the Owner/Operator and the CACT may be ~~extended with a written no cost extension granted by DHEC.~~
-

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

- e. Please provide a cost breakdown and estimated timetable (as shown in Solicitation Section VIII.4.A) for implementation as well as attainment of contractual remediation goals pertaining to this specific component.

Please see attached table labeled "Section 2e."

3. EXCAVATION OF PLAYPALS PROPERTY AND REPLACEMENT OF FRENCH DRAIN SYSTEM

- a. The Corrective Action cost is \$443,000.00, in whole dollars, to complete all component tasks as described in this solicitation including, but not limited to, excavation of the impacted soil, sheet piling, dewatering, addition of the amendments (Persulfate Compound & Oxygen Releasing Compound), backfilling and compaction of clean fill, installation of up to 6 replacement monitoring wells, preparation of all documentation/reports, and replacement of the French drain.

- b. Please provide the manufacturer and name of the proposed Persulfate Compound & Oxygen Releasing Compound (ORC) to be used in backfill of the excavation area.

Sodium persulfate from PeroxyChem or other

A mixture of IXPEN 70C granules and IXPEN 75C granules of calcium peroxide by Carus.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

4. TOTAL CORRECTIVE ACTION COST FOR ALL COMPONENTS: \$822,500.00

- a. Please provide an estimated timetable for implementation of all proposed techniques discussed in Item 1, 2, and 3 as well as attainment of all performance milestones (i.e. Free Product Removal, 60% reduction, 90% reduction, 100% reduction, etc.) **Please note, the table is for example purposes only and not inclusive, actual line items to be included may vary depending on the technology and costs that will actually be incurred. All anticipated costs should be accounted for in the table along with the appropriate time for completion.**

Item	Cost	Time (date)
Preconstruction Cost		
Baseline Sampling	\$9,500	July 2020
Surfactant Selection	\$15,000	August 2020
CAP Design	\$10,000	August 2020
Construction Cost		
Site Preparation	\$8,000	September 2020
Well Installation/Drilling Services	\$25,000	October 2020
Drill Cuttings/Disposal	\$3,000	October 2020
Surfactant Cost	\$40,000	September 2020
Chemical Injection Cost	\$25,000	September 2020
Installation of Air Sparging/Vapor Extraction	\$35,000	October 2020
Soil Excavation	\$45,000	November 2020
Soil amendments & Backfill costs	\$20,000	November 2020
AFVR w/ off gas (10 events/96 hours)	\$85,000	July 2023
Wastewater/Product Disposal (200,000 gallons)	\$95,000	July 2023

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Skimmers/Socks	\$6,500	July 2023
Operations & Maintenance Costs		
Labor Costs	\$85,000	August 2025
Utilities/Indirect Misc Cost	\$23,000	August 2025
Analytical/Groundwater Sampling (# events & frequency)	\$65,250	August 2025
Total	\$595,250	

Please see attached table labeled "Section 4a."

Section 1d. Prevent Migration of FPP onto PlayPals and Adjacent Properties

Item	Cost	Time (date)
CAP Design & Implementation	\$10,500	30 days from award
Soil Disposal	\$18,000	30 days from award
Construction Labor & Materials	\$55,000	30 days from award
Post Barrier Monitoring	\$11,500	Weekly
Reporting	\$4,500	Included in CASE Report
Total	\$99,500	

Section 2e. FP Removal at Broad River Amoco Property

Item	Cost	Time (date)
Administrative costs	\$3,500	N/A
CAP Preparation & CAP Implementation Report	\$15,000	30 days from Authorization (can be concurrent with section 1d.)
Injection/Extraction Well Installation	\$35,000	30 days from Authorization (can be concurrent with section 1d.)
Surfactant/Oxidant costs	\$14,500	30 days from Authorization (can be concurrent with section 1d.)
Injection/Extraction & Application costs (labor)	\$30,500	Weekly applications as needed
Liquid Disposal & misc. costs	\$6,500	N/A
FPP Quarterly Gauging	\$25,000	Quarterly
Semi-Annual Sampling & CASE Reporting	\$150,000	Semi-annually
Total	\$280,000	

Section 3c. Excavation of PlayPals and Replacement of French Drain System

Item	Cost	Time (date)
Preparation of ECAP, Excavation Report, Work Plans, and Project Management	\$10,500	Implement ECAP within 30 days of DHEC authorization
Field prep, utility locate, Health & Safety	\$7,500	N/A
Soil Transport & Disposal	\$135,000	Excavation in sections, assume 20-30 days to complete
Oxygen Releasing Product (SolvayIXPER70/75) & Equipment, transportation	\$69,500	Apply 3'-7' zone excavate, backfill in sections
Sodium persulfate, transport	\$33,920	N/A
Labor & materials for excavation, backfilling, french drain construction	\$82,330	N/A
Backfill material	\$52,900	N/A
Geotechnical Soil Compaction/Engineering	\$6,500	Compaction testing performed in 1' lifts
Shoring adjacent to building	\$28,000	N/A
Install french drain	\$5,500	completed in 2 to 3 days following backfilling
Misc, Well Abandonment, reseeding landscaping	\$8,150	N/A
Soil Confirmation Sampling	\$3,200	
Total	\$443,000	

Section 4a. Total Corrective Action Costs

Prevent Migration of FPP onto PlayPals and Adjacent Properties		
Item	Cost	Time (date)
CAP Design & Implementation	\$10,500	30 days from award - start July 2020
Soil Disposal	\$18,000	30 days from award
Construction Labor & Materials	\$55,000	30 days from award
Post Barrier Monitoring	\$11,500	Weekly, assume goal met within 30 days of installation
Reporting	\$4,500	Included in CASE Report
Total	\$99,500	
FP Removal at Broad River Amoco Property		
Item	Cost	Time (date)
Administrative costs	\$3,500	N/A
CAP Preparation & CAP Implementation Report	\$15,000	30 days from Authorization (can be concurrent with FPP Barrier)
Injection/Extraction Well Installation	\$35,000	30 days from Authorization (can be concurrent with FPP Barrier)
Surfactant/Oxidant costs	\$14,500	30 days from Authorization (can be concurrent with FPP Barrier)
Injection/Extraction & Application costs (labor)	\$30,500	Weekly applications
Liquid Disposal & misc. costs	\$6,500	N/A
FPP Quarterly Gauging	\$25,000	Quarterly
Semi-Annual Sampling & CASE Reporting	\$150,000	Semiannually
Goals		Anticipate reaching 60% FPP goal 16 months after award 90% within 1 year 100% within 2 years
Total	\$280,000	

Excavation of PlayPals and Replacement of French Drain System

Item	Cost	Time (date)
Preparation of ECAP, Excavation Report, Work Plans, and Project Management	\$10,500	Implement ECAP within 30 days of DHEC authorization, assumed after 90-day barrier monitoring
Field prep, utility locate, Health & Safety	\$7,500	N/A
Soil Transport & Disposal	\$135,000	Excavation in sections, assume 20-30 days to complete
Oxygen Releasing Product (Solvay/XP70/75) & Equipment, transportation	\$69,500	Apply 3'-7' zone excavate, backfill in sections
Sodium persulfate, transportation	\$33,920	
Labor & materials for excavation, backfilling, french drain construction	\$82,330	N/A
Backfill material	\$52,900	N/A
Geotechnical Soil Compaction/Engineering	\$6,500	Compaction testing performed in 1' lifts
Shoring adjacent to building	\$28,000	N/A
		completed in 2 to 3 days following backfilling
Install french drain	\$5,500	
Misc, Well Abandonment, reseeding landscaping	\$8,150	N/A
Soil Confirmation Sampling	\$3,200	
Goals		Assume 2 months for project completion
Total	\$443,000	
GRAND TOTAL	\$822,500	

**Envirorisk Bid Submission Clarification Questions – UST
Permit #11946**

1. Have you conducted a site visit to familiarize yourself with the site and the layout of the property?

Yes and this week conducted another visit to update us on site conditions

2. Are you aware of the elevation difference between the Broad River Amoco Property and the Play Pals Property? Will this affect the proposed remediation plan?

Yes, we are aware of the elevation differences and no this will not affect the plan

3. Are you aware of the presence of several interceptor trenches currently on the Play Pals property? Do you understand that they cannot be utilized as is for the proposed remediation and do you understand that they will need to be deconstructed and returned to pre-existing conditions during the site restoration phase of the contract if they are not utilized?

We are aware of the trenches and open excavations present on the Play Pals property. There are also above ground PVC piping runs, absorbent booms, piles of disturbed soil both covered and uncovered with plastic, and left over 55 gallon drums. The drums were locked and were located in a water filled excavation so we weren't able to determine if they contain soil or water. The site is extremely over-grown but all of the trenches and open excavations appear to be in the footprint of the proposed excavation area outlined in the Bid document. We were not planning on utilizing any of the trenches or excavations for remedial purposes. After excavation and backfilling with chemical oxidant and soils, the French drain will be installed and the site surface restored.

We request that the drums (4 or 5?) be removed prior to the start of field work since these drums were filled by others and we have no analytical to profile the waste.

4. Envirorisk is proposing two or more hydraulic control barriers. Exactly how many control barriers does Envirorisk plan on installing? Will Envirorisk be able to obtain permission to install the hydraulic barriers on the PlayPals property? Does Envirorisk have an alternative in the event that permission cannot be obtained?

Based on current/historic free product occurrences, we proposed two passive hydraulic barriers. One barrier is roughly "L" shaped and will extend from slightly east of MWR-2-9, west to RW-C, and north-NW past MWR-2-12. A smaller trench will be advanced adjacent and south of MW-4/RW-7 and will extend north in the

direction of the on-site dumpster. A small additional barrier trench or a series of closely spaced large auger borings (will be advanced if needed around RW-D to the north or directly behind the convenience store building, where only traces of free product have historically been detected. Both trenches or auger borings will be extended to approx. depths of 15 feet or deeper, depending on the extent of free product observed in the soils. Free product extraction will occur using a combination of manual pumping recovery methods and mobile vacuum extraction (AFVR), depending on product accumulation.

No barriers are proposed on the Play Pals property since the intention of the barriers is to prevent free product migration off-site.

5. Does EnviroRisk have a contingency plan for the hydraulic control barrier in the event that it does not perform as planned? Yes, a series of 1" or 2" temporary wells will be installed on the downslope side of the trenches or auger borings and will be regularly gauged to ensure that further free product migration is not occurring.
6. Can you please provide further information regarding the impermeable barrier that will be utilized on the downslope side of the hydraulic barrier? The barrier we are proposing will ideally consist of double-thick 6 mill poly sheeting. A weighted rod or board will be used to secure the sheeting from the base of the trench interior to ensure a tight fit against the rear soil wall (northwest side) extending and overlapping the surface. The trenches will then be backfilled with gravel. Observation/extraction wells will be installed in the gravel trenches. If extensive sloughing of the rear trench walls is observed, a grout wall may be necessary.
7. Can you verify whether the installation of the observation wells will be installed or not? Yes, a series of vertical observation/extraction wells will be installed to gauge product and for periodic free product extraction.
8. Can you provide further specifications on the low capillary pressure gravel-based material that will be used? EnviroRisk will determine the gravel size/type after excavation is commenced. Any gravel product will provide for capillary "suction" of the free product as groundwater flows into the trenches.
9. Please confirm whether or not the 1" temporary points will or will not be installed on the downslope of the trench to monitor the effectiveness of the barrier. Under what circumstances would the gauging points be installed to monitor the effectiveness of the barrier? Yes, temporary wells will be installed.
10. Can you provide further details on how you will verify the effectiveness of the

mitigation barrier to ensure that free product does not pass the barrier? Regular gauging of the temporary wells on a weekly or biweekly basis will be performed as well as visual observations of the exposed soil bank on the Play Pals property.

11. How will you ensure that the free product does not go around the barrier and stays confined to the Broad River Road Amoco property? This question has already been answered above. Barriers will be installed and extended farther than described if necessary based on field observations of soil conditions.
12. Will Envirorisk be conducting a utility survey prior to the installation of the hydraulic barrier? Yes. Note that the underground gas line will require temporary capping and removal on the Play Pals property.
13. Will Envirorisk be able to adequately conduct weekly inspections as proposed for the duration of the contract? Yes, it is anticipated that the weekly inspection schedule will be modified after the 90-day timeframe. Weekly inspections may also be adjusted based on product accumulation.
14. Are you aware the site is an active gas station? Yes Are you aware of the number of wells currently installed on the property? Yes Can you please provide a map showing how you plan to install 50 additional wells on the property? Yes, see attached. Can you please provide a schematic of a large gravel envelope injection/extraction well? No, we don't have a schematic. The injection/extraction wells will be constructed using a smaller auger rig fitted with 6.26 ID augers or slightly larger to produce a 10" to 12" borehole or larger 2' to 3' borings drilled using a bucket auger rig. The wells will be constructed similarly to typical monitoring wells with manhole completions and boring logs and 1903s provided. We have discussed this with the property owner who is agreeable to this approach.
15. What is the planned method of drilling the injection/envelope wells at the site? See above
16. Can you please provide additional detail on the plant-based surfactant and low-concentration oxidant mixture? A surfactant containing D-limonene or similar surfactant that we have used previously will be utilized such as sodium laurel sulfate. The surfactant will be selected after examining the product type since a review of file information and discussion with site owners indicates that different viscosity products may be present. The surfactants role is only to emulsify the product by reducing the interstitial pressure in the soil pores that holds the product in place. Oxidants that may be employed would include calcium peroxide, sodium percarbonate, or very dilute and stabilized mixtures of hydrogen peroxide with a catalyst. Some of these oxidants are useful in combination with surfactants.

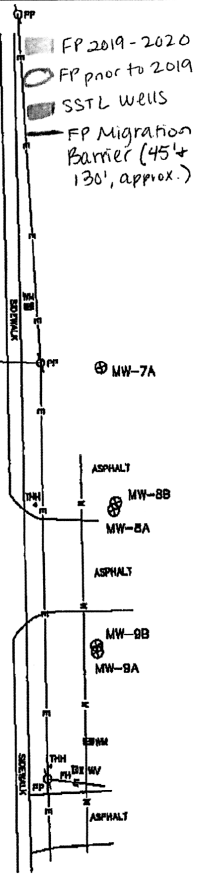
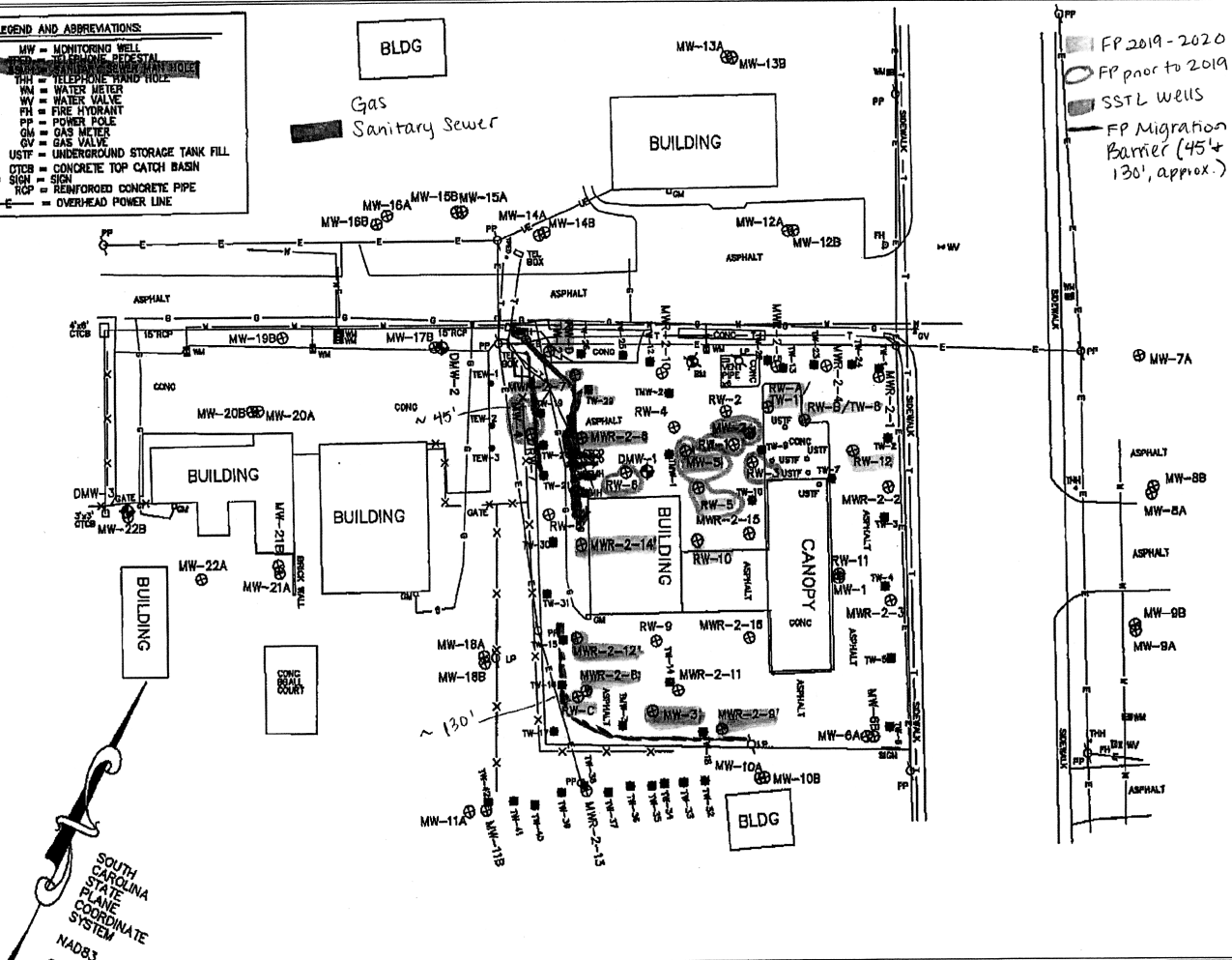
17. EnviroRisk listed PeroxyChem or "other". Can you provide clarification on "other" that would be utilized if PeroxyChem is not? Terra Systems who purchases sodium and potassium persulfate for United Initiators (the manufacturer).
18. Can you please provide more detail regarding the short-term extraction events planned as part of the FPP Removal? Depending on the extent of free product recharge, extraction will be performed using a typical vacuum truck or pump truck after injecting surfactant or oxidants. Extraction may be performed during injection if significant recovery is observed but based on the low permeability or preferential permeability anticipated, extraction will likely occur a day or two following injection to allow more time for product emulsification. EnviroRisk is currently utilizing this treatment method successfully on several PFP sites.
19. Please explain how EnviroRisk will conduct the injection and extraction events on the subject property without disrupting the ongoing business operations. The work will be performed in a manner that doesn't result in blocking all of the dispenser pumps. The owner is agreeable with the scope of work and understands that the work will disturb site operations to some extent.
20. Please indicate whether EnviroRisk will be submitting one CAP or three separate CAPs for the proposed work? We had planned to submit two CAPs, one for the first two phases and an ECAP for the work on Play Pals.
21. Is EnviroRisk aware of the playground equipment bordering the excavation area? Yes, it doesn't appear that DHECs planned excavation area will result in the removal of the equipment.
22. Does EnviroRisk understand that some of the excavation area is concrete and will need to be replaced once excavation is completed? Yes. Has that cost been incorporated into the submitted bid? Yes.
23. Is EnviroRisk aware that no additional costs will be approved from the SUPERB account for any additional remedial work that would be necessary to achieve the terms and conditions of the solicitation? Yes. Does EnviroRisk understand that additional costs beyond what is approved from the SUPERB account would be a matter between EnviroRisk and the responsible parties? Yes.

EnviroRisk has received tentative approval from the site owner, Mr. Desai to perform this bid scope. Mr. Cecchini has repeatedly indicated that he is unwilling to accept responsibility for any site rehabilitation. If this bid is awarded to us,

Envirorisk would appreciate any assistance DHEC can offer regarding the responsible parties and gaining off-site access. In addition, Envirorisk would welcome any site observations from field personnel involved in prior emergency response actions to ensure that the free product barrier and other corrective action is implemented in the best manner to achieve goals quickly.

LEGEND AND ABBREVIATIONS:

○	MW	MONITORING WELL
○	TH	TELEPHONE HAND HOLE
○	WM	WATER METER
○	WV	WATER VALVE
○	FH	FIRE HYDRANT
○	PP	POWER POLE
○	GM	GAS METER
○	GV	GAS VALVE
○	USTF	UNDERGROUND STORAGE TANK FILL
○	CTCB	CONCRETE TOP CATCH BASIN
○	SGN	SIGN
○	RCP	REINFORCED CONCRETE PIPE
○	E	OVERHEAD POWER LINE



ENVIRORISK CONSULTANTS, INC.

BROAD RIVER AMOCO, UST PERMIT 11946
4335 BROAD RIVER ROAD
COLUMBIA, RICHLAND COUNTY, SOUTH CAROLINA

Free Product Migration Barrier Map **DRAFT**

FIGURE NO **1**

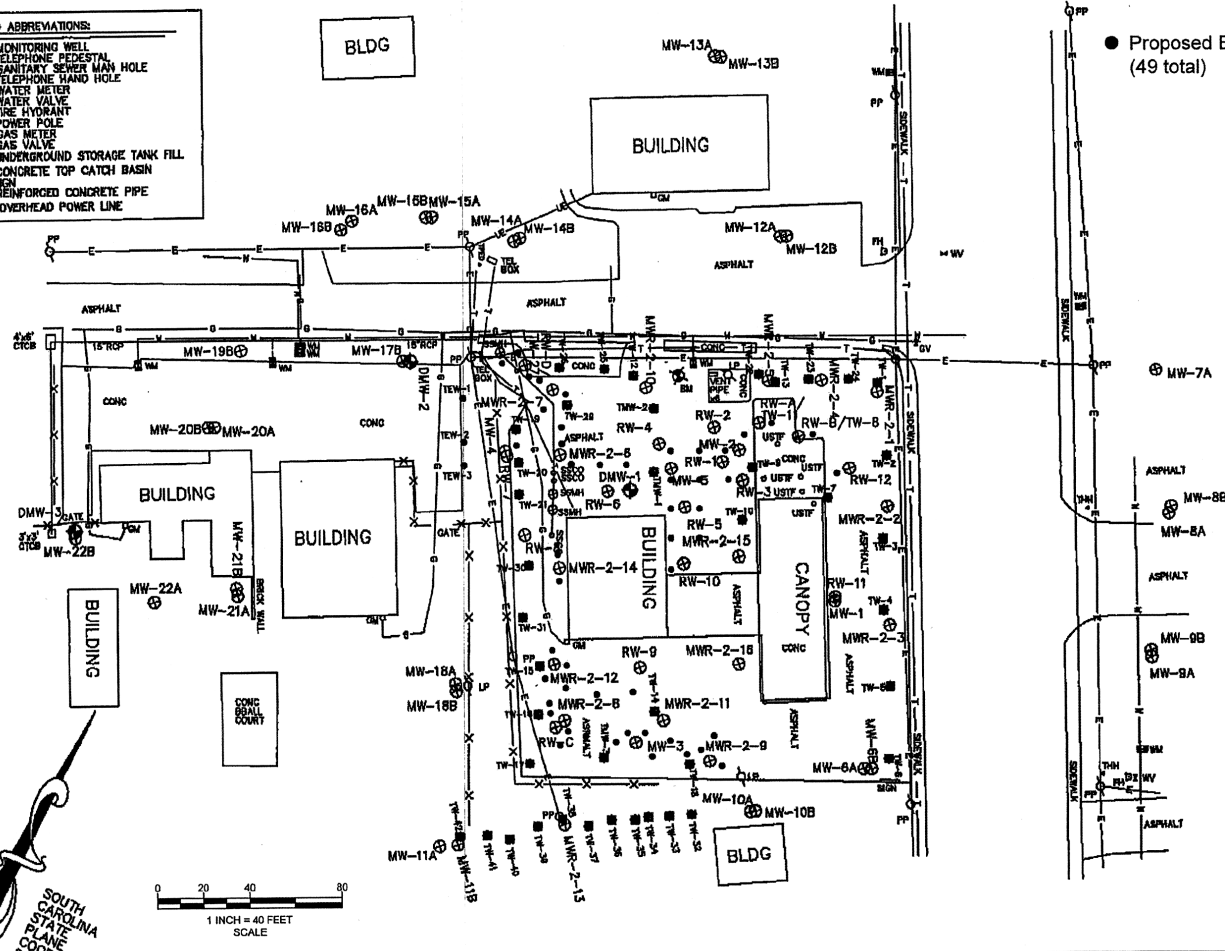
SOUTH CAROLINA STATE COORDINATE SYSTEM
NAD83

LEGEND AND ABBREVIATIONS:

○	MW	MONITORING WELL
○	TPED	TELEPHONE PEDESTAL
○	SSMH	SANITARY SEWER MAIN HOLE
○	THH	TELEPHONE HAND HOLE
○	WM	WATER METER
○	WV	WATER VALVE
○	PH	FIRE HYDRANT
○	PP	POWER POLE
○	GM	GAS METER
○	GV	GAS VALVE
○	USTF	UNDERGROUND STORAGE TANK FILL
○	CTCB	CONCRETE TOP CATCH BASIN
○	SIGN	SIGN
○	RCP	REINFORCED CONCRETE PIPE
○	E	OVERHEAD POWER LINE

BLDG

BUILDING



● Proposed EWs (49 total)



ENVIRORISK
CONSULTANTS, INC.

BROAD RIVER AMOCO, UST PERMIT 11946
4335 BROAD RIVER ROAD
COLUMBIA, RICHLAND COUNTY, SOUTH CAROLINA
FREE PRODUCT CORRECTIVE ACTION MAP

FIGURE NO

2

DRAFT



Healthy People. Healthy Communities.

FREDERICK CECCHINI
429 PRESS LINDLER RD
COLUMBIA SC 29212

OCT 14 2020



Re: **Corrective Action Solicitation Response Summary**
Broad River Amoco, 4335 Broad River Rd., Columbia, SC
UST Permit #11946
Release #1 reported January 4, 2011
Richland County
Corrective Action Solicitation Responses received September 18, 2020

Dear Mr. Cecchini:

The Underground Storage Tank Management Division (UST Division) of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the Corrective Action Solicitation responses resulting from the Technical Specifications Package. The Corrective Action Cost submitted by EnviroRisk was for the amount of \$822,500.

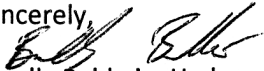
The Corrective Action Cost is defined as the total amount established through the procurement process to complete the scope of work/specifications detailed in the solicitation, unless otherwise modified pursuant to the terms of this solicitation. The maximum allowable Corrective Action Cost DHEC can establish is dependent on the remaining State Underground Petroleum Environmental Response Bank (SUPERB) account balance for the individual release, less costs required for verification of performance milestones. Corrective action costs above the maximum amount allowable, as established in S.C. Code Ann. § 44-2-40 (2018), are the responsibility of the owner/operator. The verification costs for this release will be **\$10,000**. The Corrective Action Cost will be established in the amount of **\$2,316.25**. All remaining corrective action costs above the amount allowed from SUPERB are the responsibility of the owner/operator. The amount of SUPERB funds spent to date is \$987,683.75.

Copies of the corrective action solicitation responses are enclosed for your review. A "Corrective Action Solicitation Response Summary" form is also enclosed for you to specify your choice of contractor. Any Class I Certified Underground Storage Tank Contractor may perform the necessary activities at the established price. Please return the Corrective Action Solicitation Response Summary form in order for the necessary financial approval to be made. **The Corrective Action Solicitation Response Summary Form should be returned to the UST Division within 30 days from the date of this letter.**

You may consider entering a written contract with your selected contractor following completion of the solicitation process to address any costs that exceed reasonable or SUPERB-allowable costs and not approved by DHEC for reimbursement from the SUPERB Account. DHEC would not be a party to the contract; however, we will monitor and ensure you are making progress with corrective action activities. If the selected contractor is not able to complete the required activities, you will be required to find another certified contractor to complete the required activities. Except for the limitations specified in the solicitation, the reasonable (or SUPERB-allowable) cost is the maximum amount the SUPERB Account will pay for this active corrective action.

On all correspondence concerning this site, please reference UST Permit #11946. If there are any questions concerning this project, feel free to contact me by telephone at (803) 898-0605, by fax at (803) 898-0673, or by e-mail at baldwiba@dhec.sc.gov.

Sincerely,



Bradly Baldwin, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Corrective Action Solicitation Response Summary Form
Corrective Action Solicitation Responses received from one contractor

cc: Adam Looper, UST Management Division
Technical file (w/enc)

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA
Department of Health and Environmental Control
Underground Storage Tank Program

UST Permit # 11946 Facility Name Broad River Amoco, Release #1

1. Completed Corrective Action Solicitation Response Forms are attached from one contractor.

EnviroRisk

2. Based on a review of the corrective action responses, I select (please name):

I understand that except for the limitations specified in the solicitation, \$2,316.25 is the maximum amount the SUPERB Account will pay for this active corrective action.

3. Compensation from the SUPERB Account should be paid to: (please check one)

UST Owner/ Operator

SC Certified Site Rehabilitation Contractor named above in Item 2

4. List any anticipated changes to the site in the near future: (e.g. sale, UST removal, etc.)

5. Additional Comments: (Attach additional page(s) if required)

UST Owner/ Operator Name _____

Address _____

Telephone Number () _____ **FAX Number** () _____

Signature _____ **Printed or Typed Name** _____ **Title** _____

_____ **Date Signed**

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

IV. CORRECTIVE ACTION SOLICITATION RESPONSE FORM

A. ACCEPTANCE and DELIVERY STATEMENT

In compliance with the solicitation and subject to all conditions thereof, the UST Site Rehabilitation Contractor agrees, if selected by the UST Owner/Operator within _____ days from the date of financial approval form submittal, to complete the corrective action as specified at the price set forth for the site as stated below. For the purpose of this submittal and possible acceptance of financial approval, I certify that this company understands the nature of the release(s) and the geologic conditions at the site as documented in the technical file and this solicitation. **Any quantities listed in the corrective action method(s) below are estimates and changes to those quantities or to the listed method(s) will not affect the financial approval amount.** Additionally, I certify that this company understands that acceptance is based on total cost to treat the area of concern.



Envirorisk Consultants, Inc.
UST Site Rehabilitation Contractor (Print)

428

UST Site Rehabilitation Contractor Certification #

Kenneth Summerour
Registered Professional Name (Print)

Kenneth Summerour
Registered Professional Signature (required)

P.G. P.E. (check appropriate box) Professional Certification # 3742

B. CORRECTIVE ACTION SOLICITATION RESPONSE

Please respond to the following questions for Broad River Amoco, UST Permit #11946, 4355 Broad River Rd., Columbia, SC:

1. PREVENT MIGRATION OF FREE PRODUCT ONTO PLAYPALS AND ADJACENT PROPERTIES
 - a. State and describe the corrective action method(s) or technology(ies) that will be discussed in detail in the CAP to effectively prevent migration of FPP onto Playpals and adjacent properties and achieve all reduction milestones in 90 days, should financial approval occur. Only method(s) and/or technology(ies) that will be implemented on site should be included. Attach an additional sheet if necessary.

In order to prevent further FPP migration, Envirorisk proposes to install 2 L-shaped hydraulic control _____ barriers on the SW and NW corners of the property. These barriers will be positioned near and overlapping _____

hw
SCANNED

VERIFIED

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

the areas where FPP seepage was observed on the PlayPals property. The hydraulic barrier will be constructed after excavation and removing soils down to approximately 15' and backfilling with a low capillary pressure gravel based material. 4" vertical observation wells will be installed in the hydraulic barrier for FPP gauging and extraction, if needed. The areas will be backfilled and restored to grade with minimal disturbances to site operations. The downslope wall of the barrier on the west will be lined with an impermeable barrier to prevent further migration onto the PlayPals property.

- b. Please provide the two method(s), which will be discussed in detail in the CAP, used to verify that both the short term and long term migration prevention system meets the design objective and monitor the physical and/or chemical effectiveness of method(s) or technology(ies) listed in Section III.B.2.

The high permeability of the gravel hydraulic barrier and low capillary pressure relative to the surrounding water-bearing unit will provide a collection point to effectively halt FPP migration. Weekly gauging of the 15 vertical observation wells will be performed. During weekly gauging events, the exposed soil bank on the PlayPals property will be inspected and photographed. In addition, 1" temporary FPP gauging points may be installed on the downslope side of the trench to monitor the effectiveness of the barrier.

- c. The Corrective Action Cost for this component is \$99,500.00, in whole dollars, regardless of the type, quantity, or duration of the permitted technology applied, to prevent the migration of the free phase product onto Playpals and adjacent properties; complete all associated monitoring and post-corrective action verification; prepare all plans, reports, and correspondence; obtain and meet all terms and conditions of all required permits and licenses; design, install, monitor, operate, maintain, and when completed, properly abandon and/or remove all assessment and corrective action components, if necessary; and complete other items outlined in this solicitation

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

- d. Please provide a cost breakdown and estimated timetable (as shown in Solicitation Section VIII.4.A) for implementation as well as attainment of contractual remediation goals pertaining to this specific component.

Please see attached table labeled "Section 1d."

2. FREE PRODUCT REMOVAL AT BROAD RIVER AMOCO PROPERTY

- a. Please provide detailed information as to how the active corrective action treatment techniques that will be discussed in the CAP will, in accordance with this solicitation, effectively remove free phase product to reach target SSTL values and achieve all performance milestones within the 5 year contract period. Please include the number of proposed injection points, proposed number of extraction points, proposed volume of excavated material, proposed volume of injected material, etc. Only method(s) and/or technology(ies) that will be implemented on site should be included. Attach an additional sheet if necessary.

A review of the file data indicates that numerous AFVR events have been conducted at the site with

minimal long term effectiveness. Envirorisk proposes to utilize surfactant/oxidant based desorption

and capture methods to complete remediation. Our process will entail the installation of up to 50

large gravel envelope injection/extraction wells in target areas. Treatment will be performed using

plant-based surfactants combined with low concentration oxidant mixtures to provide effective FPP

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

~~desorption. Extraction(s) will be performed using a series of pumps and and short term extraction~~
events.

b. The Corrective Action Cost, pertaining to this specific component, in whole dollars is \$280,000.00, regardless of the type, quantity, or duration of the permitted technology applied, to treat the area of concern shown in the Appendix such that FPP thickness does not exceed SSTLs at any point in the area of concern; complete all associated monitoring and post-corrective action verification; prepare all plans, reports, and correspondence; obtain and meet all terms and conditions of all required permits and licenses; design, install, monitor, operate, maintain, and when completed, properly abandon and/or remove all assessment and corrective action components; and complete other items outlined in this solicitation.

c. Please provide how the corrective action costs stated in item #1b will be allocated for the corrective action activities listed in item #2a to include, but not limited to, sampling/analyses over the entire duration of the contract, corrective action system installation, site restoration, etc. Attach an additional sheet if necessary.

Please see attached tables labeled "Section 1d and 2e."

d. The CACT, in months, to achieve all performance milestones from the date of CAP implementation until the final corrective action performance milestone have been achieved and maintained for 2 consecutive quarters is 36 months. All activities must be completed within 5 years of the effective date. Any request for an extension beyond the 5 year time frame must be made in writing by the Owner/Operator and the CACT may be extended with a written no cost extension granted by DHEC.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

e. Please provide a cost breakdown and estimated timetable (as shown in Solicitation Section VIII.4.A) for implementation as well as attainment of contractual remediation goals pertaining to this specific component.

Please see attached table labeled "Section 2e."

3. EXCAVATION OF PLAYPALS PROPERTY AND REPLACEMENT OF FRENCH DRAIN SYSTEM

a. The Corrective Action cost is \$443,000.00, in whole dollars, to complete all component tasks as described in this solicitation including, but not limited to, excavation of the impacted soil, sheet piling, dewatering, addition of the amendments (Persulfate Compound & Oxygen Releasing Compound), backfilling and compaction of clean fill, installation of up to 6 replacement monitoring wells, preparation of all documentation/reports, and replacement of the French drain.

b. Please provide the manufacturer and name of the proposed Persulfate Compound & Oxygen Releasing Compound (ORC) to be used in backfill of the excavation area.

Sodium persulfate from PeroxyChem or other

A mixture of IXPEN 70C granules and IXPEN 75C granules of calcium peroxide by Carus.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

4. TOTAL CORRECTIVE ACTION COST FOR ALL COMPONENTS: \$822,500.00

- a. Please provide an estimated timetable for implementation of all proposed techniques discussed in Item 1, 2, and 3 as well as attainment of all performance milestones (i.e. Free Product Removal, 60% reduction, 90% reduction, 100% reduction, etc.) **Please note, the table is for example purposes only and not inclusive, actual line items to be included may vary depending on the technology and costs that will actually be incurred. All anticipated costs should be accounted for in the table along with the appropriate time for completion.**

Item	Cost	Time (date)
Preconstruction Cost		
Baseline Sampling	\$9,500	July 2020
Surfactant Selection	\$15,000	August 2020
CAP Design	\$10,000	August 2020
Construction Cost		
Site Preparation	\$8,000	September 2020
Well Installation/Drilling Services	\$25,000	October 2020
Drill Cuttings/Disposal	\$3,000	October 2020
Surfactant Cost	\$40,000	September 2020
Chemical Injection Cost	\$25,000	September 2020
Installation of Air Sparging/Vapor Extraction	\$35,000	October 2020
Soil Excavation	\$45,000	November 2020
Soil amendments & Backfill costs	\$20,000	November 2020
AFVR w/ off gas (10 events/96 hours)	\$85,000	July 2023
Wastewater/Product Disposal (200,000 gallons)	\$95,000	July 2023

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Skimmers/Socks	\$6,500	July 2023
Operations & Maintenance Costs		
Labor Costs	\$85,000	August 2025
Utilities/Indirect Misc Cost	\$23,000	August 2025
Analytical/Groundwater Sampling (# events & frequency)	\$65,250	August 2025
Total		\$595,250

Please see attached table labeled "Section 4a."

Section 1d. Prevent Migration of FPP onto PlayPals and Adjacent Properties

Item	Cost	Time (date)
CAP Design & Implementation	\$10,500	30 days from award
Soil Disposal	\$18,000	30 days from award
Construction Labor & Materials	\$55,000	30 days from award
Post Barrier Monitoring	\$11,500	Weekly
Reporting	\$4,500	Included in CASE Report
Total	\$99,500	

Section 2e. FP Removal at Broad River Amoco Property

Item	Cost	Time (date)
Administrative costs	\$3,500	N/A
CAP Preparation & CAP Implementation Report	\$15,000	30 days from Authorization (can be concurrent with section 1d.)
Injection/Extraction Well Installation	\$35,000	30 days from Authorization (can be concurrent with section 1d.)
Surfactant/Oxidant costs	\$14,500	30 days from Authorization (can be concurrent with section 1d.)
Injection/Extraction & Application costs (labor)	\$30,500	Weekly applications as needed
Liquid Disposal & misc. costs	\$6,500	N/A
FPP Quarterly Gauging	\$25,000	Quarterly
Semi-Annual Sampling & CASE Reporting	\$150,000	Semi-annually
Total	\$280,000	

Section 3c. Excavation of PlayPals and Replacement of French Drain System

Item	Cost	Time (date)
Preparation of ECAP, Excavation Report, Work Plans, and Project Management	\$10,500	Implement ECAP within 30 days of DHEC authorization
Field prep, utility locate, Health & Safety	\$7,500	N/A
Soil Transport & Disposal	\$135,000	Excavation in sections, assume 20-30 days to complete
Oxygen Releasing Product (Solvay XPER70/75) & Equipment, transportation	\$69,500	Apply 3'-7' zone excavate, backfill in sections
Sodium persulfate, transport	\$33,920	N/A
Labor & materials for excavation, backfilling, french drain construction	\$82,330	N/A
Backfill material	\$52,900	N/A
Geotechnical Soil Compaction/Engineering	\$6,500	Compaction testing performed in 1' lifts
Shoring adjacent to building	\$28,000	N/A
Install french drain	\$5,500	completed in 2 to 3 days following backfilling
Misc, Well Abandonment, reseeding landscaping	\$8,150	N/A
Soil Confirmation Sampling	\$3,200	
Total	\$443,000	

Section 4a. Total Corrective Action Costs

Prevent Migration of FPP onto PlayPals and Adjacent Properties		
Item	Cost	Time (date)
CAP Design & Implementation	\$10,500	30 days from award - start July 2020
Soil Disposal	\$18,000	30 days from award
Construction Labor & Materials	\$55,000	30 days from award
Post Barrier Monitoring	\$11,500	Weekly, assume goal met within 30 days of installation
Reporting	\$4,500	Included in CASE Report
Total	\$99,500	
FP Removal at Broad River Amoco Property		
Item	Cost	Time (date)
Administrative costs	\$3,500	N/A
CAP Preparation & CAP Implementation Report	\$15,000	30 days from Authorization (can be concurrent with FPP Barrier)
Injection/Extraction Well Installation	\$35,000	30 days from Authorization (can be concurrent with FPP Barrier)
Surfactant/Oxidant costs	\$14,500	30 days from Authorization (can be concurrent with FPP Barrier)
Injection/Extraction & Application costs (labor)	\$30,500	Weekly applications
Liquid Disposal & misc. costs	\$6,500	N/A
FPP Quarterly Gauging	\$25,000	Quarterly
Semi-Annual Sampling & CASE Reporting	\$150,000	Semiannually
Goals		Anticipate reaching 60% FPP goal 16 months after award 90% within 1 year 100% within 2 years
Total	\$280,000	

Excavation of PlayPals and Replacement of French Drain System		
Item	Cost	Time (date)
Preparation of ECAP, Excavation Report, Work Plans, and Project Management	\$10,500	Implement ECAP within 30 days of DHEC authorization, assumed after 90-day barrier monitoring
Field prep, utility locate, Health & Safety	\$7,500	N/A
Soil Transport & Disposal	\$135,000	Excavation in sections, assume 20-30 days to complete
Oxygen Releasing Product (SolvayIXPER70/75) & Equipment, transportation	\$69,500	Apply 3'-7' zone excavate, backfill in sections
Sodium persulfate, transportation	\$33,920	
Labor & materials for excavation, backfilling, french drain construction	\$82,330	N/A
Backfill material	\$52,900	N/A
Geotechnical Soil Compaction/Engineering	\$6,500	Compaction testing performed in 1' lifts
Shoring adjacent to building	\$28,000	N/A
Install french drain	\$5,500	completed in 2 to 3 days following backfilling
Misc, Well Abandonment, reseeding landscaping	\$8,150	N/A
Soil Confirmation Sampling	\$3,200	
Goals		Assume 2 months for project completion
Total	\$443,000	
GRAND TOTAL	\$822,500	

**Envirorisk Bid Submission Clarification Questions – UST
Permit #11946**

1. Have you conducted a site visit to familiarize yourself with the site and the layout of the property?

Yes and this week conducted another visit to update us on site conditions

2. Are you aware of the elevation difference between the Broad River Amoco Property and the Play Pals Property? Will this affect the proposed remediation plan?

Yes, we are aware of the elevation differences and no this will not affect the plan

3. Are you aware of the presence of several interceptor trenches currently on the Play Pals property? Do you understand that they cannot be utilized as is for the proposed remediation and do you understand that they will need to be deconstructed and returned to pre-existing conditions during the site restoration phase of the contract if they are not utilized?

We are aware of the trenches and open excavations present on the Play Pals property. There are also above ground PVC piping runs, absorbent booms, piles of disturbed soil both covered and uncovered with plastic, and left over 55 gallon drums. The drums were locked and were located in a water filled excavation so we weren't able to determine if they contain soil or water. The site is extremely over-grown but all of the trenches and open excavations appear to be in the footprint of the proposed excavation area outlined in the Bid document. We were not planning on utilizing any of the trenches or excavations for remedial purposes. After excavation and backfilling with chemical oxidant and soils, the French drain will be installed and the site surface restored.

We request that the drums (4 or 5?) be removed prior to the start of field work since these drums were filled by others and we have no analytical to profile the waste.

4. Envirorisk is proposing two or more hydraulic control barriers. Exactly how many control barriers does Envirorisk plan on installing? Will Envirorisk be able to obtain permission to install the hydraulic barriers on the PlayPals property? Does Envirorisk have an alternative in the event that permission cannot be obtained?

Based on current/historic free product occurrences, we proposed two passive hydraulic barriers. One barrier is roughly "L" shaped and will extend from slightly east of MWR-2-9, west to RW-C, and north-NW past MWR-2-12. A smaller trench will be advanced adjacent and south of MW-4/RW-7 and will extend north in the

direction of the on-site dumpster. A small additional barrier trench or a series of closely spaced large auger borings (will be advanced if needed around RW-D to the north or directly behind the convenience store building, where only traces of free product have historically been detected. Both trenches or auger borings will be extended to approx. depths of 15 feet or deeper, depending on the extent of free product observed in the soils. Free product extraction will occur using a combination of manual pumping recovery methods and mobile vacuum extraction (AFVR), depending on product accumulation.

No barriers are proposed on the Play Pals property since the intention of the barriers is to prevent free product migration off-site.

5. Does EnviroRisk have a contingency plan for the hydraulic control barrier in the event that it does not perform as planned? Yes, a series of 1" or 2" temporary wells will be installed on the downslope side of the trenches or auger borings and will be regularly gauged to ensure that further free product migration is not occurring.
6. Can you please provide further information regarding the impermeable barrier that will be utilized on the downslope side of the hydraulic barrier? The barrier we are proposing will ideally consist of double-thick 6 mill poly sheeting. A weighted rod or board will be used to secure the sheeting from the base of the trench interior to ensure a tight fit against the rear soil wall (northwest side) extending and overlapping the surface. The trenches will then be backfilled with gravel. Observation/extraction wells will be installed in the gravel trenches. If extensive sloughing of the rear trench walls is observed, a grout wall may be necessary.
7. Can you verify whether the installation of the observation wells will be installed or not? Yes, a series of vertical observation/extraction wells will be installed to gauge product and for periodic free product extraction.
8. Can you provide further specifications on the low capillary pressure gravel-based material that will be used? EnviroRisk will determine the gravel size/type after excavation is commenced. Any gravel product will provide for capillary "suction" of the free product as groundwater flows into the trenches.
9. Please confirm whether or not the 1" temporary points will or will not be installed on the downslope of the trench to monitor the effectiveness of the barrier. Under what circumstances would the gauging points be installed to monitor the effectiveness of the barrier? Yes, temporary wells will be installed.
10. Can you provide further details on how you will verify the effectiveness of the

mitigation barrier to ensure that free product does not pass the barrier? Regular gauging of the temporary wells on a weekly or biweekly basis will be performed as well as visual observations of the exposed soil bank on the Play Pals property.

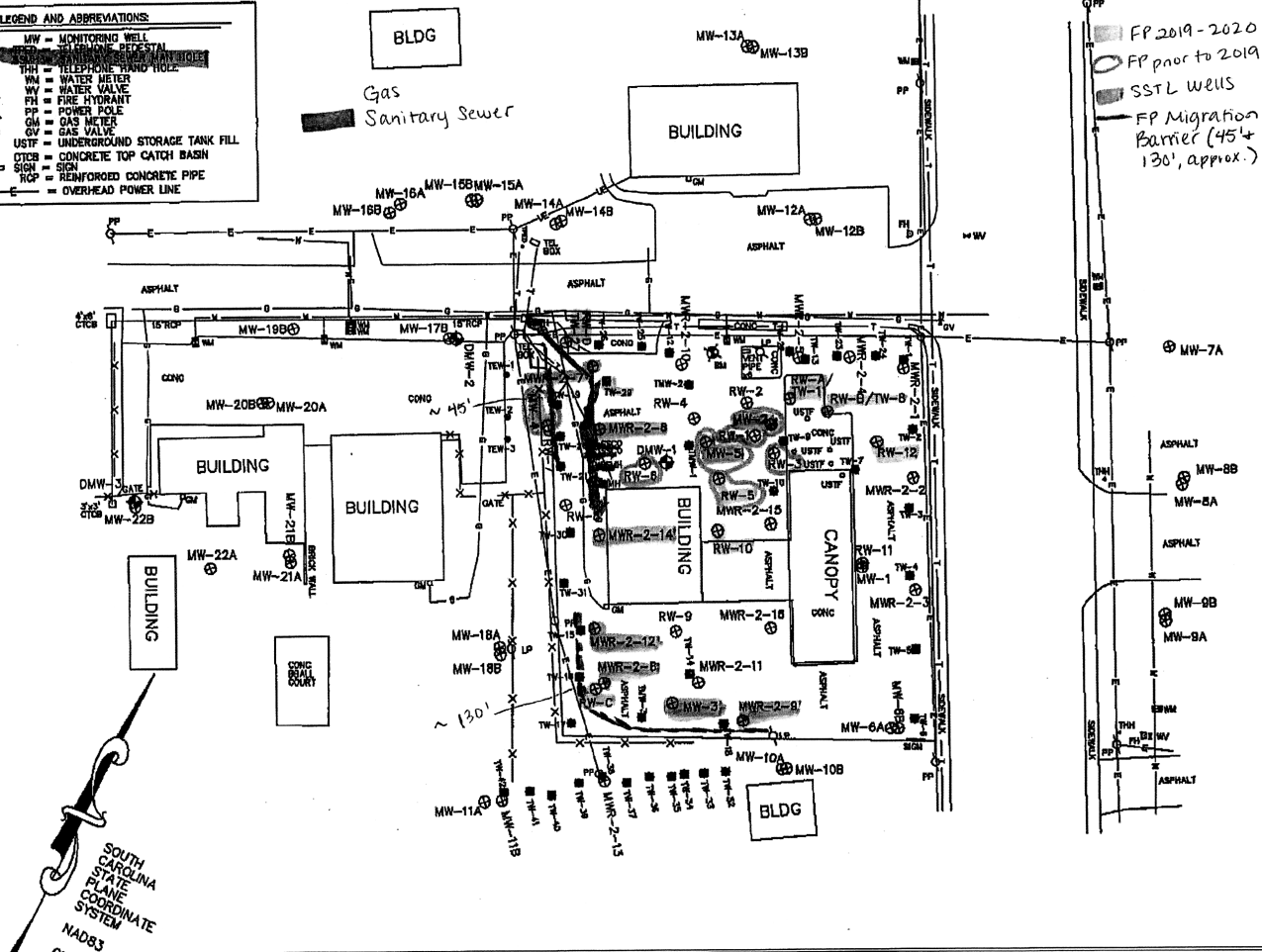
11. How will you ensure that the free product does not go around the barrier and stays confined to the Broad River Road Amoco property? This question has already been answered above. Barriers will be installed and extended farther than described if necessary based on field observations of soil conditions.
12. Will EnviroRisk be conducting a utility survey prior to the installation of the hydraulic barrier? Yes. Note that the underground gas line will require temporary capping and removal on the Play Pals property.
13. Will EnviroRisk be able to adequately conduct weekly inspections as proposed for the duration of the contract? Yes, it is anticipated that the weekly inspection schedule will be modified after the 90-day timeframe. Weekly inspections may also be adjusted based on product accumulation.
14. Are you aware the site is an active gas station? Yes Are you aware of the number of wells currently installed on the property? Yes Can you please provide a map showing how you plan to install 50 additional wells on the property? Yes, see attached. Can you please provide a schematic of a large gravel envelope injection/extraction well? No, we don't have a schematic. The injection/extraction wells will be constructed using a smaller auger rig fitted with 6.26 ID augers or slightly larger to produce a 10" to 12" borehole or larger 2' to 3' borings drilled using a bucket auger rig. The wells will be constructed similarly to typical monitoring wells with manhole completions and boring logs and 1903s provided. We have discussed this with the property owner who is agreeable to this approach.
15. What is the planned method of drilling the injection/envelope wells at the site? See above
16. Can you please provide additional detail on the plant-based surfactant and low-concentration oxidant mixture? A surfactant containing D-limonene or similar surfactant that we have used previously will be utilized such as sodium laurel sulfate. The surfactant will be selected after examining the product type since a review of file information and discussion with site owners indicates that different viscosity products may be present. The surfactants role is only to emulsify the product by reducing the interstitial pressure in the soil pores that holds the product in place. Oxidants that may be employed would include calcium peroxide, sodium percarbonate, or very dilute and stabilized mixtures of hydrogen peroxide with a catalyst. Some of these oxidants are useful in combination with surfactants.

17. EnviroRisk listed PeroxyChem or "other". Can you provide clarification on "other" that would be utilized if PeroxyChem is not? Terra Systems who purchases sodium and potassium persulfate for United Initiators (the manufacturer).
18. Can you please provide more detail regarding the short-term extraction events planned as part of the FPP Removal? Depending on the extent of free product recharge, extraction will be performed using a typical vacuum truck or pump truck after injecting surfactant or oxidants. Extraction may be performed during injection if significant recovery is observed but based on the low permeability or preferential permeability anticipated, extraction will likely occur a day or two following injection to allow more time for product emulsification. EnviroRisk is currently utilizing this treatment method successfully on several PFP sites.
19. Please explain how EnviroRisk will conduct the injection and extraction events on the subject property without disrupting the ongoing business operations. The work will be performed in a manner that doesn't result in blocking all of the dispenser pumps. The owner is agreeable with the scope of work and understands that the work will disturb site operations to some extent.
20. Please indicate whether EnviroRisk will be submitting one CAP or three separate CAPs for the proposed work? We had planned to submit two CAPs, one for the first two phases and an ECAP for the work on Play Pals.
21. Is EnviroRisk aware of the playground equipment bordering the excavation area? Yes, it doesn't appear that DHECs planned excavation area will result in the removal of the equipment.
22. Does EnviroRisk understand that some of the excavation area is concrete and will need to be replaced once excavation is completed? Yes Has that cost been incorporated into the submitted bid? Yes
23. Is EnviroRisk aware that no additional costs will be approved from the SUPERB account for any additional remedial work that would be necessary to achieve the terms and conditions of the solicitation? Yes Does EnviroRisk understand that additional costs beyond what is approved from the SUPERB account would be a matter between EnviroRisk and the responsible parties? Yes.

EnviroRisk has received tentative approval from the site owner, Mr. Desai to perform this bid scope. Mr. Cecchini has repeatedly indicated that he is unwilling to accept responsibility for any site rehabilitation. If this bid is awarded to us,

Envirorisk would appreciate any assistance DHEC can offer regarding the responsible parties and gaining off-site access. In addition, Envirorisk would welcome any site observations from field personnel involved in prior emergency response actions to ensure that the free product barrier and other corrective action is implemented in the best manner to achieve goals quickly.

LEGEND AND ABBREVIATIONS	
	MW = MONITORING WELL
	THH = TELEPHONE HAND HOLE
	WM = WATER METER
	WV = WATER VALVE
	FH = FIRE HYDRANT
	PP = POWER POLE
	GM = GAS METER
	GV = GAS VALVE
	USTF = UNDERGROUND STORAGE TANK FILL
	CTCB = CONCRETE TOP CATCH BASIN
	SIGN = SIGN
	RCP = REINFORCED CONCRETE PIPE
	OPL = OVERHEAD POWER LINE



ENVIRORISK
CONSULTANTS, INC.

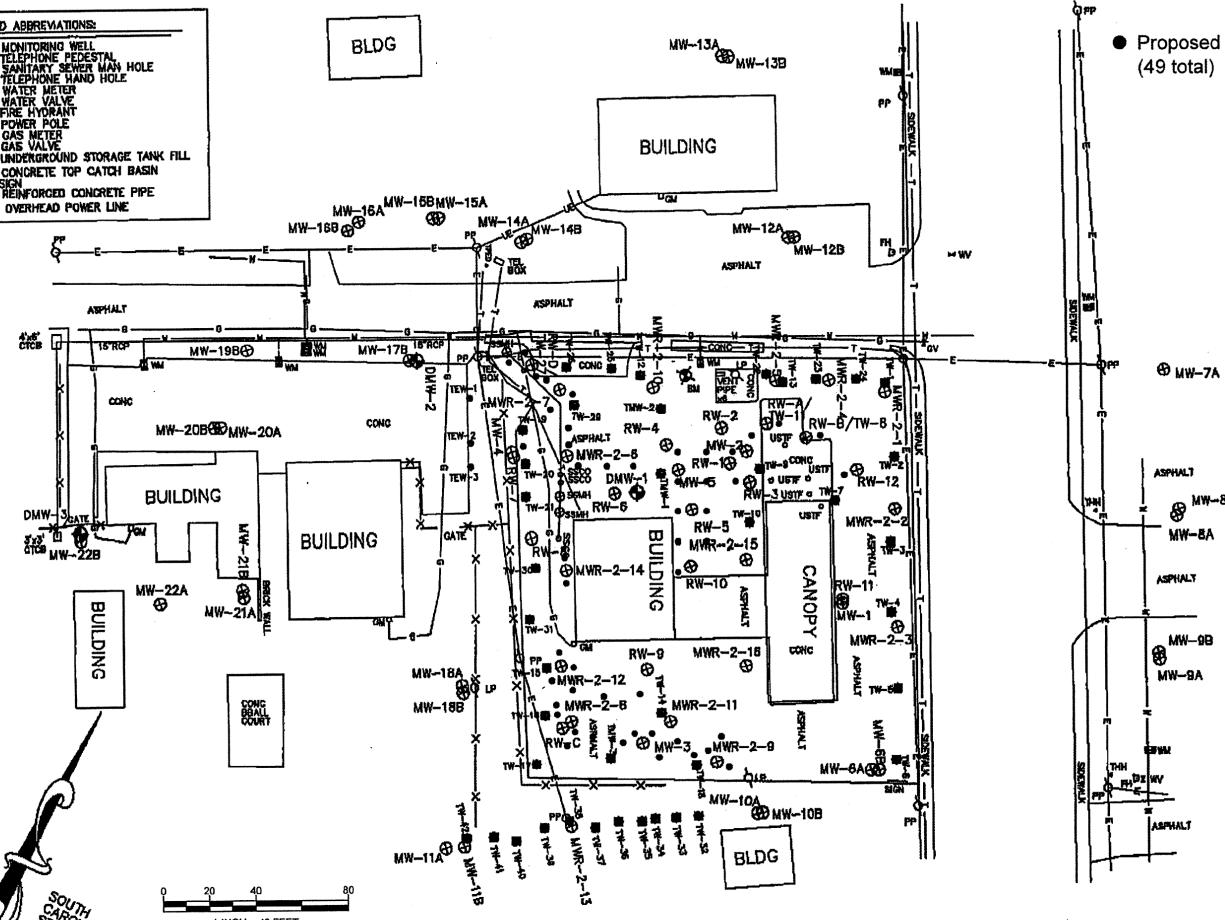
BROAD RIVER AMOCO, UST PERMIT 11946
4335 BROAD RIVER ROAD
COLUMBIA, RICHLAND COUNTY, SOUTH CAROLINA
Free Product Migration Barrier Map **DRAFT**

LEGEND AND ABBREVIATIONS:

- MW - MONITORING WELL
- TPED - TELEPHONE PEDESTAL
- SSMH - SANITARY SEWER MAN HOLE
- THH - TELEPHONE HAND HOLE
- WM - WATER METER
- WV - WATER VALVE
- PH - FIRE HYDRANT
- PP - POWER POLE
- GM - GAS METER
- GV - GAS VALVE
- USTIF - UNDERGROUND STORAGE TANK FILL
- CTCB - CONCRETE TOP CATCH BASIN
- SIGN - SIGN
- ROP - REINFORCED CONCRETE PIPE
- OP - OVERHEAD POWER LINE

BLDG

BUILDING



● Proposed EWs (49 total)



ENVIORISK CONSULTANTS, INC.

BROAD RIVER AMOCO, UST PERMIT 11946
 4335 BROAD RIVER ROAD
 COLUMBIA, RICHLAND COUNTY, SOUTH CAROLINA

FREE PRODUCT CORRECTIVE ACTION MAP

FIGURE NO

2



PAUL DESAI
BROAD RIVER C STORE LLC
278 CANTERWOOD ROAD
IRMO SC 29063

OCT 20 2020

Re: **Corrective Action Solicitation Response Summary**
Broad River Amoco, 4335 Broad River Rd., Columbia, SC
UST Permit #11946
Release #2 reported November 16, 2018
Richland County
Corrective Action Solicitation Responses received September 18, 2020

Dear Mr. Desai:

The Underground Storage Tank Management Division (UST Division) of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the Corrective Action Solicitation responses resulting from the Technical Specifications Package. The Corrective Action Cost submitted by EnviroRisk was for the amount of \$822,500.


The Corrective Action Cost is defined as the total amount established through the procurement process to complete the scope of work/specifications detailed in the solicitation unless otherwise modified pursuant to the terms of this solicitation. The maximum allowable Corrective Action Cost DHEC can establish is dependent on the remaining State Underground Petroleum Environmental Response Bank (SUPERB) account balance for the individual release, less costs required for verification of performance milestones. Corrective action costs above the maximum amount allowable, as established in S.C. Code Ann. § 44-2-40 (2018), are the responsibility of the owner/operator. The verification costs for this release will be **\$10,000**. The Corrective Action Cost will be established in the amount of **\$411,250**. This amount is one-half of the amount submitted by EnviroRisk for the corrective action of both releases. To date, \$73,125.73 has been spent from SUPERB for this release.

Copies of the corrective action solicitation responses are enclosed for your review. A "Corrective Action Solicitation Response Summary" form is also enclosed for you to specify your choice of contractor. Any Class I Certified Underground Storage Tank Contractor may perform the necessary activities at the established price. Please return the Corrective Action Solicitation Response Summary form in order for the necessary financial approval to be made. **The Corrective Action Solicitation Response Summary Form should be returned to the UST Division within 30 days from the date of this letter.**

You may consider entering a written contract with your selected contractor following completion of the solicitation process to address any costs that exceed reasonable or SUPERB-allowable costs and not approved by DHEC for reimbursement from the SUPERB Account. DHEC would not be a party to the contract; however, we will monitor and ensure you are making progress with corrective action activities. If the selected contractor is not able to complete the required activities, you will be required to find another certified contractor to complete the required activities. Except for the limitations specified in the solicitation, the reasonable (or SUPERB-allowable) cost is the maximum amount the SUPERB Account will pay for this active corrective action.

On all correspondence concerning this site, please reference UST Permit #11946. If there are any questions concerning this project, feel free to contact me by telephone at (803) 898-0605, by fax at (803) 898-0673, or by e-mail at baldwiba@dhec.sc.gov.

Sincerely,



Brady Baldwin, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Corrective Action Solicitation Response Summary Form
Corrective Action Solicitation Responses received from 1 contractor

cc: Adam Looper, UST Management Division
Technical file (w/enc)

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA

Department of Health and Environmental Control

Underground Storage Tank Program

UST Permit # 11946

Facility Name Broad River Amoco, Release #2

1. Completed Corrective Action Solicitation Response Forms are attached from one contractor.

EnviroRisk

2. Based on a review of the corrective action responses, I select (please name):

I understand that except for the limitations specified in the solicitation, \$411,250 is the maximum amount the SUPERB Account will pay for this active corrective action.

3. Compensation from the SUPERB Account should be paid to: (please check one)

UST Owner/ Operator

SC Certified Site Rehabilitation Contractor named above in Item 2

4. List any anticipated changes to the site in the near future: (e.g. sale, UST removal, etc.)

5. Additional Comments: (Attach additional page(s) if required)

UST Owner/ Operator Name _____

Address _____

Telephone Number _____

()

FAX Number _____

()

Signature _____

Printed or Typed Name _____

Title _____

Date Signed _____

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

IV. CORRECTIVE ACTION SOLICITATION RESPONSE FORM

A. ACCEPTANCE and DELIVERY STATEMENT

In compliance with the solicitation and subject to all conditions thereof, the UST Site Rehabilitation Contractor agrees, if selected by the UST Owner/Operator within _____ days from the date of financial approval form submittal, to complete the corrective action as specified at the price set forth for the site as stated below. For the purpose of this submittal and possible acceptance of financial approval, I certify that this company understands the nature of the release(s) and the geologic conditions at the site as documented in the technical file and this solicitation. **Any quantities listed in the corrective action method(s) below are estimates and changes to those quantities or to the listed method(s) will not affect the financial approval amount.** Additionally, I certify that this company understands that acceptance is based on total cost to treat the area of concern.



Envirorisk Consultants, Inc.
UST Site Rehabilitation Contractor (Print)

428

UST Site Rehabilitation Contractor Certification #

Kenneth Summerour
Registered Professional Name (Print)

Kenneth Summerour
Registered Professional Signature (required)

P.G. P.E. (check appropriate box)

Professional Certification # 3742

B. CORRECTIVE ACTION SOLICITATION RESPONSE

Please respond to the following questions for Broad River Amoco, UST Permit #11946, 4355 Broad River Rd., Columbia, SC:

1. PREVENT MIGRATION OF FREE PRODUCT ONTO PLAYPALS AND ADJACENT PROPERTIES

a. State and describe the corrective action method(s) or technology(ies) that will be discussed in detail in the CAP to effectively prevent migration of FPP onto Playpals and adjacent properties and achieve all reduction milestones in 90 days, should financial approval occur. Only method(s) and/or technology(ies) that will be implemented on site should be included. Attach an additional sheet if necessary.

In order to prevent further FPP migration, Envirorisk proposes to install 2 L-shaped hydraulic control

barriers on the SW and NW corners of the property. These barriers will be positioned near and overlapping

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

the areas where FPP seepage was observed on the PlayPals property. The hydraulic barrier will be constructed after excavation and removing soils down to approximately 15' and backfilling with a low capillary pressure gravel based material. 4" vertical observation wells will be installed in the hydraulic barrier for FPP gauging and extraction, if needed. The areas will be backfilled and restored to grade with minimal disturbances to site operations. The downslope wall of the barrier on the west will be lined with an impermeable barrier to prevent further migration onto the PlayPals property.

- b. Please provide the two method(s), which will be discussed in detail in the CAP, used to verify that both the short term and long term migration prevention system meets the design objective and monitor the physical and/or chemical effectiveness of method(s) or technology(ies) listed in Section III.B.2.

The high permeability of the gravel hydraulic barrier and low capillary pressure relative to the surrounding water-bearing unit will provide a collection point to effectively halt FPP migration. Weekly gauging of the 15 vertical observation wells will be performed. During weekly gauging events, the exposed soil bank on the PlayPals property will be inspected and photographed. In addition, 1" temporary FPP gauging points may be installed on the downslope side of the trench to monitor the effectiveness of the barrier.

- c. The Corrective Action Cost for this component is \$99,500.00 , in whole dollars, regardless of the type, quantity, or duration of the permitted technology applied, to prevent the migration of the free phase product onto Playpals and adjacent properties; complete all associated monitoring and post-corrective action verification; prepare all plans, reports, and correspondence; obtain and meet all terms and conditions of all required permits and licenses; design, install, monitor, operate, maintain, and when completed, properly abandon and/or remove all assessment and corrective action components, if necessary; and complete other items outlined in this solicitation

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

- d. Please provide a cost breakdown and estimated timetable (as shown in Solicitation Section VIII.4.A) for implementation as well as attainment of contractual remediation goals pertaining to this specific component.

Please see attached table labeled "Section 1d."

2. FREE PRODUCT REMOVAL AT BROAD RIVER AMOCO PROPERTY

- a. Please provide detailed information as to how the active corrective action treatment techniques that will be discussed in the CAP will, in accordance with this solicitation, effectively remove free phase product to reach target SSTL values and achieve all performance milestones within the 5 year contract period. Please include the number of proposed injection points, proposed number of extraction points, proposed volume of excavated material, proposed volume of injected material, etc. Only method(s) and/or technology(ies) that will be implemented on site should be included. Attach an additional sheet if necessary.

A review of the file data indicates that numerous AFVR events have been conducted at the site with

minimal long term effectiveness. Envirorisk proposes to utilize surfactant/oxidant based desorption

and capture methods to complete remediation. Our process will entail the installation of up to 50

large gravel envelope injection/extraction wells in target areas. Treatment will be performed using

plant-based surfactants combined with low concentration oxidant mixtures to provide effective FPP

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

desorption. Extraction(s) will be performed using a series of pumps and and short term extraction events.

b. The Corrective Action Cost, pertaining to this specific component, in whole dollars is \$280,000.00, regardless of the type, quantity, or duration of the permitted technology applied, to treat the area of concern shown in the Appendix such that FPP thickness does not exceed SSTLs at any point in the area of concern; complete all associated monitoring and post-corrective action verification; prepare all plans, reports, and correspondence; obtain and meet all terms and conditions of all required permits and licenses; design, install, monitor, operate, maintain, and when completed, properly abandon and/or remove all assessment and corrective action components; and complete other items outlined in this solicitation.

c. Please provide how the corrective action costs stated in Item #1b will be allocated for the corrective action activities listed in item #2a to include, but not limited to, sampling/analyses over the entire duration of the contract, corrective action system installation, site restoration, etc. Attach an additional sheet if necessary.

Please see attached tables labeled "Section 1d and 2e."

d. The CACT, in months, to achieve all performance milestones from the date of CAP Implementation until the final corrective action performance milestone have been achieved and maintained for 2 consecutive quarters is 36 months. All activities must be completed within 5 years of the effective date. Any request for an extension beyond the 5 year time frame must be made in writing by the Owner/Operator and the CACT may be extended with a written no cost extension granted by DHEC.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

e. Please provide a cost breakdown and estimated timetable (as shown in Solicitation Section VIII.4.A) for implementation as well as attainment of contractual remediation goals pertaining to this specific component.

Please see attached table labeled "Section 2e."

3. EXCAVATION OF PLAYPALS PROPERTY AND REPLACEMENT OF FRENCH DRAIN SYSTEM

a. The Corrective Action cost is \$443,000.00, in whole dollars, to complete all component tasks as described in this solicitation including, but not limited to, excavation of the impacted soil, sheet piling, dewatering, addition of the amendments (Persulfate Compound & Oxygen Releasing Compound), backfilling and compaction of clean fill, installation of up to 6 replacement monitoring wells, preparation of all documentation/reports, and replacement of the French drain.

b. Please provide the manufacturer and name of the proposed Persulfate Compound & Oxygen Releasing Compound (ORC) to be used in backfill of the excavation area.

Sodium persulfate from PeroxyChem or other

A mixture of IXPEN 70C granules and IXPEN 75C granules of calcium peroxide by Carus.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

4. TOTAL CORRECTIVE ACTION COST FOR ALL COMPONENTS: \$822,500.00

- a. Please provide an estimated timetable for implementation of all proposed techniques discussed in Item 1, 2, and 3 as well as attainment of all performance milestones (i.e. Free Product Removal, 60% reduction, 90% reduction, 100% reduction, etc.) **Please note, the table is for example purposes only and not inclusive, actual line items to be included may vary depending on the technology and costs that will actually be incurred. All anticipated costs should be accounted for in the table along with the appropriate time for completion.**

Item	Cost	Time (date)
Preconstruction Cost		
Baseline Sampling	\$9,500	July 2020
Surfactant Selection	\$15,000	August 2020
CAP Design	\$10,000	August 2020
Construction Cost		
Site Preparation	\$8,000	September 2020
Well Installation/Drilling Services	\$25,000	October 2020
Drill Cuttings/Disposal	\$3,000	October 2020
Surfactant Cost	\$40,000	September 2020
Chemical Injection Cost	\$25,000	September 2020
Installation of Air Sparging/Vapor Extraction	\$35,000	October 2020
Soil Excavation	\$45,000	November 2020
Soil amendments & Backfill costs	\$20,000	November 2020
AFVR w/ off gas (10 events/96 hours)	\$85,000	July 2023
Wastewater/Product Disposal (200,000 gallons)	\$95,000	July 2023

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Skimmers/Socks	\$6,500	July 2023
Operations & Maintenance Costs		
Labor Costs	\$85,000	August 2025
Utilities/Indirect Misc Cost	\$23,000	August 2025
Analytical/Groundwater Sampling (# events & frequency)	\$65,250	August 2025
Total		\$595,250

Please see attached table labeled "Section 4a."

Section 1d. Prevent Migration of FPP onto PlayPals and Adjacent Properties

Item	Cost	Time (date)
CAP Design & Implementation	\$10,500	30 days from award
Soil Disposal	\$18,000	30 days from award
Construction Labor & Materials	\$55,000	30 days from award
Post Barrier Monitoring	\$11,500	Weekly
Reporting	\$4,500	Included in CASE Report
Total	\$99,500	

Section 2e. FP Removal at Broad River Amoco Property

Item	Cost	Time (date)
Administrative costs	\$3,500	N/A
CAP Preparation & CAP Implementation Report	\$15,000	30 days from Authorization (can be concurrent with section 1d.)
Injection/Extraction Well Installation	\$35,000	30 days from Authorization (can be concurrent with section 1d.)
Surfactant/Oxidant costs	\$14,500	30 days from Authorization (can be concurrent with section 1d.)
Injection/Extraction & Application costs (labor)	\$30,500	Weekly applications as needed
Liquid Disposal & misc. costs	\$6,500	N/A
FPP Quarterly Gauging	\$25,000	Quarterly
Semi-Annual Sampling & CASE Reporting	\$150,000	Semi-annually
Total	\$280,000	

Section 3c. Excavation of PlayPals and Replacement of French Drain System

Item	Cost	Time (date)
Preparation of ECAP, Excavation Report, Work Plans, and Project Management	\$10,500	Implement ECAP within 30 days of DHEC authorization
Field prep, utility locate, Health & Safety	\$7,500	N/A
Soil Transport & Disposal	\$135,000	Excavation in sections, assume 20-30 days to complete
Oxygen Releasing Product (Solvay/XP70/75) & Equipment, transportation	\$69,500	Apply 3'-7' zone excavate, backfill in sections
Sodium persulfate, transport	\$33,920	N/A
Labor & materials for excavation, backfilling, french drain construction	\$82,330	N/A
Backfill material	\$52,900	N/A
Geotechnical Soil Compaction/Engineering	\$6,500	Compaction testing performed in 1' lifts
Shoring adjacent to building	\$28,000	N/A
Install french drain	\$5,500	completed in 2 to 3 days following backfilling
Misc, Well Abandonment, reseeding landscaping	\$8,150	N/A
Soil Confirmation Sampling	\$3,200	
Total	\$443,000	

Section 4a. Total Corrective Action Costs

Prevent Migration of FPP onto PlayPals and Adjacent Properties		
Item	Cost	Time (date)
CAP Design & Implementation	\$10,500	30 days from award - start July 2020
Soil Disposal	\$18,000	30 days from award
Construction Labor & Materials	\$55,000	30 days from award
Post Barrier Monitoring	\$11,500	Weekly, assume goal met within 30 days of installation
Reporting	\$4,500	Included in CASE Report
Total	\$99,500	
FP Removal at Broad River Amoco Property		
Item	Cost	Time (date)
Administrative costs	\$3,500	N/A
CAP Preparation & CAP Implementation Report	\$15,000	30 days from Authorization (can be concurrent with FPP Barrier)
Injection/Extraction Well Installation	\$35,000	30 days from Authorization (can be concurrent with FPP Barrier)
Surfactant/Oxidant costs	\$14,500	30 days from Authorization (can be concurrent with FPP Barrier)
Injection/Extraction & Application costs (labor)	\$30,500	Weekly applications
Liquid Disposal & misc. costs	\$6,500	N/A
FPP Quarterly Gauging	\$25,000	Quarterly
Semi-Annual Sampling & CASE Reporting	\$150,000	Semiannually
Goals		Anticipate reaching 60% FPP goal 16 months after award 90% within 1 year 100% within 2 years
Total	\$280,000	

Excavation of PlayPals and Replacement of French Drain System

Item	Cost	Time (date)
Preparation of ECAP, Excavation Report, Work Plans, and Project Management	\$10,500	Implement ECAP within 30 days of DHEC authorization, assumed after 90-day barrier monitoring
Field prep, utility locate, Health & Safety	\$7,500	N/A
Soil Transport & Disposal	\$135,000	Excavation in sections, assume 20-30 days to complete
Oxygen Releasing Product (Solvay/XP70/75) & Equipment, transportation	\$69,500	Apply 3'-7' zone excavate, backfill in sections
Sodium persulfate, transportation	\$33,920	
Labor & materials for excavation, backfilling, french drain construction	\$82,330	N/A
Backfill material	\$52,900	N/A
Geotechnical Soil Compaction/Engineering	\$6,500	Compaction testing performed in 1' lifts
Shoring adjacent to building	\$28,000	N/A
Install french drain	\$5,500	completed in 2 to 3 days following backfilling
Misc, Well Abandonment, reseeding landscaping	\$8,150	N/A
Soil Confirmation Sampling	\$3,200	
Goals		Assume 2 months for project completion
Total	\$443,000	
GRAND TOTAL	\$822,500	

**Envirorisk Bid Submission Clarification Questions – UST
Permit #11946**

1. Have you conducted a site visit to familiarize yourself with the site and the layout of the property?

Yes and this week conducted another visit to update us on site conditions

2. Are you aware of the elevation difference between the Broad River Amoco Property and the Play Pals Property? Will this affect the proposed remediation plan?

Yes, we are aware of the elevation differences and no this will not affect the plan

3. Are you aware of the presence of several interceptor trenches currently on the Play Pals property? Do you understand that they cannot be utilized as is for the proposed remediation and do you understand that they will need to be deconstructed and returned to pre-existing conditions during the site restoration phase of the contract if they are not utilized?

We are aware of the trenches and open excavations present on the Play Pals property. There are also above ground PVC piping runs, absorbent booms, piles of disturbed soil both covered and uncovered with plastic, and left over 55 gallon drums. The drums were locked and were located in a water filled excavation so we weren't able to determine if they contain soil or water. The site is extremely over-grown but all of the trenches and open excavations appear to be in the footprint of the proposed excavation area outlined in the Bid document. We were not planning on utilizing any of the trenches or excavations for remedial purposes. After excavation and backfilling with chemical oxidant and soils, the French drain will be installed and the site surface restored.

We request that the drums (4 or 5?) be removed prior to the start of field work since these drums were filled by others and we have no analytical to profile the waste.

4. Envirorisk is proposing two or more hydraulic control barriers. Exactly how many control barriers does Envirorisk plan on installing? Will Envirorisk be able to obtain permission to install the hydraulic barriers on the PlayPals property? Does Envirorisk have an alternative in the event that permission cannot be obtained?

Based on current/historic free product occurrences, we proposed two passive hydraulic barriers. One barrier is roughly "L" shaped and will extend from slightly east of MWR-2-9, west to RW-C, and north-NW past MWR-2-12. A smaller trench will be advanced adjacent and south of MW-4/RW-7 and will extend north in the

direction of the on-site dumpster. A small additional barrier trench or a series of closely spaced large auger borings (will be advanced if needed around RW-D to the north or directly behind the convenience store building, where only traces of free product have historically been detected. Both trenches or auger borings will be extended to approx. depths of 15 feet or deeper, depending on the extent of free product observed in the soils. Free product extraction will occur using a combination of manual pumping recovery methods and mobile vacuum extraction (AFVR), depending on product accumulation.

No barriers are proposed on the Play Pals property since the intention of the barriers is to prevent free product migration off-site.

5. Does Envirorisk have a contingency plan for the hydraulic control barrier in the event that it does not perform as planned? Yes, a series of 1" or 2" temporary wells will be installed on the downslope side of the trenches or auger borings and will be regularly gauged to ensure that further free product migration is not occurring.
6. Can you please provide further information regarding the impermeable barrier that will be utilized on the downslope side of the hydraulic barrier? The barrier we are proposing will ideally consist of double-thick 6 mill poly sheeting. A weighted rod or board will be used to secure the sheeting from the base of the trench interior to ensure a tight fit against the rear soil wall (northwest side) extending and overlapping the surface. The trenches will then be backfilled with gravel. Observation/extraction wells will be installed in the gravel trenches. If extensive sloughing of the rear trench walls is observed, a grout wall may be necessary.
7. Can you verify whether the installation of the observation wells will be installed or not? Yes, a series of vertical observation/extraction wells will be installed to gauge product and for periodic free product extraction.
8. Can you provide further specifications on the low capillary pressure gravel-based material that will be used? Envirorisk will determine the gravel size/type after excavation is commenced. Any gravel product will provide for capillary "suction" of the free product as groundwater flows into the trenches.
9. Please confirm whether or not the 1" temporary points will or will not be installed on the downslope of the trench to monitor the effectiveness of the barrier. Under what circumstances would the gauging points be installed to monitor the effectiveness of the barrier? Yes, temporary wells will be installed.
10. Can you provide further details on how you will verify the effectiveness of the

mitigation barrier to ensure that free product does not pass the barrier? Regular gauging of the temporary wells on a weekly or biweekly basis will be performed as well as visual observations of the exposed soil bank on the Play Pals property.

11. How will you ensure that the free product does not go around the barrier and stays confined to the Broad River Road Amoco property? This question has already been answered above. Barriers will be installed and extended farther than described if necessary based on field observations of soil conditions.
12. Will Envirorisk be conducting a utility survey prior to the installation of the hydraulic barrier? Yes. Note that the underground gas line will require temporary capping and removal on the Play Pals property.
13. Will Envirorisk be able to adequately conduct weekly inspections as proposed for the duration of the contract? Yes, it is anticipated that the weekly inspection schedule will be modified after the 90-day timeframe. Weekly inspections may also be adjusted based on product accumulation.
14. Are you aware the site is an active gas station? Yes Are you aware of the number of wells currently installed on the property? Yes Can you please provide a map showing how you plan to install 50 additional wells on the property? Yes, see attached. Can you please provide a schematic of a large gravel envelope injection/extraction well? No, we don't have a schematic. The injection/extraction wells will be constructed using a smaller auger rig fitted with 6.26 ID augers or slightly larger to produce a 10" to 12" borehole or larger 2' to 3' borings drilled using a bucket auger rig. The wells will be constructed similarly to typical monitoring wells with manhole completions and boring logs and 1903s provided. We have discussed this with the property owner who is agreeable to this approach.
15. What is the planned method of drilling the injection/envelope wells at the site? See above
16. Can you please provide additional detail on the plant-based surfactant and low-concentration oxidant mixture? A surfactant containing D-limonene or similar surfactant that we have used previously will be utilized such as sodium laurel sulfate. The surfactant will be selected after examining the product type since a review of file information and discussion with site owners indicates that different viscosity products may be present. The surfactants role is only to emulsify the product by reducing the interstitial pressure in the soil pores that holds the product in place. Oxidants that may be employed would include calcium peroxide, sodium percarbonate, or very dilute and stabilized mixtures of hydrogen peroxide with a catalyst. Some of these oxidants are useful in combination with surfactants.

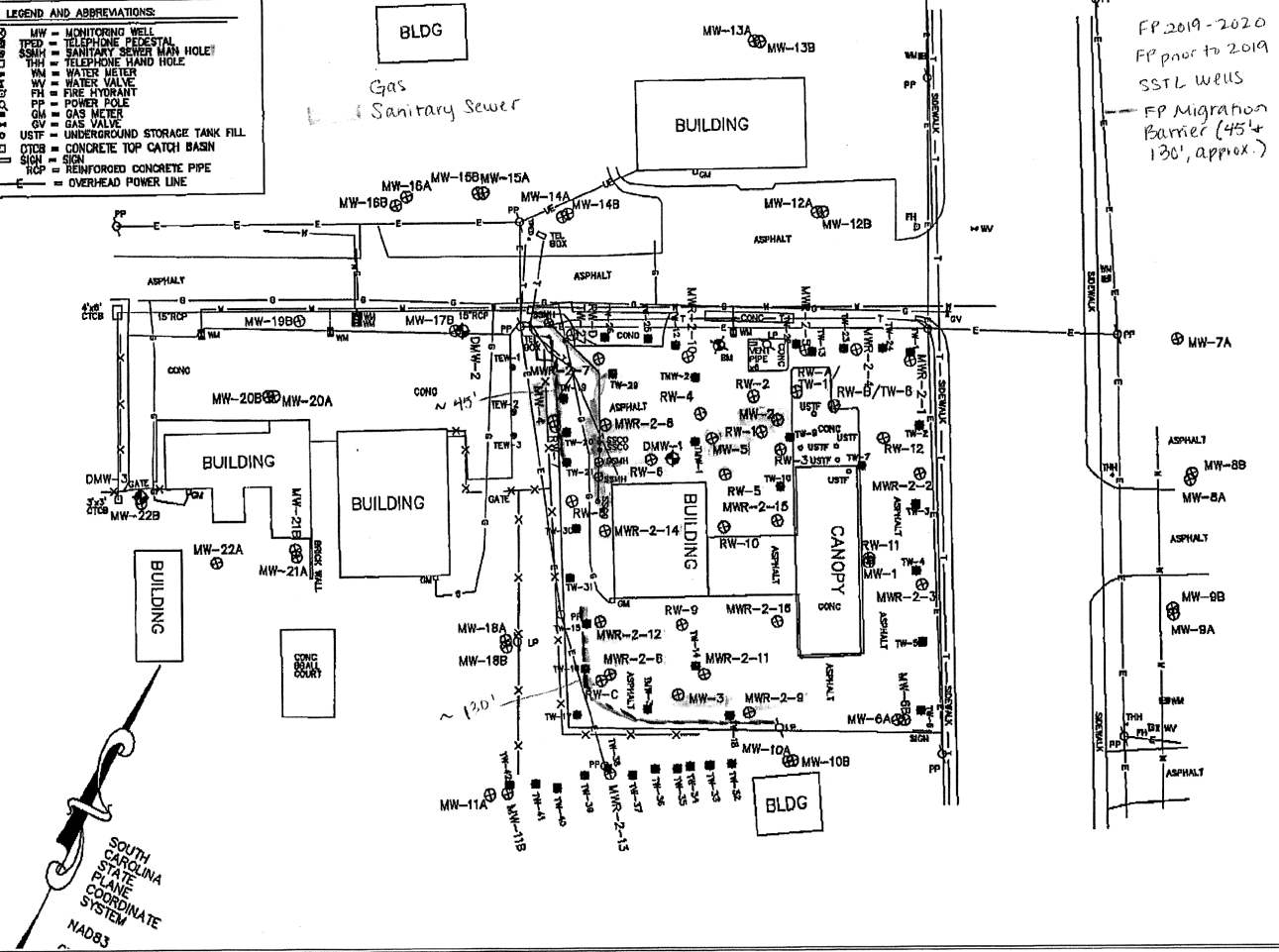
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17. EnviroRisk listed PeroxyChem or "other". Can you provide clarification on "other" that would be utilized if PeroxyChem is not? Terra Systems who purchases sodium and potassium persulfate for United Initiators (the manufacturer).
 18. Can you please provide more detail regarding the short-term extraction events planned as part of the FPP Removal? Depending on the extent of free product recharge, extraction will be performed using a typical vacuum truck or pump truck after injecting surfactant or oxidants. Extraction may be performed during injection if significant recovery is observed but based on the low permeability or preferential permeability anticipated, extraction will likely occur a day or two following injection to allow more time for product emulsification. EnviroRisk is currently utilizing this treatment method successfully on several PFP sites.
 19. Please explain how EnviroRisk will conduct the injection and extraction events on the subject property without disrupting the ongoing business operations. The work will be performed in a manner that doesn't result in blocking all of the dispenser pumps. The owner is agreeable with the scope of work and understands that the work will disturb site operations to some extent.
 20. Please indicate whether EnviroRisk will be submitting one CAP or three separate CAPs for the proposed work? We had planned to submit two CAPs, one for the first two phases and an ECAP for the work on Play Pals.
 21. Is EnviroRisk aware of the playground equipment bordering the excavation area
Yes, it doesn't appear that DHECs planned excavation area will result in the removal of the equipment.
 22. Does EnviroRisk understand that some of the excavation area is concrete and will need to be replaced once excavation is completed? Yes Has that cost been incorporated into the submitted bid? Yes
 23. Is EnviroRisk aware that no additional costs will be approved from the SUPERB account for any additional remedial work that would be necessary to achieve the terms and conditions of the solicitation? Yes Does EnviroRisk understand that additional costs beyond what is approved from the SUPERB account would be a matter between EnviroRisk and the responsible parties? Yes.

EnviroRisk has received tentative approval from the site owner, Mr. Desai to perform this bid scope. Mr. Cecchini has repeatedly indicated that he is unwilling to accept responsibility for any site rehabilitation. If this bid is awarded to us,

Envirorisk would appreciate any assistance DHEC can offer regarding the responsible parties and gaining off-site access. In addition, Envirorisk would welcome any site observations from field personnel involved in prior emergency response actions to ensure that the free product barrier and other corrective action is implemented in the best manner to achieve goals quickly.

LEGEND AND ABBREVIATIONS

○	MW	MONITORING WELL
○	TPED	TELEPHONE PEDESTAL
○	SSMH	SANITARY SEWER MAN HOLE
○	THH	TELEPHONE HAND HOLE
○	WM	WATER METER
○	WV	WATER VALVE
○	PH	FIRE HYDRANT
○	PP	POWER POLE
○	GM	GAS METER
○	GV	GAS VALVE
○	USTF	UNDERGROUND STORAGE TANK FILL
○	CTCB	CONCRETE TOP CATCH BASIN
○	SIGN	SIGN
○	RCP	REINFORCED CONCRETE PIPE
○	E	OVERHEAD POWER LINE



FP 2019-2020
 FP prior to 2019
 SSTL WELLS
 FP Migration Barrier (45' + 130', approx.)



ENVIRORISK
 CONSULTANTS, INC.

BROAD RIVER AMOCO, UST PERMIT 11946
 4335 BROAD RIVER ROAD
 COLUMBIA, RICHLAND COUNTY, SOUTH CAROLINA

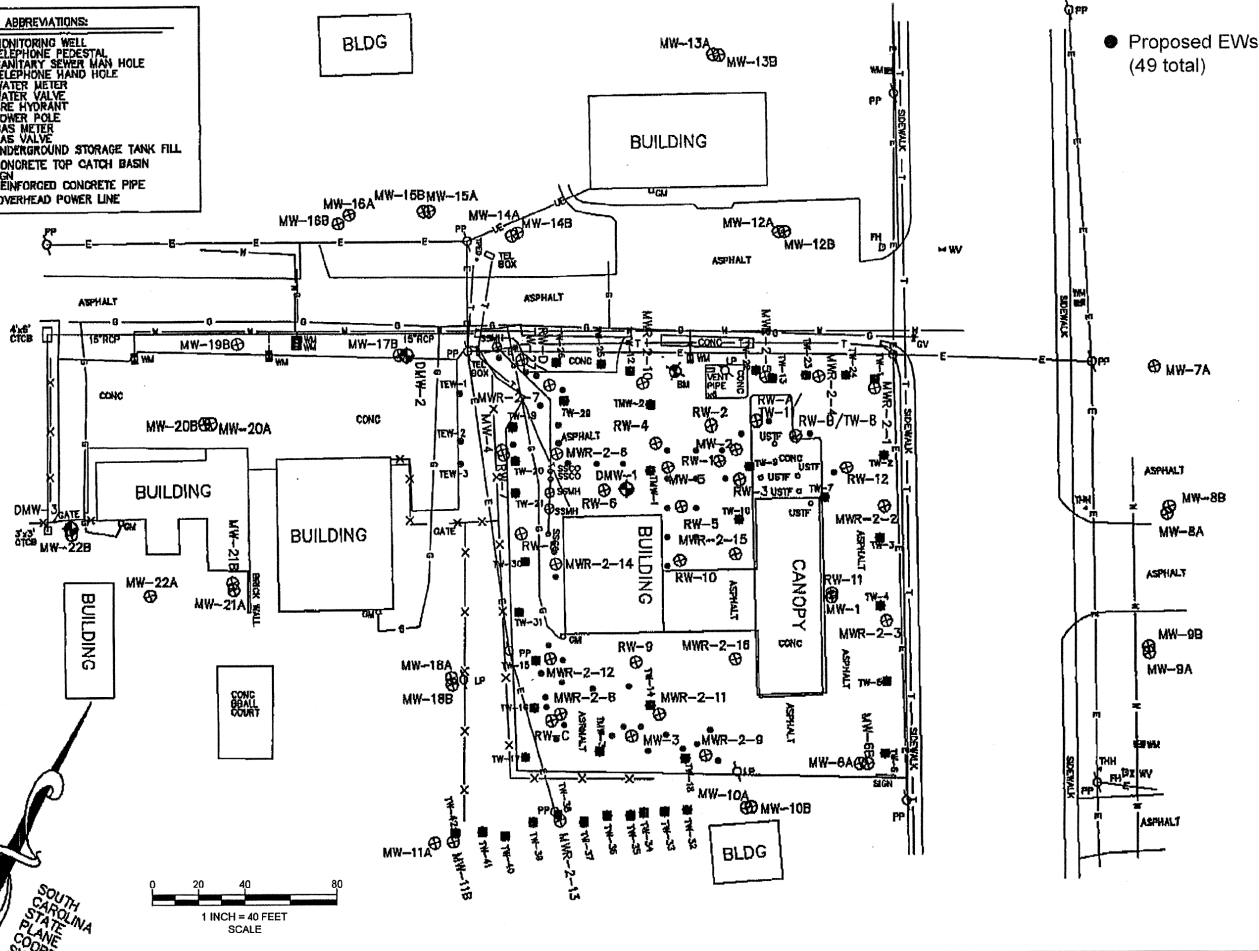
Free Product Migration Barrier Map **DRAFT**

FIGURE NO

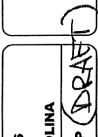
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LEGEND AND ABBREVIATIONS:

MW	MONITORING WELL
TPED	TELEPHONE PEDIESTAL
SSMH	SANITARY SEWER MAN HOLE
THH	TELEPHONE HAND HOLE
WM	WATER METER
WV	WATER VALVE
FH	FIRE HYDRANT
PP	POWER POLE
GM	GAS METER
GV	GAS VALVE
USTF	UNDERGROUND STORAGE TANK FILL
CTCB	CONCRETE TOP CATCH BASIN
SIGN	SIGN
RCP	REINFORCED CONCRETE PIPE
E	OVERHEAD POWER LINE



ENVIRONMENTAL
CONSULTANTS, INC.



BROAD RIVER AMOCO, UST PERMIT 11946
4335 BROAD RIVER ROAD
COLUMBIA, RICHLAND COUNTY, SOUTH CAROLINA
FREE PRODUCT CORRECTIVE ACTION MAP

FIGURE NO

2

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA

Department of Health and Environmental Control

Underground Storage Tank Program

UST Permit # 11946

Facility Name Broad River Amoco, Release #2

1. Completed Corrective Action Solicitation Response Forms are attached from one contractor.

EnviroRisk

2. Based on a review of the corrective action responses, I select (please name):

I understand that except for the limitations specified in the solicitation, \$411,250 is the maximum amount the SUPERB Account will pay for this active corrective action.

3. Compensation from the SUPERB Account should be paid to: (please check one)

UST Owner/ Operator

SC Certified Site Rehabilitation Contractor named above in Item 2

4. List any anticipated changes to the site in the near future: (e.g. sale, UST removal, etc.)

5. Additional Comments: (Attach additional page(s) if required)

UST Owner/ Operator Name _____

Address _____

Telephone Number () _____ FAX Number () _____

Signature _____ Printed or Typed Name _____ Title _____

_____ Date Signed

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY



S. Jahue Moore[†]
James Edward Bradley[†]
Sheila McNair Robinson
Christian G. Spradley
William H. Edwards
Stanley L. Myers
Jane H. Downey^{*}
S. Jahue Moore, Jr.
John C. Bradley, Jr.
Melissa K. Moore
William B. Fortino
Ralph Nichols Riley, Jr.
Lester McGill Bell, Jr.
Bryan C. Letteer
Sierra D. Carini
Nicole E. Jackson

J. Mark Taylor[†]
Robert D. Hazel[†]
C. David Sawyer, Jr.[†]
Billy C. Coleman
1916-2019

October 27, 2020

Bradley Baldwin
DHEC – Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201

RE: 4335 Broad River Road – Broad River C-Store

Dear Mr. Baldwin:

As you know, I represent Paul Desai and Broad River C-Store, LLC. Mr. Desai and Broad River C-Store have paid the annual registration fees on the underground storage tanks. They have up to one million dollars in coverage for the remediation of this spill.

My client objects to any type of discount or cutting in half of the expenses.

You have provided a list of names for approved contractors. My client picked EnviroRisk to do the corrective action needed for this spill.

We take great exception to the content of your letter. The amount liable for corrective action is not dependent on the remaining State Underground Petroleum Environmental Response Bank. The funds were paid for coverage. Coverage exists. My client has coverage up to one million dollars. We also understand that federal law would pick up anything over the one million dollars.

My client wants to use EnviroRisk for this project. If there is any form of allocation among other insureds, that is all right with us. What we do expect is for this site to be cleaned up and that my client not have to expend any further money.

We also understand there is a fund available for third party claims. My client is entitled to protection in that regard.

The purpose of this letter is to demand that you immediately approve EnviroRisk and authorize EnviroRisk to do the work necessary to clean up this project.

October 27, 2020

Bradley Baldwin

RE: Broad River C-Store

My client has done everything you have asked it to do. We have selected a contractor; cooperated with DHEC; provided statements as to what happened; and have reviewed all of your correspondence.

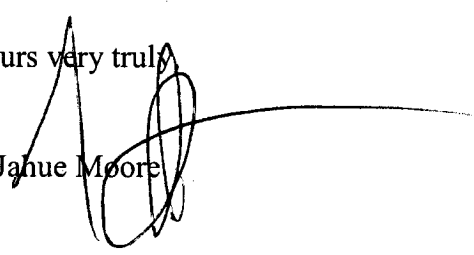
My client simply wants assurance that what he has paid for will be delivered from the state. We also insist that EnviroRisk be immediately authorized to commence work.

Thank you for your attention to this matter and I happy to discuss this at any time with anyone from DHEC. You may accept this letter as approval by my client for the work to be done by EnviroRisk Consultants, Inc. with the work to be paid for by the State of South Carolina pursuant to the SUPERB fund.

It is imperative this work be done immediately. Thank you for your cooperation.

Yours very truly

S. Jahue Moore



SJM/arj

cc: Paul Desai

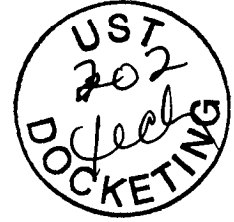
EnviroRisk Consultants, Inc.

Debra Thoma, Manager of Corrective Action & Quality Assurance



Healthy People. Healthy Communities.

NOV 23 2020



CERTIFIED MAIL

9214 8969 0099 9790 1540 5226 77

FREDERICK CECCHINI
501 ZANARK DRIVE
COLUMBIA SC 29212

Re: **Notice of Extension Approval for Corrective Action Solicitation Response**
Broad River Amoco, 4335 Broad River Road, Columbia, SC
UST Permit #11946
Release #1 reported January 4, 2011
Corrective Action Solicitation Response Summary letter dated October 20, 2020
Richland County

Dear Mr. Cecchini:

The Underground Storage Tank Management Division of the South Carolina Department of Health and Environmental Control (DHEC) directed you on October 20, 2020 to submit Corrective Action Solicitation Response Summary form due on or before November 20, 2020. To date, DHEC has not yet received the required Corrective Action Solicitation Response form.

Due to the ongoing impact from COVID-19 as well as the upcoming holiday schedule, DHEC has approved an extension for submittal of the Corrective Action Solicitation Response Summary form.

Please sign and submit the Corrective Action Solicitation Response form with your choice of selected contractor on or before December 23, 2020. Should you not submit the report by this date, this office may initiate further action.

This correspondence is being sent to you by first class mail and certified to better ensure delivery. On all correspondence regarding this site, please reference UST Permit #11946. If you have any questions concerning this correspondence, please call me at (803) 898-0605, e-mail me at baldwiba@dhec.sc.gov, or fax me at (803) 898-0673.

Sincerely,

Brad Baldwin, GIT, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Corrective Action Solicitation Response Summary Letter

cc: Colin Thomas Lee Spangler, Wayne Floyd Law Office, 1611 Augusta Road, West Columbia, SC 29169
(w/ enc)
Technical File



FREDERICK CECCHINI
501 ZANARK DRIVE
COLUMBIA SC 29212

Re: **Corrective Action Solicitation Response Summary**
Broad River Amoco, 4335 Broad River Rd., Columbia, SC
UST Permit #11946
Release #1 reported January 4, 2011
Richland County
Corrective Action Solicitation Responses received September 18, 2020

Dear Mr. Cecchini:

The Underground Storage Tank Management Division (UST Division) of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the Corrective Action Solicitation responses resulting from the Technical Specifications Package. The Corrective Action Cost submitted by EnviroRisk was for the amount of \$822,500.

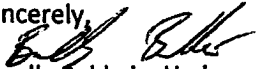
The Corrective Action Cost is defined as the total amount established through the procurement process to complete the scope of work/specifications detailed in the solicitation, unless otherwise modified pursuant to the terms of this solicitation. The maximum allowable Corrective Action Cost DHEC can establish is dependent on the remaining State Underground Petroleum Environmental Response Bank (SUPERB) account balance for the individual release, less costs required for verification of performance milestones. Corrective action costs above the maximum amount allowable, as established in S.C. Code Ann. § 44-2-40 (2018), are the responsibility of the owner/operator. The verification costs for this release will be **\$10,000**. The Corrective Action Cost will be established in the amount of **\$2,316.25**. All remaining corrective action costs above the amount allowed from SUPERB are the responsibility of the owner/operator. The amount of SUPERB funds spent to date is \$987,683.75.

Copies of the corrective action solicitation responses are enclosed for your review. A "Corrective Action Solicitation Response Summary" form is also enclosed for you to specify your choice of contractor. Any Class I Certified Underground Storage Tank Contractor may perform the necessary activities at the established price. Please return the Corrective Action Solicitation Response Summary form in order for the necessary financial approval to be made. **The Corrective Action Solicitation Response Summary Form should be returned to the UST Division within 30 days from the date of this letter.**

You may consider entering a written contract with your selected contractor following completion of the solicitation process to address any costs that exceed reasonable or SUPERB-allowable costs and not approved by DHEC for reimbursement from the SUPERB Account. DHEC would not be a party to the contract; however, we will monitor and ensure you are making progress with corrective action activities. If the selected contractor is not able to complete the required activities, you will be required to find another certified contractor to complete the required activities. Except for the limitations specified in the solicitation, the reasonable (or SUPERB-allowable) cost is the maximum amount the SUPERB Account will pay for this active corrective action.

On all correspondence concerning this site, please reference UST Permit #11946. If there are any questions concerning this project, feel free to contact me by telephone at (803) 898-0605, by fax at (803) 898-0673, or by e-mail at baldwiba@dhec.sc.gov.

Sincerely,



Bradly Baldwin, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Corrective Action Solicitation Response Summary Form
Corrective Action Solicitation Responses received from one contractor

cc: Adam Looper, UST Management Division
Technical file (w/enc)

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA

Department of Health and Environmental Control

Underground Storage Tank Program

UST Permit # 11946

Facility Name Broad River Amoco, Release #1

1. Completed Corrective Action Solicitation Response Forms are attached from one contractor.

EnviroRisk

2. Based on a review of the corrective action responses, I select (please name):

I understand that except for the limitations specified in the solicitation, \$2,316.25 is the maximum amount the SUPERB Account will pay for this active corrective action.

3. Compensation from the SUPERB Account should be paid to: (please check one)

UST Owner/ Operator

SC Certified Site Rehabilitation Contractor named above in Item 2

4. List any anticipated changes to the site in the near future: (e.g. sale, UST removal, etc.)

5. Additional Comments: (Attach additional page(s) if required)

UST Owner/ Operator Name _____

Address _____

Telephone Number () _____

FAX Number () _____

Signature _____

Printed or Typed Name _____

Title _____

Date Signed _____

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY



NOV 23 2020



CERTIFIED MAIL

9214 8969 0099 9790 1540 5226 84

PAUL DESAI
BROAD RIVER C STORE LLC
278 CANTERWOOD ROAD
IRMO SC 29063

Re: **Notice of Extension Approval for Corrective Action Solicitation Response**
Broad River Amoco, 4335 Broad River Road, Columbia, SC
UST Permit #11946
Release #2 reported November 16, 2018
Corrective Action Solicitation Response Summary letter dated October 20, 2020
Richland County

Dear Mr. Desai:

The Underground Storage Tank Management Division of the South Carolina Department of Health and Environmental Control (DHEC) directed you on October 20, 2020 to submit Corrective Action Solicitation Response Summary form due on or before November 20, 2020. To date, DHEC has received a written correspondence submitted by MT Moore & Taylor on behalf of Mr. Desai on November 2, 2020, but the required Corrective Action Solicitation Response form has not yet been received.

Due to the ongoing impact from COVID-19 as well as the upcoming holiday schedule, DHEC has approved an extension for submittal of the Corrective Action Solicitation Response Summary form.

Please sign and submit the Corrective Action Solicitation Response form with your choice of selected contractor on or before December 23, 2020. Should you not submit the report by this date, this office may initiate further action.

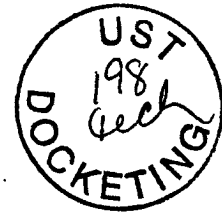
This correspondence is being sent to you by first class mail and certified to better ensure delivery. On all correspondence regarding this site, please reference UST Permit #11946. If you have any questions concerning this correspondence, please call me at (803) 898-0605, e-mail me at baldwiba@dhec.sc.gov, or fax me at (803) 898-0673.

Sincerely,

Brad Baldwin, GIT, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Corrective Action Solicitation Response Summary Letter

cc: S. Jahue Moore, Moore Taylor Law Firm, P.A., PO Box 5709, West Columbia, SC 29171 (w/ enc)
Technical File (w/o enc)



PAUL DESAI
BROAD RIVER C STORE LLC
278 CANTERWOOD ROAD
IRMO SC 29063

OCT 20 2020

Re: **Corrective Action Solicitation Response Summary**
Broad River Amoco, 4335 Broad River Rd., Columbia, SC
UST Permit #11946
Release #2 reported November 16, 2018
Richland County
Corrective Action Solicitation Responses received September 18, 2020

Dear Mr. Desai:

The Underground Storage Tank Management Division (UST Division) of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the Corrective Action Solicitation responses resulting from the Technical Specifications Package. The Corrective Action Cost submitted by EnviroRisk was for the amount of \$822,500.

The Corrective Action Cost is defined as the total amount established through the procurement process to complete the scope of work/specifications detailed in the solicitation unless otherwise modified pursuant to the terms of this solicitation. The maximum allowable Corrective Action Cost DHEC can establish is dependent on the remaining State Underground Petroleum Environmental Response Bank (SUPERB) account balance for the individual release, less costs required for verification of performance milestones. Corrective action costs above the maximum amount allowable, as established in S.C. Code Ann. § 44-2-40 (2018), are the responsibility of the owner/operator. The verification costs for this release will be \$10,000. The Corrective Action Cost will be established in the amount of \$411,250. This amount is one-half of the amount submitted by EnviroRisk for the corrective action of both releases. To date, \$73,125.73 has been spent from SUPERB for this release.

Copies of the corrective action solicitation responses are enclosed for your review. A "Corrective Action Solicitation Response Summary" form is also enclosed for you to specify your choice of contractor. Any Class I Certified Underground Storage Tank Contractor may perform the necessary activities at the established price. Please return the Corrective Action Solicitation Response Summary form in order for the necessary financial approval to be made. **The Corrective Action Solicitation Response Summary Form should be returned to the UST Division within 30 days from the date of this letter.**

You may consider entering a written contract with your selected contractor following completion of the solicitation process to address any costs that exceed reasonable or SUPERB-allowable costs and not approved by DHEC for reimbursement from the SUPERB Account. DHEC would not be a party to the contract; however, we will monitor and ensure you are making progress with corrective action activities. If the selected contractor is not able to complete the required activities, you will be required to find another certified contractor to complete the required activities. Except for the limitations specified in the solicitation, the reasonable (or SUPERB-allowable) cost is the maximum amount the SUPERB Account will pay for this active corrective action.

On all correspondence concerning this site, please reference UST Permit #11946. If there are any questions concerning this project, feel free to contact me by telephone at (803) 898-0605, by fax at (803) 898-0673, or by e-mail at baldwiba@dhec.sc.gov.

Sincerely,



Bradly Baldwin, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Corrective Action Solicitation Response Summary Form
Corrective Action Solicitation Responses received from 1 contractor

cc: Adam Looper, UST Management Division
Technical file (w/enc)

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA

Department of Health and Environmental Control

Underground Storage Tank Program

UST Permit # 11946

Facility Name Broad River Amoco, Release #2

1. Completed Corrective Action Solicitation Response Forms are attached from one contractors.

EnviroRisk

2. Based on a review of the corrective action responses, I select (please name):

I understand that except for the limitations specified in the solicitation, \$411,250 is the maximum amount the SUPERB Account will pay for this active corrective action.

3. Compensation from the SUPERB Account should be paid to: (please check one)

UST Owner/ Operator

SC Certified Site Rehabilitation Contractor named above in Item 2

4. List any anticipated changes to the site in the near future: (e.g. sale, UST removal, etc.)

5. Additional Comments: (Attach additional page(s) if required)

UST Owner/ Operator Name _____

Address _____

Telephone Number _____

() _____

FAX Number _____

() _____

Signature _____

Printed or Typed Name _____

Title _____

Date Signed _____

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY



CERTIFIED MAIL

9214 8969 0099 9790 1418 7138 86

FREDERICK CECCHINI
501 ZANARK DRIVE
COLUMBIA SC 29212

DEC 22 2020

Re: Notice of Extension Approval for Corrective Action Solicitation Response

Broad River Amoco, 4335 Broad River Road, Columbia, SC

UST Permit #11946

Release #2 reported November 16, 2018

Corrective Action Solicitation Response Summary letter dated October 20, 2020

Richland County

Dear Mr. Cecchini:

The Underground Storage Tank Management Division of the South Carolina Department of Health and Environmental Control (DHEC) directed you on October 20, 2020 to submit Corrective Action Solicitation Response Summary form due originally on or before November 20, 2020. To date, DHEC has not yet received the required Corrective Action Solicitation Response form.

Due to the ongoing impact from COVID-19 as well as the upcoming holiday schedule, DHEC has approved an additional extension for submittal of the Corrective Action Solicitation Response Summary form.

Please sign and submit the Corrective Action Solicitation Response form with your choice of selected contractor on or before February 1, 2021. Should you not submit the report by this date, this office may initiate further action.

This correspondence is being sent to you by first class mail and certified to better ensure delivery.

On all correspondence regarding this site, please reference UST Permit #11946. If you have any questions concerning this correspondence, please call me at (803) 898-0605, e-mail me at baldwiba@dhec.sc.gov, or fax me at (803) 898-0673.

Sincerely,

Brad Baldwin, GIT, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Corrective Action Solicitation Response Summary Letter

cc: Colin Thomas Lee Spangler, Wayne Floyd Law Office, 1611 Augusta Road, West Columbia, SC 29169
(w/ enc)
Technical File (w/ enc)

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA

**Department of Health and Environmental Control
Underground Storage Tank Program**

UST Permit # 11946 Facility Name Broad River Amoco, Release #1

1. Completed Corrective Action Solicitation Response Forms are attached from one contractor.

EnviroRisk

2. Based on a review of the corrective action responses, I select (please name):

I understand that except for the limitations specified in the solicitation, \$2,316.25 is the maximum amount the SUPERB Account will pay for this active corrective action.

3. Compensation from the SUPERB Account should be paid to: (please check one)

UST Owner/ Operator

SC Certified Site Rehabilitation Contractor named above in Item 2

4. List any anticipated changes to the site in the near future: (e.g. sale, UST removal, etc.)

5. Additional Comments: (Attach additional page(s) if required)

UST Owner/ Operator Name _____
Address _____

Telephone Number () _____ **FAX Number** () _____

Signature _____ **Printed or Typed Name** _____ **Title** _____

Date Signed _____

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY



CERTIFIED MAIL

9214 8969 0099 1418 7138 93

PAUL DESAI
BROAD RIVER C STORE LLC
278 CANTERWOOD ROAD
IRMO SC 29063

DEC 22 2020



Re: **Notice of Extension Approval for Corrective Action Solicitation Response**
Broad River Amoco, 4335 Broad River Road, Columbia, SC
UST Permit #11946
Release #2 reported November 16, 2018
Corrective Action Solicitation Response Summary letter dated October 20, 2020
Richland County

Dear Mr. Desai:

The Underground Storage Tank Management Division of the South Carolina Department of Health and Environmental Control (DHEC) directed you on October 20, 2020 to submit Corrective Action Solicitation Response Summary form due originally on or before November 20, 2020. To date, DHEC has received a written correspondence submitted by MT Moore & Taylor on behalf of Mr. Desai on November 2, 2020, but the required Corrective Action Solicitation Response form has not yet been received.

Due to the ongoing impact from COVID-19 as well as the upcoming holiday schedule, DHEC has approved an additional extension for submittal of the Corrective Action Solicitation Response Summary form.

Please sign and submit the Corrective Action Solicitation Response form with your choice of selected contractor on or before January 23, 2021. Should you not submit the report by this date, this office may initiate further action.

This correspondence is being sent to you by first class mail and certified to better ensure delivery.

On all correspondence regarding this site, please reference UST Permit #11946. If you have any questions concerning this correspondence, please call me at (803) 898-0605, e-mail me at baldwiba@dhec.sc.gov, or fax me at (803) 898-0673.

Sincerely,

Brad Baldwin, GIT, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Corrective Action Solicitation Response Summary Letter

cc: S Jahue Moore, Moore Taylor Law Firm, P.A., PO BOX 5709, West Columbia, SC 29171 (w/ enc)
Technical File (w/ enc)

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA

**Department of Health and Environmental Control
Underground Storage Tank Program**

UST Permit # 11946

Facility Name Broad River Amoco, Release #2

1. Completed Corrective Action Solicitation Response Forms are attached from one contractors.

EnviroRisk

2. Based on a review of the corrective action responses, I select (please name):

I understand that except for the limitations specified in the solicitation, \$411,250 is the maximum amount the SUPERB Account will pay for this active corrective action.

3. Compensation from the SUPERB Account should be paid to: (please check one)

UST Owner/ Operator

SC Certified Site Rehabilitation Contractor named above in Item 2

4. List any anticipated changes to the site in the near future: (e.g. sale, UST removal, etc.)

5. Additional Comments: (Attach additional page(s) if required)

UST Owner/ Operator Name _____

Address _____

Telephone Number _____

()

FAX Number _____

()

Signature _____

Printed or Typed Name _____

Title _____

Date Signed _____

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

11946



January 6, 2021

S. Jahue Moore[†]
James Edward Bradley[†]
Sheila McNair Robinson
Christian G. Spradley
William H. Edwards
Stanley L. Myers
Jane H. Downey^{*}
S. Jahue Moore, Jr.
John C. Bradley, Jr.
Melissa K. Moore
William B. Fortino
Ralph Nichols Riley, Jr.
Lester McGill Bell, Jr.
Bryan C. Letteer
Sierra D. Carini
Nicole E. Jackson

J. Mark Taylor[†]
Robert D. Hazel[†]
C. David Sawyer, Jr.[†]
Billy C. Coleman
1916-2019

Brad Baldwin
DHEC – Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201

RE: 4335 Broad River Road – Broad River C-Store

Dear Mr. Baldwin:

Thank you for your letter of December 22, 2020 regarding the notice of extension approval for corrective action. I remain frustrated as we continue signing whatever it is you have asked us to sign.

You have previously been advised that my client has selected EnviroRisk as its contractor to do the work at this location. My client has paid to register the tanks under the SUPERB fund and has paid the deductible.

You will note that we have changed the language of your form as we do not agree that there is a maximum amount that will be paid for the corrective action. The maximum amount that should be paid by SUPERB would be the amount of the coverage under the SUPERB act which I understand to be much more than the amount listed in the form.

I am sure you can understand that we will not agree to cap the amount that has to be paid to remediate this problem. The insurance which has been paid for through the state does not have a cap and we cannot agree to any form of cap.

We would ask that you deal with EnviroRisk in order to start the work and in order to work out payment. We consent to the work necessary to be done and we consent to you paying EnviroRisk the amount necessary in order to correct the problem.

My client has fully paid for the coverage. My client has paid his deductible. My client has previously designated this agency as the agency of choice to do the work. It is now up to the DHEC to approve this agency. We understand EnviroRisk to be on the approved list. You instructed us

January 6, 2021

Brad Baldwin

RE: 4335 Broad River Road – Broad River C-Store

to choose from the list and EnviroRisk was on the list. If anything else is needed please communicate with me. I represent the owners of the Broad River Amoco which paid the insurance to insure against environmental hazards related to the underground storage tanks.

It is imperative that the work begin immediately. You know have had designated the contractor of choice. We are willing to sign anything necessary in order to allow EnviroRisk to do the work. We are having a very difficult time understanding why it is taking DHEC so long to get the arrangements made with EnviroRisk and to have the work started.

Thank you for your attention to this matter and we look forward to confirmation that the work will begin soon.

Yours very truly,


S. Jahue Moore

SJM/arj

cc: Paul Desai
EnviroRisk Consultants, Inc.

11946

MT MOORE | TAYLOR
LAW FIRM



- S. Jahue Moore[†]
- James Edward Bradley[†]
- Sheila McNair Robinson
- Christian G. Spradley
- William H. Edwards
- Stanley L. Myers
- Jane H. Downey[♦]
- S. Jahue Moore, Jr.
- John C. Bradley, Jr.
- Melissa K. Moore
- William B. Fortino
- Ralph Nichols Riley, Jr.
- Lester McGill Bell, Jr.
- Bryan C. Letteer
- Sierra D. Carini
- Nicole E. Jackson
-
- J. Mark Taylor[†]
- Robert D. Hazel[†]
- C. David Sawyer, Jr.[†]
- Billy C. Coleman
- 1916-2019

January 20, 2021



Brad Baldwin
 DHEC – Hydrogeologist
 Corrective Action & Quality Assurance Section
 Underground Storage Tank Management Division
 2600 Bull Street
 Columbia, SC 29201

RE: 4335 Broad River Road – Broad River C-Store

Dear Brad:

I hope you received a recent letter from me regarding Paul Desai and Broad River C-Store, LLC.

This location has paid its money of it SUPERB fund. Per your directive we have selected EnviroRisk as the contractor. Notwithstanding the fact that we have selected EnviroRisk to do the work, we continue being asked to sign certain forms.

My client is not willing to accept any type of limitation on the cost of the work. The information you have sent us asks us to place a cap on the cost of remediation. Quite frankly, the cost of remediation is no longer the concern of my client. My client has paid the registration deductible and has paid the registration fees. It is now up to DHEC and SUPERB to fix the problem.

If I am incorrect in any of the foregoing, please let me know. Otherwise, EnviroRisk is our selected contractor and we would greatly appreciate your moving forward with this clean up.

Yours very truly,

S. Jahue Moore

SJM:dc
 cc: Mr. Paul Desai
 EnviroRisk Consultants, Inc.



JAN 25 2021

FREDERICK CECCHINI
501 ZANARK DRIVE
COLUMBIA SC 29212

Re: **Reallocation of Abatement Costs and Corrective Action Costs**
Broad River Amoco, 4335 Broad River Road, Columbia, SC
UST Permit #11946
Release #1 reported January 4, 2011
Richland County

Dear Mr. Cecchini:

This letter is a follow up to the prior correspondence sent to you from the Underground Storage Tank Management Division (UST Division) of the South Carolina Department of Health and Environmental Control (DHEC), regarding your responsibility for abatement costs and corrective action costs associated with Release #1 reported on January 4, 2011 at 4335 Broad River Road. Since the time of our last correspondence, the UST Division has reviewed the previous cost allocations of funds from the State Underground Petroleum Environmental Response Bank (SUPERB) and reconsidered the amount obligated or specified for reimbursement from your portion of eligible and qualified SUPERB Account funds. As a consequence of this reallocation of costs, the amount of funds available from your SUPERB account for corrective actions and third-party claims will be modified, as more fully explained below.

By way of background, Release #1 occurred at 4335 Broad River Road on January 4, 2011, during your period of ownership. The corrective action following a release can take many years to complete. While the corrective actions from Release #1 were underway but not completed, there was a change in ownership from you to Mr. Paul Desai. However, before the corrective actions for Release #1 were completed, Release #2 occurred during the period of ownership of Mr. Desai.

Initially, the UST Division assigned \$547,622.90 in abatement costs following Release #2 solely to your account. After further review was conducted, the UST Division determined that the releases were commingled such that it could not distinguish the damage caused by Release #1 from the damage caused by Release #2. As a result, the abatement costs incurred after Release #2 are now being equally divided between the

two releases and SUPERB Account funds will reflect half of the abatement costs attributed to the UST owners/operators responsible for Release #1 and Release #2, in the amount of \$273,811.45 each.

While the abatement costs have been reallocated, the proposed corrective action costs remain at \$822,500.00, equally divided between you and Mr. Desai, in the amount of \$411,250.00 each. After adding the reallocation of abatement costs to your portion of the corrective action costs, \$137,438.55 in costs are being allocated to your SUPERB account, with an available balance as of this writing of \$2,316.25.

As a reminder, administrative costs, abatement costs, corrective action costs, and third-party liability costs above the \$1 million maximum amount allowable pursuant to the SUPERB Act, as established by S.C. Code Ann. § 44-2-40, are the responsibility of the owner/operator. Based on the current allocation of SUPERB funds, it is possible that the aggregate allowed costs will exceed the SUPERB account balance for an owner/operator. In your case, this means that you have \$135,122.30 in corrective action costs not covered by your SUPERB fund account.

On all correspondence concerning this site, please reference UST Permit #11946. If there are any questions concerning this project, feel free to contact me by telephone at (803) 898-0605, by fax at (803) 898-0673, or by email at baldwiba@dhec.sc.gov.

Sincerely,



Bradly Baldwin, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

cc: Colin T.L. Spangler, Esquire (Wayne Floyd Law Office, 1611 Augusta Road, West Columbia, SC 29169)



JAN 25 2021



PAUL DESAI
BROAD RIVER C STORE LLC
278 CANTERWOOD ROAD
IRMO SC 29063

Re: **Reallocation of Abatement Costs and Corrective Action Costs**
Broad River Amoco, 4335 Broad River Road, Columbia, SC
UST Permit #11946
Release #2 reported November 16, 2018
Richland County

Dear Mr. Desai:

This letter is a follow up to the prior correspondence sent to you from the Underground Storage Tank Management Division (UST Division) of the South Carolina Department of Health and Environmental Control (DHEC), regarding your responsibility for abatement costs and corrective action costs associated with Release #2 reported on November 16, 2018, at 4335 Broad River Road. Since the time of our last correspondence, the UST Division has reviewed the previous cost allocations of funds from the State Underground Petroleum Environmental Response Bank (SUPERB) and reconsidered the amount obligated or specified for reimbursement from your portion of eligible and qualified SUPERB Account funds. As a consequence of this reallocation of costs, the amount of funds available from your SUPERB account for corrective actions and third-party claims will be modified, as more fully explained below.

By way of background, Release #1 occurred at 4335 Broad River Road on January 4, 2011 while Mr. Fredrick Cecchini was the UST owner/operator. The corrective action following a release can take many years to complete. At the time of Release #1, DHEC assigned the abatement costs and corrective action costs solely to Mr. Cecchini. While the corrective actions from Release #1 were underway but not completed, there was a change in ownership from Mr. Cecchini to you. However, before the corrective actions for Release #1 were completed, Release #2 occurred during your period of ownership.

Initially, the UST Division assigned \$547,622.90 in abatement costs following Release #2 solely towards SUPERB Account funds associated with only Release #1 for

Mr. Cecchini, even though Release #2 occurred during your period of ownership. After further review was conducted, the UST Division determined that the releases were commingled such that it could not distinguish the damage caused by Release #1 from the damage caused by Release #2. As a result, the abatement costs incurred after Release #2 are now being equally divided between the two releases and SUPERB Account funds will reflect half of the abatement costs attributed to the UST owners/operators responsible for Release #1 and Release #2, in the amount of \$273,811.45 each.

While the abatement costs have been reallocated, the proposed corrective action costs remain at \$822,500.00, equally divided between you and Mr. Cecchini, in the amount of \$411,250.00 each. After adding the reallocation of abatement costs to your portion of the corrective action costs, \$685,061.45 in costs are being attributed to your SUPERB account funds, with an available balance as of this writing of \$916,874.27.

As a reminder, administrative costs, abatement costs, corrective action costs and third-party liability costs above the \$1 million maximum amount allowable pursuant to the SUPERB Act, as established by S.C. Code Ann. § 44-2-40, are the responsibility of the owner/operator. Based on the current allocation of SUPERB funds, it is possible that the aggregate allowed costs will exceed the SUPERB account balance for an owner/operator.

On all correspondence concerning this site, please reference UST Permit #11946. If there are any questions concerning this project, feel free to contact me by telephone at (803) 898-0605, by fax at (803) 898-0673, or by email at baldwiba@dhec.sc.gov.

Sincerely,



Bradly Baldwin, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

cc: S. Jahue Moore, Esquire (Moore Taylor Law Firm, P.A., Post Office Box 5709, West Columbia, SC 29171)



S. Jahue Moore[†]
James Edward Bradley[†]
Sheila McNair Robinson
Christian G. Spradley
William H. Edwards
Stanley L. Myers
Jane H. Downey^{*}
S. Jahue Moore, Jr.
John C. Bradley, Jr.
Melissa K. Moore
William B. Fortino
Ralph Nichols Riley, Jr.
Lester McGill Bell, Jr.
Bryan C. Letteer
Sierra D. Carini
Nicole E. Jackson

J. Mark Taylor[†]
Robert D. Hazel[†]
C. David Sawyer, Jr.[†]
Billy C. Coleman
1916-2019

January 28, 2021

Brad Baldwin
DHEC – Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201

RE: Reallocation of Abatement Costs and Corrective Action Costs

Dear Mr. Baldwin:

I have received a letter from you dated January 25, 2021 to Mr. Paul Desai. Quite frankly, the content of your letter makes absolutely no sense to us at all.

There was a discharge on this property for which Mr. Desai has insurance through SUPERB. He has paid for the insurance. He has notified you appropriately of the discharge. He has paid his deductible.

You advised him it was his responsibility to select an environmental company to do the work. He did that.

Quite frankly, Mr. Desai is ready for this work to be done and for this clean-up to be accomplished. The money should be there. His money has been paid. The contractor has been selected. We truly have a difficult time understanding why the State is taking so long to get this work started and completed.

You asked Mr. Desai to sign a paper agreeing to cap the amount it would take to clean-up the project. He is unwilling to that and I do not blame him.

My understanding is he has one million dollars in insurance money available for the clean-up. After that I believe we have federal funds available.

January 28, 2021

Brad Baldwin

DHEC – Hydrogeologist

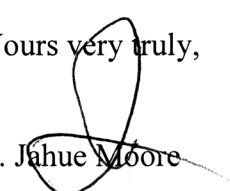
RE: Reallocation of Abatement Costs and Corrective Action Costs

Page 2 of 2

In any event, we will do whatever we have too in order to cooperate with you. Quite frankly, it is time for action and we would like to see a contractor retained and the work finished.

Thank you for the help.

Yours very truly,


S. Jahue Moore

SJM:de

cc: Mr. Paul Desai



CERTIFIED MAIL

9214 8969 0099 9790 1419 2213 80

MAR 25 2021



PAUL DESAI
BROAD RIVER C STORE LLC
278 CANTERWOOD ROAD
IRMO SC 29063

Re: **Notice of Extension Approval for Corrective Action Solicitation Response**
Broad River Amoco, 4335 Broad River Road, Columbia, SC
UST Permit #11946
Release #2 reported November 16, 2018
Corrective Action Solicitation Response Summary letter dated October 20, 2020
Richland County

Dear Mr. Desai:

The Underground Storage Tank Management Division of the South Carolina Department of Health and Environmental Control (DHEC) directed you on October 20, 2020 to submit Corrective Action Solicitation Response Summary form on or before November 20, 2020. Following our meeting on February 9, 2021 with your counsel to discuss the Solicitation Response Summary and reallocation of abatement costs and corrective action costs, DHEC received the contractor selection form, however the form was incomplete and still requires the following information in section two (2) and three (3):

- 2. The name of the selected contractor should be included.
- 3. Compensation from the SUPERB Account needs to be either paid to the UST Owner/Operator or directly to the SC Certified Contractor that is selected in section 2.

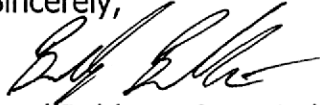
DHEC has approved a third extension for submittal of the Corrective Action Solicitation Response Summary Form in an effort to proceed with the necessary corrective action at the site and allow you to resubmit the forms with all necessary information included.

Please properly complete, sign, and submit the enclosed Corrective Action Solicitation Response form with your choice of selected contractor within thirty (30) days from the date of this letter. Should you not submit the form on or before this date, this office may initiate further action.

This correspondence is being sent to you by both first class mail and certified mail to better ensure delivery.

On all correspondence regarding this site, please reference UST Permit #11946. If you have any questions concerning this correspondence, please call me at (803) 898-0605, e-mail me at baldwiba@dhec.sc.gov, or fax me at (803) 898-0673.

Sincerely,



Brad Baldwin, GIT, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Corrective Action Solicitation Response Summary Form

cc: S Jahue Moore, Moore Taylor Law Firm, P.A., PO BOX 5709, West Columbia, SC 29171
(w/ enc)
Technical File (w/ enc)

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA

**Department of Health and Environmental Control
Underground Storage Tank Program**

UST Permit # 11946 Facility Name Broad River Amoco, Release #2

1. Completed Corrective Action Solicitation Response Forms are attached from one contractor.

EnviroRisk

2. Based on a review of the corrective action responses, I select (please name):

I understand that except for the limitations specified in the solicitation, \$685,061.45 is the maximum amount the SUPERB Account will pay for this active corrective action.

3. Compensation from the SUPERB Account should be paid to: (please check one)

- UST Owner/ Operator
 SC Certified Site Rehabilitation Contractor named above in Item 2

4. List any anticipated changes to the site in the near future: (e.g. sale, UST removal, etc.)

5. Additional Comments: (Attach additional page(s) if required)

UST Owner/ Operator Name _____
Address _____

Telephone Number () _____ FAX Number () _____

Signature _____ Printed or Typed Name _____ Title _____
Date Signed _____

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY



Healthy People. Healthy Communities.

CERTIFIED MAIL

9214 8969 0099 9790 1419 2216 32

MAR 25 2021



FREDERICK CECCHINI
501 ZANARK DRIVE
COLUMBIA SC 29212

Re: **Notice of Extension Approval for Corrective Action Solicitation Response**
Broad River Amoco, 4335 Broad River Road, Columbia, SC
UST Permit #11946
Release #1 reported January 4, 2011
Corrective Action Solicitation Response Summary letter dated October 20, 2020
Richland County

Dear Mr. Cecchini:

The Underground Storage Tank Management Division of the South Carolina Department of Health and Environmental Control (DHEC) directed you on October 20, 2020 to submit the Corrective Action Solicitation Response Summary form on or before November 20, 2020. A meeting was conducted with your counsel, Mr. Colin Spangler, on February 04, 2021 to address any questions regarding the Solicitation Response Summary and reallocation of abatement cost and corrective action costs. To date, DHEC has not yet received the required Corrective Action Solicitation Response form.

In an effort to proceed with undertaking the necessary corrective action at the site, DHEC has approved a third extension for submittal of the Corrective Action Solicitation Response Summary form.

Please sign and submit the Corrective Action Solicitation Response form with your choice of selected contractor within thirty (30) days from the date of this letter. Should you not submit the form by this date, this office may initiate further action.

This correspondence is being sent to you by both first class mail and certified mail to better ensure delivery.

On all correspondence regarding this site, please reference UST Permit #11946. If you have any questions, please call me at (803) 898-0605, e-mail me at baldwiba@dhec.sc.gov, or fax me at (803) 898-0673.

Sincerely,

Brad Baldwin, GIT, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Corrective Action Solicitation Response Summary Form

cc: Colin Thomas Lee Spangler, Wayne Floyd Law Office, 1611 Augusta Road, West Columbia, SC 29169
(w/ enc)
Technical File (w/ enc)

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

SOUTH CAROLINA

Department of Health and Environmental Control

Underground Storage Tank Program

UST Permit # 11946

Facility Name Broad River Amoco, Release #1

1. Completed Corrective Action Solicitation Response Forms are attached from one contractor.

EnviroRisk

2. Based on a review of the corrective action responses, I select (please name):

I understand that except for the limitations specified in the solicitation, \$2,316.25 is the maximum amount the SUPERB Account will pay for this active corrective action.

3. Compensation from the SUPERB Account should be paid to: (please check one)

UST Owner/ Operator

SC Certified Site Rehabilitation Contractor named above in Item 2

4. List any anticipated changes to the site in the near future: (e.g. sale, UST removal, etc.)

5. Additional Comments: (Attach additional page(s) if required)

UST Owner/ Operator Name _____

Address _____

Telephone Number _____

()

FAX Number _____

()

Signature _____

Printed or Typed Name _____

Title _____

Date Signed _____

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

JM



UNDERGROUND STORAGE TANK MANAGEMENT DIVISION
BUREAU OF LAND AND WASTE MANAGEMENT

2600 Bull Street
Columbia, SC 29201
Telephone (803) 898-2544
Fax (803) 898-0673

MEMORANDUM

To: Beverly McLeod, Manager
Enforcement Section

Date: May 3, 2019

Re: Enforcement Referral

Type: Technical (Tier II Report)

UST Permit #: 11946

Facility Name: Broad River Amoco

Owner/Operator:	Name	Mr. Paul Desai
(when the release	Address	41 Cromwell Court, Irmo, SC 29063
is reported)	Phone #	803-477-7575

Regulatory Citation: Subpart F, Section 280.65 Investigation for soil and ground-water cleanup of the South Carolina Underground Storage Tank Regulations, R. 61-92

Requested Action/Information: The Tier II Assessment Report for the release reported on November 16, 2018 was due March 1, 2019. The assessment is to be conducted with O/O's money.

Additional Comments: Original Tier II Assessment Report due date was extended until April 5, 2019 on request. Certified letter sent on April 8, 2019 confirming second extension request due date of April 30, 2019. Report has not been received to date.

Are there any Tank Ownership Issues? : Yes No If yes please explain.

Are there any other persons being dealt with other than the tank owner? Yes No

If yes please list name and relationship _____

Referred By: <u>Jeffrey E Marshall</u>	Date: <u>5/5/19</u>
Section Manager's Approval: <u>Donnaugh Thad</u>	Date: <u>5/9/19</u>
Division Director's Approval: <u>Debra Thomas</u>	Date: <u>5/9/19</u>

Enc: Certified Letter dated April 8, 2019

cc: Contractor Certification File
Technical File



Resolved
19-0121-UST
5/24/19
Jm