

RESOLUTION NO. 2024-378

A RESOLUTION AUTHORIZING THE ISSUANCE OF AN AMENDATORY SUPPLEMENTAL CHANGE ORDER NO. 1 TO CONTRACT NO. C23-0103, ISSUED TO CHASE ENVIRONMENTAL GROUP, INC., LENOIR CITY, TN, IN THE AMOUNT OF \$133,628.00.

WHEREAS, the City Council of the City of Vineland, on October 10, 2023, adopted Resolution No. 2023-472, entitled "A RESOLUTION AWARDING A NEGOTIATED CONTRACT TO CHASE ENVIRONMENTAL GROUP, INC., LENOIR CITY, TN FOR DECONTAMINATION, REMOVAL AND DISPOSAL OF ABANDONED RADIUM VESSELS, CONTAINERS, EQUIPMENT & APPURTENANCES IN THE AMOUNT OF \$407,415.00"; and

WHEREAS, N.J.A.C. 5:30-11.9 sets forth the procedures for processing change orders which exceed the 20 percent limitation; and

WHEREAS, the Director of Electric Utility has requested that an amendment be made to contract awarded to Chase Environmental Group, Inc., Lenoir City, TN, for the Decontamination, Removal, and Disposal of Abandoned Radium Vessels, Containers, Equipment & Appurtenances, as authorized by Resolution No. 2023-472: said amendment is necessary because additional and deeper contaminated levels of soil was discovered after original scope of work was completed; this change order provides for the final remediation of radium contaminated soils at 2180 Helen Avenue; and

WHEREAS, the City of Vineland desires to comply with said requirements of N.J.A.C. 5:30-11.1, et seq., and to that end herewith files with the governing body a report stating the facts involved and indicating that the proposed change order may be allowed under these regulations; and

WHEREAS, the Chief Financial Officer has certified the availability of funds for the amendatory supplemental change order for which authorization is requested in the amount of \$133,628.00; now, therefore,

BE IT RESOLVED by the Council of the City of Vineland that said amendatory supplemental change order #1 to Contract No. C23-0103, issued to Chase Environmental Group, Inc., Lenoir City, TN, in the amount of \$133,628.00, be and the same is hereby ratified and approved.

Adopted: August 27, 2024

ATTEST:

President of Council

eea

Deputy City Clerk rgf



August 20, 2024

REPORT

TO: THE MAYOR AND COUNCIL

Amendatory Supplemental Change Order No. 1
Contract No. C23-0103
Decontamination, Removal, and Disposal of Abandoned Radium Vessels
Chase Environmental Group, Inc., Lenoir City, TN

We are requesting that an amendatory supplemental change order be issued to Contract No. C23-0103, issued to Chase Environmental Group, Inc., Lenoir City, TN, for the Decontamination, Removal, and Disposal of Abandoned Radium Vessels, Containers, Equipment & Appurtenances. This negotiated contract was authorized by Resolution No. 2023-472, adopted by City Council on October 10, 2023.

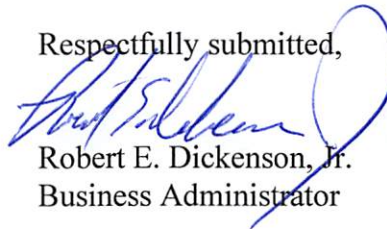
After the original scope of work was completed, required testing confirmed that additional and deeper contaminated levels of soil needed to be removed in addition to the original NJDEP identifications.

The change order requested, in the amount of \$133,628.00, provides for the final remediation of radium contaminated soils at 2180 Helen Avenue.

This change order represents, an increase of approximately 32.79899% over the original contract amount of \$407,415.00.

The amendatory supplemental change order which exceeds the 20% limitation, for which authorization is herein requested, may be authorized in accordance with N.J.A.C. 5:30-11.9.

Respectfully submitted,



Robert E. Dickenson, Jr.
Business Administrator

RD/wr
Encl.

REQUEST FOR CHANGE ORDER

FOR:

Removal of Radium Contaminated Soil

(8-5-24)

PROJECT NAME

TO: BUSINESS ADMINISTRATION

DEPARTMENT: Water Utility

FROM: John Lillie

This is a request for change order # 1 to Contract # C23-0103 for:

Project Name Removal Of Radium Contaminated Soil

Name/Address of

Contractor: Chase Environmental 200 Sam Rayburn Parkway Lenoir City, TN 37771

The change order is necessary because: (use additional pages if necessary to explain your reason and you must attach *documentation to support the necessity of this change order.

*(Documentation from contractor, engineer, etc.)

See attached Sheet

Original Contract Amount:	\$ <u>\$407,415.00</u>	
Amount of this change order:	\$ <u>\$133,628.00</u>	32.79 899%
Previous Change Orders:	\$ <u>0</u>	
Total Revised Amount:	\$ <u>\$541,043.00</u>	

APPROVED BY: John Lillie
Print/type

John Lillie
Signature

NOTE:

CHANGE ORDERS CANNOT EXCEED 20% OF THE ORIGINAL CONTRACT AMOUNT

Please provide the account number that the change order will be charged to:

Account # 4-07-55-512-8002-52000-W400

CC: Purchasing Division

-Removal of Radium Contaminated Soil-

-Change Order Request # 1-----8-5-24-

Change order Justification:

Original Contract to Chase Environmental—Contract # C23-0103-- Outlined the Scope of Radium Contamination Removal and Disposal of Contaminated and Abandon Radium Vessels, Containers Equipment and associated Soils Contamination as identified by The New Jersey DEP.

After the Original Scope of work was completed as per the Bid Documents, required Radium Testing confirmed additional and deeper contaminated levels of soil to be removed in addition to the original NJDEP identifications.

The attached Scope of Work and Proposal incorporates the additional required remediation to complete and comply with the NJDEP Regulations to complete the project. It should be noted, Chase Environmental is the Disposal and Removal Permit holder for this project.

\$64,032.00 was unused from the Original Contract Amount so an additional \$ 133,628.00 is needed to cover the” Not to Exceed Amount” of \$197,660.00 for this additional Scope of Work and Quotation. See page (9) of the scope of work for project pricing.

PROPOSAL FOR FINAL REMEDIATION OF RADIUM CONTAMINATED SOILS AT 2180 HELEN AVENUE

City of Vineland
640 E. Wood Street
Vineland, NJ 08362-1508

February 20, 2024

Prepared by:



Chase Environmental Group, Inc.
200 Sam Rayburn Parkway
Lenoir City, TN 37771
(865) 816-6015

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1.0 INTRODUCTION

The City of Vineland, NJ (COV) has sites located at 330 E. Walnut Road and 2180 Helen Avenue with equipment and soils that were impacted by radioactivity from water treatment for radium. In December 2023, Chase Environmental Inc. (Chase) performed remediation at both sites in accordance with "*City of Vineland Municipal Water Utility Treatment Facility Remediation Plan*," dated October 15th, 2023. Results of the remediation efforts are documented in "*Helen Avenue Treatment Facility Characterization Report*," dated February 9th, 2024, and "*Walnut Road Treatment Facility Final Status Survey Report*," dated February 14th, 2024. No further action is required at the 330 E. Walnut Road Site; however, additional remediation is required at the Helen Avenue Site.

Chase proposes to remediate the Helen Avenue site, utilizing a COV-provided backhoe with a grading bucket for soil remediation, and a hammer attachment or concrete saw, as necessary for asphalt remediation. COV will also provide an equipment operator for the backhoe and concrete saw. After removal of contaminated soils and asphalt, Chase will conduct a final status survey (FSS) to document that the site meets the radiological release criteria.

Chase will ship radioactive wastes to Unitech Services, a licensed radioactive waste processing facility, for disposition under the provisions of their Tennessee radioactive materials license. Unitech will evaluate the most economical disposition option for each waste package, such as bulk radiological survey for release (BSFR) or licensed disposal.

All on-site radiological work will be performed under Chase's Commonwealth of Kentucky radioactive materials license number 201-605-15 utilizing a reciprocal agreement with the New Jersey Department of Environmental Protection (NJDEP). Chase will develop a Radiological Work Plan using the applicable guidance provided in NUREG 1757, "Consolidated NMSS Decommissioning Guidance," NUREG 1575, "Multi-Agency Radiation Survey and Site Investigation Manual" (MARSSIM), other NRC guidance, and NJDEP regulations. The Plan will provide the approach, methods, and techniques for all radiological activities.

2.0 RADIOLOGICAL CONDITIONS

At the 2180 Helen Avenue Site, there are four (4) areas that require additional remediation of soils, and potentially a small amount of asphalt on the south end of the parking lot. The total area that requires remediation is bounded by seven hundred and fifty square feet (750 ft²). Based on an estimated remediation depth of six (6) inches, and a take-off factor of 1.3, the estimated volume of remediation soils is four hundred and eighty-seven cubic feet (487 ft³). Based on an *in-situ* soil density of 1.8 g/cc for sandy loam, the estimated weight of remediation soils is forty-two thousand pounds (42,000lbs). See Figure 1, Figure 2, and Table 1 for remediation locations and radiological sample results.

Figure 1, Soil Sample Numbers

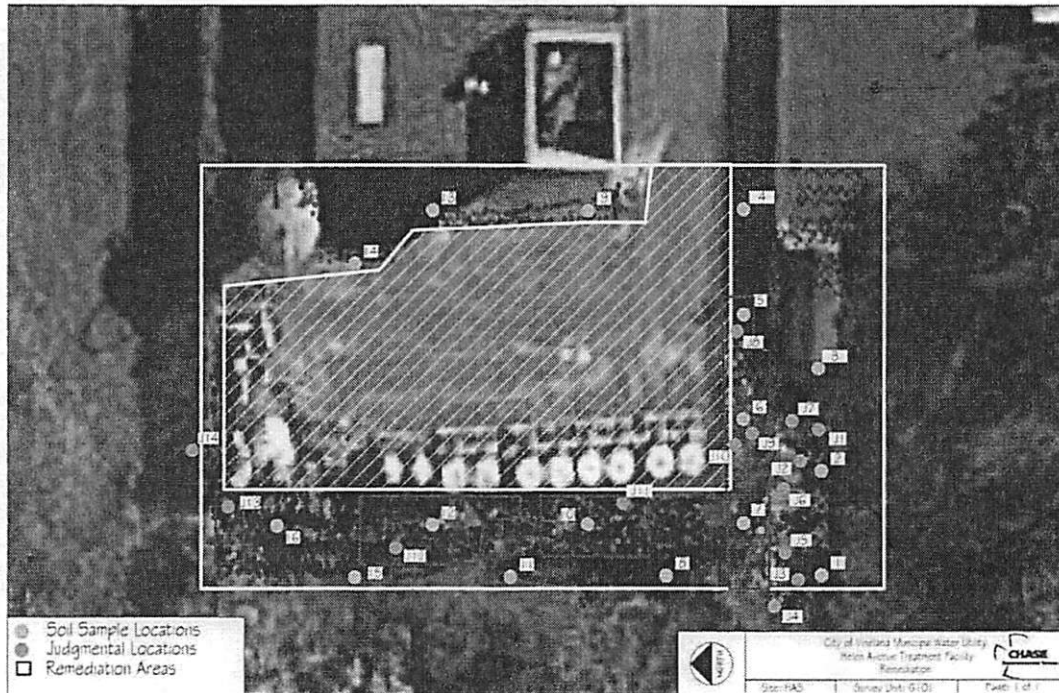


Figure 2, Soil Sample Results

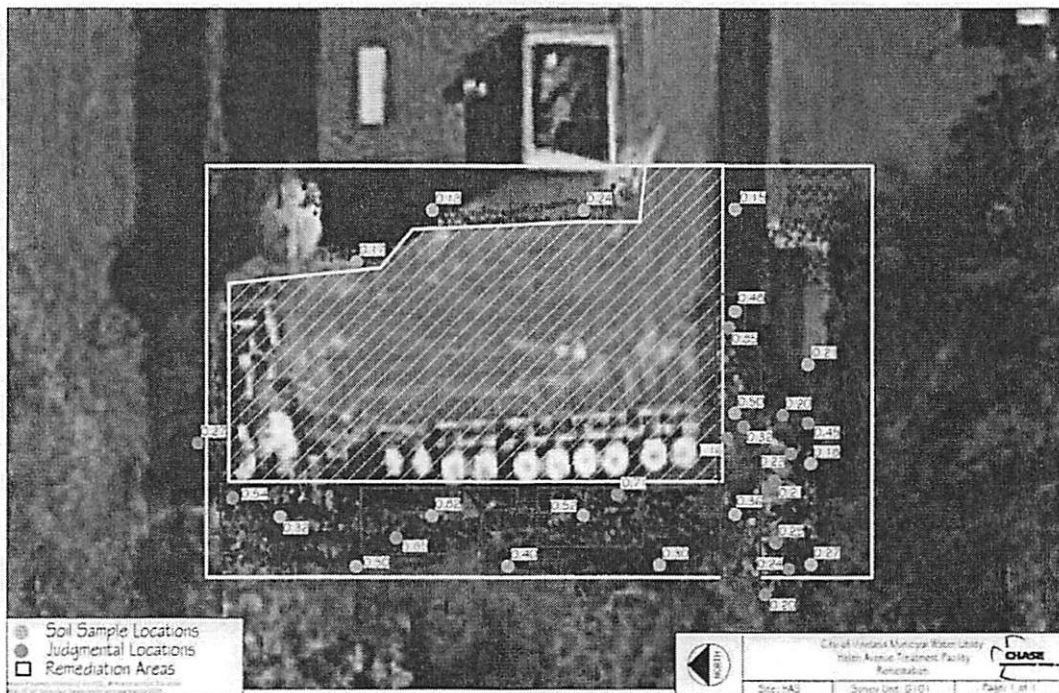


Table 1, Soil Sample Results

Sample Number	Ra-226		Ra-228		Sum of Fractions	Gross NaI Result (cpm)
	Result (pCi/g)	DCGL Fraction	Result (pCi/g)	DCGL Fraction		
5	0.998	0.333	0.286	0.143	0.48	5,329
J8	1.960	0.653	0.393	0.197	0.85	7,721
6	1.150	0.383	0.230	0.115	0.50	8,784
J9	0.517	0.172	0.289	0.145	0.32	4,708
J10	2.230	0.743	0.842	0.421	1.16	21,446
7	0.947	0.316	0.091	0.045	0.36	7,330
J11	1.290	0.430	0.568	0.284	0.71	8,425
10	1.030	0.343	0.346	0.173	0.52	8,897
12	1.790	0.597	0.444	0.222	0.82	11,054
J12	12.570	4.190	3.330	1.665	5.85	29,298
J13	1.130	0.377	0.334	0.167	0.54	9,824

3.0 RADIOLOGICAL RELEASE CRITERIA

The following release criteria are contained in NJAC 7:28-12.8 and apply to the outside grounds:

“Radiation dose standards applicable to remediation of radioactive contamination of all real property:

- (a) Sites shall be remediated so that the incremental radiation dose to any person from any residual radioactive contamination at the site above that due to natural background radionuclide concentration, under either an unrestricted use remedial action, limited restricted use remedial action, or a restricted use remedial action, shall be as specified below:

1. For the sum of annual external gamma radiation dose (in effective dose equivalent) and intake dose (in committed effective dose equivalent), including the groundwater pathway: 15 millirem (0.15 milliSievert) total annual effective dose equivalent (15 mrem/yr. TEDE)
2. For radon-222: three picocuries per liter (pCi/L) of radon gas (111 Bq/m³).

- (b) Radioactively contaminated ground water shall be remediated to comply with the New Jersey Groundwater Quality Standards rules, N.J.A.C. 7:9C.

- (c) Radioactively contaminated surface water shall be remediated to comply with the New Jersey Surface Water Quality Standards, N.J.A.C. 7:9B-1.14(c)6.”

4.0 SCOPE OF WORK

Chase proposes to provide the qualified staff, on-site and off-site labor, materials and equipment needed to ensure full compliance with the Chase radioactive materials license, NJDEP regulations, NRC guidance documents and industry standard practices. The proposed scope of work consists of the following elements:

- Develop a comprehensive Radiological Work Plan for submittal to NJDEP.
- Establish a reciprocal agreement with NJDEP to perform on-site activities under the Chase license.
- Mobilize to the Helen Avenue site.
- Remediate identified radium contaminated areas at the Helen Avenue Site.
- Ship all radioactive waste materials off-site for disposal.
- Conduct a Final Status Survey of the property to document completion of remediation.
- Provide COV copies of all shipping papers, transportation permits, manifests processor receipt documentation and certificates of disposal.
- Based on the survey data, prepare a Final Status Report for submittal to NJDEP if the sites meet the radiological release criteria.
- Demobilize personnel, equipment, and materials from the site.

The scope of work will be conducted according to the work breakdown structures described below.

4.1 Pre-Mobilization

Chase will develop a Radiological Work Plan using the guidance provided in NUREG 1757, “Consolidated NMSS Decommissioning Guidance”, NUREG 1575, “Multi-Agency Radiation Survey and Site Investigation Manual” (MARSSIM), and NJAC 7:28-12, “Remediation Standards for Radioactive Materials.” The Plan will provide the approach, methods, and techniques for the radiological decommissioning of impacted areas of the sites. COV will submit the plan to NJDEP for approval; Chase will assist COV with any questions and/or comments.

Chase will prepare the required project plans and procedures, develop job safety analyses, procure equipment and supplies, establish vendor accounts, and ensure all employees are up to date on all necessary training and physicals. After NJDEP approval of the Work Plan,

Chase will perform all steps necessary to implement their Kentucky radioactive materials license at the site under a reciprocal agreement with NJDEP.

4.2 Mobilization

Chase will mobilize personnel and equipment to the site. COV will provide Chase an office, equipment staging area, restroom facilities, and parking for a 32-ft equipment trailer and pickup truck or a cargo van.

4.3 Soil and Asphalt Remediation

COV will provide a backhoe with a grading bucket (flat edge with no teeth) and an equipment operator to excavate soils in identified remediation areas until no elevated radioactivity is detected; the depth is not expected to exceed six inches. COV will provide a hammer attachment, or a concrete saw, and an operator to remove any asphalt required for remediation.

Characterization surveys indicate that radioactivity has not penetrated very deeply into soils. COV will remove soils in thin layers while Chase continuously monitors remaining soils to minimize the quantity of radioactive waste generated. It may be necessary to remove asphalt in locations where contaminated soils covered the asphalt. All waste material will be loaded into US Department of Transportation (DOT) compliant twenty-seven cubic feet (27 ft³) waste bags.

4.4 Waste Disposal

Chase will subcontract a rigging company to remove the waste packages and place them onto trucks provided by Chase. The waste packages will be shipped to Unitech Services, a licensed radioactive waste processing facility located in Oak Ridge, TN, for disposition under the provisions of their Tennessee radioactive materials license. The processing facility will evaluate the waste packages to achieve the most economical disposition, potential disposition options are:

- Bulk Survey for Release (BSFR) disposal at a Tennessee landfill.
- Dispose at a licensed/permitted disposal site.

Chase will provide COV copies of all shipping papers, transportation permits, manifests processor receipt documentation and certificates of disposal.

4.5 Final Status Surveys

Once all radiologically contaminated soils and asphalt have been removed from the site, Chase will perform radiological surveys of the site to meet the data quality objectives of the FSS. The FSS will be the same design as the previously NJDEP-approved Facility Remediation Plan.

4.6 Demobilization

Upon completion of on-site work, Chase will ship equipment and supplies, and demobilize personnel. The Chase Project Manager will walk down the jobsite with a COV representative at the conclusion of work to ensure the site is left in an acceptable condition.

4.7 Final Status Report

At the completion of FSS, a FSR will be developed. The content specified in NUREG-1757 will be included as applicable. The report will be reviewed for technical content by Chase personnel and an independent technical person prior submitting to COV and ultimately to the NJDEP. The report will describe all project activities, provide the results of all measurements, summarize survey data, provide an analysis of the data, and present conclusions. Chase will provide technical support to address any regulatory or technical questions and/or comments until NJDEP approval.

5.0 ASSUMPTIONS

Cost and schedule estimates are based on the following assumptions:

- On-site activities will be performed under the Chase State of Kentucky mobile decommissioning license utilizing a reciprocal agreement with the NJDEP.
- The radionuclides of interest at the site are Ra-226, and Ra-228.
- The identified soil contamination area at the Helen Avenue site will not require remediation to more than a maximum depth of six inches.
- COV will locate and mark utilities and identify any buried structures.
- COV will provide a backhoe with a grading bucket, hammer attachment, concrete saw, and an operator for the equipment.
- COV will provide Chase an office, equipment staging area, restroom facilities, parking for a 32-ft equipment trailer, and parking for a company pickup truck.
- COV will provide unescorted access to Chase employees for ten-hour workdays.
- COV will provide 120V and 20A electrical service.

- Chase is not responsible for weather delays.
- Chase is not responsible for any damages to asphalt, curbs, landscaping, etc. caused by remediation.
- **DAMAGE TO EXISTING MAN-MADE OBJECTS** - It shall be the responsibility of COV or duly authorized representative to disclose the presence and accurate location of all hidden or obscure man-made objects relative to our work. This includes subsurface utilities and drains delineated throughout the property. Chase field personnel are trained to recognize clearly identifiable stakes or markings in the field, and without special written instructions, to initiate work within a reasonable distance of each designated location. If Chase is cautioned, advised, or given data in writing that reveals the presence or potential presence of underground or over-ground obstructions, such as utilities, Chase will give special instructions to its field personnel. As evidenced by COV's acceptance of this proposal, COV agrees to indemnify and save harmless Chase from all claims, suits, losses, personal injuries, death and property liability resulting from unusual subsurface conditions or damages to subsurface structures, owned by COV or third parties, occurring in the performance of the proposed services, whose presence and exact locations were not revealed to Chase in writing, and to reimburse Chase for expenses in connection with any such claims or suits, including reasonable attorney's fees.
- Soil samples for gamma spectroscopy analysis on standard turnaround times will be required for FSS.
- There will be no hazardous materials or chemical analysis of soils required for release or disposal.
- COV is responsible for backfilling and restoration of any locations of soil remediation.
- There are no federal, state, or local travel restrictions and/or isolation/testing or other COVID-related requirements to access the site to perform the scope of work.
- For waste shipped to a Tennessee licensed radioactive waste processing facility, the generator must agree to and sign a "Return of Waste" agreement that indicates willingness and ability on the part of the generator to accept a return of waste in the event of regulatory action on the part of the State of Tennessee requiring such action.
- There are no costs included for bonding.

6.0 SCHEDULE

Upon receipt of a purchase order, Chase will begin preparation work and schedule a mutually agreeable date to mobilize to the site. On-site activities are expected to take three days. Laboratory analysis will take approximately 30 days. The final report will be submitted approximately two weeks after receipt of all data.

7.0 PRICING

Scope items that can be accurately determined are proposed on a fixed-price basis. Some of the scope items cannot be accurately determined prior to performing work; therefore, those items are proposed on a unit rate basis as described below.

Fixed Price Services

Chase proposes to complete Licensing, Planning, Mobilization, Demobilization, and Final Status Report for a firm-fixed price of \$35,160 based on the breakdown below.

Pre-Mobilization (Licensing, Planning and Preparation)	\$10,950
Mobilization.....	\$10,500
Demobilization.....	\$8,260
Final Status Report.....	\$5,450

Unit Rate Services

Chase proposes to complete On-Site Activities, Subcontracted Rigging Services, Soil Sample Analysis, and Waste Packaging and Disposal on a unit rate basis according to the rates below.

Daily On-Site Rate	\$8,170.00/per day
Forklift Rental (4 Hours)	\$1,200.00
Waste Packaging 1-Yard Bags.....	\$251.00/each
Soil Sample Analysis (Standard Turnaround Time).....	\$125.00/each
Transportation Truck	\$9,136.00/each ¹
Cancelled Not Used Truck.....	\$1,200.00/each
Waste Disposal (Bulk Survey for Release).....	\$0.78/lb.
Waste Disposal (Licensed/Permitted Disposal).....	\$2.63/lb.

¹ Fuel prices are projected to be very volatile going forward. Waste transportation costs are determined using current fuel pricing; if fuel prices are significantly different at the time of shipment, transportation pricing may be adjusted using the National Average Diesel Fuel Index, published by the Energy Information Administration of the U.S. Department of Energy (DOE).

Total Project Estimated Costs

To provide COV with a reasonable range of potential outcomes, Chase has estimated the total project cost for two scenarios. The scenarios assume three days onsite, thirty soil samples for analysis, eighteen waste packages, two trucks for waste transportation, and forty-two thousand pounds (42,000 lbs.) of waste. The quantity of waste is intended to be bounding for budgeting purposes; Chase will only remove the quantity of soils necessary to remediate the site.

The estimated cost for each option is presented below

Scenario 1: All waste disposed of by BSFR..... **\$120,170.00**
Scenario 2: All waste disposed of by Licensed/Permitted Disposal.... **\$197,660.00**

Project not to exceed \$197,660.00

8.0 TERMS

This proposal is valid for 60 days. Payment is due upon receipt of our invoice. If payment is not received within 30 days from the invoice date, Client agrees to pay a finance charge on the principal amount of the past due account of one and one-half percent per month plus any applicable collection fees including attorney and expert charges. If one and one-half percent per month exceeds the maximum allowed by law, the charge shall automatically be reduced to the maximum legally allowable.