



August 16, 2016

North Carolina Department of Environmental Quality
Division of Waste Management – Inactive Hazardous Sites Branch
Pre-Regulatory Landfill Unit
1646 Mail Service Center
Raleigh, NC 27699-1646

Attention: Mr. Matthew Aufman email: matthew.aufman@ncdenr.gov
Engineer

Reference: **Draft Remedial Action Plan**
 Task Orders 805RA-2 and 805RA-3
 W.C. Beck Property
 Amberly Drive, Durham, Durham County, North Carolina
 NCDEQ ID No. NONCD0000805
 S&ME Proposal No. P1026H-12V

Dear Mr. Aufman:

S&ME, Inc. (S&ME) appreciates the opportunity to present this revised proposal and work plan to the North Carolina Department of Environmental Quality (NCDEQ), Pre-Regulatory Landfill Unit (Unit) to prepare a Draft Remedial Action Plan and Engineering Design for the W. C. Beck Property located in Durham, Durham County, North Carolina as requested in a letter from the Unit dated November 23, 2015 and subsequent emails and conversations. This proposal outlines our understanding of the project, a scope of services, an estimated fee, and a schedule for completing the proposed scope of services. These services will be performed according to the terms of Contract Number N15002i dated April 20, 2016 between NCDEQ and S&ME.

❖ SCOPE OF SERVICES

As requested by the Unit, S&ME proposes to offer the following Scope of Services to prepare a Draft Remedial Action Plan (RAP) and Engineering Design for the W. C. Beck Property (805RA-1 and 2). These services will be performed in general accordance with NCDEQ Inactive Hazardous Sites Program guidance documents: Guidelines for Assessment and Cleanup, Guidelines for Addressing Old Landfills & Dumps), S&ME's approved Standard Operating Procedures and Quality Assurance (SOP/QA) Manual (July 2010).

Task Order 805RA-2 Draft Remedial Action Plan & Engineering Design

Subtask A Work Plan / Proposal Preparation

The following services were performed:

- ❖ The Project Team developed Scope of Services and Cost Estimate Spreadsheets.

Subtask B Prepare Remedial Investigation Summary Report

A report will be prepared that summarizes the remedial investigation activities and results completed at W. C. Beck Property by S&ME. The sources of the remedial investigation activities that will be included in the Remedial Investigation Summary Report include the following:

- ❖ *Water Supply Well Sampling Report, 805WS, April 26, 2013, by S&ME, Inc.;*
- ❖ *Remedial Investigation – First Phase Report, 805FP-1, September 25, 2013, by S&ME, Inc.;*
- ❖ *Remedial Investigation – Contaminant Delineation Phase Report, 805DP-2, June 12, 2015, by S&ME, Inc.;*
- ❖ *Remedial Investigation – Waste Delineation Report, 805DP-3, March 11, 2016, by S&ME, Inc.; and,*
- ❖ *Remedial Investigation – Surveying, 805RA-4, June 3, 2016, by S&ME, Inc.*

Information from the reports listed above will be incorporated into the *Remedial Investigation Summary Report*.

This report will cover the following areas as they pertain to the W. C. Beck Property:

- ❖ Introduction
- ❖ Sensitive Environments
- ❖ Site Geology and Hydrogeology
- ❖ Waste Disposal Area
- ❖ Media Characterization
 - Soil and Sediment Characterization
 - Soil and Sediment Remedial Goals
 - Soil Sampling
 - Sediment Sampling
 - Water Characterization
 - Potable Water Supply Wells
 - Surface Water and Seeps
 - Landfill Gas Characterization
- ❖ References

This report will not include photographs, boring logs, probe logs, monitor well logs, field notes or laboratory reports. We will submit a digital copy of the report as required.

Subtask C Prepare Draft Remedial Action Plan & Engineering Design Documents

S&ME will prepare a Draft RAP that will include the following:

- ❖ Remedial Investigation Summary;
- ❖ Remedial Goals (total waste removal);
- ❖ Schedule;
- ❖ Estimate of Probable Cost;
- ❖ List of Required Permits; and,
- ❖ The following proposed engineering design documents:
 - ❖ A.1 - Engineering drawings – S&ME proposes to prepare engineering drawings for the Draft Remedial Action Plan. The following drawings are anticipated:
 - Cover Sheet;
 - Existing Conditions;
 - Proposed Grading Plan (includes Erosion and Sedimentation Controls);
 - Cross Sections and details (2 -3 drawings); and,
 - Erosion and Sedimentation Control Details.
 - ❖ A.2 - Technical specifications – S&ME proposes to prepare technical specifications for construction of the Draft Remedial Action Plan. Specifications will be in the Construction Specification Institute (SCI) Master Format (1995) for both Division 1 – General, and Division 2 – Site Work will be prepared.
 - ❖ A.3 – Erosion and Sedimentation Control Plan – S&ME proposes to prepare documentation, including Plan Narrative, Site Vicinity Map, and Soils Map to provide to Durham County to obtain the permit for construction. S&ME also proposes to provide the permit review fee to be reimbursed. We estimate this fee to be on the order of \$100 assuming a disturbance limits area of less than 1 acre. Borrow area needs both in terms of quantities of material and erosion and sediment control will be addressed by the bidding contractors.
 - ❖ A.4 - Supporting Engineering Analyses and Calculations – S&ME proposes to prepare calculations to support the design elements of the Remedial Action Plan. These calculations and analyses are anticipated to include:
 - Erosion and sedimentation control measure analysis and sizing calculations including but not limited to rainfall/runoff analyses, temporary and permanent ditch and berm sizing, slope drain sizing, and sediment trap sizing; and,
 - In the event that the existing ground surface is significantly modified (re-graded) with new geometry, general slope stability analyses will be performed using estimated strength parameters based on information gathered during the subsurface field exploration.

These calculations will be prepared for internal design use and will not be provided except where required for Erosion and Sedimentation Control Plan review.

In concurrence with S&ME's recommendations, the Unit has decided that the remedy will consist of the excavation and removal of the three identified buried waste disposal areas (~1,253 cubic yards). The excavated portions of the site will be backfilled, or otherwise re-graded and reshaped to promote stormwater drainage and erosion control. The surface debris located between the three identified disposal areas will be removed at the same time. Re-grading of this area will not be necessary as the land surface will not be disturbed.

In May 2016, S&ME conducted a topographical survey of the site. This topographic data will form the basis for mapping which will serve as the base mapping for drawing production and quantity estimates.

The RAP will be submitted first as a draft to the Unit. After revising the RAP with comments from the Unit, S&ME will submit a digital copy of the report as required.

Subtask D Meetings

S&ME has budgeted for up to three meetings with the Unit to discuss the Draft RAP. The Draft RAP will be revised following receipt of comments from the Unit. The Project Manager and Environmental Engineer from Raleigh will attend in person. The Civil Engineer from Charlotte will participate by telephone.

Task Order 805RA-3 Subcontractor Process

Subtask A Prepare Bid Documents

S&ME will combine information developed for the RAP (drawings, technical specifications) with the following items to develop a bid package.

- ❖ A.5 - Construction Quality Assurance (CQA) Plan – S&ME proposes to prepare a CQA Plan to define the roles and responsibilities of the project personnel and the contractor, and outlining the activities necessary to monitor, document, and communicate that construction was completed in accordance with the project requirements;
- ❖ A.6 - Bid Documents - S&ME proposes to prepare a draft bid package consisting of the technical specifications and engineering drawings. The bid package will also include Division 00 – Contracting Requirements specifications using the Engineers Joint Contract Documents Committee (EJCDC) documents. The completed bid package is anticipated to consist of the components listed below.
 - Contract/Agreement, scope of work, and terms and conditions for the project;
 - General specifications describing the aspects of construction, including:
 - Trash Removal;
 - Location and specifications for localized re-grading of the soil cover;
 - Repair and installation of stormwater management systems; and,
 - Installation and inspection of E&SC systems.



- Engineer’s Opinion of Estimated Cost / Quantities;
- Bid Form;
- Health and safety plan to address health and safety risks during remedial activities;
- Engineering Drawings prepared for the Remedial Action Plan; and,
- Technical Specifications.

S&ME will submit a digital copy of the Bid Documents to the Unit as required.

Subtask B Meetings

Following completion of the Bid Documents, S&ME has budgeted to prepare for and conduct an on-site pre-bid meeting with environmental remediation contractors. This meeting will be held on-site in Durham, North Carolina. The Project Manager and Environmental Engineer from Raleigh and the Civil Engineer from Charlotte will prepare for and attend the meeting in person. Within at least two weeks prior to this meeting, S&ME will send bid documents to the selected contractors.

Subtask C Project Management

S&ME will conduct the following as part of the Project Management Subtask:

- ❖ Provide weekly email project status updates;
- ❖ Project Management of Scope, Schedule and Budget and communication with the Unit; and,
- ❖ Support to project team.

❖ SCHEDULE

The proposed Scope of Services will be conducted according to the following schedule.

Task	Time to Complete Task
The Unit issues Authorization to Proceed	N/A
Draft RAP & Engineering Design prepared and submitted to the Unit	8 Weeks
RAP is reviewed by Unit (one week) and is finalized by S&ME (one week). Public notice is issued by the Unit (45-day notice)	2 Week
Draft Bid Documents prepared and submitted to the Unit	3 Weeks
Bid Documents are finalized and Request for Bids issued to contractors	1 Week
Erosion and Sedimentation Control Plan prepared for Durham County	2 Weeks
On-site Pre-bid meeting with contractors	1 Day
Contractors submit bids	3 Weeks After Pre-Bid Meeting
Contractor is selected and S&ME submits construction remedy proposal to the Unit	1-2 Weeks After Contractor Bids



❖ PROJECT BUDGET

S&ME proposes to provide the Scope of Services presented above on a time and materials basis for an estimated fee of **\$41,118.20**. The breakdown of the budget for each phase is summarized below:

❖ Work Plan & Proposal - 805RA-2A:	\$1,745.00
❖ Remedial Investigation Summary Report – 805RA-2B	\$3,750.00
❖ Draft RAP & Engineering Design - 805RA-2C and 805RA-2D:	\$17,908.65
❖ Subcontractor Process & Project Mgmt. - 805RA-3:	\$17,714.55

See the attached spreadsheet for details of the proposed budget.

❖ AUTHORIZATION

This proposal is solely intended for the Basic Services as described in the Scope of Services. The Scope of Services may not be modified or amended, unless the changes are first agreed to by the client and S&ME. Use of this proposal and resulting documents, including final report is limited to the above referenced project and client.

S&ME appreciates the opportunity to submit this proposal and we look forward to continue working with you on this project. We will follow-up with you to review this proposal and to answer any questions that you may have.

Sincerely,

S&ME, Inc.

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Attachments: Proposed Budget Spreadsheets