



PAT MCCRORY

*Governor*

DONALD R. VAN DER VAART

*Secretary*

MICHAEL SCOTT

*Director*

July 14, 2016

Mr. Tom Raymond  
S&ME, Inc.  
3201 Spring Forest Road  
Raleigh, NC 27616

Re: Work Plan and Cost Proposal Request - Task Orders 245DP-1&2  
Miller Street  
Gastonia, Gaston County  
ID # NONCD0000245

Dear Mr. Raymond:

Submit a task work plan and cost estimate to perform remedial investigation-contaminant delineation phase activities at the above referenced site. Conduct these activities in accordance with State Contract No. N15002i.

**Investigation Goals:** Delineate the waste boundary to determine if the waste disposal area extends onto adjacent properties. Collect soil assessment samples from beneath the waste disposal area. Collect groundwater samples from the groundwater within the waste disposal area.

**Scope of work for Task Order 245DP-1:**

Sub Task A: Work Plan and Cost Estimate Preparation:

- Prepare a work plan in accordance with S&ME's approved standard operating procedures dated July 2010, and include a schedule of daily activities.
- Submit an itemized cost estimate that identifies personnel and materials involved.
- Reference the most recent Guidelines for Addressing Pre-Regulatory Landfills and Dumps for details regarding procedures.
- Ensure personnel in the field are qualified to identify contaminated material and landfill waste and comply with OSHA-required health and safety training. Before task activities begin, photograph areas or objects that may be disturbed. If needed, photograph affected areas and objects, restoration efforts, and noteworthy items encountered during task activities. Submit these photographs upon completion of the activities, and a review will determine if any need to be included in the report.
- Collect GPS coordinates for each new boring location. Report coordinates in decimal degrees to the seventh order using the North American Datum of 1983 (NAD83) format and latitude and longitude using WGS 84 format. These coordinates will be tabulated and included as an appendix.



- Include background (light grey) topographic contour lines on figures detailing the Site and Site vicinity.
- For any invasive activities, provide a plan to properly manage investigation derived waste (IDW). If sampling results indicate non-hazardous IDW, spread within the waste disposal area. If sampling results indicate hazardous IDW, analyze containerized waste as required by waste hauler and include details of sampling and disposal of drums in the proposal. Remove all drummed waste and associated fencing from site within 90 days after field activities are concluded.
- For any field work, minimize the clearing of vegetative material to enable access to proposed sampling points. Using hand tools for clearing is the preferred method, otherwise an explanation must be provided for use of heavy equipment.
- Submit samples to a North Carolina-certified laboratory and analyze for the following parameters by the most current U.S. EPA Contract Laboratory Program Target Compound List: volatile organic compounds by SW-846 method 8260, 1,4-dioxane by Method 8260SIM, semi-volatile organic compounds by SW-846 method 8270, 14 metals by SW-846 method 6020, mercury by method 7471, ammonia by SM 4500, and nitrate and sulfate by EPA Method 300. Please note that any alternate method should be the U.S. EPA Method having the lowest detection limit and that at least achieves the detections equivalent to the 15A NCAC 2L standards or where these are not available, then federal maximum contaminant limits (MCLs). Soil analysis methods must meet the IHSB Preliminary Soil Remediation Goals Table. Initial samples also need 10 Tentatively Identified Compounds (TICs).
- Upon completion of task activities, submit field notes, photographs, and validated analytical results for review.
- Provide daily updates via phone or email to the Unit Project Manager.

#### Sub Task B: Waste Boundary Delineation:

- Based on review of the November 16, 2015 “Report of Geotechnical Exploration” prepared by S&ME for the referenced property, the waste disposal area may extend onto adjacent properties.
- Advance seven borings (B-24 through B-30) around the perimeter of the waste disposal area as shown on the accompanying figure. Extend borings 10 feet below land surface unless waste is encountered. Waste is generally determined not to be present if it is not encountered within ten feet of ground surface.

#### Sub Task C: Soil Assessment:

- Advance nine soil borings (SB-1 through SB-9) located within the waste disposal footprint as indicated on the attached map.
- Collect soil samples for laboratory analysis from each soil boring at the interval located below the waste/fill and native soil interface.

#### Sub Task D: Groundwater Evaluation:

- Install and sample three temporary Type II monitoring wells (TW-1 through TW-3), located at proposed soil borings SB-1, SB-5 and SB-8 as presented in the attached figure.



- The wells will be installed by a NC Certified Well Driller and upon completion the wells will be properly developed.
- The three temporary monitoring wells will be sampled at least 24 hours after installation and development. Prior to sampling the wells, collect depth to groundwater and depth of well measurements.

**Scope of Work for Task Order 245DP-2: Report Compilation**

Compilation of the report will be approved as a separate task order. The Report will be titled “Remedial Investigation – Waste Delineation and Media Sampling”.

The report is to contain the following items:

- Text, tables, and figures to adequately summarize task activities.
- A section concerning any variations from the work plan or your SOPs.

A task authorization to begin work will be issued based on the approved proposal. Do not proceed with tasks prior to receiving this authorization. If you have any questions or concerns, contact me at (919)707-8230.

Sincerely,



David P. Kwiatkowski, Hydrogeologist  
Division of Waste Management – NCDEQ

