



PAT MCCRORY  
*Governor*

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*Acting Director*

April 13, 2016

Tim Grant, PG  
ATC Group Services, LLC  
2725 East Millbrook Road, Suite 121  
Raleigh, NC 27604

Re: Additional Landfill Gas Sampling – Task Order 679DP-13  
Jacksonville WWTP Landfill at Sturgeon City | ID # NONCD0000679  
Loyola Drive & Wardola Drive, Jacksonville, Onslow County

Dear Mr. Grant:

Please 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. N13003S.

**Investigation Goals:** Collect additional landfill gas data to help determine if setback distances from the waste disposal area at Sturgeon City Park are needed for development purposes.

**Scope of Work for Task Order 679DP-13:**

- Prepare a work plan in accordance with ATC's approved standard operating procedures dated April 17, 2013, and approved April 22, 2013, 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.
- 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.

#### Subtask A: Landfill Gas Probe Installation and Screening

- Install three [3] new permanent landfill gas probes within the waste boundary at the proposed locations presented in the attached map. Gas probes are to be installed with flush-mount covers.
- Install flux chambers at the waste boundary and 50-100 feet from the waste boundary at the proposed locations presented in the attached map.
- Screen the new landfill gas probes and existing gas probes GP-1, GP-2, GP-3, and GP-4 for volatile organic compounds (VOCs), methane, oxygen, carbon dioxide, barometric pressure and hydrogen sulfide.
- Screen new landfill gas probes at least 24 hours after installation.
- Compare landfill gas probe screening results with the IHSB Residential Vapor Intrusion Screening levels.
- Do not abandon the gas probes following screening. A review of the field testing results will determine subsequent sample collection.
- If the proposed new landfill gas probes cannot be constructed according to minimum requirements in the Guidelines, then install flux chambers.
- If flux chambers cannot be installed, then collect groundwater samples for dissolved methane analysis.

#### Subtasks B, C, and D: Additional Screening

Conduct additional screening events once a month for three months after the initial screening event.

#### Subtask E: Report Compilation

Compile a report titled "Remedial Investigation – Landfill Gas Sampling". The report is to contain the following items:

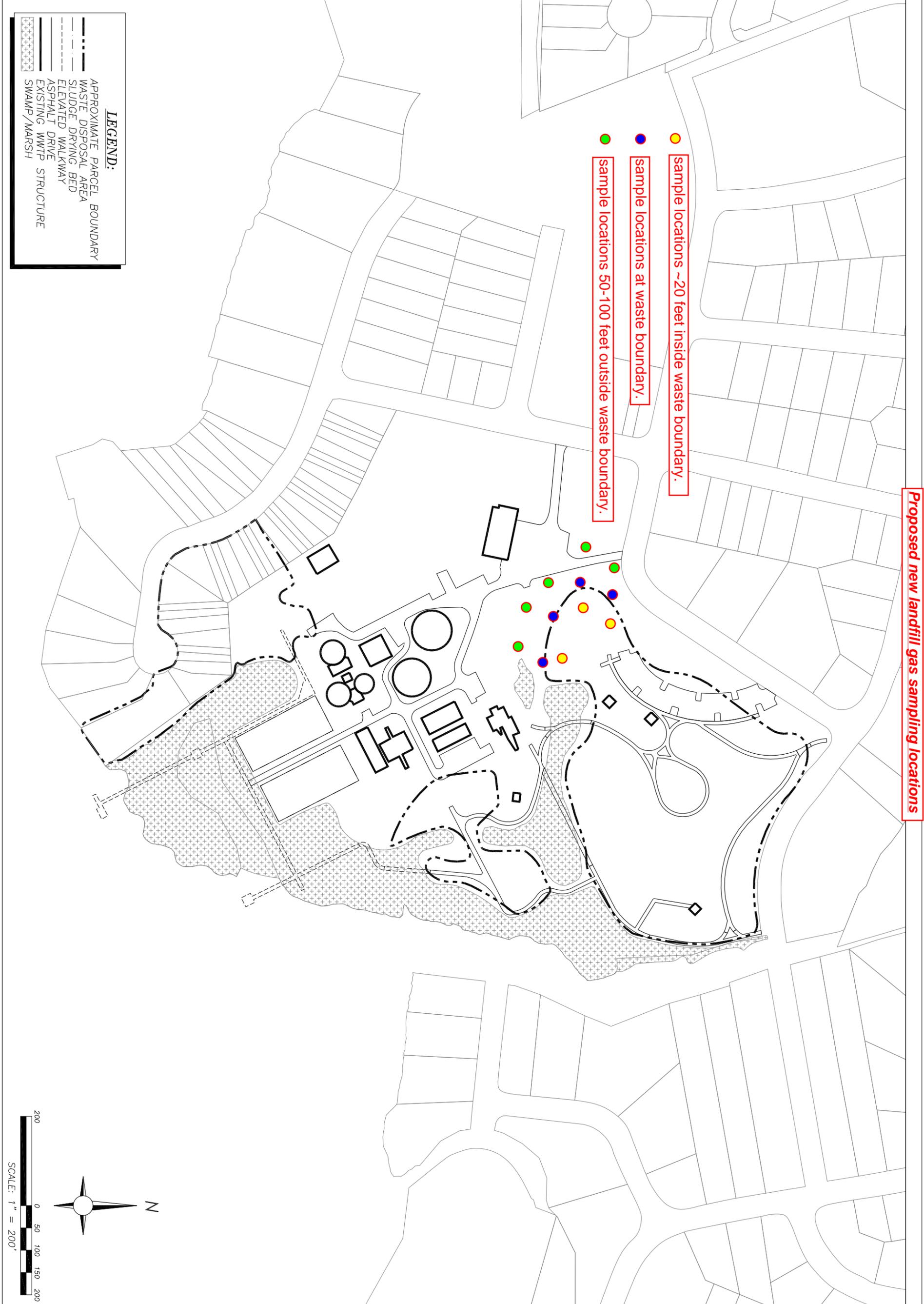
- Text, tables, and figures to adequately summarize task activities
- A section concerning any variations from the work plan or your SOPs.

Please provide the work plan and cost estimate by March 20, 2016. A task authorization to begin work will be issued based on the approved proposal. Do not proceed with tasks prior to receiving this authorization. Please contact me at 919-707-8331 or [thomas.slusser@ncdenr.gov](mailto:thomas.slusser@ncdenr.gov) if you have any questions.

Best regards,



Thomas Slusser, L.G.  
Pre-Regulatory Landfill Unit  
Division of Waste Management



<b>FIGURE</b> 1	<b>REMEDIAL INVESTIGATION - DELINEATION PHASE</b> <b>JACKSONVILLE WWTP LANDFILL AT STURGEON CITY</b> JACKSONVILLE, ONSLOW COUNTY, NC	DESIGNED: HMS DRAWN: AK CHECKED: TG DATE: 2/16/2016 SCALE: 1"=60' PROJECT #: NCUL202P5	<table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>REVISION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO.	DATE	REVISION													Prepared by:  <b>Marshall Miller &amp; Associates, Inc.</b> Geology, Environmental Sciences & Engineering, Geophysics Bluefield, VA   Lexington, KY   Raleigh, NC Richmond, VA   Charleston, WV   Camp Hill, PA Mission, KS   Kingsport, TN   Morgantown, WV Shreveport, LA
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