



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

Mr. Jacob D. Smith  
Staff Professional  
SCS Engineers, PC  
15521 Midlothian Turnpike, Suite 305  
Midlothian, VA 23113

Dear Mr. Smith:

This is in response to your letter dated May 6, 2020, which proposed an alternative monitoring procedure (AMP) for the North Wake County Landfill (Landfill) located in Raleigh, North Carolina. The landfill is subject to Title 40, Code of Federal Regulations (CFR), Part 60, Subpart WWW—Standards of Performance for Municipal Solid Waste Landfills. Your letter was addressed to the North Carolina Division of Environmental Quality (NCDEQ), but the U.S. Environmental Protection Agency Region 4 is responding to your request because the authority to approve major alternatives to monitoring under 40 CFR Part 60 has not been delegated to the NCDEQ. Based upon our review, the request is denied because the proposal to conduct quarterly monitoring for a section of landfill would be less stringent than monitoring the entire landfill. Details regarding the AMP and the bases for our determination are provided in the remainder of this letter.

Wake County's Solid Waste Management Division (SWMD) operates a closed landfill in Raleigh, NC. The contiguous landfill consists of a 32-acre unlined landfill and a 64-acre lined landfill. On behalf of Wake County's SWMD, SCS Engineers, PC (SCS) performs surface emissions monitoring (SEM) on the closed landfill to comply with the provisions of §60.755(c)(1)-(4). During an annual SEM event conducted on the landfill on March 17 and 18, 2020, SCS found one monitoring location where the methane concentration equaled or exceeded the regulatory allowable concentration limit of 500 parts per million by volume (ppmv) above background. Corrective actions were conducted by Wake County's SWMD to meet the requirements of §60.755(c)(4)(i), (ii), & (iv):

- i) Wake County's SWMD implemented cover maintenance in the vicinity of the location; and
- ii) Conducted the post-cover-maintenance corrective-action initial 10-day and 1-month supplemental monitoring; and
- iii) Demonstrated a methane concentration result of less than 500 ppmv above background for the affected location.

SCS is proposing to conduct quarterly monitoring under the provisions of §60.755(c)(4)(iv) for a specified section (2.2 acres of 32 acres) of the closed unlined landfill.

The landfill is subject to the operational standards for collection and control systems under provisions of §60.753. In accordance with §60.753(d), the collection system shall be operated so that the methane concentration is less than 500 ppmv above background at the landfill's SEM design-plan monitoring locations. Provisions in §60.756(f) allow an annual SEM frequency for closed landfills where no methane concentrations greater than or equal to 500 ppmv above background are detected during three

successive quarterly monitoring periods. These provisions require a resumption of quarterly SEM whenever a methane reading of 500 ppmv or more above background is detected during an annual SEM event.

Under definitions in §60.751, landfill means "... an area of land or an excavation in which wastes are placed for permanent disposal." Disposal facility means "... all contiguous land and structures, other appurtenances, and improvements on the land." A review of available information confirms that the 32-acre unlined landfill and the 64-acre lined landfill are contiguous and are permitted as one facility under Title 40, CFR, Part 70 Title-V Operating Permit provisions (NCDEQ Permit No, 08890T10, effective April 20, 2020).

When a source experiences an exceedance, Subpart WWW requires SEM for all monitoring points of the landfill and does not contain provisions allowing a reduction in the stringency of the standard. Therefore, the EPA denies SCS's proposal to monitor only a section of the unlined landfill and reaffirms that the quarterly SEM must be conducted for all SEM locations identified in the design-plan for the 96-acre closed landfill. In accordance with §60.756(f), and upon successfully achieving three consecutive quarters of satisfactory results for all SEM locations, resumption of annual SEM may resume at the landfill.

This response was coordinated with the EPA's Office of Enforcement and Compliance Assurance and Office of Air Quality Planning and Standards. If you have any questions concerning this response, please contact Tracy Watson at (404) 562-8998, or by email at [watson.marion@epa.gov](mailto:watson.marion@epa.gov).

Sincerely,

**GREGG  
WORLEY**

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Gregg Worley  
Acting Director  
Air and Radiation Division

cc: Steve Hall, NCDEQ  
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