



North Carolina Department of Environment and Natural Resources

Dexter Matthews, Director

Division of Waste Management

Beverly Eaves Perdue, Governor
Dee Freeman, Secretary

November 6, 2009

Mr. Johnny Beal
Wake County Solid Waste Management Division
9025 Deponie Drive
Raleigh, NC 27614

**Re: Groundwater Sampling, Analysis, Assessment, and
Implementation of Corrective Action
Feltonsville Landfill, Permit #92-03 and North Wake Landfill, Permit #92-09**

Dear Mr. Beal:

The Wake County Solid Waste Management Division has proposed to discontinue the services of independent environmental consultants for the investigation and remediation of contaminant releases from the closed Feltonsville Landfill and the closed North Wake Landfill. Volatile organic constituents in concentrations exceeding the State's groundwater standards have repeatedly been detected beyond the compliance boundary at both landfills. On behalf of Wake County, independent environmental professionals have conducted assessments and analyses of groundwater contamination at each landfill pursuant to 15A N.C. Administrative Code 13B §§ .1634 and .1635, including an assessment of corrective measures for each landfill. The next steps in addressing the groundwater contamination are the selection of remedy, preparation of a corrective action plan (CAP), and implementation of the corrective action plan (CAP) for each landfill facility.

In addition, the Wake County Solid Waste Management Division proposes to discontinue the use of an independent laboratory for analysis of groundwater samples, with future sample analysis to be performed by the Wake County Environmental Services Laboratory. However, 15A N.C. Administrative Code Chapter 2H requires laboratories to be certified in accordance with those rules for every parameter which is to be reported to an environmental agency. The Wake County Environmental Services Laboratory does not have the required certifications, and thus is not qualified to perform this work.

Typically, owners and operators of solid waste management facilities utilize independent environmental consultants and laboratories to provide data collection, data analyses, and interpretations to ensure the public that the results and the selection and implementation of remedies are scientifically sound, impartial, fair, and objective. Professional independent consultants who have wide experience in the investigation of geologic and hydrogeologic conditions, collection and analysis of water quality data, the design of studies to characterize the nature and extent of groundwater contamination, and the design, implementation and monitoring of corrective action remedies are best equipped to provide data, analyses, recommendations and interpretations in which the public, the owners and operators, and the regulatory agencies may have confidence.

As the Solid Waste Section understands the proposal, Wake County staff would perform all (or part) of future work beginning January 1, 2010 relating to groundwater for each of the landfills, including, but not limited to, advising the County on the selection of remedy for each of the landfills, preparation and submission of the corrective action plans, implementation or oversight of implementation of the remedy at each landfill, conducting water quality sampling, interpreting the analytical data, and writing and submitting the semiannual monitoring reports. Does Wake County also propose to conduct the landfill gas monitoring previously conducted by independent professional consultants at each landfill?

1

The water quality investigations at each of these landfills are at a critical juncture. The Solid Waste Section strongly recommends that Wake County retain independent environmental consultants to perform all of this work. Although the Wake County Division of Solid Waste Management has licensed professionals on staff, they may not have the requisite training experience and time in the specialized area of water quality sampling, analysis and interpretation, water quality investigation, and corrective action at municipal solid waste landfills.

In addition to the training and experience of Wake County personnel in water quality sampling, analysis and interpretation, etc., Wake County personnel would need to develop a Health and Safety Plan for each of the landfills, a Quality Assurance/ Quality Control Plan for each sampling event, and protocols for collecting field parameters, corrective action parameters, and monitored natural attenuation (MNA) parameters for each sample. MNA parameters, which are a necessary part of monitoring during corrective action, are usually performed by specialists. Personnel collecting samples at the landfill would be required to have the OSHA 40-hour HAZWOPER Training and all HAZWOPER updates.

Previous environmental samples collected at these landfills have followed standard sampling protocols. When standard protocols are not used, validity of the analytical results may be brought in to question. The Solid Waste Section has a guidance document for environmental sampling on the Solid Waste Section web page: www.wastenotnc.org/swhome/EnvMonitoringSolidWasteSampling_Guidance.pdf.

To reiterate, the water quality work being performed at the North Wake and Feltonville Landfills is far more complex and sensitive than routine detection monitoring. The Solid Waste Section encourages Wake County to continue to engage independent environmental professionals to perform water quality work at these landfills.

If you have any additional questions or concerns regarding this letter, please feel free to contact me at 919-508-8500.

Sincerely,



Jaclynne Drummond
Hydrogeologist
Environmental Compliance
Solid Waste Section

cc: Lee Squires, Wake County Solid Waste Management Division
Joe Alexander, Wake County Solid Waste Management Division
Tommy Esqueda, Wake County Environmental Services
Mark Poindexter, Field Operations Supervisor
Jason Watkins, Central District Supervisor
Brad Bailey, Environmental Senior Specialist