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June 17, 2016

Sent Via Email – mike@griffinbrothers.com

Mr. Mike Griffin
Greenway Waste Solutions at North Meck, LLC
19109 West Catawba Avenue, Suite 200
Cornelius, NC 28031

Re: *Contaminant Delineation Plan for the Infill Expansion Area*
North Mecklenburg C&D Landfill Infill Area
Mecklenburg County
Solid Waste Permit Number 6013
DIN 25975

Dear Mr. Griffin:

The Solid Waste Section has completed a review of the *Contaminant Delineation Plan for the Infill Expansion Area* dated May 26, 2016 (DIN 25974) and submitted on behalf of Greenway Waste Solutions at North Meck, LLC by CEC, Inc. for the North Mecklenburg C&D Landfill Infill Area, Solid Waste Permit Number 6013. The plan was submitted in response to confirmed exceedances of the Appendix I constituents, specifically volatile organic compounds, and in accordance with 15A NCAC 13B .0545. Assessment monitoring has been conducted since 2013.

Within the *Contaminant Delineation Plan for the Infill Expansion Area*, additional groundwater and vapor phase assessment is recommended to evaluate the observed groundwater impacts. The recommendations include:

- Additional site characterization in the landfill area exhibiting the most elevated groundwater contaminant concentrations in the vicinity of existing groundwater monitoring well cluster MW-9/MW-9D to include an addition groundwater monitoring well cluster (saprolite and bedrock wells) installed 50 feet within the property boundary to determine if impacted groundwater may be migrating beyond the landfill property boundary, and also to assess hydraulic gradients in the vicinity of the adjacent tributary stream in this area;
- The installation of a groundwater monitoring well cluster at the eastern perimeter of the Infill Expansion Area Landfill to serve as detection monitoring wells at the true point of compliance, and subsequent routine semi-annual monitoring of these proposed new detection groundwater monitoring wells. The existing internal groundwater monitoring wells will then be used for assessment monitoring. The proposed groundwater monitoring well network for the Infill Expansion Area will consist of Detection Wells (MW-1, MW-2, MW-3, MW-10, proposed new well cluster near the southeast, and proposed new well cluster near MW9, MW-9D) and Assessment Wells (MW-4, MW-4D, MW-5, MW-5D, MW-6, MW-7, MW-7D, MW-8, MW-8D, MW-9, and MW-9D);
- Evaluation of additional analytical leachate/landfill gas “indicator” parameters as a part of routine landfill monitoring to characterize the source of the groundwater impacts;

- For six semiannual groundwater assessment monitoring events, the historical data show that Appendix II semi-VOCs, herbicides, and PCBs are not of significant concern at the site. Consequently, Greenway Waste Solutions at North Meck, LLC is petitioning the Solid Waste Section to amend the assessment monitoring requirements for the Infill Expansion Area by discontinuing routine groundwater and surface water sampling and analyses for Appendix II semi-VOCs, herbicides, and PCBs;
- Assessment of the need for landfill gas extraction in the Infill Expansion Area; and
- Development of a screening numerical model to simulate contaminant fate and transport to further evaluate risk associated with the migration of groundwater contaminants.

As a result, the *Contaminant Delineation Plan for the Infill Expansion Area* recommendations are approved at this time with two exceptions. First, a phased approach will be applied to the monitoring request for the distinction between detection and assessment groundwater monitoring wells. Please install the new proposed groundwater monitoring wells, and then please conduct two consecutive semiannual groundwater monitoring events at those new groundwater monitoring wells. Based upon the analytical results for the two monitoring events and the well construction details, the Solid Waste Section will provide a response to the monitoring request. Second, because the contaminant plume has not been completely delineated horizontally and vertically and Appendix II of 40 CFR Part 258 constituents have been detected periodically within groundwater monitoring wells since 2013, please continue to conduct the full suite of Appendix II of 40 CFR Part 258 constituents at this time.

If you have any questions regarding this letter, please feel free to contact me at 828.296.4706 or by email at jaclynne.drummond@ncdenr.gov. Thank you again for your continued cooperation with this matter.

Sincerely,



Jaclynne Drummond
Compliance Hydrogeologist
Solid Waste Section, Division of Waste Management
NCDEQ

cc sent via email: John Brown, Griffin Brothers
 Jason Watkins, Field Operations Branch Head
 Deb Aja, Western District Supervisor
 Teresa Bradford, Senior Environmental Specialist
 Perry Sugg, Permitting Branch Hydrogeologist
 John Murray, Permitting Branch Engineer
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 Ed Stephens, CEC, Inc.
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