



**CAVANAUGH**

*Stewardship Through Innovation*

January 15, 2016

Ms. Joelle Burleson  
Department of Environmental Quality  
Division of Air Quality  
1641 Mail Service Center  
Raleigh, NC 27699-1641  
Submitted electronically to [daq.publiccomments@ncdenr.gov](mailto:daq.publiccomments@ncdenr.gov)

Re: Comments on Proposed State Rules to Implement 40 C.F.R. Part 60, Subpart UUUU

Dear Ms. Burleson;

I appreciate the opportunity to provide comments on the subject proposed rule. I submit these comments as a life-long resident of North Carolina, raising a family and growing a small business that employs North Carolinians. I do not support the approval of the subject rule.

I presume that many of the comments you and the Department will receive on the proposed rule will reflect opinions on the negative health and environmental impacts of greenhouse gas and/or carbon emissions. I agree that the emissions of greenhouse gases are of concern, warranting attention and action to mitigate the negative impacts so caused. My desire is to focus your attention to ways in which the strategy of North Carolina can be improved through a revised rule that seeks to comply with the Clean Power Plan, addressing those carbon emissions stemming from the use of fossil fuels to generate electricity.

The EPA is not the only agency that has been active in evaluating ways to better manage the carbon cycle. Agencies such as USDA and DOE have been collaborating with EPA and other public agencies and private think-tanks to address carbon management – not only through the elimination of the combustion of fossil fuels, but through opportunities to displace the use of fossil-based subterranean carbon fuels with those fuels that stem from recycled atmospheric carbon. Why? Because the use of biogenic carbon (waste organics, in particular) makes good sense for the environment, and it makes great sense for our economy.

The conversion of organic waste into biogas, which may easily be refined to renewable natural gas, is an extremely positive approach to addressing carbon emissions. Such organic-waste-derived renewable natural gas allows us to continue utilizing existing electricity generating infrastructure (existing power plants that use natural gas to make electricity) and supports the electric utilities continuing to do what they do best – convert fuel into electrons. It also reduces carbon emissions (more on this in a minute), supports existing NC economic engines such as agriculture and forestry, and provides revenues and motivation for improved waste management across all sectors.

The final Clean Power Plan rule by EPA recognizes that carbon emissions from the decomposition of organic waste has a net neutral impact on greenhouse gas emissions. Simply put, organic stuff is created from atmospheric carbon, and when organic carbon decomposes, it re-releases the carbon to the atmosphere from which it came. Capturing the carbon emissions (methane) from this decomposing organic waste and then using it to create electricity along the way to being released does not add to atmospheric carbon levels. This is called organic recycling.

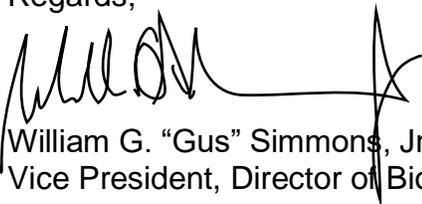
North Carolina is recognized by many reputable sources such as the National Renewable Energy Laboratory (NREL)<sup>i</sup>, as the third richest state in organic waste resources in the country, as expressed as biomethane potential. The abundance of this rich resource in NC continues to grow, as our state population grows and creates even more organic wastes. Agriculture has been the greatest contributor to our State's economy for a long, long time, and we still have great potential to harvest even more value from animal wastes, crop residues, and forestry residues. Disposing of these organic resources is the same as throwing cash in the garbage or flushing coins down the toilet. These materials are a resource, not a waste.

The utilization of other renewable energy resources, such as solar and wind, are also helpful in supplanting the use of fossil fuels like coal and natural gas, which pump carbon long-ago trapped deep in the earth into the atmosphere. The combined renewable resources available to our State are more than enough to displace the fossil fuels we buy from other states to create our electricity. We should be aggressively developing a plan to develop these renewable resources and keep the dollars we ship to other states to buy fossil fuels right here.

As an engineer, I am constantly looking for solutions that are economically, environmentally, and socially sound. Perhaps this is why I see a strategy to addressing the Clean Power Plan so obviously before us – harvest the renewable natural gas potential of our immense organic waste resources, use this Renewable Natural Gas to fuel our energy needs, and buy North Carolina fuel created by North Carolina resources. When you have an abundance of a renewable resource that you are currently wasting, dedicate yourself to becoming a good steward of this resource. Along the way, you will find yourself making good choices that have a positive impact for our State.

Thank you, in advance, for consideration of my comments. If, upon receipt and review of this information, you have any questions or would like to discuss this matter in more detail, please contact me at your earliest convenience.

Regards;



William G. "Gus" Simmons, Jr., P.E.  
Vice President, Director of Bioenergy

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<sup>i</sup> Reference page 3 of the NREL Biogas Potential in the United States Fact Sheet