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NORTH CAROLINA
Environmental Quality

January 17, 2020

Mr. Kraig Westerbeek
VP, Environmental and Manufacturing
BF Grady Road (Align RNG LLC)
PO Box 856
Warsaw, NC 28398

Subject: Additional Information Request
proposed Air Permit 10644R00
BF Grady Road (Align RNG LLC)
Warsaw, Duplin County, North Carolina
Permit Class: Synthetic Minor
Facility ID# 3100179

Dear Mr. Westerbeek / BF Grady Road (Align RNG LLC):

Our office is in receipt (12-10-2019) of the application for a biogas upgrading facility in Duplin County (Warsaw/Turkey, NC) along with the correct application fee (\$400) and the local zoning consistency determination request. This facility is planning to receive biogas produced in anaerobic digesters at various hog farms located throughout Duplin and Sampson counties.

15A North Carolina Administrative Code 2D .0516, "Sulfur Dioxide Emissions from Combustion Sources" provides:

Emission of sulfur dioxide from any source of combustion that is discharged from any vent, stack, or chimney shall not exceed 2.3 pounds of sulfur dioxide per million BTU input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. Sulfur dioxide formed or reduced as a result of treating flue gases with sulfur trioxide or other materials shall also be accounted for when determining compliance with this standard.

On page 20 of the application, Section IV, State Regulatory Applicability, Part E, you have claimed that this rule does not apply to the gas upgrading system and associated flares at your facility because the gas upgrading system is not a "source of combustion" and the emissions points are not a "vent, stack, or chimney." You further suggest that, if the rule does apply, "compliance can be achieved through increasing the use of supplemental natural gas in the enclosed flare from 2.7 MM Btu/hr to 7.3 MM Btu/hr."

The Division of Air Quality does not agree with your interpretation of 2D .0516. It is our position that 2D .0516 applies to your facility and that compliance cannot be achieved by burning additional natural gas to artificially inflate the heat input associated with your combustion unit.



North Carolina Department of Environmental Quality | Division of Air Quality
Wilmington Regional Office | 127 Cardinal Drive Extension | Wilmington, NC 28405
910.796.7215 T | 910.350.2004 F

Kraig Westerbeek
January 17, 2020
Page 2

First, the flares that combust waste gas from your gas upgrading system and release emissions into the environment are a "combustion source." Second, the language, "vent, stack, or chimney" clearly encompasses the flares at your facility that will be venting SO₂ emissions into the atmosphere.

Finally, it is our interpretation that the "BTU input" referenced in the rule refers to the BTU input associated with combustion of the waste gas stream being generated by your facility and not an increase in BTUs generated to artificially lower the SO₂ emission rate per million BTU. We further note that the purpose of this rule is to reduce pollution. The approach you outline in your application does not reduce the mass emission rate of SO₂, needlessly wastes fuel, increases the emission of other pollutants, and is, therefore, contrary to the purpose of the rule.

On December 12, 2019, Dean Carroll of my staff contacted Ben Cauthen, Cavanaugh Solutions, and discussed treating more tail gas using the iron sponge control technology prior to flaring of the gas. Please submit a revised permit application which demonstrates compliance with 15A NCAC 2D .0516. In addition, we are requesting the following information for us to assess SO₂ impacts in the area.

- Air Permit Application Form D3 (attached) for modeling
- Site map depicting dimensions and heights of all proposed structures and the property boundaries to be used to establish public receptors for the purposes of AQ modeling
- Heights dimensions and corner/center coordinates for all structures located on the adjacent Smithfield -Warsaw Feed Mill regardless of whether they are considered within the property boundaries (if available)
- Confirm the heat release value for the candle stick flare
- Confirm the existence of a rain cap on the enclosed flare

Further discussions are expected between Align and DAQ to achieve the goal of a satisfactory air permit that meets all DAQ rules and standards.

The application process time clock will be put on hold during this time for you to respond to this request.

Sincerely,



Brad Newland, Wilmington Regional Supervisor
Division of Air Quality, NC DEQ

Enclosures

c: Wilmington Regional Office
Ibeam Doc Mod ____