

# Blue Ridge Environmental Defense League

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November 20, 2017

Charles McEachern  
Division of Air Quality  
3800 Barrett Dr., Raleigh, N.C., 27609  
Email: publiccomments@ncdenr.gov

## **RE: N.C. DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF AIR QUALITY INTENT TO ISSUE AIR QUALITY PERMIT #10466R00 for the Northampton Compressor Station Facility ID 6600169**

Dear Mr. McEachern:

On behalf of the Blue Ridge Environmental Defense League and our members in North Carolina, I write to provide the following comments on the above captioned matter. These remarks will supplement those submitted in writing by our staff and orally at the public hearing held on November 15.

### Background Information

On January 13, 2016, the North Carolina Department of Environmental Quality received a completed application associated with the Atlantic Coast Pipeline LLC's proposed Northampton Compressor Station for a permit to construct and operate a new compressor station at 718 Forest Rd., Pleasant Hill, N.C. in Northampton County, GIS parcel number 0500230. On July 20, 2017, the Atlantic Coast Pipeline submitted an application update.

### North Carolina DEQ Improperly Designates Facility a Minor Source

In its application, ACP seeks to have the facility permitted as a small or minor source of air pollution. However, the natural gas compressor station proposed for Pleasant Hill would emit large amounts of pollution and does not meet the requirements to be considered a minor source of air pollution.

Under federal law, the emission threshold for major sources of air pollution is 100 tons per year for designated sources and 250 tpy for others. The Clean Air Act<sup>1</sup> definition states:

Except as otherwise expressly provided, the terms "major stationary source" and "major emitting facility" mean any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant (including any major emitting facility or source of fugitive emissions of any such pollutant, as determined by rule by the Administrator).

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<sup>1</sup> U.S. Code, Title 42, Chapter 85, Subchapter III, § 7601

See 42 U.S. Code § 7602(j).

Further, a small source, or minor source, is defined as follows:

The term "small source" means a source that emits less than 100 tons of regulated pollutants per year, or any class of persons that the Administrator determines, through regulation, generally lack technical ability or knowledge regarding control of air pollution.

See 42 U.S. Code § 7602(x).

However, the potential to emit air pollutants at the proposed Northampton Compressor Station exceeds the benchmarks to a considerable degree. Our analysis indicates the potentials to emit are significantly above major source thresholds.

Table 1 and Table 2 contain the results of our pollutant emission analysis based on heat input rates provided by the permit application and US EPA air pollution emission factors for natural gas-powered turbines.

**Table 1. Northampton C3 Station Turbine Power Ratings**

Turbine Type Manufacturer: Solar	Emission Unit	Heat input 100% load mmBTU/hour
Taurus 70	CT 01	96.0
Centaur 50	CT 02	60.0
Centaur 40	CT 03	51.0
	Total =	207.0

For annual operation, calculate hourly heat rate mmBTU/hour time 8760 hours/year to find annual heat input of 1.81 e+06 (or 1,813,320 mmBTU per year).

**Table 2: Northampton C3 Station Annual Emissions**

Pollutant	Heat Input mmBTU/year	Emission Factor <sup>2</sup> AP-42 uncontrolled	Air Emissions Tons/year
Carbon Monoxide	1.81 e+06	1.77 e-01 <sup>a</sup>	160.2
Carbon Monoxide	1.81 e+06	8.23 e-02 <sup>b</sup>	74.6
Nitrogen Oxides	1.81 e+06	2.95 e-01 <sup>a</sup>	266.9
Nitrogen Oxides	1.81 e+06	3.23 e-01 <sup>b</sup>	292.3

a. all loads

b. high loads

<sup>2</sup> AP-42 Table 3.4-1, Summary of Emission Factors for Natural Gas-fired Gas Turbines, April 2000

These air pollution levels are projections. They could be higher. The actual emissions can be affected by many things, including weather conditions, operator ability, control devices, regulations and load factors. According to the air permit application, Form A1, the compressor is considered a "small" source. We hereby request that the DEQ take steps to correct this error before issuing this permit. The compressor station proposed for Northampton should be deemed a major source.

#### Conclusion

If permitted, the Northampton Compressor Station would be a major source of air pollution. The NC Department of Environmental Quality draft permit incorrectly allows the facility to be a minor source.

Respectfully,

A handwritten signature in black ink, appearing to read "Louis A. Zeller", followed by a horizontal line.

Louis A. Zeller, Executive Director  
Blue Ridge Environmental Defense League