## Blue Ridge Environmental Defense League

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October 25, 2018

David Hughes Division of Air Quality 1641 Mail Service Center Raleigh, North Carolina 27699-1641 David.B.Hughes@ncdenr.gov

# **RE: Permit No: 03069T36, University of North Carolina at Chapel Hill Application ID 6800043 15A, 15B and 18A**

Mr. Hughes:

On behalf of the Blue Ridge Environmental Defense League and our members in North Carolina, I write to comment on the permit renewal for the above-captioned facility. We hereby request that a public hearing be held in the affected community before the permit is issued. Further, we request that the comment period be extended. We are concerned that the air pollution created by the combustion of fuel at the University's physical plant presents a serious risk to the health and well-being of residents in the Chapel Hill area. A public hearing would allow the NC Division of Air Quality (DAQ) to ascertain the potential public heath risks before finalizing this permit. Currently, Chapel Hill has a population of 59,862.<sup>1</sup> The town is thickly settled, with a population density of 2,748 per square mile which is about 14 times higher than the North Carolina average.

## **Background**

The University of North Carolina at Chapel Hill (UNC-CH) operates a 760-acre campus located in Orange County, North Carolina. The University has several large sources of air pollutant emissions, including two large industrial boilers Emission Sources ES-001 and ES-002 which are permitted to burn coal, natural gas, fuel oil #2 and wood. The heat input capacity for each boiler is 323.17 million Btu per hour, for a combined total of 646.34 MMBtu/h. According to the DAQ's permit review, additional air pollutant emission sources include a co-generation facility on Cameron Avenue near the main campus, a Steam Plant on Manning Drive near the UNC Hospitals complex and a Landfill gas-fired generator and LFG flare at the landfill. Pursuant to the federal Clean Air Act and NC Department of Environmental Quality regulations, the facility is classified as a major source, Title V.

With Air Permit Application No. 6800043.15A (May 18, 2015), the permittee requests significant modification to Boilers ID Nos. ES-001-Boiler #6 and ES-002-Boiler #7 15A NCAC 02D .1109 112(j) Boiler MACT operating limits. And Air Permit Application No. 6800043.18A (March 19, 2018) requests modification pursuant to 15A NCAC 02Q .0515 to add a dry sorbent injection system (DSI) (ID Nos. CD-004.3 and CD-005.3) on

<sup>&</sup>lt;sup>1</sup> US Census Bureau, Population estimate July 1, 2017, data accessed at:

https://www.census.gov/quickfacts/fact/table/chapelhilltownnorthcarolina/PST045217

each of ES-001-Boiler #6 and ES-002-Boiler #7. The permittee has also requested that the current 15A NCAC 02D 112(j) Case-by-Case MACT permit conditions which are applicable to all six boilers located on the UNC-CH campus (ID Nos. ES-001-Boiler #6, ES-002-Boiler #7, ES-003-#8, ES-004-Boiler #9, ES-005-Boiler #10 and ES-SB-6) be replaced with a generic interim permit condition requiring compliance of the boilers with 15A NCAC 02D .1111 MACT 40 CFR 63, Subpart DDDDD.

### **Comments**

The actual air pollution emission levels of criteria pollutants and hazardous air pollutants from UNC-CH, as reported to the NC DAQ, are illustrated in Charts A and B, below.<sup>2</sup>





As shown above in Chart A, the sulfur dioxide  $(SO_2)$  emissions have increased by 50% during the most recent five-year period. Carbon monoxide (CO) emissions have remained at about the same level. And nitrogen oxide  $(NO_x)$  emissions have been reduced by about 28%. Chart B shows the trends for volatile organic compounds (VOC) and fine particulate matter (PM-10) remaining stable, but hazardous air pollutants (HAP) show an increasing trend of 58% with a startling increase in 2015 of 113%. The hazardous air pollutant responsible for 80% to 90% of the HAP total is hydrogen chloride (HCl). HCl vapor is heavier than air and may concentrate in low-lying areas. Hydrogen chloride forms corrosive hydrochloric acid on contact with water found in body tissue. Inhalation of the fumes can cause coughing, choking, inflammation of the nose, throat, and upper respiratory tract, and in severe cases, pulmonary edema, circulatory system failure, and death. Skin contact can cause redness, pain, and severe skin burns. Hydrogen chloride may cause severe burns to the eye and permanent eye damage.

<sup>&</sup>lt;sup>2</sup> Application Review, North Carolina Division of Air Quality, Facility ID 6800043, Permit No. 03069T35



## **Conclusion**

The health risks presented by the pollutants outlined above must be reduced. The attachments to these comments and the letters submitted separately will attest to the need for a public hearing on this permit and a comment extension.

Respectfully,

Louis A. Zeller

Attachments

CC: Martin, Sharon L. <sharon.martin@ncdenr.gov>

#### ATTACHMENT A

October 18, 2018

David Hughes Division of Air Quality 1641 Mail Service Center Raleigh, North Carolina 27699-1641 David.b.hughes@ncdenr.gov

Mr. Hughes,

As a person disabled by Toxicant Induced Loss of Tolerance I have experienced increased and chronic breathing and other health problems since living in Chapel Hill, North Carolina I am desperately interested in the Air Quality Permit for:

The University of North Carolina at Chapel Hill 1120 Estes Drive Extension Chapel Hill, North Carolina 27599-1650 Orange County Application ID 6800043 15A, 15B and 18A Permit No: 03069T36

Please accept my written request for a public hearing, with the U.S Environmental Protection Agency present. I also request that the public comment period be extended by 60 days to allow time to obtain and review the pertinent records. Please send me the information offered in the public notice: copies of the permit, permit application, all other relevant supporting materials, and all other materials available to DAQ including any notices of violation, fines, reports of non compliance or complaints of health affects or other complaints. If this information is not available on the internet I request that it be made available to the public on a public website. As a disability access provision I request this information be emailed to me at the email address below.

Civic minded citizens are currently engaged in the election process and additional time is needed for us to consider this source of pollution. It is important that a public hearing be allowed to present health information and consider appropriate alternatives as well as consider all aspects of the proposed permit.

I want to make my reasons known in a public hearing why I am opposed to renewal of this permit. I represent a significant sensitive subpopulation of disabled individuals that suffer from Toxicant Induced Loss of Tolerance that deserve to be recognized and heard. We are not disposable. My health has been impaired by the poor air quality in this area. I recently have had surgery and radiation treatment for cancer and can ill afford these additional assaults on my health. I ask that this permit be denied and more appropriate renewable energy such as solar panels be used alternatively. It is unconscionable that a dirty energy source could be allowed to exist and the permit be renewed in this residential area where young people study.

Sincerely,

Elizabeth M. T. O'Nan

420 Hickory Drive Chapel Hill NC 27517 Pbone: 655 0376 email: pace@mcdowell.main.nc.us

#### ATTACHMENT B

-----Original Message-----From: Elizabeth O'Nan <pace@mcdowell.main.nc.us> Sent: Wednesday, October 24, 2018 10:52 PM To: Lou & Janet Zeller <BREDL@skybest.com> Subject: Coal plant permit

Hi Lou and Janet,

I small bit of good news to share. I attended the Chapel Hill Town meeting tonight after speaking with our mayor today and learning that the city had not been notified of the change in the permit. Within about an hour of my meeting with the mayor and before the town hall meeting started the received an apologist letter from UNC saying the permit was for all good things at their cogeneration plant. The long and short of it is it is still more combustion and substantially increased pollution. I attended the meeting and presented an emergency petition that the city submit a letter to DAQ requesting a public meeting and extending the comment time by 60 days as the least that could be done. They took an immediate vote and supported it unanimously.

#### ATTACHMENT C

From: Ed Harrison <<u>edcharrison@gmail.com</u>> Subject: Re: [Little Ridgefield] Local air pollution alert Date: October 20, 2018 at 11:12:44 AM EDT To: <u>littleridgefield@googlegroups.com</u> Reply-To: <u>littleridgefield@googlegroups.com</u>

It appears to me that the person who compiled the permit letter to Jonathan Pruitt, the relatively new Vice Chancellor of Finance and Operations (about 8 months in the job) has reversed the address of the UNC department office responsible for permit compliance, and the location of the sizable co-generation plant at 200 East Cameron Avenue. That would be the facility which needs a renewal of "Air Quality Permit No. 03069T36 to The University of North Carolina at Chapel Hill, 200 E.Cameron Avenue, CB#1000, Chapel Hill, North Carolina" — the permit brought up by the second link.

That address is at the far western end of the main UNC campus, about 4 air miles from Little Ridgefield.

1120 Estes Drive Extension is in the UNC campus extension area about 2.5 miles drive from Little Ridgefield. It's the building which houses the UNC Office of Environmental Health and Safety. have never encountered any "coal burning power plant" in that area.

The "Estes" near Little Ridgefield is \*South\* Estes Extension.

The Co-Gen plant is the primary source of power generation for the UNC Main Campus. I seriously doubt that it will be closed, but pressure does need to be maintained to convert the fuel sources. Once UNC pays off the bond for the plant construction, they will be better positioned to do this. I can supply correspondence to me from Mr Pruitt's predecessor on the process they are carrying out for this conversion. A close associate of mine, the executive director of the NC Sierra Club, has been in meeting

with UNC-CH administrators for many years about this. The Cameron Avenue power plant was the subject of a major National Sierra Club campaign in the previous decade, and the "Beyond Coal" effort of the national organization has not dropped it as an issue.

In my 43 professional years as an environmental manager, I have never seen a weirder address screw-up in an official permit document.

Ed Harrison