

STOP THE BUCKINGHAM COMPRESSOR STATION!

BUCKINGHAM COMPRESSOR STATION

Fact Sheet: Update

Higher Levels of Air Pollution Would Be Emitted

Dominion Transmission, Inc. wants to build a series of compressor stations to move gas through the Atlantic Coast Pipeline. The original application was for a four-unit compressor of 44,512 horsepower. If constructed, the updated Buckingham Compressor Station would have a total of 57,863 horsepower. DTI's application to the Virginia Department of Environmental Quality indicates the plant would emit huge levels of air pollution:

Estimated Annual Emissions

Pollutant	Annual Emissions (pounds/year)
Nitrogen oxides (NOx)	100,400
Carbon monoxide (CO)	190,400
Sulfur dioxide (SO2)	14,600
Volatile organic compounds (VOC)	65,400
Particulate matter (PM)	87,800
Hazardous air pollutants (HAP)	9,940
TOTAL	468,540
Greenhouse gas (CO2e)	647 million

The emissions listed above are from Table C-9 of the updated permit application submitted to Virginia DEQ on June 17, 2016 by Dominion Transmission, Inc.

Cold Weather Increases Pollution

The emission totals listed above are not the whole story. Compressors operate 24 hours a day, 365 days a year. During the winter, natural gas powered turbines can emit many times more pollution. On average, at low temperatures (below 0 degrees-F) the four combustion turbines at the Buckingham Compressor Station would emit:

- 13 times as much nitrogen oxides
- 6 times as much carbon monoxide
- 2 times as much volatile organic compounds

Huge Emissions of Global Warming Pollution



The Buckingham Compressor Station would emit 647 million pounds of carbon dioxide and other global warming pollutants every year of operation.

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Blue Ridge Environmental Defense League

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Toxic Formaldehyde Emissions

Over two and a half tons of formaldehyde would be emitted from the four turbines, boiler and heaters every year. Formaldehyde vapors are highly irritating to the eye and respiratory tract. Formaldehyde causes nausea, headaches, and difficult breathing. Formaldehyde can also cause or aggravate asthma. The US EPA has classified formaldehyde as a probable human carcinogen (Group B1). The compressor would have many emission points releasing formaldehyde:

Emission Point ID	Source	Formaldehyde emissions, pounds/year
CT-01	Compressor Turbine (100)	1,635
CT-02	Compressor Turbine (70)	1,101
CT-03	Compressor Turbine (130)	1,984
CT-04	Compressor Turbine (50L)	688
WH-01	Boiler	6
LH-01-04	Line Heaters	11
TOTAL		5,425

Compressor Station Noise Pollution

Natural gas compressor stations operate 24 hours a day, 365 days a year. Chronic noise pollution can cause ill health effects, including high blood pressure, ulcers, colitis and asthma. Federal laws and regulations attempt to reduce this risk to public health, but state and local governments also have a responsibility to curb noise pollution. Too often, noise pollution from industrial sources is not controlled. For, example, in a Pennsylvania community the owner of a home with a compressor station 3,000 feet away reported, "You lay in bed, you can hear this thing running. It sounds like a truck in the driveway, 30 feet away." In another community, where a natural gas compressor station had just been brought on-line, the plant neighbors started complaining about the noise. Ambient noise levels in this rural area were measured between 43 and 46 decibels (dBA) at night.

What can one person do?

- ✓ Find out about the air and noise pollution impacts from natural gas compressors and pipelines
- ✓ Talk to your family and friends about the pollution and its negative impact on public health
- ✓ Tell the Buckingham Planning Commission and Board of Supervisors you oppose the compressor station
- ✓ Organize a meeting in your community to stop the plant
- ✓ Join the Blue Ridge Environmental Defense League

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