

Proposed gas plant would mean more air pollution for Chesterfield communities.



Clean air is fundamental for communities, families and individuals to lead healthy and productive lives. Bad air quality is known to increase asthma attacks and cardiovascular events and some of the worst air quality in the South — and across the nation — can be found in and near communities that have historically had higher populations of Black and other people of color. Low-income communities and communities of color disproportionately bear the pollution burden of fossil fuel infrastructure — meaning they live closer to pollution sources.

Proposed gas plant dirtier than old coal plant

Communities in eastern Chesterfield County have been in the shadow of Dominion Energy's coal plant for nearly 80 years. Now Dominion is proposing a new 1000-megawatt gas plant, that will pollute even more than the shuttered coal facility, expanding its gas footprint in an area already dealing with the legacy of coal pollution. This proposal not only runs counter to Virginia's clean energy laws and future priorities but would leave customers holding the bill for this expensive project and the local community breathing in even more polluted air.

From Dominion's air pollution application submitted to the Virginia Department of Environmental Quality, we know the proposed gas plant will emit various air pollutants into the surrounding community. In fact, the proposed gas plant will produce even more fine particulate matter, carbon monoxide, volatile organic compounds (VOC), and greenhouse gas (GHG) emissions than the coal plant produced, and will also emit sulfur dioxide, and nitrogen oxides, among other pollutants.

Fine Particulate Matter (PM2.5)

With a diameter of 2.5 micrometers or smaller, PM2.5 is the type of particulate matter that poses the greatest risk to health. PM2.5 can easily travel more than one mile from its source and penetrates deep into the lungs when inhaled. Inhaling PM2.5 has been shown to significantly impact older adults' and children's health, including harmful effects on blood vessels and the heart. The severity of health impacts resulting from inhaling PM2.5 prompted the Environmental Protection Agency's new rule strengthening National Ambient Air Quality Standards for PM2.5, which went into effect on May 6, 2024¹.

Carbon monoxide

Carbon monoxide (CO) is an odorless, colorless gas that when inhaled can be of particular concern for people with some types of heart disease. It can also reduce blood's ability to carry oxygen to the body's organs, leading to fatigue, headaches, and dizziness. In addition to the proposed gas plant, other sources of CO include cars, trucks, and machinery that burn fossil fuels².

Sulfur dioxide

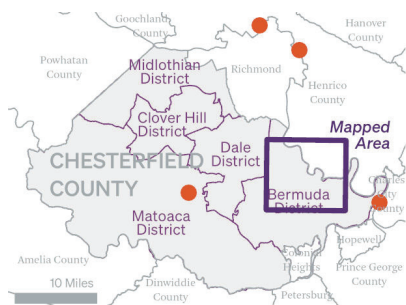
Sulfur dioxide (SO₂) is a gas that can irritate the eyes, nose, and throat, cause wheezing, shortness of breath, and/or chest tightness and exacerbate asthma.

Nitrogen oxides

Nitrogen oxides are a family of gases that can cause harm to the respiratory tract and lungs. Nitrogen dioxide (NO₂), in particular, poses threats to health that can be severe. Nitrogen dioxide is a gas that is usually released into the air we breathe from the combustion of fuels. Short-term exposures (as short as one hour) can aggravate existing respiratory diseases such as asthma (or can cause children to develop asthma) and can lead to increased hospital admissions and/or visits to the emergency room. Long-term exposure to NO₂ can increase susceptibility to respiratory infections such as bronchitis and pneumonia.

Greenhouse Gases

Emission of GHGs endanger our public health and welfare and contribute to the increasingly dire impacts of climate change. Fossil fuel-fired power plants are the nation's largest stationary source of GHG emissions. If permitted, Dominion's proposed gas plant would produce more GHG emissions than the coal plant.



Legend

- Sites of Concern¹
- EPA NAAQS Air Monitor (locator map)

Virginia Environmental Justice Community²

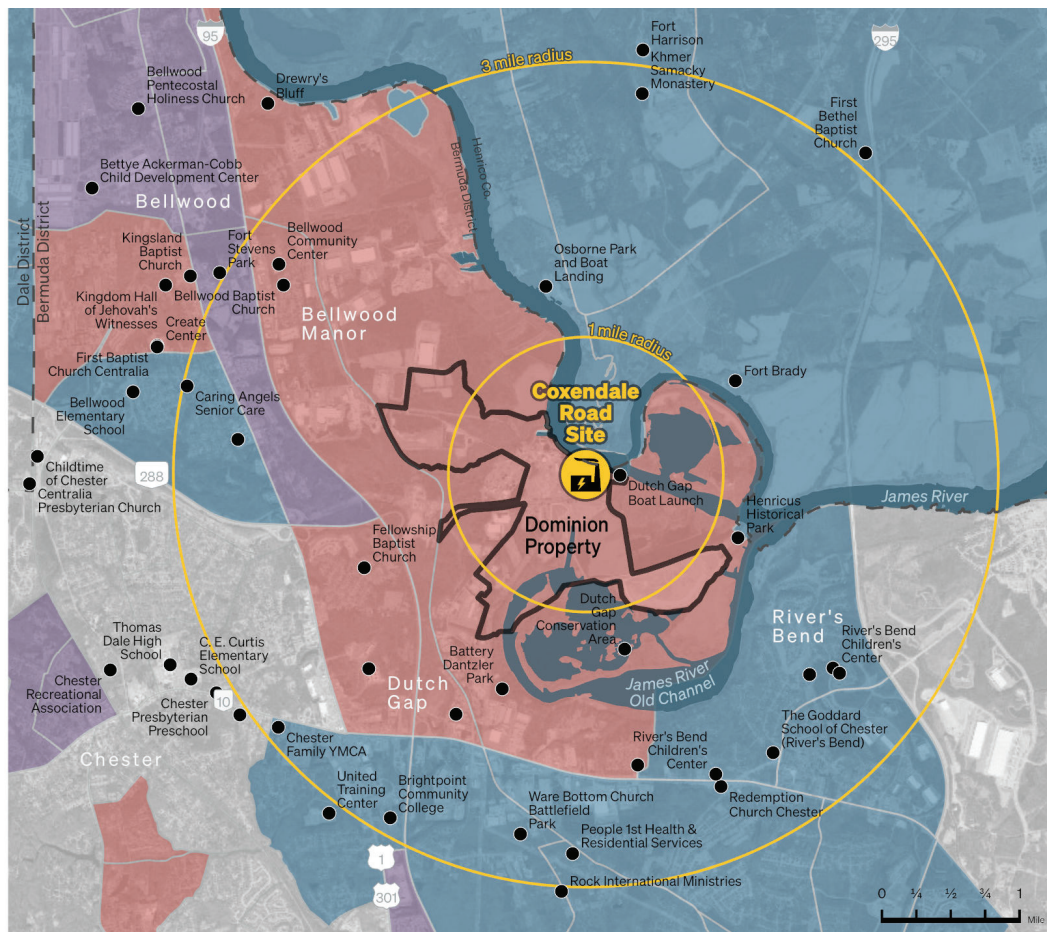
- Community of Color
- Low Income Community
- Both
- Neither

1 = Outdoor recreation sites for neighborhood pools and playgrounds are not labeled.

2 = Block Groups meeting the criteria of the Virginia 2020 Environmental Justice Act (§ 2.2-234 through § 2.2-235).

Sources: VA DEQ; US Census Bureau; USGS; USDOT; Virginia Geographic Information Network (VGIN)

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A risk Chesterfield communities are not willing to take

Dominion has not provided community members with any evaluation of the gas plant's impacts on human health. Given the known health effects of these specific pollutants and the historic disproportionate pollution burden placed on this community, a thorough community-specific health risk assessment should be completed prior to any permit decisions associated with this proposed new pollution source.

REFERENCES

- <https://www.epa.gov/pm-pollution/national-ambient-air-quality-standards-naaqs-pm>
- <https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution>



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