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June 8, 2021

Remarks for Public Comment

Allegheny County Health Department
Air Quality Program
Re: Regulation Comment
301 39th Street, Bldg. 7
Pittsburgh, PA 15201-1811

Submitted via email to: aqcomments@alleghenycounty.us

Ref. Comments on draft Allegheny Energy Center – Invenergy Installation Permit

Dear ACHD Board of Health Members and Staff:

Thank you for holding this hearing. The Breathe Project wants to thank ACHD for the opportunity to share our assessment of the Invenergy Installation Permit draft.¹ In Allegheny County, we should feel confident knowing that the air we breathe will not make us sick or cause cancer, asthma, or other diseases. We have the right to live and work in clean, safe-and healthy environments. Everyone knows that air pollution is bad for your health. No one wants to breathe dirty air, get sick, or to see our children, our parents, our friends, neighbors, or our colleagues get sick or die before their time.

The impacts of the emissions from the proposed Invenergy plant will add additional pollution burdens to an environmental justice community that already suffers from unfair and high levels of pollution.

According to environmental justice statistics from the US EPA's EJ Screen tool (<https://ejscreen.epa.gov/mapper/>):

- Approximately 30,000 people live within a 5-mile radius of the proposed Invenergy Plant's property (5 mile Ring Centered at 40.224650,-79.795940)
- People in this area have air that is worse than 92 percent of the entire country for particulate matter PM 2.5 pollution and worse than 71 percent of the country for ozone pollution.
- People in this area already have high cancer risk from air toxics. The surrounding community is already in the 80th – 90th percentile for NATA Cancer Risk, with a value of 40 per 1,000,000.

¹ Invenergy Draft Permit Application, as published on the ACHD website:
https://www.alleghenycounty.us/uploadedFiles/Allegheny_Home/Health_Department/Programs/Air_Quality/Public_Comment_Notices/Invenergy-Application.pdf.

- The region is in the 39th percentile for low income
- The region is in the 80th percentile for elderly people over 64 years old

The Invenergy Plant will add to our region’s existing burden of air pollution problems.

Our region suffers from some of the worst air pollution in the United States. According to an analysis of our region’s pollution sources from the National Emissions Inventory, particle pollution from stationary industrial point sources is the largest contributor to our region’s pollution, accounting for approximately two-thirds of our region’s pollution.² Air quality ranks “not good” two thirds of all days in our region from the EPA Air Quality Index ratings for at least the past 5 years.³

An analysis of data from one of our region’s monitors in Allegheny County, Liberty (which has a 2017 – 2019 annual design value of 12.4 ug/m3), indicates measurements that rank worse than 97 percent of data from all 774 monitors throughout the U.S. and exceeds the current standard. Data from two other nearby monitors (Braddock, Parkway) exceed the world health standards and rank worse than 93 percent of all monitors in the U.S. Across Allegheny County, data from seven out of eight PM monitors have been in the worst 30 percent of all monitors nationally with the one “best” monitor ranking at the 40th percentile nationally.⁴ On average, the Pittsburgh region’s air ranks at the bottom 11.5th percentile when compared with monitored regions across the U.S.⁵

Allegheny County also ranks in the top 2 percent of counties in the U.S. for cancer risk from point source air pollution. Our air poses a significant threat to public health with an increased risk of heart and lung disease, asthma, diabetes, cancer and premature death.⁶

The American Lung Association’s (ALA) annual “State of the Air” (SOTA) report for 2021 again put the Pittsburgh region on notice. Allegheny County once again received straight Fs for daily particulate matter levels, long-term particulate matter levels, and ozone. The region still ranks in the top 10 worst regions in the country (9th overall).⁷

A recent study of 1,200 children in schools in proximity to point source pollution sources in Allegheny County, 70% were exposed to PM 2.5 fine particle pollution at an annual mean level greater than 10 ug/m3, which is the World Health Organization’s recommended upper limit of annual average exposure. This compares with 3.1% rate of exposure nationally at this same level. This rate of exposure is alarmingly high. Additionally, children exposed to pollution levels above this 10ug/m3 threshold increased their odds of having asthma by 58% as compared with children exposed to pollution below this WHO recommended limit. Of this same sample, 38.9% of the participating children were exposed to PM 2.5 fine particle pollution at an annual mean level greater than 12 ug/m3, which is the U.S. EPA’s compliance limit (averaged over three years) prescribed in the Clean Air Act and enforced locally by the Allegheny County Health Department (ACHD). Many of the children lived in environmental justice

² Breathe Project, “Air Pollution Sources,” Available Online, <https://breatheproject.org/resources/air-pollution-sources/>, accessed December 9, 2020.

³ US EPA Air Data, Available online, <https://www.epa.gov/air-data>, accessed July 14, 2020.

⁴ Analysis completed by Clean Air Task Force, 2020.

⁵ Breathe Project, “Breathe Meter,” Available Online, <https://breatheproject.org/breathe-meter/>, accessed December 9, 2020.

⁶ Breathe Project, “Air Pollution Sources,” Available Online, <https://breatheproject.org/resources/air-pollution-sources/> and https://breatheproject.org/app/uploads/2018/03/18-02-26_health_facts.pdf, accessed December 9, 2020.

⁷ ALA SOTA 2020, Available online: <http://www.stateoftheair.org/city-rankings/states/pennsylvania/allegheny.html>, accessed June 8, 2021.

communities with a high percentage of low income and African American families. The overall prevalence of asthma in the study was highest among African Americans (26.8%) and those 10-12 years of age (26.7%) on public health insurance.⁸

Moreover, a review of science literature affirms PM 2.5 exposure levels and chronic health effects with no apparent lower bound⁹ and acute health effects with no apparent lower bound.¹⁰ This means that it is critical to reduce pollution exposures to reduce negative health effects.

Our region's 2.6 million people are at risk until pollution levels can be reduced. This includes vulnerable populations who bear disproportionate risks from current levels of air pollution: 48,000 children with pediatric asthma; 214,000 people with adult asthma; 160,000 people with COPD; 220,000 people with cardiovascular disease; 291,000 people living with low incomes; and 363,000 people who are non-white.¹¹ The environmental justice concerns are clear and should not be ignored.

The Invenergy Plant will lock into place a source of climate pollution that will greatly hinder us in achieving our climate goals and become a stranded asset.

The Invenergy plant's permit calls for the ability to emit 1,951,189 tons of CO₂e per year. This is the equivalent of permitting an additional 384,959 automobiles to emit climate pollution per year.¹² This is like adding the additional emissions of 1/3 of the entire number of vehicles registered in Allegheny County. The social cost of carbon for these same emissions is \$81,949,938/year.¹³ This means that over the estimated 30-year lifespan of the plant, the greenhouse gas emissions will cost our region's economy over \$2.5 billion while hindering our ability to meet climate emissions goals.

Building this plant now also does not make economic sense. Industry sources state that, "...there are indications that demand in the U.S. [for natural gas power plants] is topping out decades ahead of schedule with cheaper renewables and net zero moving up the agenda for utilities. Renewables could become the leading power sources on U.S. grids by 2028, Morgan Stanley said last year."¹⁴ Our region will be saddled with pollution as well as an underperforming asset in terms of access to low-cost power within just a few years after the plant is completed, locking into place higher prices for customers for decades.

⁸ Deborah A. Gentile, Tricia Morphey, Jennifer Elliott, Albert A. Presto & David P. Skoner (2020), "Asthma prevalence and control among schoolchildren residing near outdoor air pollution sites," *Journal of Asthma*, DOI: [10.1080/02770903.2020.1840584](https://doi.org/10.1080/02770903.2020.1840584).

⁹ Cohen, Brauer, et al, "Estimates and 25-year trends of the global burden of disease attributable to ambient air pollution: an analysis of data from the Global Burden of Diseases Study 2015," *Lancet* 2017; 389: 1907–18.

¹⁰ Schwartz et al, "The Concentration Response Relation between PM 2.5 and Daily Deaths," *Environ Health Perspect.* 2002 Oct; 110(10): 1025–1029.

¹¹ ALA SOTA 2020, Available online: <http://www.stateoftheair.org/city-rankings/states/pennsylvania/allegheny.html>, accessed June 8, 2021.

¹² EPA Greenhouse Gas Equivalency Calculator. Available online: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>, accessed June 8, 2021.

¹³ EPA Social Cost of Carbon. Available online: https://www.epa.gov/sites/production/files/2016-12/documents/social_cost_of_carbon_fact_sheet.pdf, accessed June 8, 2021. The calculation uses a 2020 estimate of \$42.00/ton, 3% discount rate.

¹⁴ Morison, Rachel. "Gas Is the New Coal With Risk of \$100 Billion in Stranded Assets, Available online: <https://www.bloomberg.com/news/articles/2021-04-17/gas-is-the-new-coal-with-risk-of-100-billion-in-stranded-assets>, published April 17, 2021, accessed June 8, 2021.

Our region does not need another Title V emissions source using technology on the cusp of being surpassed by cheaper and healthier options in the very near future. Please do not permit this facility to be built and further burden the lives of people our region.

Sincerely,

Matthew M. Mehalik, Ph.D.
Executive Director
Breathe Project