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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. Regulation Comment: Modifications to Coke Oven Regulations and Source Testing Manual

Dear ACHD Board of Health Members and Staff:

Thank you for holding this hearing. The Breathe Project wants to thank ACHD for its efforts to hold US Steel accountable to the Clean Air Act and the opportunity to share our assessment of the proposed coke oven regulations.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 Breathe Project supports ACHD's assertion of its authority to establish strident coke oven regulations. ACHD should not pre-emptively limit its legal authority to propose regulations and enforce compliance with the Clean Air Act. The Breathe Project asserts that the proposed ACHD regulations must be as strident as possible in order to protect the health of residents of the Mon Valley and all of Allegheny County from ongoing poor air quality from the Clairton Coke Works.

Clairton Coke Works has been causing air pollution problems for a long period of time.

The Clairton Coke Works is a large emitter of H₂S, SO₂, PM_{2.5}, and VOCs, such as benzene and other air toxics. The facility has been the source of many violations of the Clean Air Act and its own Title V permit provisions; enforcement orders; 60-day notices of citizens intents to sue; settlement agreements;

¹ Coke Oven Regulations (§2105.21 & §2101.20) and Inspection Regulations (§2109.01) with Technical Support Document; Regulations related to source testing methods (§2107.01 to §2107.20) with Technical Support Document; and Revisions to the Allegheny County Source Testing Manual, as published on the ACHD website: <https://www.alleghenycounty.us/Health-Department/Programs/Air-Quality/Coke-Oven-Regulations.aspx>.

financial penalties; ongoing court cases; explosions; fires; broken promises about repairs;² and community anguish spanning decades.

Our county regularly sees exceedances of the state’s 24-hour H₂S standard specifically at the liberty monitor in proximity to the Clairton Coke Works and integrated Mon Valley Works facilities, all of which use coke oven gas generated at the Clairton Coke Works. According to ACHD’s own report, our region has experienced nearly 50 days per year on average over the past 20 years (1999 – 2019) where the liberty monitor recorded exceedances of the 24-hour H₂S standard. More notably, there have been no noticeable improvements in meeting this standard over this 20-year period of time. The average number of days with exceedances over the past five years is 51 days. The range spans between 35 and 85 days per year over this five-year period. This is nearly identical to the range over the past 20 years.³ This alone tells us that something about the existing regulatory, enforcement, and inspection framework is not working. This alone justifies more strident requirements and updates to coke oven regulations.

For the 2020 period, during which the Clairton Coke Works has been apparently operating at reduced levels beginning in November 2019,⁴ the state’s 24-hour H₂S standard was still exceeded at least 26 days, based on preliminary data.⁵

The SmellPGH app recorded over 19,000 smell complaints in 2020 despite notable reductions in traffic pollution. The vast majority of these complaints attach the descriptors, “rotten egg,” “sulfur,” and “industrial.”

It is clear that coke oven regulations, inspections, and enforcement all need to become more robust, strident, and effective. For these reasons the Breathe Project encourages ACHD to maximize its efforts to protect the health of Mon Valley and Allegheny County residents by finalizing updated coke oven regulations that clearly reduce emissions and eliminate the possibility of exceedances of the state’s 24-hour H₂S standard.

The impacts of effective coke oven regulations can be beneficially significant.

Pollution from the Clairton Coke Works affects a large number of people, particularly a large number of low-income, elderly, and African American people. According to environmental justice statistics from the US EPA’s EJ Screen tool (<https://ejscreen.epa.gov/mapper/>):

² Patricia Sabatini, “U.S. Steel’s \$1.5 billion investment in Mon Valley Works in question?,” Pittsburgh Post-Gazette, October 30, 2020. Available online: <https://www.post-gazette.com/business/pittsburgh-company-news/2020/10/30/U-S-Steel-s-1-5-billion-investment-Mon-Valley-Works-Edgar-Thomson-Clairton-Coke-Works-Burritt/stories/202010300137>, accessed January 20, 2021.

³ ACHD, “2019 Air Quality Annual Report. Available Online: https://www.alleghenycounty.us/uploadedFiles/Allegheny_Home/Health_Department/Resources/Data_and_Reporting/Air_Quality_Reports/2019-Air-Quality-Annual-Report.pdf, accessed January 20, 2021.

⁴ “U.S. Steel hot idling a battery at Clairton Coke Works,” WPXI.com. Available Online: <https://www.wpxi.com/news/top-stories/clairton-coke-works-us-steel-hot-idling-a-battery-at-clairton-coke-works/1004111989/>, accessed January 20, 2021.

⁵ “Mon Valley Residents Suffer Another Bout of Bad Air as Allegheny County Sees 3 More Air Quality Exceedances,” GASP Blog, December 14, 2020. Available Online: <https://gasp-pgh.org/2020/12/14/mon-valley-residents-suffer-another-bout-of-bad-air-as-allegheny-county-sees-3-more-air-quality-exceedances/>, accessed January 20, 2021.

- Approximately 130,000 people live within a 5-mile radius of the Clairton Coke Works property (5 mile Ring Centered at 40.318643,-79.897805)
- People in this area have air that is worse than 95 percent of the entire country for particulate matter
- People in this area are in the worst 5th percentile for NATA Cancer Risk
- 1/3 of the people living in this area have low income
- 1/5 percent of people in this area are minority population, primarily African American
- 1/5 of the people living in this area are older than 64 years old

The Clairton Coke Works’ air pollution problems 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 are the largest contributor to our region’s pollution, accounting for approximately two-thirds of our region’s pollution.⁶ 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.⁷

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.⁸ On average, the Pittsburgh region’s air ranks at the bottom 11.5th percentile when compared with monitored regions across the U.S.⁹

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.¹⁰

The American Lung Association’s (ALA) annual “State of the Air” (SOTA) report for 2020 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 (8th overall) and retains the dubious distinction for being the only metropolitan region east of the Mississippi River to be ranked in the top 25 most polluted cities.¹¹

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

⁶ Breathe Project, “Air Pollution Sources,” Available Online, <https://breatheproject.org/resources/air-pollution-sources/>, accessed December 9, 2020.

⁷ US EPA Air Data, Available online, <https://www.epa.gov/air-data>, accessed July 14, 2020.

⁸ Analysis completed by Clean Air Task Force, 2020.

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

¹⁰ 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.

¹¹ ALA SOTA 2020, Available online: <http://www.stateoftheair.org/city-rankings/states/pennsylvania/allegheny.html>, accessed December 9, 2020.

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 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.¹²

Moreover, a review of science literature affirms PM 2.5 exposure levels and chronic health effects with no apparent lower bound¹³ and acute health effects with no apparent lower bound.¹⁴ 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.¹⁵ The environmental justice concerns are clear, substantial, and should not be ignored. Ignoring the risks to vulnerable people will be a shame on our region and state.

The Breathe Project encourages ACHD to move forward aggressively to reduce coke oven pollution through effective regulations, operational procedural requirements, inspections, and enforcement. Let's save lives, reduce burdens on vulnerable people, preserve future generations' rights to clean air and a healthy climate, and take action that makes everyone proud.

Thank you for your time and consideration.

Sincerely,

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

¹² Deborah A. Gentile, Tricia Morphew, 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).

¹³ 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.

¹⁴ Schwartz et al, "The Concentration Response Relation between PM 2.5 and Daily Deaths," Environ Health Perspect. 2002 Oct; 110(10): 1025–1029.

¹⁵ ALA SOTA 2020, Available online: <http://www.stateoftheair.org/city-rankings/states/pennsylvania/allegheny.html>, accessed December 9, 2020.