

United States Senate
Washington, DC 20510-1304

July 27, 2017

The Honorable Scott Pruitt
Administrator, Environmental Protection Agency
Office of the Administrator, Room 1101A
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator Pruitt:

It has come to my attention that the Environmental Protection Agency recently granted permission to the petroleum coke storage facility in Chicago to remove their air quality monitors, even though they continue to measure concerning levels of large particulate matter (PM₁₀). Fugitive dust emissions from petroleum coke storage piles pose a serious public health risk and air quality surrounding these sites should continue to be monitored. Additionally, I urge the Agency to use its authority to conduct a thorough review of airborne petroleum coke particulate hazards, evaluate best practices to control emissions, and introduce new standards regarding petroleum coke storage accordingly. These actions are necessary to protect vulnerable populations, including children and elderly, from the harmful effects of PM₁₀ exposure.

While the Clean Air Act clearly directs the EPA to protect human health, there are no current standards in place to guard against particulates specifically emitted from petroleum coke. The National Ambient Air Quality Standards under the Clean Air Act requires total PM₁₀, including those particulates emitted from petroleum coke, to be lower than 150 µg/m³ over a 24 hour average. Additionally, the Administrator is directed under Section 111 of the Clean Air Act to designate new sources of pollutants that cause, or contribute significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare. I am concerned that the EPA has not taken action to list petroleum coke piles as a new source of PM₁₀. Open coal storage pits, which emit particulate matter very similar to open petroleum coke piles, have already been listed as a new source and regulated under Standards of Performance for Coal Preparation and Processing Plants. This precedent may model controls to likewise mitigate particulate matter emissions from open-air petroleum coke piles.

Numerous scientific studies have demonstrated that particulate matter is associated with respiratory and cardiovascular problems including cardiovascular disease, asthma complications, chronic bronchitis, and increased risk of heart attack.¹ The EPA found that repeated exposure to petroleum coke dust caused irreversible lung damage.² Residents living near the petroleum coke storage sites in Chicago expressed concern that petroleum coke dust puts their families at risk. The U.S. Department of Health and Human Services monitored air quality around the Chicago storage sites for 12 months and prepared a Health Consultation Report reviewing particulate matter exposures. Hourly average PM₁₀ concentrations were detected up to 985 µg/m³ near the petroleum coke piles. Frequently, levels were reached that may cause problems for sensitive individuals. Twice, levels were characterized as “Unhealthy for Sensitive Groups,” indicating an increased likelihood of respiratory problems. On three separate days, the 24-hour PM₁₀ NAAQS limit of 150 µg/m³ was violated at monitors downwind of the petroleum coke piles.³ Notably, even after one of the sites ceased operation, the 24-hour PM₁₀ NAAQS limit was violated due to residual dust.⁴ At another site, PM₁₀ levels surpassed the World Health Organization’s air quality guideline of 50 µg/m³ even after the piles were enclosed. It is apparent to us that the community surrounding this facility would benefit from continued air quality monitoring to assess health risks to residents.

I am further concerned that there are still no federal protections in place to safeguard communities from petroleum coke health hazards. I am confident that the EPA will take new scientific studies into account, including the Health Consultation Report for the Chicago site, as part of the ambient 24-hour PM₁₀ NAAQS review process. However, I am concerned that a decrease in ambient 24-hour PM₁₀ standard may not protect vulnerable populations residing near petroleum coke storage sites, particularly during extreme weather events, and we urge the EPA to control emissions directly from these sources.

I urge the Agency to carefully review its current policies related to particulate matter emissions from petroleum coke piles, and to regulate emission controls through New Source Performance Standards as necessary. Please provide me with the steps you are prepared to take to address this threat to public health. Thank you for your prompt attention to this matter.

Sincerely,



Richard Durbin
U.S. Senator

¹United States Environmental Protection Agency, *Integrated Science Assessment for Particulate Matter* (December, 2009) accessed at https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=216546.

²United States Environmental Protection Agency, *Screening-Level Hazard Characterization of Petroleum Coke* (June, 2011) accessed at <https://www.epa.gov/petroleum-coke-chicago/screening-level-hazard-characterization-petroleum-coke>.

³United States Department of Health and Human Services, *Health Consultation Review of Analysis of Particulate Matter and Metal Exposures in Air KCXB* (August, 2016) accessed at <https://www.epa.gov/petroleum-coke-chicago/health-effects-petroleum-coke>.

⁴United States Environmental Protection Agency, *KCBX Fenceline Air Monitoring Data* (February, 2017) accessed at <https://www.epa.gov/petroleum-coke-chicago/kcbx-fenceline-air-monitoring-data#summarydata>.