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Via electronic mail to: petcokecomments@cityofchicago.org

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Chicago Department of Public Health Attn: Environmental Permitting and Inspections 333 South State Street, Room 200 Chicago, IL 60604

Re: Comments on the Chicago Department of Public Health's Air Pollution Control Proposed Rules and Regulations for the Handling and Storage of Bulk Material Piles (Article II.)

To Whom It May Concern:

The American Fuel & Petrochemical Manufacturers (AFPM) is the trade association that represents high-tech manufacturers of virtually the entire U.S. supply of gasoline, diesel, jet fuel, other fuels and home heating oil, as well as the petrochemicals used as building blocks for thousands of products. Many of our members also use crude oil to produce petroleum coke, a non-toxic, non-hazardous, highly valued source of cost-effective energy and as a source of carbon for industrial applications. AFPM herein provides a better understanding of petroleum coke; describes its value to the refining industry and to the Chicago region, dispels misunderstanding and misperceptions about the product. We request that the Chicago Department of Public Health (CDPH) incorporate our comments when finalizing the proposed rulemaking that targets petroleum coke.

#### Introduction to Petroleum Coke

Petroleum coke is one of many products manufactured during the oil refining process. Crude oil is processed into gasoline, diesel fuel, jet fuel, lubricating oil and waxes, and with additional processing, petroleum coke through the use of a coker. A coker breaks down, or cracks, large



hydrocarbon molecules to produce petroleum coke, which has a variety of uses, including as a cost-effective fuel. A coker allows refiners to maximize the yield of transportation fuels from a barrel of crude oil. Today petroleum coke is produced at more than 140 refineries around the world.

#### Use of Petroleum Coke

Petroleum coke is classified by the U.S. Environmental Protection Agency (EPA) as "traditional fuels" and is typically used as a source of energy or as a source of carbon for industrial purposes. Fuel grade petroleum coke represents nearly 80 percent of worldwide production and is a source of fuel for cement kilns and electric power plants. It is also used in the aluminum, graphite electrode, steel, titanium dioxide and other carbon consumer industries. Since the 1930s, petroleum coke has been safely produced, processed and transported in the United States and, most pertinent to this proposed rulemaking, for decades in the Chicago area.

# Regulatory Framework

Petroleum coke is regulated at every stage of its life-cycle, including production, handling, storage, transportation, combustion and use. In short, petroleum coke is regulated to ensure that it poses little to no impact on health and the environment. More specifically, petroleum coke is subject to federal regulations including: emissions control and fugitive dust under the National Ambient Air Quality Standards (NAAQS)(40 CFR 50) and Title V Air Permitting (40 CFR 70) of the Clean Air Act; Emergency Planning and Community Right-to-Know Act (EPCRA) (40 CFR 372, 40 CFR 370, 40 CFR 355); Greenhouse Gas Reporting Rule (40 CFR 98); Toxic Substances Control Act (TSCA) (40 CFR 711); U.S. Coast Guard Bulk Solid Materials Shipping Regulation (46 CFR 148.295); and the Resource Conservation and Recovery Act (RCRA) (40 CFR Part 261). The handling and storage of petroleum coke is regulated under the National Pollutant Discharge Elimination System Permit Program as authorized by the Clean Water Act (CWA) (33 U.S.C. 1251-1387).



In addition to federal regulations, the Illinois Environmental Protection Agency (IEPA) regulates petroleum coke through the Illinois Fugitive Dust Control Program (IAC Title 35, Section 212.301, 212.314 and 212.316 (g)(1)) and through an Air Permit (IAC Part 203), which includes all air pollution requirements that apply to the source, including emission limits and monitoring, record keeping and reporting. Further, the CDPH own website concludes: "According to available scientific data, there are no known illnesses or health effects associated specifically with exposure to petroleum coke."

## Health and Environmental Impact

The U.S. EPA does not classify petroleum coke as a hazardous waste nor has it been shown to pose health issues in humans. As part of the U.S. EPA's High Production Volume (HPV) Challenge Program, petroleum coke has been tested extensively for potential health and environmental impacts as well as eco-toxicity. The results of these tests have demonstrated that petroleum coke poses a low health hazard potential in humans, with "no observed carcinogenic, reproductive or developmental effects."

Chemical analyses cited by the U.S. EPA have found petroleum coke to be highly stable with a low potential to cause adverse effects on aquatic or terrestrial environments. Today many regulations, at the state and Federal levels, have been enacted to ensure that there is little to no environmental impact.

## Impact of Proposed Rulemaking

Refineries in the Chicago area have used cokers to produce petroleum coke for decades. If refineries are subjected to unnecessary regulatory barriers that impede or limit the production of petroleum coke, the production of other fuels will also be reduced since petroleum coke is just one of several products that are refined from a barrel of crude oil. As diesel, gasoline and other fuels are produced, so too is petroleum coke. Conversely, any reduction in petroleum coke production, results in a reductions of all the other products, thus possibly creating gasoline and



diesel supply problems in the region. The CDPH, as it finalizes any rules regarding petroleum coke, should also consider that petroleum coke is used in the Midwest as a cost competitive fuel, especially by non-profit public utilities, because it is more economical than coal. The elimination of petroleum coke from the region could increase utility prices for consumers.

Furthermore, petroleum coke has been produced in Chicago area refineries long before processing any oil sands bitumen from Canada. Petroleum coke is made, regardless of the type of oil refined – different amounts of the product are produced depending on the grade of the oil that is refined. Construction of the Keystone XL pipeline is irrelevant to Chicago petroleum coke production as the pipeline is designed to move heavy oil from Alberta to the U.S. Gulf Coast.

## Conclusion

AFPM requests that the CDPH consider all the facts before making any decisions that could result in the elimination of petroleum coke production in the region. The CDPH should disregard the hyperbole and misinformation that has unfortunately surrounded the processing and transport and storage of petroleum coke. As previously stated, numerous federal and state regulations already in place make the proposed rulemaking not only unnecessary, but also harmful. Finally, such action discriminates again carbon-based products because the CDPH's rules will not apply to similar bulk materials that are prone to dust, such as grain, salt or grayel.

Sincerely,

Charles T. Drevna President, AFPM