



# CITY OF PHILADELPHIA

OFFICE OF THE MANAGING DIRECTOR

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## **Testimony of Brian Abernathy, Managing Director Regarding the PES Refinery**

**Senate of Pennsylvania  
Committee on Environmental Resources and Energy  
July 24, 2019 – 11:00 a.m.**

Chairman Yaw and Honorable Members of the Committee:

On behalf of the City of Philadelphia, thank you for the opportunity to provide written testimony to the committee regarding the effects of the Philadelphia Energy Solutions (PES) fire.

As you know, the PES refinery is the largest oil refinery complex on the East Coast. The facility, which comprises two separate refinery complexes on more than 1,300 acres, has been in existence since 1866 and is one of the oldest petroleum processing facilities in the world. The facility has long been a center of economic activity in the region, employing approximately 1,000 direct jobs and hundreds more every year on a contract basis.

While the facility has been an integral part of the City for many years, it has not been without controversy or occasional tragedy. The refining industry is an inherently hazardous one. The refinery has been a significant source of air pollution, remains a source of water pollution in the City, and much of the site is impacted by legacy environmental contamination in soils and ground water. Most recently, in the morning hours on Friday, June 21<sup>st</sup>, an explosion occurred in an alkylation unit in the Girard Point section of the refinery complex. The Philadelphia Fire Department (PFD) supported the PES Fire Brigade in containing and extinguishing the fire, which destroyed the impacted alkylation unit. Thankfully, nobody was killed or seriously injured as a result of this catastrophic incident.

City emergency response personnel have been on scene 24x7x365 since June 21<sup>st</sup>, and several City, State, and Federal agencies are conducting investigations into the incident. Because these investigations are all ongoing, and the situation at the refinery complex remains dynamic, there are limits as to the information that I have available to share with you at this time. However, City emergency response personnel remain fully engaged with PES leadership and our partner agencies and we are committed to ensuring that the safety of the public remains protected and that the facility operates in a safe and responsible manner while its future is determined.

## Health Impacts of the Incident

Understandably, many area residents were concerned about the environmental impacts caused by the incident on June 21<sup>st</sup>. The Air Management Services (AMS) division of the Philadelphia Department of Public Health was notified immediately by PES about the situation and AMS dispatched inspectors to collect samples and conduct on-site monitoring for pollutants in the community surrounding the PES refinery site. Air samples were collected from in front of the refinery (upwind), and behind the refinery (downwind). These samples were transported to the Air Management lab to be tested for more than 60 volatile organic compounds. The initial tests were completed later on the same day of the incident and showed minimally elevated levels of ethanol (the chemical compound found in drinking alcohol), and acetone (the chemical compound found in nail polish remover). Both of these compounds were far below the threshold limit values (TLVs) established by the American Conference of Governmental Industrial Hygienists. The TLV is the level at which a worker can be exposed for 8-hours per day and 40-hours per week for a working lifetime without adverse health effects. These two elevated results were only found in the initial samples, and subsequent testing of this nature found no elevations in any of the tested-for compounds. Three more samples were collected and tested through Tuesday at a variety of locations in the community surrounding the refinery.

Beginning on Friday, June 21<sup>st</sup> and continuing through Sunday, AMS inspectors continued to conduct tests with handheld monitors throughout the community surrounding the facility. On Friday, these handheld monitoring tests were conducted constantly throughout the day, and 18 additional tests were conducted on Saturday and Sunday. These handheld monitoring tests checked for the presence of explosive hydrocarbons, carbon monoxide, hydrogen sulfide, and the percentage of oxygen saturation. At every test, no hydrocarbons, carbon monoxide, or hydrogen sulfide were detected. The oxygen saturation levels ranged from 20.8% to 21.0%, which is consistent with the absence of other dangerous airborne chemicals.

AMS maintains a permanent air monitoring network in the City. This network includes a monitoring site at 24<sup>th</sup> and Ritner Streets, near the PES facility. The 24<sup>th</sup> and Ritner monitor tests for five toxic compounds: formaldehyde, acetaldehyde, benzene, toluene, and ethylbenzene, as well as the more common air pollutants particulate matter 2.5 and sulfur dioxide. The data collected from this monitor showed no abnormal increase in the detection of these pollutants or chemical compounds throughout the weekend of the fire, or in the time since. Indeed, none of the AMS air monitoring sites in Philadelphia detected pollutants in excess of the Federal, National Ambient Air Quality Standards on the weekend of the fire, or in the week that followed.

In addition to the ongoing work by AMS, the PFD Hazardous Materials Task Force, Environmental Protection Agency (EPA), and PES have been continually performing air monitoring at multiple locations inside and outside the involved unit. With respect to potential ground and water contamination arising from this incident, the Pennsylvania Department of Environmental Protection (DEP) is fully engaged with oversight and testing of the PES wastewater treatment facility located in the refinery complex.

## Moving Forward

In the immediate aftermath of the incident, Mayor Kenney called on Fire Commissioner Adam Thiel and I to convene a panel of experts and stakeholders to review the incident. In the days following the explosion, PES has announced its intent to close its facility and lay off its workforce in the coming weeks. Since that announcement was made, the focus of the panel has shifted to an advisory role to help provide information to City officials about the future of the site. Multiple scenarios are possible – for example, the refinery (or parts of it) could be restarted or sold to a new operator and continue its existing uses; the site could be purchased and reused differently; or it could be orphaned with no responsible party operating it.

It is unclear at this point in time what the future will look like, but the City is taking steps to understand and plan for all possible scenarios.

We have assembled a diverse array of points of view from business, the community, labor, academia, and the environment to help the City facilitate a series of public conversations on their respective areas of expertise. The goal of this Refinery Advisory Group is to have each constituent group form a committee that convenes subject matter experts and a wide array of voices to present information to the City about the facility – its existing operations, visions for the future, its economic impact to the region, limitations on other uses, environmental conditions, community concerns, etc. The City will then synthesize that feedback into a document that outlines a series of recommendations for how the site can be positioned to remain a significant asset to the City in the years ahead. A website will be established to share information about the advisory group and its upcoming meetings, which will be scheduled in the coming weeks.

I understand that many stakeholders have a wide array of opinions and perspectives about the PES facility. The City is committed to listening to all of those opinions, gathering a wide array of perspectives, and trying to take a well-informed and realistic approach to the site going forward with the understanding that the City has limitations over what type of control it can exert over a privately owned and controlled site. We are firmly committed to ensuring that the site remains an important part of Philadelphia, and that its future is one that is cleaner and safer than its past.