



## **Testimony before the PA Senate Environmental Resources and Energy Committee**

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By Andrew Williams, Director, Regulatory and Legislative Affairs

Chairman Yaw, Chairman Yudichak, Committee Members, thank you for your time and the opportunity to comment today. My name is Andrew Williams, and I am the Director of Regulatory and Legislative Affairs for Environmental Defense Fund (EDF), an international environmental organization focused on the intersection of science, law and policy with over 75,000 members in Pennsylvania.

EDF commends this committee for taking a serious look at the events surrounding the PES fire and urges the committee to take efforts to develop state-specific policies to help deal with the inherent risks associated with concentrated petro-chemical processing, refining or other handling facilities. At a minimum, Pennsylvania policy options should include a state-based risk management framework for usage of hydrofluoric acid (HF), which is not otherwise covered by federal regulations, a requirement for third party engineering review of facility risk management plans, more transparent data policies with the goal of making data more accessible to first responders and the public, better shelter-in-place policies, and continued site monitoring.

Unfortunately, incidents such as the fire at the PES facility in Philadelphia are far too common and often predictable. It is becoming clear to the scientists at EDF that fires like the one at the PES facility often happen at facilities operating with old, outdated technology. These same facilities tend to have long histories of violations, and significant emission events, and find themselves unprepared to manage significant risks that may occur when the inevitable happens. These incidents often occur, as they did in Philadelphia, in communities where residents are more vulnerable to the harms that come with the release of these air toxics.

PES is by far the largest source of toxic pollution in Philadelphia County, releasing some 600,000 pounds of toxic compounds in 2017<sup>1</sup>. PES air toxic emissions are more than triple that of the next closest facility. PES also contributes a significant majority of criteria air pollution emissions, which are harmful to human health and the environment and have been linked to increased rate of asthma and breathing problems, especially in children and elderly adults.

The PES refinery is one hundred and fifty (150) years old and has had several incidents throughout the course of its history. In fact, the fire on June 21, 2019, was the second in a single month. In addition, the facility has had a healthy number of OSHA violations, which might lead a lay person to question the commitment of facility management to worker safety.

<sup>1</sup> EPA, TRI Explorer 2019, [https://iaspub.epa.gov/triexplorer/tri\\_release.chemical](https://iaspub.epa.gov/triexplorer/tri_release.chemical)

PES represents a special kind of public threat due to the presence of hydrofluoric acid (HF) at the facility. The Chemical Safety Review Board and advocates have petitioned the Environmental Protection Agency (EPA) specifically to review risk management plans for facilities that manage HF because of the disaster potential that exists from storing and using the compound<sup>2</sup>. In the case of PES, reports indicate that the potential for a significant release of HF could have threatened the lives of over a million people.

***This is an area where Pennsylvania should act. In light of EPA's failure to require increased risk management practices for facilities using or processing HF, Pennsylvania should develop and implement a requirement for third party engineering review of facility risk management plans.***

### **Risk Management Plans Background:**

Under section 112(r) of the Clean Air Act<sup>3</sup>, EPA is required to publish regulations and guidance for chemical accident prevention at facilities that use certain hazardous substances. These regulations and guidance are contained in the Risk Management Plan (RMP) rule developed by EPA<sup>4</sup>. The RMP rule requires that owners and operators of facilities holding more than a threshold quantity of a regulated substance in a process must implement a risk management program and submit an RMP to EPA.

At a minimum, RMPs are required to contain, in addition to other provisions, the following elements:

- A ***hazard assessment*** of procedures and potential impacts of an accidental release, an accident history of the last five years and an evaluation of worst-case and alternative accidental releases;
- A ***prevention program*** that includes safety precautions and maintenance, monitoring and employee training measures; and
- An ***emergency response program*** that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g. the fire department), should an accident occur.

### **Federal Regulatory Context and Data Transparency:**

As a result of a 2012 explosion at a fertilizer plant in West, Texas, EDF has been heavily engaged in the EPA process to improve the RMP rule, known as the Chemical Disaster Rule.

<sup>2</sup> April 23, 2019, U.S. Chemical Safety and Hazard Investigation Board Letter addressed to Administrator Wheeler; See also Public Employees for Environmental Responsibility (PEER) Petition for Rulemaking, June 25, 2019.

<sup>3</sup> Section 112(r) of the 1990 Clean Air Act amendments, <https://www.epa.gov/rmp>.

<sup>4</sup> <https://www.epa.gov/rmp>.

While the initial revised rule was finalized in January 2017, the EPA has since delayed implementation and is in the process of attempting to weaken or totally remove some of the key protections included in the revision. The removal of these critical provisions could occur as soon as this August.

Specifically, EDF is focused on, among other things, requirements that will provide for better data transparency for first responders, additional protections for fence-line communities and a pathway for implementation of the best available technology to reduce emissions. The burden on communities and local governments increases every day that the federal government delays critical action.

***Yet, Pennsylvania should not wait for the federal government to act. Pennsylvania can develop and implement requirements that ensure first responders and communities have as much information as possible in the most transparent way possible.***

As a first step, the state should send letters to all RMP facilities with the following requests:

- Facilities provide copies of their RMPs and Tier II inventories— if they will not provide copies of the full RMPs, request summaries of the RMPs;
- Documentation for coordination procedures with emergency responders and provide details of that coordination;
- RMP standardization so that fire departments are the default local response agency, and request that facilities voluntarily share their plans with additional police and fire departments in the region; and
- Following letters to facilities with active RMPs, the state should also send letters to de-registered RMP facilities to request confirmation and verification that they no longer should have an RMP in place.

### **Shelter in Place Improvements:**

Residents of Philadelphia County need a better shelter in place system to ensure their safety. Shelter in place warnings should provide more details about the necessary steps individuals must take to protect themselves. Explicit instructions to turn off air conditioning and close all doors and windows should be included to ensure that citizens are aware of all the steps they need to take.

While landline phones automatically receive shelter in place alerts, mobile phone users must opt in to the system, leaving gaps in coverage. The county and city government should examine expanding coverage of shelter in place alerts to all mobile users in the region to ensure all residents receive key updates and instructions. The county and city could also request that any

event that requires notification of emergency responders (e.g. firefighters) also require that residents within a certain radius of the facility receive an alert.

Additionally, and related to data transparency, the Pennsylvania Department of Health or any other responsible governmental agency should also share air quality monitoring results quickly and transparently during shelter in place events to ensure community members are as informed as possible about the potential threats to their personal health.

#### **Additional and Continued Monitoring:**

There is a sparsity of air monitors within the Philadelphia region, especially for measuring individual air toxics. Often, there is no routine monitoring for certain air toxics, especially with regard to those toxics such as benzene and HF. In addition, many handheld measurement devices may have detection thresholds that are too high, meaning concentrations that are harmful to health could go undetected by the monitors. Further, in disaster events, there is limited time to establish a sampling protocol.

Recommendations to develop a robust monitoring network include:

- Establishing background levels of air pollutants across the city to determine how much is being added and whether pollution is being transported from one place to another;
- Determining whether pollutant levels meet health-based ambient air quality standards established by EPA and measuring the extent of population exposure at the area level;
- Identifying hot spots (elevated levels of pollution) within a particular geographic area;
- Evaluating whether significant sources (like refineries) or source categories (like transportation) are a significant source of ambient air quality in the region; and
- Performing trend analysis and tracking the effectiveness of strategies, programs, and regulations developed to achieve needed reductions.

**And specifically, if fully reopened and allowed to continue operating, PES should be required to install a fence-line monitoring system. An improved near-refinery air monitoring network can be achieved through site-appropriate implementation of:**

- Continuous, real-time or near-real-time air monitoring inside the refinery;
- Predictive and real-time dispersion modeling of unplanned refinery releases; and
- Real-time or near real-time community monitoring.

**Additional Recommendations Include:**

- Developing needed environmental policy and identify funding priorities;
- Creating a “playbook” for a multi-jurisdictional response to chemical fires and other large pollution events;
- Designing a meaningful toxic alert system;
- Producing the framework for robust monitoring and enforcement for air pollution in the region;
- Establishing decision-making protocols for shelter in place orders and evacuations when air quality monitors detect high levels of benzene and other harmful pollutants; and
- Informing the development of a publicly accessible website that identifies “bad actors” among polluters – and lists what government agencies are doing about them.

Importantly, the continued monitoring work could be done in partnership with nonprofit groups, scientists, physicians and community leaders already working to reduce the region’s air pollution and protect people’s health.

**Closing:**

As the center of a major manufacturing and processing industrial sector with a very strong economic future, it is imperative that Pennsylvania exercise proper and responsible oversight over the industry to help prevent incidents like the fire at the PES facility. It is not enough to say that most companies will do the right thing – we are learning firsthand what will happen when even one facility operator does the wrong thing or is not properly prepared for a disaster or major facility failure.

We believe that with the proper focus and a commitment to pass new laws that balance inherent risk to communities with the economic needs of the industry, fewer incidents like this one will occur and lives will be saved.

On behalf of the Environmental Defense Fund, I thank you for your attention today.