Before the United States Oversight & Investigations Subcommittee Hearing on Trump EPA's Troubling Enforcement Record

Testimony of Bakeyah S. Nelson, Ph.D. Executive Director Air Alliance Houston

February 26, 2019

Thank you, Chair DeGette, Ranking Member Guthrie, and members of the Oversight & Investigations Subcommittee, for the opportunity to testify here today about EPA's enforcement record and the implications for the eight-county Houston region. My name is Bakeyah Nelson. I am the executive director of Air Alliance Houston, a local nonprofit organization that works to improve air quality and public health through research, education and advocacy. Our primary focus is Harris County, where consistently clean air remains out of reach for the more than 4 million people living there, particularly for communities of color and low wealth.

Air Alliance Houston believes everyone has a right to breathe clean air every day. Where you live, work, learn, and play should not determine your health.

Rogue releases of air pollution are all too common in Texas. Industry says these releases, known generically as emissions events, are unavoidable. Yet they also know the U.S. Environmental Protection Agency (EPA) and Texas Commission for Environmental Quality (TCEQ) will not hold them accountable. This leaves people across Houston and Texas almost defenseless against harmful air pollution, including cancer-causing benzene and lung-damaging particulate matter.

More than 400 petrochemical facilities, including two of the four largest U.S. oil refineries, reside in Harris County. For the people living here, enforcement action is critical to deter industry from violating air permits. A recent study found that emissions events in Texas lead to the premature deaths of at least 16 people and \$148 million in

health-related costs per year.¹ TCEQ, however, fails to penalize violators 97% of the time, according to an analysis by Environment Texas.²

This general unwillingness to enforce the law has essentially given industry a pass to poison. The Valero Houston Refinery, for example, released 256,980 pounds of hydrogen cyanide and 720 pounds of cyanide compounds into the air in 2016 despite not having a permit to do so.

The consequence? There has been none to date. Neither EPA nor TCEQ has taken enforcement action.

This is extremely concerning because the Valero refinery is located beside Houston's Manchester community, where 97 percent of the residents are people of color, 37 percent live in poverty, and 90 percent live within one mile of an industrial facility that is subject to the EPA's Risk Management Program.^{3,4} Many homes are within yards of the refinery, which has self-reported more than 200 unauthorized releases of toxic air pollutants since January 2003.

The Centers for Disease Control says high exposures following accidental releases of hydrogen cyanide can be extremely harmful to people's health and can result in death within minutes while exposure at lower concentrations can cause eye irritation, headache, confusion, nausea, among other health effects.⁵

Valero has now applied for a "retroactive" permit to allow them to release hydrogen cyanide legally. The initial proposed permit would have originally allowed 512.86 tons per year of HCN emissions. However, Manchester is already overwhelmed by toxic air pollution. What's more, the Valero Refinery was the source of one of the largest releases of air pollution in Texas in the days after Hurricane Harvey made landfall in August 2017.

An alarming amount of pollution escaped into the air during Hurricane Harvey because of inadequate preparation for the storm by industry, EPA, and TCEQ. Yet neither EPA nor TCEQ have taken enforcement action against many of those responsible for the largest releases: Valero Refining, Magellan Terminals Holdings in Galena Park, and Arkema's Crosby plant.

Simply, Hurricane Harvey serves as a cautionary tale about the vulnerability of millions of Americans who live near chemical plants. The storm also revealed how ill-equipped

¹ Understanding Excess Emissions from Industrial Facilities: Evidence from Texas. Nikolaos Zirogiannis, Alex J. Hollingsworth, and David M. Konisky Environmental Science & Technology 2018 *52* (5), 2482-2490 DOI: 10.1021/acs.est.7b04887.

² Environment Texas. Major Malfunction: Air Pollution from Industrial Malfunctions and Maintenance in Texas in 2017. Available at <u>https://environmenttexas.org/sites/environment/files/reports/TX_MajorMal_scrn.pdf</u>

³ Double Jeopardy in Houston: Acute and Chronic Chemical Exposures Pose Disproportionate Risks for Marginalized Communities (2016). https://www.ucsusa.org/sites/default/files/attach/2016/10/ucs-double-jeopardy-in-houston-full-report-2016.pdf

⁴ https://www.epa.gov/rmp

⁵ Hydrogen Cyanide (HCN) CAS 74-90-8; UN 1051. <u>https://www.atsdr.cdc.gov/mhmi/mmg8.pdf</u>

the state of Texas and the EPA are to handle future disasters. The hurricane produced a second storm of air pollution. We know this because of industry's own pollution reports to the state. We also know because of measurements of air pollution in and around Houston by Air Alliance Houston, Environmental Defense Fund and the City of Houston while parts of the city were still underwater.

Industry estimates that facilities released an additional 8.3 million pounds of air pollution immediately before, during, and after Hurricane Harvey. The largest share of this pollution was in the Houston region, apparently a result of industrial facilities waiting too long to shut down. While Harvey's flooding impacted neighborhoods across the socioeconomic spectrum, communities of color and low wealth suffered a disproportionate share of the burden from air pollution released during the storm.

Before Harvey reached Houston, TCEQ shut down over 75 percent of its stationary air monitors in the region. Air Alliance Houston <u>worked with the media to raise awareness</u> about the fact that regulatory agencies were not providing adequate information to the public about air pollution. TCEQ and the EPA, meanwhile, offered broad assertions that the air quality was not of concern. Yet industrial facilities along the Houston Ship Channel were reporting pollution releases. One of the worst releases (of which we are aware) happened at Valero Energy's refinery in southeast Houston. After reports of a leaking storage tank at the refinery, city officials detected concentrations of cancercausing benzene of over 300ppb in the Manchester community.

Air Alliance Houston worked with EDF to dispatch a mobile monitoring unit from a California-based company, Entanglement Technologies, to take air quality samples in Manchester and other communities in Houston and across southeast Texas. Between Sept. 4 and Sept. 10, the last day of our sampling, we had conducted the largest and most robust active air monitoring campaign of any agency or organization. Air Alliance Houston and EDF took action because neither the EPA nor the TCEQ conducted active surveillance fast enough or in the areas most likely to have problems with air quality.

For example, EPA did not conduct its first ASPECT flight over the Houston Ship Channel until Sept. 7. EPA also did not deploy TAGA buses until Sept. 5. It is also unclear whether TCEQ had any of its own active surveillance because the agency has not released any data beyond what was recorded at stationary monitors. The detection of a benzene plume in the Manchester community later resulted in an <u>EPA investigation</u> of the Valero Refinery.

The agency, however, has taken no enforcement action and hasn't required correction to prevent similar problems.

The biggest release of air pollution after Hurricane Harvey made landfall happened in Galena Park, a predominantly Latinx and low-wealth community along the Houston Ship Channel. Two storage tanks at the Magellan Terminal released more than 11,000 barrels of gasoline. The company did not report the incident until 11 days after the spill occurred, the Houston Chronicle found.

"An explosion risk prompted workers to evacuate upwind as the nearly half-million gallons of gasoline gushed out of failed storage tanks, state environmental and Coast Guard records show. The spill ranked as Texas' largest reported Harvey-related venting of air pollutants at 1,143 tons," the Houston Chronicle reported.

Lifelong Galena Park resident Juan Flores, who works as a community organizer for Air Alliance Houston, said he and his neighbors smelled the strong odor of petroleum for several days after Harvey. People complained about the extreme stench, burning eyes and more. They closed doors and windows, but many still could not escape the odor, Flores said.

Yet EPA and TCEQ have taken no enforcement action against Magellan.

Finally, the explosions at Arkema's flooded Crosby plant filled the air with black smoke, sending emergency responders to hospitals with breathing problems. The Chemical Safety Board launched an investigation and later concluded that Arkema could have done more to prevent the explosion that occurred during Harvey. This incident is just one of many examples that highlights why facilities that store and process hazardous chemicals need to prioritize protecting public health and safety. A Harris County grand jury later indicted Arkema executives for the <u>'reckless' release of toxic chemicals during Harvey</u>.

EPA, however, has taken no enforcement action against Arkema. It is essential for EPA to do inspections and ensure compliance with the 2017 Chemical Disaster Rule, which a court ordered EPA to put in full effect after the agency unlawfully tried to delay these protections. Now we need EPA to implement, not rollback those regulations, because communities need both stronger safety measures and more enforcement.

Communities suffered public health impacts from the storm. Yet EPA and TCEQ are not ensuring compliance or holding the polluters accountable.

During and in the immediate weeks after the storm, several organizations, including Air Alliance Houston, collected information from residents about the public health impacts during this period. One month after the storm, our staff members went door-to-door, collecting over 1,300 surveys in North Pasadena. More than 40 percent of residents reported Harvey-related health impacts.

Furthermore, the <u>Episcopal Health Foundation's survey</u> revealed that among those who suffered damage to their home or property, 17 percent reported that they or a family member experienced new or worsening health conditions. Four months after the storm, the <u>University of Texas School of Public Health</u> found that 22 percent of residents experienced worsening of an existing health condition or physical injury, or a new illness – including 22 percent reporting respiratory issues such as asthma.

At this point, we will never know the actual amount of air pollution released during this time or the true extent of adverse health outcomes. However, these sources of data shed light on how the storm affected air quality and public health. Since Harvey, the Houston

Health Department, Rice University and Environmental Defense Fund, have launched a <u>health registry</u> to track health impacts related to the storm and plan to use this information to take steps to minimize exposures during future disasters.

Texas needs robust oversight from EPA because the state also limits the ability of local agencies to pursue enforcement actions against industrial polluters. A legal review commissioned by Air Alliance Houston identified significant challenges to local enforcement of the Texas Clean Air Act (TCAA). Specifically, the findings identify "one of the challenges to local enforcement of the TCAA is that in some types of cases, the City must notify the TCEQ of a violation and give the state agency the first opportunity to determine whether to pursue an enforcement action. More specifically, notice is required before the City files a lawsuit for criminal enforcement of the TCAA⁶, and in civil actions when the City intends to request the court to assess a monetary penalty against the violator.⁷

After receiving notice, the TCEQ could chose to remedy violations at the state level through administrative proceedings or other strategies, which would preclude the City from moving forward with an enforcement action.⁸ The TCEQ's approach to enforcement may not be aligned with the City's priorities. For example, in a case for a civil penalty, the TCEQ may choose not to address all of the alleged violations set forth in the City's notice—so long as the TCEQ commences a proceeding addressing at least one of the alleged violations, the City is precluded from enforcing any of the others.⁹ When the City provides notice to the TCEQ of an alleged criminal violation, the TCEQ could decide that an administrative or civil remedy—or even no penalty at all—is the appropriate course of action."¹⁰

Enforcement action is critical for communities of color and low wealth to protect them from the disproportionate impact of air pollution on their health and safety.

In 1994, President Bill Clinton issued Executive Order 12898 to address environmental justice issues in communities of color and low-wealth populations. The EPA defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or wealth, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

The overwhelming majority of incidents that occurred during Harvey took place in or near environmental justice communities. Furthermore, hazardous facilities are disproportionately concentrated in communities of color and low-wealth neighborhoods – compromising the health and safety of people with some of the greatest health challenges and the fewest resources to address these issues. Communities of color and

⁶ Tex. Water Code § 7.203; Tex. Code Crim. Pro. art. 2.12.

⁷ Tex. Water Code §§ 7.351(a), 7.3511.

⁸ Tex. Water Code §§ 7.203(d), 7.3511(d).

⁹ Tex. Water Code § 7.3511(d).

¹⁰ Tex. Water Code § 7.203(d); BCCA Appeal Grp., Inc. v. City of Houston, 496 S.W.3d 1, 14 (Tex. 2016).

low-wealth continue to be treated as collateral damage by industries that prioritize profits over public health. Both the EPA and the TCEQ have failed to take vigorous action to enforce existing laws and effectively uphold the intent of EO 12898.

Years ago, EPA had recognized the need to make preventing chemical disasters a national enforcement initiative – but communities in Houston haven't seen EPA make good on that promise. Even worse, after committing to **increase** enforcement resources to the most overburdened communities in EJ2020, EPA's strategic plan for environmental justice, the agency is instead turning its back on communities that need enforcement the most, like Houston.¹¹

It is incumbent upon the EPA to take steps to ensure that all people breathe clean air every day and to protect them from exposure to harmful pollution during disasters. The agency must communicate accurate information about air quality to emergency responders and the public to protective of their health and safety.

In the 2018 Arkema Investigation Report, the Chemical Safety Board called for more and better preparation, to prevent these double disasters, but EPA has been failing to exercise its enforcement authority to ensure this happens.¹² The Board has also urged EPA to implement and not rollback the 2017 Chemical Disaster Rule which would require facilities to take steps to prevent and mitigate harm from these incidents.¹³ As then-CSB Chairperson Vanessa Allen Sutherland said:

"Considering that extreme weather events are likely to increase in number and severity, the chemical industry must be prepared for worst case scenarios at their facilities. We cannot stop the storms, but working together, we can mitigate the damage and avoid a future catastrophic incident."¹⁴

An EPA funded study about ambient air concentration levels in Southeast Louisiana after the Deepwater Horizon oil spill recommended that EPA establish "health-based and regulatory air quality levels that should apply during environmental disasters including the types of emergency monitoring equipment that would be acceptable to capture as much data as possible.

According to the study, there should be plans to protect "fence-line" communities that may need to shelter in place or evacuate, as well as health-based disaster thresholds that could facilitate decision-making, increase public awareness, and reduce the potential

¹¹ EPA, EJ2020 Action Agenda: The U.S. EPA's Environmental Justice Strategic Plan for 2016-2020, p. 20 (2016), https://www.epa.gov/sites/production/files/2016-

^{05/}documents/052216_ej_2020_strategic_plan_final_0.pdf ("Action 1.2: EPA will increase compliance evaluations and enforcement actions for serious violations affecting overburdened communities. In particular, over the next five years, EPA will work with co-regulators to identify and undertake community-focused compliance reviews and enforcement strategies in at least 100 of the most overburdened communities where data indicate that facilities present a high likelihood of serious non-compliance issues impacting those communities, and address serious violations if found...").

¹² Arkema Final Investigation Report (May 2018), http://www.csb.gov/file.aspx?DocumentId=6068; 13 CSB Comments to EPA opposing rollback of Chemical Disaster Rule,

https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-1897.

¹⁴ CSB Releases Arkema Final Report, May 24, 2018, https://www.csb.gov/csb-releases-arkema-final-report.

public health impact during an environmental disaster."¹⁵ These recommendations could supplement enforcement efforts if implemented.

Thank you for the opportunity to testify today.

Respectfully,

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¹⁵ Earthea Nance, Denae King, Beverly Wright & Robert D. Bullard (2016). Ambient air concentrations exceeded health-based standards for fine particulate matter and benzene during the Deepwater Horizon oil spill, Journal of the Air & Waste Management Association, 66:2, 224-236, DOI: 10.1080/10962247.2015.1114044.