Statement of Chris Frey
Nominee for the Position of Assistant Administrator for the
Office of Research and Development
in the
United States Environmental Protection Agency
Before the
Committee on Environment and Public Works
United States Senate

October 27, 2021

Good morning Chairman Carper, Ranking Member Capito, and Members of the Committee. I am honored that President Biden has nominated me to serve as Assistant Administrator for the Office of Research and Development at the U.S. Environmental Protection Agency.

Science and the environment have long been my passions – and my purpose.

I grew up in lower Manhattan in the 60s and 70s. My family lived in a rent-controlled walk-up building built in the 1880s. There was lead paint on the walls, smog outside, and greasy flakes of soot wafted from the sky, smearing my bedroom windowsill. This affected me so much that when I was eight, I wrote an essay titled "Pollution" in which I posited that "Pollution is bad for people and animals too." Although I didn't realize it at the time, I identified multiple environmental media, transport and fate pathways, and adverse effect outcomes. My father typed and copied my essay and gave it to all of our neighbors. This was my first publication. I trace my career – my passion and my purpose – to that essay and to my firsthand experience with environmental pollution while growing up.

My parents instilled in me a passion for the environment and a sense of duty to serve the public. My father served honorably in the United States Marine Corps. After his military service, he became an oceanographer and a professor. He spent the last 22 years of his career with the

National Oceanic and Atmospheric Administration. He now rests at Arlington National Cemetery.

My mother's passion was art. She was a painter and a writer. Her last book was a novel about dolphins, for which she conducted extensive research. Although not rich in a material sense, she had enormous wealth of spirit. She taught me to listen to many different voices, understand how things work, and collaborate with others to find solutions.

With my parents teaching me the value of listening, observation, and public service – it's no surprise that I found my way to environmental science and engineering.

During summers in college, I worked as a civilian engineering aid for the U.S. Army and U.S. Navy. These experiences were some of my earliest appreciating the practical application science has in our everyday life. I conducted quality assurance tests on an adsorbent used to scrub carbon dioxide inside submarines. The lab science I was doing was keeping our servicemembers safe. Seeing the direct impact that science has in protecting people - I was hooked.

I have been privileged to have spent most of my career in academia, including 27 years at North Carolina State University. While there, I researched how to improve the efficiency and reduce the emissions and cost of coal-fired power plants. I helped governments and industry develop cost-effective solutions for emissions prevention. I researched improved quantitative uncertainty methods for exposure and risk assessment. My research has also focused on measuring and modeling real-world emissions from vehicles and human exposure to air pollution. My research has helped inform a wide variety of decisions – from improving traffic signal timing that reduces vehicle emissions to selection of ambient air quality standards taking into account uncertainties in health risk assessment.

As an experienced researcher and professor, I am a champion of science and its essential role in keeping American families healthy and safe. I am proud of the quality, scope, and impact my work has had, as demonstrated by my extensive peer reviewed publication record and numerous awards, such as the Excellence in Air Pollution Control Award from the Air & Waste Management Association. I have been invited to share my expertise on numerous national and international expert advisory panels. I also have extensive experience with EPA: I completed a fellowship in the Office of Research and Development in the early 90s; I was an Exposure Modeling Advisor to ORD in the mid-2000s; and I have served on multiple EPA advisory committees for many years, including the Science Advisory Board and chairing the Clean Air Scientific Advisory Committee. I believe that I have the scientific credentials, expertise, experience, vision, and commitment to serve as ORD's Assistant Administrator and to lead ORD's world class research staff.

Senators, applying science to solve complex challenges that affect the lives of the American people has been my highest priority throughout my career. It would be a tremendous privilege to continue that dedication at EPA. I recognize that science is just one of the many factors that inform policy decisions. If confirmed, my leadership will start with listening. The complex environmental challenges our Nation faces require an "all hands on deck" approach, drawing on the experience, expertise, and perspectives of numerous stakeholders, including all of you.

Thank you, and I look forward to your questions.