Thank you for the opportunity to speak in favor of HB 1406 as a companion bill to the CHERISH our Communities Act (HB 1484). My name is Jeremy Greene, and I am a practicing internist at a community health center in East Baltimore, and I teach social sciences and humanities to medical students at Johns Hopkins University School of Medicine. The views expressed here are based on my experience as a physician and as a Maryland resident and not on behalf of Johns Hopkins.

I would like to frame the value of this bill in terms of preventive medicine, using the example of a condition I treat nearly every week in my clinic: asthma. Medical textbooks teach about the biological sciences of acute asthma: the anatomy and pathophysiology that explains how the airways constrict in response to environmental triggers, and cause that feeling of not being able to get enough air in—that terrifying moment of "I can't breathe." We could talk about the clinical diagnosis of asthma: how signs of wheezing and cough can be tested with spirometers, peak flow meters and nebulizer trials. And we could talk about the pharmacology and therapeutics of asthma: how fast-acting inhalers can relax smooth muscle in the airways, how steroids and other agents can reduce the inflammatory response and lead to better outcomes.

But anyone who sees patients with asthma knows that diagnosis and pharmacology are the easy part. If this is where we stop, we fail to intervene in the lives of the millions of pediatric patients whose asthma is triggered by the building materials in older-stock apartments and the cumulative burden of particulate matter suspended in the air in local neighborhoods. Asthma is an environmental disease, but that does not mean we cannot help alter the lived environments of our patients in crucial ways to help them thrive. Because most asthma deaths are preventable. We know from decades of data that healthcare workers who think upstream can work with case managers to help their patients hold landlords accountable to reduce triggers in their homes, or work with local medical-legal aid groups to find safer housing. These measures have been proven to save lives, but only if we think to use them.

HB 1406 addresses a fundamental upstream cause of health disparities in asthma and other pulmonary diseases: the disproportionate cumulative burden caused by concentrating air pollution in certain communities, urban and rural, in Baltimore City and in Garrett County and in Prince Georges County and in several counties Eastern Shore, that face more collective environmental pollution from a concentration of co-located heavy industries. Because asthma does not affect all residents of Maryland, or even all residents of Baltimore, in the same way. We know from several studies that people who identify as Black are more than three times more likely to die of asthma than people who identify as white. Studies of the racialized disparities in asthma outcomes point to of history and geography of racial segregation in American society which links asthma morbidity and mortality to the specific environmental triggers of old and poorly-maintained urban housing . But asthma is not just an urban disease. Asthma is also a disease that is disproportionally dangerous in rural areas, which can also abound with environmental triggers from multiple industries, and can also face steep disparities in access and outcomes. Several studies have indicated that patients with asthma in rural counties have more severe disease, requiring higher rates of hospitalization, than urban and suburban spaces.

As a doctor in Baltimore I first became interested in the problems posed by concentration of energy plants and other heavy industries when I began to realize that the disposable syringes, gloves, masks and gowns I was using to help save lives in my clinic were all going, after their single use, to a waste-to-energy incinerator in South Baltimore, owned by the Curtis Bay Energy Co. Curtis Bay Energy is the nation's largest medical waste incinerator, and the neighborhood of Curtis Bay in which it is located has with the highest rates of asthma and other pulmonary diseases in Baltimore City, and by some measures in the country. I am sure most members of this committee already know that Curtis Bay Energy was

recently found guilty of the largest environmental crime in the history of the state of Maryland, after MDE found that subpar incineration practices were exposing Curtis Bay residents to unacceptable levels of partially-combusted medical plastics. But the story of Curtis Bay Energy is not just the story of a single bad actor, but of an energy installation whose health effects on the surrounding community need to be understood as cumulative with the 40-plus other heavy industries co-located near the South Baltimore peninsula, which together present an fundamentally different collective burden on the lungs on South Baltimore residents than I experience in my North Baltimore neighborhood just 10 miles away.

I mention Curtis Bay Energy since it is a tangible example close at hand, but similar clusters of cumulative burden can be found across the state of Maryland: in Prince Georges County, in Garrett County, in Dorchester County. The common denominator here is areas of high cumulative burden and concentration of air pollution, communities which already bear a disproportionate burden of pulmonary disease and other downstream health effects of cumulative environmental impact. As someone who lives and work in Baltimore, I happen to have learned of the importance of CHERISH and HB1406 through the remarkable advocacy work and citizen-science work of the South Baltimore Community Land Trust and efforts of other Curtis Bay residents. But I especially admire the efforts by community groups like SBCLT to put preventive measure in place not only on their own community level (working with City Council in Baltimore) but also in concert with other disproportionately affected communities across the state. These problems cannot be addressed at the local level alone: they require a prescription only the State of Maryland can provide.

As a primary care physician who sees first hand in my clinic every week the need for better upstream solutions to the downstream effects of environmental health, I support HB 1406. This bill fosters a community-driven process in alignment with the CHERISH our Communities Act (1484) in the separate domain of energy installations. HB1406 addresses an important gap in how Maryland considers applications for Certificates of Public Convenience and Necessity (CPCN), giving the PSC more authority to protect the health and well-being of communities in their permitting process, seeks a just transition of the health impact of heavy industries, and fosters healthy business alongside healthy neighborhoods.