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Written Testimony for State of Maryland HB701
Dr. Peter DeCarlo

Hello, my name is Dr. Peter DeCarlo, and I am providing testimony today on HB701 which prohibits the State from purchasing gasoline-powered leaf blowers. I am providing these comments as a resident of Maryland and in my personal capacity and am not representing the views or position of Johns Hopkins University. I am an associate professor at Johns Hopkins University in the Department of Environmental Health and Engineering. The area of my research is on air pollution with a focus on understanding emissions and the environmental and health impacts from these emissions.

The proposed HB701 would improve environmental quality for residents of Maryland by reducing air pollutant emissions, reducing noise related to leaf and debris removal and have the added benefit of protecting worker health.

Noise and air pollutant emissions from gasoline powered leaf blowers are extremely high when compared with alternative. The two-stroke engines used in this equipment are inefficient combustion technologies and emit unhealthy levels of particulate matter, carbon monoxide, and volatile organic compounds including benzene, a known carcinogen. These emissions originate from the unburned fuel and oil mixtures used for two-stroke engines and retain much of the chemical makeup of this mixture when being emitted. This necessarily leads to direct emissions of gasoline and oil to the immediate area where the equipment is being used.

From a health perspective both the workers using the equipment and others nearby are impacted by exposure to the air pollutants emitted as particulate matter made up of unburned fuel and oil and the volatile components as well. Chemicals such as benzene and butadiene are both contained in gasoline and are known to cause cancer. Reducing exposure to these chemicals will protect heath of nearby residents and workers using the equipment. Electric powered debris removal equipment which can be used in place of gasoline powered equipment do not have these emissions and will therefore reduce air pollution, reduce noise, and protect worker and nearby resident health.