Dr Chessa Lutter, 5024 Newport Ave, Bethesda, MD, 20816 (chessa.lutter@gmail.com)

Re: HB 934, banning of Gas-Powered Leaf Blowers

Thank you, for the opportunity to speak today. My name is Chessa Lutter, a 30-year resident of Montgomery County, MD. I am a nutritionist and epidemiologist with a PhD from Cornell University and BS from UC Berkeley and retired from the World Health Organization. I am currently a Senior Nutrition Researcher and Senior Fellow at RTI International and telework from my home.

Gas-powered leaf blowers (GPLBs) seriously effect human health. According to the US Centers for Disease Control and Prevention, they cause: hearing loss, tinnitus, cardiovascular effects, immune system suppression, stress hormone release, sleep disturbance, impaired childhood development, impaired cognition, mental health problems. These effects lead to reduced work and school productivity, and reduced quality of life. The health consequences are particularly acute for children, seniors, people with hearing disorders and neurological conditions like autism, and sensory deficit orders. The more than one million workers in the landscaping industry, over half of whom are Hispanic and Latino, are at particular risk given their immediate proximity to the machines and, for the most part in my neighborhood, without any ear protection. GPLBs produce noise levels ranging from 102–115 decibels ("dBs") at the ear of the operator, which is higher than the recommended limit of 85 dBs that the US EPA and the National Institute for Occupational Safety and Health have established.

<u>GPLBs are damaging to the environment and contribute to regional air pollution and climate change</u>. They generate chemicals and particulates that can violate EPA air pollution standards and emit significant quantities of ozone-forming chemicals, carbon monoxide, and other toxic air pollutants. They generate CO2 at a rate 3 to 9 times higher than electric-powered blowers, contributing to climate change effects.

GPLBs low-wave noise frequencies travel long distances, penetrates walls of homes, and affect homes far distant from the source. The noise caused by their use in densely urban neighborhoods affect a large number of homes. From my yard, I can hear GPLBs from three and sometimes four blocks away. In my home, I can hear them from two blocks away. In my immediate neighbored, about 75% of households employ lawncare companies that come on a weekly basis. Given how far their noise travel, I can hear them from up to 90 surrounding properties.

GPLBs routinely violate Montgomery County noise standards, which are virtually never enforced despite repeated complaints. Enforcement is so poor that I have given wasting time to file complaints through the county website as they have never resulted in any change in the practices of lawncare companies near my home.

The use of GPLBs is unpredictable and I never know when they will cause disturbance. Landscaping crews, typically using two and up to four blowers simultaneously, work from

as early as 7 am to 7 pm Monday through Sunday. I never know when the noise and gas fumes will prevent me from enjoying or working in my yard, hold a gathering of friends, or concentrate on my work and, thus, livelihood. Events as important, such as a Zoom memorial service for my late mother-in-law during the height of the pandemic were marred by their noise, audible to those participating virtually from around the country. Their noise is heard from as far as Kenya and Geneva where I weekly engage in Zoom meetings.

As a resident of Maryland, I urge you to:

- Amend <u>HB 934</u>, banning of Gas-Powered Leaf Blowers to be effective as of January be
- Mount a large-scale communications campaign in English and Spanish to inform on the new bill and that include information on penalties for its violation, and
- Ensure that the bill includes strict enforcement measures and significant fines for violations. Otherwise, a warning or small fine will be acceptable to lawncare companies as merely the cost of doing business.

Thank you for the opportunity to testify on behalf of this important bill that, when passed and in effect, will reduce the multiple health and environmental hazards caused by environmental noise and air pollution and contribute to the quality of life of all citizens of Maryland.

References

- United States Environmental Protection Agency (EPA). Noise and its effects on children.
 2009; https://www.epa.gov/sites/production/files/2015-07/documents/ochp noise fs rev1.pdf.
- 2. Basner M. Auditory and non-auditory effects of noise on health. The Lancet. 2014;383(9925):132-1332.
- 3. Fritschi L, Brown AL, Kim R, Schwela DH, Kephalopoulos S. Burden of disease from environmental noise. Bonn: World Health Organization;2011.
- 4. Goines L, Hagler L. Noise pollution: A modern plague. Southern Medical Journal. 2007;100(3):287-297.
- 5. Hahad et al. Environmental noise-induced effects on stress hormones, oxidative stress, and vascular dysfunction: Key factors in the relationship between cerebrocardiovascular and psychological disorders. Oxid Med Cell Longev. 2019;4623109:1-13.
- 6. Munzel et al. Environmental noise and the cardiovascular system. Journal of the American College of Cardiology. 2018;71(6):688-697.
- 7. Stansfeld SA, Matheson MP. Noise pollution: Non-auditory effects on health. Br Med Bull. 2003;68:243-257.
- 8. Walker E, Banks JL. Characteristics of lawn and garden equipment sound: A community pilot study. J Environ Toxicol Stud 2017 1(1).
- 9. Pollock et al. Lawn and garden equipment sound: A comparison of gas and battery equipment. Journal of Environmental and Toxicological Studies. 2018.
- 10. Banks JL, McConnell R. National emissions from lawn and garden equipment. Undated.

- 11. New York State Department of Environmental Conservation. Leaf blowers. Undated; https://www.dec.ny.gov/chemical/109428.html#:~:text=Emissions%20from%20gas%20powered %20leaf,the%20amounts%20are%20even%20greater. Accessed Nov 29, 2002.
- 12. California Air Resources Board. Small engines in California. 2017; https://ww2.arb.ca.gov/resources/fact-sheets/small-engines-california.
- 13. Losacco C, Perillo A. Particulate matter air pollution and respiratory impact on humans and animals. Environ Sci Pollut Res Int. 2018;25(34):33901-33910.
- 14. Manisalidis, et al., Environmental and health impacts of air pollution: A review. Front Public Health. 2020;8(14).
- 15. Fernandes et al., . The effect of noise on attention and performance in reading and writing tasks. Codas. 2019;31(4):e20170241.
- 16. Sanzaki M, Kdoya T, Francis CD. Direct and indirect effects of noise pollution alter biological communities in and near noise-exposed environments. Proc Biol Sci. 2020;287(1923):2020017.