Gas-Powered Leaf Blowers (GLBs): Health and Environmental Risks

The Town is considering a proposal for a phased reduction in the times during which gas-powered leaf blowers may be used, as well as a proposal for an eventual ban on the use of this equipment. The Town Council will hold a public hearing on the proposal for a phased reduction during its regular July meeting and will also convene a special public comment period on the proposed eventual ban will be held after the regular public comment period at the same meeting. The meeting will take place on July 8 at 7 pm via Zoom; the link is available on XXX.

Noise and Air Pollution

<u>Noise: harmful to hearing and health</u>: Noise from gas-powered leaf blowers can exceed 100 decibels <u>at the ear of the operator</u>. This far exceeds safe levels for prevention of hearing loss established by the World Health Organization and the National Institute of Occupational Safety and Health. Gas-powered blowers are typically several times louder than comparable electric battery-powered blowers. The sound from gas blowers is also lower frequency than that from electric blowers, traveling farther and penetrating windows more readily.

Air Pollution: Gas leaf blowers, particularly the more common two-stroke models, emit more air pollutants than comparable battery-powered blowers. These pollutants include what EPA terms "hazardous air pollutants" (such as benzene and other carcinogenic and otherwise toxic substances), "criteria air pollutants" (fine particulate matter, which has been linked to premature mortality and many respiratory illnesses, carbon monoxide, nitrogen oxides), greenhouse gases (GPBs produce roughly 4 to 9 times more CO₂ emissions than BPBs) and reactive hydrocarbons (which combine with nitrogen oxides to form harmful ozone pollution). The pollution is generated close to the ground, where it is inhaled by workers and others nearby. It then spreads, contributing to regional and global air pollution.

Health Risks and Covid19

<u>Pollution from GLBs increases risk of complications and death from COVID-19</u>: It is well established that air pollution from GLBs, including fine particulate matter, is hazardous to lung functioning and our respiratory and overall health.

This month, researchers at the Harvard School of Public Health released the results of a study that specifically linked <u>air pollution from fine particulate matter</u> that type of pollution (i.e., fine particulate matter) to a higher risk of complications and death from COVID-19 infection. They found that a one-microgram increase in concentration of fine particulate matter is associated with an 8% increase in risk of death from COVID-19 infection. This is extremely important because a single commercial GLB emits tens of millions of micrograms of fine particulate per hour [6-7] at ground level where it is easily inhaled. And these particles may stay suspended in the air for a week or longer. Landscape workers face disproportionate risks from Covid19 due to GLBs.

Financial Impact on Landscapers

Financial costs to switch to battery-powered leaf blowers:

The capital cost for a contractor to switch over to battery-powered blowers for both cosmetic and more demanding uses depends on the size of the contractor's company. <u>Data indicate A Greener Side estimated that</u> a small contractor would need to spend <u>approximately</u> \$3,600 for three backpack 82 Volt blowers, with 3 batteries for each blower and allowing each blower to accommodate 2 batteries/2 slots). Bigger landscapers would need to <u>invest spend</u>-more-money. This cost burden could be lessened if the changeover were spread over several years.