

Request to Study the Environmental Impact of Two-Stroke Engine Garden Equipment

Date: August 11, 2020

To: Infrastructure and Environment Committee

From: City Council

Wards: Ward: All

CITY COUNCIL DECISION

City Council on July 28 and 29, 2020, referred Motion MM23.3 to the Infrastructure and Environment Committee.

RECOMMENDATIONS

Councillor Shelley Carroll, seconded by Councillor James Pasternak, recommends that:

1. City Council request the City Manager, in consultation with the Medical Officer of Health, to report back in the first quarter of 2021 on the environmental and associated health impacts of gasoline-powered two-stroke engine leaf blowers and other similarly operated garden equipment, including the feasibility of a year-round ban or a ban from May to September.

SUMMARY

Gasoline-powered leaf blowers and other types of small engine equipment are powered by inefficient two-stroke engines. The process of incomplete fuel combustion generates dangerous hydrocarbon 500 times that of an average automobile and produces toxic aerosol (including carcinogenic particulates) for us to breathe in. These machines have shown to be heavily polluting which can lead to the destruction of our ecosystem.

Recently published studies observed a dramatic loss of insect populations across the globe. Just within the past three decades, the number of flying insects had declined by more than 75 percent in sixty of Germany's protected area. Based on available researches, 40 percent of insect species are undergoing major declines around the world. Our local bee populations are facing similar threats.

This rapid decline is largely attributed to habitat loss and fragmentation, with gas-powered garden equipment as a major contributing factor due to its heavily polluting nature. It destroys habitats either by harming the soil biology or absorbing small animals and insects through suction. Experts warn that if this trend continues, terrestrial and freshwater ecosystem will collapse with profound consequences on our health and wellbeing.

Increasingly, private landscapers are using leaf blowers to remove grass clippings outside the fall season, i.e., from May to September, when no leaves are on the ground. This unnecessary step exposes our neighbourhoods to a greater range of air pollutants and destroys insect populations with adverse impacts on our local ecosystems.

Banning or severely restricting gas-operated leaf blowers have been successfully implemented in over 90 cities/municipalities in California and more than 100 other cities in the USA. In Canada, the West End of the City of Vancouver and Beaconsfield have bans to address air and other pollutions. Portland supported a transition to electric operations in 2021 in addition to a ban. Most recently, the findings of the insect population decline have led to a similar proposals in Germany.

In the most recent study conducted by the Harvard School of Public Health, breathing in combustion aerosols and fine particulates compromise those with lung disease and significantly raise the risk of death from COVID-19..

Communications (City Council)

(July 27, 2020) E-mail from Nicole Corrado (MM.Supp.MM23.3.1)

(July 28, 2020) E-mail from Lyn Adamson (MM.New.MM23.3.2)