

April 21, 2018

**Mayor Muriel Bowser
Council Chairman Phil Mendelson
and
Washington DC Councilmembers**

RE: <https://www.scribd.com/document/390990052/B22-234-Leaf-Blower-Regulation-Amendment-Act-of-2018>

Dear Mayor Bowser:

Calling your attention to the referenced committee report prepared by Chairman Phil Mendelson, I see that Council Member Mary Cheh has orchestrated a convincing argument consisting of opinions that support a proposal to ban gasoline powered leaf blowers. This report is amazing in that it is 92 pages long. Mr. Mendelson should be commended on his attention to detail.

I am a former Vice President of Engineering for Echo Inc., a leading manufacturer of powered lawn care products. Information on my qualifications and expertise can be found at the following website. <http://leafblownoise.com/about%20the%20author.pdf>. I am well known in the industry for taking the initiative to contact cities that are considering a leaf blower ban. I provide data and documentation that will help city councils arrive at a workable leaf blower law. <http://leafblownoise.com/List%20of%20cities.htm>

This is not my first letter to you regarding the leaf blower issue. I originally sent one via email on January 13, 2016, with a copy to Mr. Mendelson. I was disappointed to see that my first letter was not included among the attachments in the committee report, but then the purpose of this report is to justify a blower ban, not their defense. Also missing were comments from users that depend on the blower, namely homeowners that take care of their own yards (your constituents) and professional lawn care providers. These people will not be very receptive to an outright ban.

Noise is always the issue, but since noise is not a strong argument for banning blowers, other environmental considerations are introduced. I am not a stakeholder in your community, but never the less, the other side of the story must be given equal consideration in order to make an informed decision. I am in a unique position to provide the facts not presented in Mr. Mendelson's report, which will cast doubt on many of the claims presented.

Almost always, when the opposition to leaf blowers is great enough, some sort of legislation will be passed. I try to tell city managers and representatives to "ban the noise, not the blower". So how is this possible and how can it be enforced. Well, require the use of "Quiet" leaf blowers.

Okay, so you're thinking, right, quiet blowers! Do they really exist? If I may, I'd like to start with a short commercial about quiet leaf blowers.

In response to noise complaints, a number of years ago my engineering department developed the first "Quiet" gasoline powered leaf blower at ECHO Inc. ECHO now has five designs in their product line that are "Quiet". Today, several other manufacturers have joined in, investing millions of dollars in tooling, testing and new assembly lines to provide this important alternative to a blower ban. It is important because this is the only workable solution to the leaf blower noise issue.

The industry attaches a label to the blower that indicates sound level, which is measured by a third party such as Underwriters Laboratory (UL), according to a highly detailed ANSI Standard that controls all the measurement variables. This makes it easy to determine sound magnitude at the point of purchase and in the field by the enforcement officer. The number to look for is 65 dB(A), measured at 50 feet. This represents a 75% reduction in sound from a typical noisy leaf blower at 77 dB(A).

<http://leafblownoise.com/Sound%20label%20mounted.jpg>

These blowers have been available for more than 20 years and still both sides of the issue have been slow to embrace these products. Overwhelmingly, users don't see blower noise as an issue since all their power equipment makes noise. If they have an older blower that is still working, they are reluctant to scrap it. And when they do, they don't want to spend 30 dollars more for a quiet blower they think is unnecessary. Some even think that quiet blowers have less power, which of course is not true. As you can see from Mr. Mendelson's report, blower haters likewise won't acknowledge this design. They just can't seem to accept that this option is viable and just might solve their problem. To them, it is not quiet enough. They want silence. But this is unreasonable and quite frankly, unattainable. Even electric blowers are not silent. In fact, many are actually noisier than the "Quiet" gasoline powered blower.

<http://leafblownoise.com/Electric%20blower%20sound.htm>

No, not all present-day leaf blowers are quiet, but all are quieter than they once were for a given size. One large backpack and all of ECHO's small handheld blowers are in fact quiet, but some of the larger blowers are not. But even though these large blowers are not considered "Quiet" their sound level has been reduced by 50%.

I struggle with understanding the logic behind banning the leaf blower because in most cases the problem is with the user and not the blower. Some leaf blower operators are just plain inconsiderate of others. Often those that do not like leaf blowers blame the professional user for the sound issue. Keep in mind that people get upset when they must listen to blowers in the evening or early in the morning, and on Sundays or holidays. Sometimes blowers run for what seems like hours at a time. Well, homeowners are the ones that work in their yards well into the evening or very early in the morning when people may still be sleeping. They are the ones that use their blowers on Sundays and holidays. Because they buy inexpensive and therefore underpowered units, they must run them longer than they should to get the job done, another big irritation. Most professionals limit their workday to normal business hours. They are interested in getting the job done as quickly as possible, usually less than ten minutes per residence. As with any professional, time is money.

The only way to address this is to create an education program. To help with that, you will find educational materials at my website, which can be copied, paraphrased, or used in any other way that you like.

<http://leafblownoise.com/LeafBlowerTraining.pdf>

http://leafblownoise.com/OPEI%20training_videos.htm

<http://leafblownoise.com/LEAF%20BLOWER%20%20manual%2012-13-10.pdf>

I'm sure there are already many quiet gasoline-powered leaf blowers in your area, but the problem is, **if there is only one noisy leaf blower being used in the neighborhood, all leaf blowers are reviled.** If you have not actually heard the difference between these two blowers (65 vs. 77 dB(A)), you really should seek out a comparative noise demonstration. These

numbers may not seem significant, but keep in mind that for every 6 dB(A) reduction in sound, the sound pressure is reduced by 50%. http://leafblownoise.com/Measuring_Sound.pdf

Some people claim that gasoline-powered leaf blowers create high levels of exhaust pollution. This is way out of line with today's reality. If there is any truth to their statement, it is only true of outdated or unimproved engines. Years ago, engines from leaf blowers were troublesome and some of these may still be in service, but since January 1, 2005, new leaf blower engines have been well within acceptable limits according to the EPA. Due to government regulations, hydrocarbon emission has been reduced by 85 to 90%, depending on engine size. <http://leafblownoise.com/emission%20graph.htm>

As for the claim that leaf blower exhaust emission is worse than automobiles, first of all, there is no way one can compare these two without considering realistic running times. The EPA measures emissions by "hydrocarbons per mile" for the automobile and "hydrocarbons per horsepower-hour" for small off-road engines. Comparisons must be calculated after converting hydrocarbon emissions to "Total Kilograms per week", for example. To put this in perspective, think in terms of households.

The most common use for a leaf blower is to remove debris from a sidewalk and driveway after mowing the lawn and trimming the hedges. Most people work in their yard once a week and they use handheld equipment for about 1/2 hour (hedge clippers, string trimmers, edgers and leaf blowers). Of that, about 10 minutes is spent blowing grass clippings. The same household most likely has a car which is driven to work five days a week. A typical number of miles per week is 245 miles.

Using this method, a week's worth of **automobile driving** for a typical homeowner vs. a week's worth of leaf blower use **is 30 times worse for the environment**. An SUV is 45 times worse than a leaf blower. You can easily calculate what happens if two people in the household drive to work separately. <http://leafblownoise.com/carchart%20comparison.htm>

Well, what about the contractor you might ask? They service 10 or 15 properties per day or 75 households per week. Clearly, 75 households will likely have as many or more cars and the comparison remains valid. One should count the number of cars one sees while driving in the city and on that same trip, count how many leaf blowers are seen. It makes sense that leaf blowers are a minor contributor to exhaust emission.

One more thing. Only the EPA has the authority to regulate exhaust emission from small engines in the United States. All other States or subdivisions thereof are preempted from controlling emissions, including through the means of banning. See the [section 209 of the Federal Clean Air Act](#) to read the restriction.

As far as greenhouse gasses are concerned, this claim is a non-starter. Have you ever given any thought to what happens to fuel that is burned in an internal combustion engine? It oxidizes. That means oxygen combines with the two elements found in fuel, namely hydrogen and carbon. Every ounce of it turns into an airborne gas. Hydrogen combines with oxygen to form water vapor (H₂O) and carbon oxidizes to form carbon dioxide (CO₂). CO₂ is the greenhouse gas everyone is talking about.

Those arguing that leaf blowers are worse than automobiles when it comes to greenhouse gasses, are totally incorrect. How many cars in your household are used to drive to work? How many gallons of gasoline do you burn in a week, one tank full (18 gallons)? How much do you burn in a leaf blower in a week, 10 ounces? A gallon, by the way, is 128 ounces. The average

automobile is 230 times worse than a leaf blower when it comes to the emission of greenhouse gasses.

Don't give any credence to the health hazard assertion either. The insinuation that leaf blowers can be hazardous to your health is totally unfounded. There are reputable organizations that have done research to determine if there are health hazards attached to leaf blowers. The Greenwich Department of Health, for example, indicated in a report that there is no health hazard attributable to leaf blowers. http://leafblownoise.com/#Greenwich_Department_of_Health_Statement

Dr Nancy Steele, of the California Air Resources Board (CARB), came to the same conclusion in a report to the California State Legislature. This report is over 15 years old, but the blower can only be better today, since engines are cleaner by magnitudes than they were when this report was prepared. <http://leafblownoise.com/Dr.%20Steele.pdf>

Certain individuals, relying on their title to give weight to what they say, make health hazard claims without justification. Because we have a paradigm to always believe our doctors, people tend to believe them blindly in whatever they say. I read that one pediatrician claimed that leaf blowers cause asthma. He may know children's health vulnerabilities and he may also know a lot about asthma, but where does he get his knowledge regarding leaf blowers. I am still waiting for him to provide test results that verify his statement.

The issue of dust and particulate matter is sometimes brought up, which is a complex and technical discussion. If you want to know more about this, you can find explanatory information at my website. But it deserves to be ignored here, for all the alternatives will generate the same amount if not more dust, they will just take longer.

So, what are the other alternatives? Obviously, the broom and rake. These are fine if you're into sweating and hard work. Perhaps some homeowners would prefer this over an exercycle or a treadmill. It will take them at least [eight times longer using a broom](#) or a rake than it would with a leaf blower. But for the rest of us and for the contractor, this is an archaic and unacceptable approach.

For others, maybe the battery powered blower will do. There is a market for these blowers, but they are as slow as a broom in most cases. All I can say about these is that their performance is not there yet. Air flow and velocity is not sufficient for the professional. As for running time, well I'm sorry to say, it's dismal. From the Internet, let me paraphrase from some customer comments:

- *I agree with several previous reviews; the battery life is maybe 20 minutes tops after a full charge.*
- *Charged it out of the box. Got about 15 minutes run time.*
- *Total run time, 8 minutes 35 seconds*

As for limiting blower use only over the summer months is concerned, thinking there is little need for them at this time, let me say that there is a need to use leaf blowers all year round. Yes, the fall of the year may be the worst, but leaves and twigs from trees and shrubs as well as grass clippings, hedge trimmings and seed pods require cleanup throughout the year, especially over the summer months and most assuredly after storms.

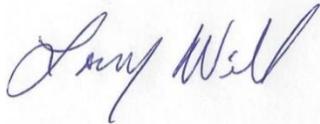
When you solicit information from professional contractors, you will find that they do not understand all the issues, but they can tell you how a blower ban will impact their income and how their customers will react to a cost increase.

Finally, keep in mind that a complete leaf blower ban does not work. You probably have heard that there is a [court case in Maplewood](#), NJ contesting a recent blower ban. Like an iceberg, this issue is deeper than it appears to be on the surface. Many problems can arise from a blower ban; for the city, for homeowners and for landscape contractors that depend on the leaf blower. http://leafblownoise.com/#Will_a_ban_work

Leaf blowers are firmly entrenched as indispensable tools, to anyone that has ever used them over the alternative. The best thing to do is find a solution that everyone can support, especially the professionals. Let me say this one more time, "Ban the noise, not the blower"!

I could go into much more detail in this document, pointing out all the inaccuracies you will be expected to believe, but for the facts and to save time here, you can find more information about the leaf blower at my [website](#). Should you have any specific questions that are not adequately answered, please respond to this email or call with your inquiry.

Best regards,

A handwritten signature in cursive script that reads "Larry Will". The signature is written in dark ink on a light-colored background.

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