

September 24, 2020

TO: Mayor Lorraine Walsh
Copy: Trustee Carol Casazza Herman
Trustee Peter Fanelli
Trustee Malcolm Frouman
Trustee Sarah Bauer
From: [Larry Will](#)



Reference:

<https://dailyvoice.com/new-york/mamaroneck/news/larchmont-bans-gas-powered-leaf-blowers/794646/>

https://lmcmmedia.org/videos_list/village-of-larchmont-board-of-trustees-meeting-9-15-20/

I see from the referenced Internet article and the ZOOM video of the September 15 Board meeting that Larchmont has been seriously misled regarding leaf blowers. There is no legitimate reason for banning gasoline-powered leaf blowers, except for noise, because everything else you have been told is either false, misrepresented, or unsubstantiated. As for noise, there is a way it can be mitigated, which I will explain later in this informational document. I believe you may want to reconsider your decision to ban leaf blowers once you know the facts, for the sake of the boards credibility, the needs of your citizens, and the livelihood of those that make a living caring for the properties of your constituents. I am perhaps the only person in a position that can give you these facts.

I am a former Vice President of Engineering for Echo Inc., a leading manufacturer of powered handheld lawn care products. I am not a stakeholder in your community's leaf blower issue, nor am I trying to interfere with any decision you deem necessary. But I am a source of facts about the design and use of cordless and gasoline powered leaf blowers that will be helpful to you. I would like to start by providing you with my [qualifications and credentials](#).

You may not know this, but there is a group of people, from outside your community, working hard to have gasoline-powered leaf blowers banned throughout the Northeast. The concept of citing health hazards as the reason for a ban was initiated by Peter and Susan Kendall of Orinda California. You can read all about them in the [New Yorker, October 25, 2010 issue](#). Because sound was not a compelling enough reason for banning leaf blowers, Ms. Kendall said, "I would (in the future) try to get the law classified not under noise but under health and safety..." So, the Kendall's and many others have searched the Internet for statements and enlisted dignitaries that would support their mission, regardless of the truth. I'm sure you know from your experience with the media that if something is said often enough, by many different people, or put in print by many sources, regardless of the facts, people will tend to believe it as being true. They then will proceed to confidently restate these unproven hypotheses emphatically.

I venture to say, the people that have convinced you that leaf blowers are bad are well meaning, conscientious, and dedicated to improving the environment, but they are not professionals. What I mean by not being professional is that none of them are in any way professionally involved in the use, development, or accreditation of the leaf blower. Although Dr. Amy Brown, a presenter at your ZOOM meeting, is most likely an eminent physician and expert in her field, her expertise does not include leaf blowers. The presenters can only quote information presented by others with no way of knowing if what they present is based on facts, qualified tests or is simply inuendo and opinion. Some of the background material presented is true in concept, but it is not true as it relates to the leaf blower.

As for the pollutants attributed to leaf blowers, their so-called facts are totally wrong. Take carbon monoxide (CO) for instance. This exhaust component is directly proportional to the amount of fuel burned and that in turn is dependent on the size of the engine and how long it is run. Even logic can tell you that trucks and automobiles, running for miles every day driving to work, or while one is using a vehicle while at work, will develop more CO than a leaf blower. The same is true of [greenhouse gas, carbon dioxide](#) (CO₂). Every drop of fuel, when completely burned, must turn into CO₂, with only a small amount becoming CO due to the lack of oxygen in the combustion chamber. Leaf blowers are used for only a few minutes per week for a given household, except during the leaf season in the fall, while cars and trucks are run for hours per week per household, all year round. Leaf blowers burn 10 to 12 ounces of fuel per week per household, while cars burn several gallons. Bottom

line, more fuel burned means more CO₂. Aspen, Colorado did a [study](#) to find the major sources of CO₂ and lawn care products, let alone leaf blowers, were not even on the scale.

Nitrous oxides (NO_x) are not present in any appreciable amount in exhaust from gasoline powered engines. That's because it takes excess nitrogen and oxygen in the combustion cycle of the fuel to generate NO_x. The nitrogen component is not present in the fuel, rather it is in the general atmosphere, [78% to be exact](#). Only diesel engines generate NO_x because they do run on excess air.

According to the EPA, the particulate matter that is potentially harmful to someone's health is known as PM10 and PM2.5. Nitrous oxides are the source of [particulate matter](#). Since leaf blowers cannot generate PM10 and PM2.5, there is no justification for banning them for this reason. As for their ability to lift PM particles from the ground and suspend them indefinitely, that is not possible. PM10 and PM2.5 particles are already in the air. Because they are so small and lightweight, the wind keeps these particles suspended. The brown haze you see over a city is comprised of these particles. Should it settle to the ground, it will immediately attach itself to a larger particle which when disturbed by a leaf blower, will return to the ground within a few feet of being raised. You can see from the above "Particulate Matter" link, even PM2.5 is not a viable argument for banning the leaf blower.

I see that your advisors equate leaf blowers to the spread of the Coronavirus. It is impossible to say this with any correlation to reality. The best doctors in the land would not be able to substantiate this. At most, the sequestering of people in their home for work is making them realize that neighbors are using leaf blowers, and some of them are noisy.

Everything that was presented in the forum can be exposed as a falsehood, except for noise, if you take the time to read the articles at the following links:

[Are automobiles cleaner?](#)

[What about global warming?](#)

[Are leaf blowers hazardous to your health?](#)

[Greenwich Department of Health](#)

[Dr. Steel's Report to California Legislature](#)

[Excessive Dust](#)

[Dust study and comparison.](#)

[What do Doctors say?](#)

[Education](#)

[Will a ban work?](#)

[Leaf Blower vs. Broom](#)

At one time hydrocarbons, or unburned fuel in the exhaust, were considered the evil source of environmental catastrophe. It caused smog, sometimes called "ozone". Admittedly, automobile manufacturers have done a lot over the years to reduce this constituent in exhaust gasses. But the leaf blower engine has also been improved. Mandated by the EPA, hydrocarbon emission has been reduced by as much as 90%, effective January 2005. See "[Certified Emission Levels](#)". Larchmont can mandate cleaner engines by disallowing blowers built prior to 2005. See [emission label](#) for manufacturing date.

Leaf blower engines may be somewhat dirtier than the automobile, but they are not as dirty as your researchers have led you to believe. When you consider emission improvements and the amount of time per week a blower is used compared to an automobile, [gasoline-powered motor vehicles are 30 to 45 times worse](#). Time of use must be a consideration in this comparison. Some like to cite the Edmonds.com comparison as justification. The [Edmonds comparison](#) has been shown to be invalid, considering the equipment they used to conduct the test.

The other issues are weak at best. Insects extinction? Respect mother nature? Emotional disturbance? I know nothing about these things and have seen no facts concerning them in the 25 years I have been involved in the leaf blower issue. I venture to say that your advisors have nothing more than opinions or assumptions to work with.

Once again, the underlying issue, and the only issue with the gasoline powered leaf blower, is [noise](#). The industry learned of this more than 20 years ago and deliberately addressed this issue in response to complaints. Much has been done to reduce the noise from gasoline powered leaf blowers.

Many statements made more directly about leaf blower noise at the ZOOM meeting are simply incorrect. For example, an increase of 10 dB(A) in sound level is not 100 times louder. Just think what that would mean. If the water pressure in your home was 40 psi, and the measurement of sound is a measurement of pressure, increasing it 100 times would mean the pressure would be 4000 psi. Ten dB(A) higher is less than 4 times louder, not 100. You can [learn the facts](#) about measuring sound from the experts.

In order to understand how sound reduction is quantified, note that for every six dB(A) reduction in sound magnitude (from any starting point on the measurement scale), the actual volume is reduced by 50%. Lower what remains by another 6 dB(A) and the total reduction is 75%.

This much sound reduction is hard to accept as being true for the average person because we cannot comprehend from experience what a 50% reduction sounds like. The best thing to do is to witness an actual leaf blower sound comparison, but I

know that it is not easy to arrange this. An alternative is to check out the [video](#) of an actual demonstration developed for the comparison of leaf blowers on my website.

In the case of a gasoline powered leaf blower, sound level is measured at 50 feet per the industry Standard ([ANSI B175.2](#)). A “Quiet” leaf blower is 65 dB(A) or less, measured per the above Standard. This is at least a seventy-five percent reduction in sound or 12 dB(A), from a typical noisy leaf blower at 77 dB(A).

Quiet leaf blowers have been available for a long time, however, not all leaf blowers are quiet. Therefore, I encourage you to learn more about these quiet blowers before summarily banning them along with the noisy ones.

Fortunately, because of the industry’s foresight, any city that wants to limit the sound emanating from a gas-powered leaf blower can easily determine sound magnitude in the field without testing. The consumer can also determine compliance with local sound limitations at the point of purchase via the attached [label](#). This decal has been on all gasoline powered leaf blowers manufactured in the United States for at least the past fifteen years. If there is no label on a unit, it would not comply.

Battery-powered leaf blowers are becoming very popular among homeowners. My wife loves ours because it is easy for her to use, not that I make her clean the entire yard with it, but because she likes to keep our flower adorned deck free of debris, which seems like an everyday ritual. I use it in the summer to clean a 5400 square foot driveway and courtyard. It does an adequate job clearing debris from paved surfaces and therefore may be viable for the homeowner. It is faster than a broom or rake and does a much better job.

However, battery powered blowers have lower performance than that of a gasoline powered unit, because of their limited available propulsion energy from a battery. This means it takes more time to get the job done. But most homeowners do not mind having to spend a little extra time working in their yard, as long as it doesn’t take too much time. To many, their yard is a source of pride and pleasure, requiring a great deal of care, with a personal touch.

To others, yardwork is a pain. It is just a yard always in need of grooming. These people turn to the yard care professional for this task. Most landscapers consider the battery powered blower inadequate. To make money, they must get the job done fast. This can only be done with a gasoline powered blower.

One other potential obstacle could be enforcement. I don’t know how many enforcement officers you have in your village, but police officers, in most cases, are reluctant to cite their neighbors with leaf blower violations. Not when their primary job is to prevent acts of violence and ardently protect citizens and their property.

Lots of cities have problems with enforcement; Palo Alto, Santa Monica, and Los Angeles just to mention a few.

Just so you know, in some cities, banning gasoline-powered leaf blowers has been very controversial. Lawn care contractors have taken at least one city to [court](#) over a ban. The reason is because it significantly impacts their livelihood.

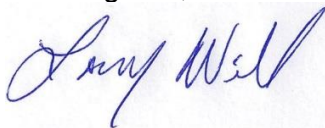
I expect there was little opposition to last spring's banning of blowers temporarily due to the Coronavirus. This is likely because most people felt obligated to comply with anything the government asked them to do that might help make them safe. But banning them full time, forever, is another matter.

I was surprised that there was not even one person objecting to your proposed ban at the referenced board meeting. Was the attendance for your ZOOM meeting fully representative of your community? It is hard to believe homeowners are willing to discard their leaf blowers without comment. Are you asking them to revert to the methods of the early 20th century to care for their lawns, sidewalks, and driveways? Have local landscapers applauded this inconvenience and loss of business because of cost and price increases? Are you prepared for your village to be covered in perpetuity with yard waste; leaves, seed pods, broken twigs, clippings from bushes and such? Cleaning a yard with a [broom is hard work](#) and will not be used to remove debris very often, especially by older people. These are things that can become serious issues in Larchmont as time passes, resulting in many violations, if residents choose not to comply.

People generally do not like more rules, especially if the rule costs them money or infringes on their personal lifestyle. Banning the leaf blower, to many, seems like a subjugation to someone else's lifestyle and ultimately is not well received.

If you should want more technical information about leaf blowers that is not clearly addressed here or on my website, please contact me and I will do whatever I can to help, at no cost to you, including further research on your behalf.

Best regards,



Larry Will. BSME
Leaf Blower Information Specialist
ECHO Inc.
479-256-0282
Email: info@leafblownoise.com

Website: <http://leafblownoise.com/>
To learn more about ECHO:
<http://www.echo-usa.com/About-ECHO/About-Us>