

February 2, 2021

TO: Mayor Tim Rogers, Village of New Paltz, New York
Copy: Deputy Mayor KT Tobin, Trustee William Wheeler-Murray, Trustee Alexandria Wojcik, Trustee Michele Zipp
From: [Larry Will](#) ¹



Reference:

<https://hudsonvalleyone.com/2021/01/31/new-paltz-considers-regulations-for-the-use-of-gas-powered-leaf-blowers/> ²

Dear Mayor Rogers:

I see from the referenced document on the Web that the leaf blower is now an issue in New Paltz. The question is, should you or should you not ban gasoline-powered leaf blowers? Except for that comment that a “ban could include making it more difficult for people who are older or have physical limitations to get leaves out of the way”, most of what you have heard is incorrect or overstated. Encouraging people to just leave the leaves on the lawn has the potential to [damage the grass](#) permanently. The other commenters do not have the knowledge or background to be able to tell when their quote, taken from a biased source, is actually true. Just about everything you hear is based on opinion, either their own or that of someone else’s.

In the case of the linked [report from quiet communities](#), the author of the report, has the agenda of replacing all lawn care gasoline-powered products with battery power. If there is any truth to what is said, it is generalized and is overstated as it relates to a leaf blower. The gasoline powered lawn and garden equipment emission components listed in the report are frightening, but not when you consider that not all

these components are uniquely found in the combustion emission of gasoline fueled lawn care products. Examples of such components are Benzene, butadiene, Acetaldehyde, Formaldehyde, Toluene ([something common to paint and paint thinners and removers](#)), and Polycyclic aromatic hydrocarbons. Even the EPA overlooks these components, with no limitations applied to leaf blowers. These are trace elements if they exist at all. Add to that, keep in mind that the volume of fuel ingested by leaf blowers per week is miniscule, compared to other sources of exhaust emission.

I find it unusual that the EPA would endorse such a report without them doing their own testing or at least acting as an overseer of the data collected. It is not known if the data presented is from present day products or from outdated designs, built prior to the application of emission limitations by the EPA. The report tells you where she gets her information, but it does not provide links to these sources for justification.

It should be of concern to you that what you mostly hear from anti-leaf blower advocates is negative. If I were in your position, I would like to know the other side of the issue and whether what you are being told is factual or not.

Here are some very important facts to consider:

- The only true issue with gasoline-powered leaf blowers is that some of them are noisy. But quiet ones are universally available from several manufacturers.
- Quiet leaf blowers at 65 dB(A), measured at 50 feet, are 85 dB(A) at the ear of the operator. Hearing protection is not required according to OSHA.
- Health hazard and environmental impact issues are overstated if not untrue.
- The operator is more at fault for the blower controversy than is the leaf blower, using the leaf blower at inopportune times and for extended periods of time.
- If you are interested in being educated about the leaf blower, its use and the issues surrounding it, this document and its appendix is where you will find the other side of the story.

Who am I to tell you all this? I am a former Vice President of Engineering for Echo Inc., a leading manufacturer of powered handheld lawn care products. I do not live or work in your community, but what I share with you in this document you will not hear from anyone else in New Paltz. I am not a stakeholder in this leaf blower issue, and I am not trying to interfere with any decision you deem necessary. I just want you to know the other side of the story, so to speak, concerning leaf blowers. More importantly, I am not trying to sell anything. I am just trying to prevent problems for those living in your community. I submit this information as a public service to you, to your city council and to the people that use leaf blowers in New Paltz. That includes the residents that presently own leaf blowers and the contractors that

depend on them to make a living. If you are still uncomfortable with trusting me, someone from outside your community, click [here](#)¹ if you want to see my qualifications and credentials. In this paper, I have provided many links to documents that support the facts I present.

You may be thinking that because there are other cities that have banned leaf blowers, you can't go too far wrong to follow their precedent. One should look into the result of creating such a ban. How will it be enforced? Will homeowners with leaf blowers be upset? How does this impact the elderly? What will be the cost impact to the homeowner, landscape contractor and the city of New Paltz? Will current users comply with your ordinance? Will people go back to rakes and brooms or will they just leave the debris where it lies? Are battery powered leaf blowers truly a replacement for a gasoline version, performance wise?

You can talk to council members from cities that already have a ban, but these are the people that wanted the ban in the first place, and you know what they will say. You need to talk to the enforcers, local lawn care contractors, and homeowners to learn the true impact.

You may not know this, but there are groups of people, from outside your community, working hard to have gasoline-powered leaf blowers banned throughout the country. The author of the quoted Quiet Communities Report is one such person. Because many cities consider noise a weak reason for banning blowers, these organized and well financed ban advocates look for other reasons. The concept of citing health hazards as a 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](#)⁴. 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. Others will then proceed to confidently restate these unproven hypotheses emphatically. I think this is called "[spinning](#)"³.

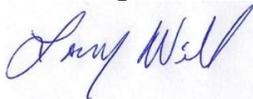
The local people on the other hand, that are trying to convince you to ban leaf blowers are well meaning, conscientious, and dedicated to improving the environment. But they are not professionals. What I mean by not being professional is that none of them are in any way professionally involved in the use, development, or accreditation of gasoline-powered yard care products. I venture to say that they themselves have likely never even used these products personally and therefore

have no concept of how valuable they are to homeowners and professional users, let alone their environmental impact.

Am I biased? Sure. But my bias is to present the facts, based on 25 years of working as an engineer in the yard care industry, dealing directly and personally with organizations such as the California Air Resources Board (CARB), the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), Underwriters Laboratories (UL), and the Outdoor Power Equipment Institute (OPEI). Do I want to preserve the gasoline-powered leaf blower? Yes! But only because I see banning it is unnecessary since noise is the issue and quiet leaf blowers are available today. There is a [label](#)²³ on the unit that tells you what the sound level is, making it easy to enforce your noise restriction, should you choose. In time, when battery-powered units have sufficient power and performance, they will replace gasoline power by their own merits.

Please, read the following appendix to learn more facts about the leaf blower and its use.

Best Regards,

A handwritten signature in blue ink that reads "Larry Will". The signature is written in a cursive style and is positioned above the typed name and contact information.

Larry Will. BSME, Leaf Blower Information Specialist, ECHO Inc.
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APPENDIX

Exhaust Emission

The contribution to pollution of each exhaust constituent from a gasoline-powered leaf blower is not meaningful because the engine is very small on low powered yard care products. Exhaust emission of concern from handheld engines consists of primarily three components:

- carbon dioxide (CO₂),
- carbon monoxide (CO),
- unburned hydrocarbons or fuel.

All other presumed exhaust emission constituents are insignificant or non-existent in small handheld gasoline-powered equipment, including two-stroke engines.

[Greenhouse gas, \(carbon dioxide\)](#) ⁵.

Think in terms of households that drive cars to work and have or use leaf blowers.

Gasoline is a hydrocarbon, which when completely burned turns into water vapor (H₂O) and Carbon Dioxide (CO₂). Carbon dioxide generation is directly proportional to the amount of fuel burned. While driving your car, how many gallons of gasoline do you burn in a week, one tank full (18 gallons)? How many cars in your household are used to drive to work? How much do you burn in a leaf blower in a week? Most likely not more than 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. Even though automobiles have a sophisticated emission control system, none of these controls will reduce the amount of CO₂ generated. Computers and catalytic converters minimize the emission of unburned hydrocarbons by converting them into water and carbon dioxide.

Aspen, Colorado did a [study](#) ⁶ to find the major sources of CO₂, but all lawn care products, of which a leaf blower is only a small part, were not even on the scale.

Carbon Monoxide

Carbon monoxide is of even less concern since leaf blowers are used outdoors. CO is less stable than CO₂ and is likely to dissipate in time. Like carbon dioxide, carbon monoxide is produced in very small amounts, because of the almost trivial amount of fuel being burned. Note that all two-stroke leaf blower engines manufactured after January 2005 have catalysts in the exhaust system to [reduce the generation of carbon monoxide](#) ²⁹ even further.

Hydrocarbon Emission

This is another matter. I am appalled by the statement that two stroke engines allow 30% of the fuel to pass straight through the engine unburned. This comment is only true of engines build 20 years ago. Two-stroke engines may be somewhat dirtier than the automobile, ounce per ounce of fuel burned, but today, they are certainly not as dirty as this incorrect statement leads you to believe. The federal government has set standards for this component, which manufacturers must comply with. Thirty years ago, hydrocarbons, or unburned fuel in the exhaust, were identified to be the source of environmental pollution. 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](#)" ⁷. Cities can mandate cleaner engines by disallowing blowers built prior to the above date. See [emission label](#) ⁸ for manufacturing date.

When you consider hydrocarbon 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](#) ⁹. Time of use must be a consideration in this comparison.

The statement claiming that leaf blower exhaust emission is 300 times worse than a pickup truck is taken from a report by "Edmonds Automotive Website". Obviously, Edmonds.com knows how to test trucks, but they know nothing about testing leaf blowers on equipment designed for testing over the road vehicles. Consider this. The truck they used in their comparison has a 3-inch diameter exhaust pipe and the leaf blower has a 3/8-inch diameter exhaust outlet. That means the truck has an exhaust pipe 64 times larger because it must handle huge amounts of exhaust air flow. Suffice it to say here that this "300 times worse" claim is bogus. To learn the technical reasons why, check out the [report](#) ¹⁰ at my website.

Dust

A totally unsubstantiated claim is that leaf blowers contribute to respiratory allergies, asthma, dizziness, headaches, heart and lung disease, cancer, and dementia. Really? This isn't even logical. Don't be misled by claims that blowers make harmful clouds of dust. If you use a leaf blower, you know this claim is not true. If you don't use one, observe how a professional landscaper uses it. You need to ask; what kind of hazardous dust are we talking about? 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 this kind of [particulate matter](#) ¹¹. Leaf blowers cannot generate PM10 and PM2.5 because the engine does not run on excess air, something required to generate NOx, which only diesel engines can do. So, there is no justification for banning them for this reason.

As for their ability to lift existing fine particles from the ground and resuspend 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. When it settles to the ground due to rain or high humidity, it will immediately attach itself to a larger particle. You know this is true from experience for if it were not, there would be no such thing as a clear day. When larger particles are disturbed by a leaf blower, they 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.

Covid-19

Recently, the misery caused by COVID-19, the new scourge for 2020 and 2021, has been falsely tied in part to the leaf blower. It all has to do with noise, not the disease itself. Working at home can be different from what people are used to because of the noise outside their window. I say different because where is there an office that is absolutely silent. Leaf blower noise is just different. Noise from a vacuum cleaner is also atypical from office noise. I very much doubt that vacuums will be banned.

Noise

[Noise](#)²⁰ has long been associated with the leaf blower, but there is a way this noise can be mitigated without an outright ban. The simplest and most obvious thing to do is limit the number of hours during which they can be used.

As for the blower itself, the industry deliberately addressed the noise issue in response to complaints 20 years ago. Millions of dollars have been spent designing, testing, and revising their manufacturing assembly lines, in order to reduce the noise from leaf blowers.

In the case of the gasoline-powered leaf blower, sound level is measured at 50 feet per the industry Standard ([ANSI B175.2](#))²¹. 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).

This much sound reduction is hard to accept as being true for the average person because we cannot comprehend from experience what a 75% 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. Today, there is a [video](#)²² of an actual demonstration developed for the comparison of leaf blowers on my website.

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](#)²³. 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 does not comply.

Even though quiet leaf blowers have been available for a long time, not all leaf blowers are quiet. Therefore, I encourage you to learn more about these quiet blowers and if a ban is in order, [ban only the noisy ones](#)²⁸.

Other perceived leaf blower issues

Almost everything that can be presented, other than noise, can be exposed as a falsehood when attributed to a leaf blower, if you take the time to read the articles at the following links:

[Are automobiles cleaner?](#)⁹

[What about global warming?](#)⁵

[Are leaf blowers hazardous to your health?](#)¹¹

[Greenwich Department of Health](#)¹²

[Dr. Steel's Report to California Legislature](#)¹³

[Excessive Dust](#)¹⁴

[Dust study and comparison.](#)¹⁵

[What do Doctors say?](#)¹⁶

[Education](#)¹⁷

[Suggested Ordinance Content](#)²⁸

[Will a ban work?](#)¹⁸

[Leaf Blower vs. Broom](#)¹⁹

Banning Issues

In some cities, banning gasoline-powered leaf blowers has been very controversial. Lawn care contractors have taken at least one city to [court](#)²⁴ over a ban. The reason is because it significantly impacts their livelihood.

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.

Doing what other cities have done may not be the right thing to do. If one is hearing leaf blowers every day, especially in the fall, it is only because people value the aesthetics of their property. The leaf blower is an important part of maintaining that appearance in a city with landscaped homes.

LINKS TO REFERENCES

1. <http://leafblownoise.com/Abouttheauthor.pdf>
2. <https://hudsonvalleyone.com/2021/01/31/new-paltz-considers-regulations-for-the-use-of-gas-powered-leaf-blowers/>
3. [https://en.wikipedia.org/wiki/Spin_\(propaganda\)#:-:text=In%20public%20relations%20and%20politics,some%20organization%20or%20public%20figure.](https://en.wikipedia.org/wiki/Spin_(propaganda)#:-:text=In%20public%20relations%20and%20politics,some%20organization%20or%20public%20figure.)
4. <https://www.newyorker.com/magazine/2010/10/25/blowback>
5. https://www.leafblownoise.com/#Consider_greenhouse_gasses
6. https://www.leafblownoise.com/Emissions%20Inv%202004_ExecSumm.pdf
7. <https://www.leafblownoise.com/emission%20graph.htm>
8. <https://www.leafblownoise.com/sound%20and%20emission%20label%20explanation.pdf>
9. https://www.leafblownoise.com/#Are_automobiles_cleaner
10. <https://www.leafblownoise.com/edmonds%20test%20response2.pdf>
11. https://www.leafblownoise.com/#Are_leaf_blowers_hazardous_to_your_health
12. https://www.leafblownoise.com/#Greenwich_Department_of_Health_Statement
13. https://www.leafblownoise.com/#Dr._Nancy_Steele,_of_the_California_Air_Resources_Board_
14. https://www.leafblownoise.com/#Excessive_dust
15. https://www.leafblownoise.com/#Dust_study_and_comparison
16. https://www.leafblownoise.com/#What_do_Doctors_say
17. <https://www.leafblownoise.com/#Education>
18. https://www.leafblownoise.com/#Will_a_ban_work
19. https://www.leafblownoise.com/#Leaf_Blower_vs._Broom
20. https://www.leafblownoise.com/Measuring_Sound.pdf
21. <https://www.leafblownoise.com/Annex%20A.pdf>
22. <https://youtu.be/we53mukGUA8>
23. https://www.leafblownoise.com/typical_sound_label.htm
24. <https://www.tapinto.net/towns/soma/articles/nine-local-landscapers-sign-on-to-new-leaf-blower>
25. info@leafblownoise.com
26. <http://leafblownoise.com/>
27. <http://www.echo-usa.com/About-ECHO/About-Us>
28. <https://www.leafblownoise.com/Suggested%20ordinance%20contents.pdf>
29. [https://www.abe.iastate.edu/extension-and-outreach/carbon-monoxide-poisoning-vehicles-aen-208/#:-:text=The%20typical%20catalytic%20converter%20found,ppm%20after%20the%20catalytic%20converter\).](https://www.abe.iastate.edu/extension-and-outreach/carbon-monoxide-poisoning-vehicles-aen-208/#:-:text=The%20typical%20catalytic%20converter%20found,ppm%20after%20the%20catalytic%20converter).)