

January 4, 2020

TO: **Mayor Denise Athas**
Mayor Pro Tem Pat Eklund

CC: **City Councilmembers**

From: [Larry Will](#)



Reference: Potential Leaf Blower Legislation

<https://www.marinij.com/2019/12/23/novato-to-consider-gas-powered-equipment-prohibition/>

According to the above article on the Internet, Novato is considering an ordinance to restrict or eliminate the use of all gasoline powered lawn care equipment. It seems obvious that the reasons are based on information gathered from sources dedicated to banning leaf blowers. By association, other lawn care products are now being given the same attention. Asking to ban all lawn care products but settling for banning just the leaf blower, is likely another anti-leaf blower advocate's tactic.

I am a former [Vice President of Engineering](#) for a leading manufacturer of lawn care products. I am not a stake holder in the above proposed regulation, nor am I trying to interfere with any decision you deem necessary for your city, but I am a source of facts that you should consider before you make up your mind on this issue. The information I have included in this commentary is based partly on my own personal experience of 26 years within the industry and partly on reputable sources of information to which I provide Internet links. As a leaf blower expert in design, manufacture, and application, I am in a unique position to supply up-to- date and accurate data and facts.

Unfortunately, the information you have already gathered to justify a move to ban gasoline powered lawncare products, according to the above article, is not based on real facts. Furthermore, often these so-called facts are out of context or are simply incorrect. As an example, greenhouse gas is not the same thing as hydrocarbon exhaust emission. Emission percentages of the total number of lawn care products, taken from a CARB statement quoted in the above article, is not applicable to products that meet current emission Standards. The formula they used likely assumes that there will be a substantial number of battery powered vehicles in use by 2031, which is a dubious assumption. Since I am most familiar with leaf blowers, I would like to focus my

comments here on gasoline powered leaf blowers. However, my comments are analogous to all gasoline powered lawn care products.

Clearly many gasoline powered blowers are used inappropriately, early in the morning, later in the evening, even on Sundays and holidays. This issue resides squarely with the private homeowner that uses a leaf blower. This person likely works full time and can only do yard maintenance work before or after normal business hours, including weekends. To some extent, this is an education issue, which I will explain later how I can help with that.

Homeowners usually buy inexpensive leaf blowers, which are always underpowered. This results in them using the blowers for several hours before the job is done. The professional uses larger blowers and usually runs them at any one location for only 10 minutes or so.

A plan to ultimately ban all forms of gasoline powered lawn care equipment (lawn mowers, string trimmers, edgers, hedge clippers and leaf blowers), will be an impossible task. The lawn care contractors will likely take you to [court](#). You will be putting them out of business. I have been fully involved in the restrictions being applied to leaf blowers and I can assure you that opposition to a ban such as this will be substantial. Addressing the leaf blower alone will be a controversial action but banning all lawn care equipment will be just plain devastating, to the user as well as to Novato. The reason is because eliminating this tool will impact a lot of people, voters as well as professionals that want or need blowers. You may not hear many ban opposing arguments at your council meetings because these people are not as well organized as those asking for a ban, but you will surely hear from them once the ordinance is implemented.

I look at it this way. Try asking your housekeeper to keep the house clean without her vacuum cleaner. If you are married to your housekeeper, you may have an even bigger problem. Some tools are just indispensable.

I gather that the impetus behind this program is sound magnitude and greenhouse gas. I will discuss later the facts concerning exhaust emission, but in the end, the real issue is the noise generated by gasoline powered leaf blowers and when they are used. At first glance, banning them seems like an easy thing to do, after all, there are battery powered leaf blowers available today.

For the homeowner with a small yard to care for and with time on their hands, battery powered blowers may be a viable option. However, for the lawn care contractor, a

battery powered blower will not work. Rakes and brooms are too inefficient to even be considered.

The cordless electric blower, from a performance standpoint, is just not there yet for the professional. Also, outfitting a contractor's workers with battery powered blowers is very expensive. One battery, for example, will cost them around \$1000, and that will only give him one hour of use.

<https://www.stihlusa.com/products/battery-products/battery-charge-run-times/>

<http://www.gardenland.com/product/stihl-ar3000-backpack-battery/>

I suggest you talk to several lawn care contractors that serve your community in order to find out just how such an ordinance will impact them. Increasing their cost will reflect back directly to their customers and your constituents, whom are not going to like paying more for a lesser quality of work.

People do not like more rules, especially if the rule costs them money or infringes on their personal lifestyle. Banning the gasoline powered leaf blower, to many, seems like a subjugation to someone else's lifestyle. It's best, therefore, to keep any regulation you decide on very simple, reasonable, fair and as painless as possible. As suggested in the article, implementation should be imposed at some later date, perhaps one to three years in the future, to give people time to adjust to the requirement and amortize the increased cost. So, here are my suggestions:

1. Require that gasoline powered leaf blowers be limited to 65 dB(A) in residential areas as measured per ANSI Standard B175.2. How quiet is 65 dB(A)? Here is a [video to give you a feel](#). Note that, unlike the popular conception, the electric leaf blower is noisier than the quiet gasoline powered blower. The industry has improved the sound signature of quiet leaf blowers by 75%, which may not be well known to the average person. Manufacturers of leaf blowers, in response to complaints from the field, have spent millions of dollars to provide a solution to the leaf blower noise problem. Testing in the field would not be required because a sound label is attached to the housing by the manufacturer.

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

In other words, ban the noisy leaf blower, not all gasoline powered leaf blowers.

2. Develop printed materials for the purpose of educating and informing the private user, as well as the professional, on how to safely and properly use a leaf blower, including acceptable hours of use. It can be made available via your website and through your enforcement agency. Here are some examples:

https://www.leafblownoise.com/Pointers_Operating_Leaf_Blower_flier.pdf

<https://www.leafblownoise.com/LeafBlowerTraining.pdf>

3. Limit hours of use, such as not allowing leaf blower use on Sundays and holidays, and not before 8:00 am or after 7:00 pm on days when they are allowed.

In the referenced article, issue is taken regarding [greenhouse gas](#) generated by two stroke engines, which is not to be confused with hydrocarbon exhaust emission. I'm sure you know that we are talking about carbon dioxide (CO₂). Aspen Colorado, a non-industrial city, wanted to know what was causing greenhouse gasses in their community. Where is the CO₂ coming from? They found that 555,660 tons of CO₂ were emitted from the transportation sector. That represents 66% of all the greenhouse emissions in Aspen in 2004. The other major contributor is the power generation sector. The data is outdated, but the proportions have changed little over the past 15 years. Lawn care equipment was not even measurable.

https://www.leafblownoise.com/Emissions%20Inv%202004_ExecSumm.pdf

Consider the following:

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. 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? 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. None of the emission controls imposed on the car engine will reduce the amount of CO₂ generated. Computers and catalytic converters minimize the emission of unburned hydrocarbons, not CO₂.

With respect to [hydrocarbon exhaust emission](#), I would first like to point out that banning a product for the sake of this type emission is illegal. Only the EPA has the authority to regulate exhaust emissions from small engines in the United States. In California, under sanction from the EPA, CARB is the controlling entity. Per [Section 209](#) of the Federal Clean Air Act, all other States or subdivisions thereof are preempted from controlling emissions, including through the means of banning. A copy of a letter from the Outdoor Power Equipment Institute (OPEI), Alexandria, Virginia, to Solana Beach, California, at the following website explains it more precisely: [OPEI letter to Solana Beach](#)

If hydrocarbon exhaust emission is truly of concern, require that all lawn care products meet the [lowest allowable level](#) per the CARB Standard. In other words, any product manufactured prior to January 2005 should be disallowed.

There are many unsubstantiated arguments, other than noise, pointing to reasons why gasoline powered leaf blowers should be banned. But you should be wary of quotations based on opinion and derogatory innuendo. Some blower ban advocates have impressive titles, but most of these sources have no real understanding of the modern leaf blower's design or its uses. I think it would be a mistake to not give at least the

same attention to the other side of the issue, in contrast to the condemnation of the blower. As other issues are brought up, such as perceived health hazard or dust, you can find help in understanding the facts at my [website](#).

I know personal opinion from residents is important to a representative government official, but other things should be given equal consideration. What will private individuals in Novato think about a ban that requires them to throw away a costly leaf blower? Are elderly people on a fixed income expected to use rakes and brooms? What about those that need them in their jobs? Have you determined how you might enforce a leaf blower ban? Lots of cities have problems with these issues, Palo Alto, Santa Monica, and Los Angeles just to mention a few. Give serious thought to ban alternatives. Explore and understand what changes and improvements have been made to the gasoline powered leaf blower. Keep in mind that the issue here is noise and how it is used, not the gasoline powered leaf blower in general.

If you should need information 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>