

June 12, 2017

**Mayer Toni Harp
and
New Haven, CT Board of
Aldermen**

RE: Potential Leaf Blower Legislation

I just read several articles on the Internet covering a presentation made by Dr. Karen Jubanyik, a medical doctor and Yale School of Medicine Professor, whereby she strongly indicated to your Environmental Advisory Council that she feels gasoline powered leaf blowers should be banned. She says that lots of cities already have leaf blower bans, but what she doesn't tell you is that none of them work. Let me give you just one notorious example:

<http://leafblownoise.com/Santa%20Monica%20Problems.pdf>

She specifically tells of the ban in Los Angeles, but the police refuse to enforce it. For some not so mysterious reason they feel they have better things to do than chase down leaf blower operators.

I am a retired Vice President of Engineering for ECHO Inc., a leading manufacturer of gasoline powered lawn care products, including leaf blowers. As an expert in the field, I disseminate 'up to date' information about modern leaf blowers throughout the United States and Canada. I have consulted with more than 160 cities over the past 15 years, helping to resolve the leaf blower noise problem in their communities. I address all the issues surrounding the leaf blower and provide them with knowledge they will not acquire from those that have a strong dislike for leaf blowers. You see, most leaf blower detractors have never even used a leaf blower and have no concept of how useful and important they are to lawn care providers and residents that depend on them. Opposing stakeholders in this issue are highly polarized and are generally intolerant of the other's point of view. It is not always obvious which way to go as you seek to develop workable leaf blower controls. I can help put things in perspective for you.

Dr. Jubanyik says she is an educator and knows how to do research, but somehow she managed to miss my website and the multitude of references that back up what I say. Now I know it will be difficult for you to question someone with such high credentials, but you should ask yourself; where did she find the data she uses to justify her convictions? I can tell you where. She found it on the websites of those that blindly hate the leaf blower, and there are many such sites. Leaf blower ban advocates are very well organized and committed to their cause. But repeating a falsehood in several places does not make it a fact. The real fact is she is not a leaf blower expert any more than I am a medical expert. I can say this because much of what she is stating is simply not true, not as it applies to leaf blowers built in the last 12 years. I will call your attention to

the obvious inaccuracies in this letter, but before you make any decision regarding a regulation, you should visit my website for all the facts (<http://leafblowernoise.com/>). I am an engineer and my expertise is highly focused, which is typical of engineers, and in my case, my focus is and has been on leaf blowers for the past 23 years.

You see, the one and only issue with the leaf blower is noise. Everything else you hear is contrived to support the banning of leaf blowers for the sake of eliminating the noise. For the most part, city councils are reticent to banning blowers based on noise alone. So people like Dr. Jubanyik are brought in to make other emphatic, but unsubstantiated claims. In effect, it is only her opinion and that of others with a like mindset that she is relating.

As for Dr. Jubanyik's claims, let me address them one by one. To start with, she states that one-third of the fuel entering the two stroke engine does not combust and is emitted directly into the environment. This is a true statement for leaf blowers older than 15 years. But since 2005, after a five year phase in period, exhaust emission was reduced by as much as 90%. <http://leafblowernoise.com/emission%20graph.htm>

She talks about the oil mixed with the gasoline used by two stroke engines as being a contributor to emissions. Gasoline used in old engines had a 16 to 1 ratio of gasoline to oil. Today's engine is 50 to 1 and some are as low as 100 to 1. The blue smoke in the exhaust of older designs is nonexistent today.

This lady and others just love to quote the test report from Edmonds.com, where they try to compare exhaust emission from a leaf blower to a large Ford pickup truck. There are many technical engineering reasons why this test is invalid, which you can read about at the following website <http://leafblowernoise.com/edmonds%20test%20response2.pdf>, but from a practical point of view, consider that the equipment they used is incompatible with the leaf blower. It is designed for sampling exhaust from a 100 to 300 horsepower engine with a two to three inch diameter exhaust pipe (7 in² cross section), having a tremendous airflow volume. By comparison, the 3 horsepower engine they tested has a ½ in diameter exhaust pipe (0.2 in² cross section) having a miniscule airflow volume. The condensation factor alone due to the slow airflow rate will render the results inaccurate. Also, the emission from the Ford truck is evaluated in hydrocarbons per mile over many different engine speeds and the leaf blower is measured in hydrocarbons per horse power hour. Apples and oranges, if you know what I mean.

She says that a two stroke leaf blower creates 23 times more carbon monoxide than that of a Ford Raptor. This is definitely not so. Carbon monoxide production is in directly proportional to the amount of fuel consumed because both the truck and today's

leaf blowers have catalysts in the exhaust system to minimize that. Also, since fuel consumption is the source of this exhaust constituent, a leaf blower's fuel consumption is measured in ounces and from your own experience, you should know about how much fuel can be used in a truck or any vehicle, for that matter, in a week's time. For any given household, a car can use 18 gallons per week simply going to and from work while a leaf blower's consumption might be 10 ounces, blowing grass clippings off the driveway and sidewalk after cutting the grass once a week.

I really like this one. She said she talked to an engineer from Edmonds.com that said hydrocarbon emissions from a two stroke leaf blower running 30 minutes is the same as a Ford pickup running from Texas to Alaska or 3900 miles. Wow. Maybe if it was running on battery power. The most interesting part to me is that these same engineers will not talk to me. I have offered to fly out to their office to discuss their findings, but they will not respond to my overtures. This tells me that they know their findings will not stand up to technical scrutiny.

Then she talks about noise pollution. Okay, I'll grant you that there are leaf blowers that are very noisy, some over 80 dB(A) measured at 50 feet, but there are also extremely quiet gasoline powered leaf blowers which measure 65 dB(A) at 50 feet per the ANSI B175.2 industry Standard. The quiet leaf blower has been available and on the market for twenty years. I can guarantee there are many quiet leaf blowers in New Haven, but the problem is, if there is only one noisy blower in the neighborhood, all leaf blowers are reviled. Many cities write ordinances that outlaw the noisy blowers. This type of ordinance works well where a ban never will. Landscape contractors will readily use quiet leaf blowers and discard their old noisy ones, but they will ignore a ban for they cannot adequately do their job without a leaf blower. The leaf blower has become an indispensable tool for landscapers.

Dr. Jubanyik then talks about the danger of people inhaling contaminants such as pollen, mold, pesticides and other chemicals potentially introduced by leaf blowers. Except for the fall of the year during leaf season, leaf blowers are used primarily on hard surfaces doing cleanup after a strong wind or after cutting the grass. If you want to address these contaminants, outlaw the power mower for this device disturbs every square inch of the area where these contaminants originate, that being the lawn.

Council Vice Chairman Kevin McCarthy is right when he laments that there may not be legal authority for banning leaf blowers. One thing for sure, it is illegal for New Haven to ban blowers for the sake of exhaust emission per the Federal Clean Air Act, 1990 Sec. 209. (a), which is the authority for emission controls imposed on leaf blowers by the EPA:

<http://leafblowernoise.com/Taken%20from%20the%20Federal%20Clean%20Air%20Act.pdf>

I would like to give you some insight on the people drawn into this issue. There is an article on my website that addresses this important matter based on my own personal experience over the past several years. ([People and their leaf blower issues](#)) You will learn from this that you must find a way to satisfy both sides of the issue, should you decide to promulgate an ordinance to control leaf blowers.

Noise can be reduced to a point where there will no longer be any complaints if you allow only quiet leaf blowers. Your enforcement agency need not measure for 65 dB(A) in the field because noise levels are labeled on the unit by the manufacturer. If your ordinance requires this label and there is no label, it simply does not comply. Chances are you are dubious about my claim that these blowers are truly quiet, thinking that although they might in fact be somewhat quieter, they are still too noisy. You need only ask one of your constituents familiar with leaf blowers to give you a sound comparison demonstration. It is important that you compare a blower at 77 dB(A) or higher with one at 65. I know you will be impressed. This represents at least a 75% reduction in sound. If you need help with that, I can arrange for a sound demonstration convenient to you through a local stakeholder.

Now please don't think that I am just trying to sell ECHO leaf blowers because as you know, we have been selling quiet leaf blowers for 20 years. Your ordinance will only be requiring that they use them exclusively. Half of the leaf blowers we offer are at 65 dB(A). As for the rest of our product line, more than half of these are at 70 dB(A), which is a 50% reduction in sound. Today, we are not the only manufacturer selling quiet leaf blowers. We were just the first to offer this valuable option. Many cities have already taken the step of outlawing noisy blowers and this action has ultimately been supported by landscapers. Why? It's because he loses money if he must use a battery powered blower and/or a broom or rake.

You know, quiet leaf blowers, blowers at 65 dB(A), are as quiet as electric units. In most cases, they are even quieter because electric blowers scream and quiet gasoline powered blowers do not. So if you hear an argument that electric blowers are always quieter, don't believe it. Check it out. This can be demonstrated at a comparison test as well, along with the noisy gasoline blower mentioned above.

One more thing! The blower is not to blame for everything in this controversy. Don't forget the operator. More than not the issue is when and where the blower is being used. Education is the solution to that problem and we have pamphlets to help you get the word out. You can use these pamphlets as a starting point for your own publication,

setting down allowable hours and days of use and other requirements of your new ordinance.

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

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

In closing, before enacting a leaf blower ordinance, be sure to talk to cities that already have bans in place. More specifically, talk directly with their enforcement agency. Leaf blower ban supporters will not tell you this, but as I said earlier, I think you will find that they are unable to enforce a ban if the landscapers do not buy into it. What you want is to make sure landscape service providers support your ordinance voluntarily and to accomplish that, you should have your Environmental Advisory Council meet with them. It is an important subject to them and it will take more time than that allowed at a typical council meeting for these stakeholders to properly relate all their concerns.

If you should need information that is not clearly addressed on my website or the linked documents I have provided, please contact me and I will do whatever I can to help, including further research on your behalf.

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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