

# **Environmental Commission, West Windsor Twp, NJ**

## **The Challenge of the Gasoline Powered Leaf Blowers**

Gasoline powered leaf blowers are used by homeowners as well as commercial landscape companies [1-17].

The benefits touted by the landscaping industry include:

**1) Leaf blowers are great for clearing large areas quickly.**

Rakes require more physical effort and can be slower for large spaces. If you have a huge lawn or driveway, a rake won't cut it. You need a leaf blower to efficiently move a large number of leaves. Otherwise, the job will take too long. It's hard to overstate how much faster a leaf blower is than a rake. A job that will take hours with a rake can be finished in minutes with a leaf blower.

Unlike rakes, leaf blowers can be used for several other tasks, like cleaning gutters, drying a car, or clearing snow from a driveway. Leaf blowers can be better for a lawn, too. Using the wrong rake can tear up your grass, ruining your lawn [18].

While they can provide an efficient approach to removing leaves from lawns, there are a number of negative aspects to using gas-powered leaf blowers:

**1). They generate noise**

The sound pressure levels of these machines exceed 95 A-weighted decibels (dB[A]) at the ear of the operator and typically 65–80 dB(A) at 50 feet. Comparing these levels to daytime sound standards set by the World Health Organization (WHO)-these levels are upwards of 15 dB(A) higher than the recommended 55 dB(A) [19].

**2). They generate dust**

Fugitive dust is not a single pollutant, but rather is a mixture of many subclasses of pollutants, each containing many different chemical species. Many epidemiological studies have shown statistically significant associations of ambient particulate matter levels with a variety of negative health endpoints, including mortality, hospital admissions, respiratory symptoms and illness, and changes in lung function [19].

**3). They increase air pollution due to the combustion of the gasoline/oil mixture**

Carbon monoxide (CO) is a component of exhaust emissions which causes health effects ranging from subtle changes to death. At low exposures, CO causes headaches, dizziness, weakness, and nausea. Children and people with heart disease are particularly at risk from CO exposure. Some toxic compounds in gasoline exhaust, in particular benzene, 1,3-butadiene, acetaldehyde, and formaldehyde, are carcinogens. Ozone, formed in the presence of sunlight from chemical reactions of exhaust emissions, primarily hydrocarbons and nitrogen dioxide, is a strong irritant and exposures can cause airway constriction, coughing, sore throat, and shortness of breath [20].

**4) They denude the soil**

As its name implies the leaf blower's primary benefit is gathering leaves for disposal. When leaves are removed, soil is denuded of this natural mulch. Leaf litter benefits the soil by increasing organic matter, preventing erosion caused by wind and rain, and by keeping the soil cool in the summer months. It also saves water and reduces the need for irrigation. For these reasons, blowing leaves off soil areas is now considered a poor management practice, and should be avoided [21].

Current options of going with artificial turf also result in soil degradation (although not directly related to the issue of gas-powered leaf blowers) [22].

**5) They are not necessarily the fastest method to remove leaves**

In fighting the ban on gas-powered maintenance gardeners have argued that it would take them twice as long to do jobs if they had to use rakes and brooms. But Diane Wolfberg, a Palisadian grandmother in her late 50s, proved them wrong in tests conducted by the Department of Water & Power Leaf blower Task Force last Thursday.

In three tests involving gas powered leaf blowers and battery powered leaf blowers, Diane cleaned the areas using rakes or brooms faster than any of the battery powered blowers and almost as fast as the gas powered leaf blowers and she did a better job in cleaning up the areas [21].

Fueled by these negatives, over 200 U.S. communities have enacted legislation to prohibit or reduce the use of gas-powered leaf blowers [23]. West Windsor Township is not immune from the negative impacts of gas-powered leaf blowers. Options for the West Windsor Council to consider include:

- 1) Banning all gas-powered leaf blowers;
- 2) Restricting the dates and times of operation; and,
- 3) Providing incentives for the use of electric-powered leaf blowers.

Some of our neighboring New Jersey communities, as well as elsewhere in the United States, have taken steps to reduce the negative impact of these gas-powered leaf blowers.

**Princeton's Sustainable Landscaping Steering Committee Ordinance #2021-32 notes [24]:**

(1) From March 15 to May 15 each calendar year and October 1 to December 15 each calendar year, no person shall operate, or cause or permit the operation of, any gas-powered leaf blower at any time on Sundays, New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving or Christmas, or other than between the hours of 8:00 a.m. and 8:00 p.m., Mondays through Fridays, and 8:00 a.m. and 5:00 p.m. on Saturdays.

(2) From May 16 to September 30 each calendar year, and from December 16 to March 14 the following calendar year, no person shall operate, or cause or permit the operation of, any gas-powered leaf blower at any time.

(3) The operation or use of gas-powered leaf blowers shall not be prohibited during the days and times set forth in subsection (p)(1) and (2) when used in response to a bona fide

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emergency, such as to clear a walkway, driveway or street from debris following a storm or other natural disaster.

The **District of Columbia** has **banned** gas-powered leaf blowers as of 2022 [25].

**California** has **banned** these leaf blowers, noting, “The California Air Resources Board today approved a measure that will require most newly manufactured small off-road engines such as those found in leaf blowers, lawn mowers and other equipment be zero emission starting in 2024. Portable generators, including those in recreational vehicles, would be required to meet more stringent standards in 2024 and meet zero-emission standards starting in 2028” [26].

**New Jersey** had Senate Bill 437 in 2022. It would ban gas-powered leaf blowers. It was “introduced – dead” on January 11, 2022 [27].

New Jersey Towns

**Maplewood** Township Committee unanimously voted to **ban** the use of gas-powered leaf blowers within the township effective January 1, 2023. This prohibition includes all adapted uses of gas-powered leaf blowers such as for gutter cleaning or for the application of chemicals or products to treat bug or insect infestation [28].

**West Orange** has prohibited (**banned**) gas-powered blowers anywhere in the Township for any reason as of January 1, 2025 [29].

**Glen Ridge** notes, “The Borough of Glen Ridge hereby finds that the unlimited use and operation of Leaf Blowers impairs the environmental, social welfare, health, peace and quality of life of persons residing in Glen Ridge. The Borough of Glen Ridge wishes to strengthen its commitment to public health and wellness and environmental sustainability. The purpose of this Ordinance is to minimize the adverse impact of Leaf Blowers by restricting their use within the Borough” [30].

Limitations for the use of these leaf blowers include:

(1) The use and operation of Gas-Powered Leaf Blowers are permitted in each calendar year only during the period from April 1 to May 15, inclusive, and during the period from October 15 to December 15, inclusive. *They are otherwise not permitted.*

(2) During the periods allowed by (1) above, Gas-Powered Leaf Blowers may be used and operated only as follows:

- (a) Mondays through and including Fridays between 8:00 a.m. and 6:00 p.m., except that Gas-Powered Leaf Blowers may be used by an occupant or owner of the premises or the non-paid agents or invitees of such occupant or owner between 8:00 a.m. and 8:00 p.m.
- (b) Saturdays between 9:00 a.m. and 6:00 p.m.
- (c) Sundays and legal holidays in the State of New Jersey between 10:00 a.m. and 5:00 p.m.

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MUFFLERS: It shall be a violation hereof to operate any Gas-Powered Leaf Blower or Turbo Blower in the Borough of Glen Ridge without a properly functioning muffler.

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The examples, above, provide West Windsor Township options to consider when addressing the “leaf blower problem”. We have company, as many groups across the nation are tackling this issue [31].

Options are noted above (banning; limiting times of use; providing incentives for homeowners and commercial operators to switch to electric blowers).

It is proposed that:

1) The commercial operators be asked their “opinion” on switching to electric blowers. Be aware that there is a lot of pushback from the landscape industry [32]. Many of the bases for their objections are not frivolous. The township needs to anticipate these legitimate concerns (mainly financial).

2) Sufficient number of WWT Residents be queried to learn what their concerns are.

3) The WWT EC present these options to the Council, along with a referenced review of the negatives associated with use of gas-powered blowers (details on air pollution, noise pollution, etc.).

4) The WWT will have an open meeting where residents and commercial operators can make their positions known officially (our prior queries will prepare the Council for what is expected from the open meeting participants). The Council should then be prepared to query homeowners and commercial operators on specifics of their opinions/rejections.

5) The Council will then recommend (to the Mayor) the best options for the Township.

Once these inputs are received and reviewed, a draft ordinance would be proposed. Toward that end, a “Model Ordinance” is available for review [33]. This issue has infiltrated many communities across the nation. Interestingly, HD Supply is providing courtesy information of each state’s regulations [34]. By example, for New Jersey it lists:

Princeton: Noise and/or Time of Day Restrictions.

Montclair: Seasonal gas blower ban.

For New York the regulations are listed by individual township.

Impact Statements need to be associated with whatever our final proposal is. By example, from the Portland, OR experience the following should be included in each Impact Statement [35]:

Purpose of Proposed regulatory action and Background Information

Financial and Budgetary Impacts

Community Impacts and Community Involvement

## References

1. *Jose Landscaping Services, 2535 Nottingham Way, Trenton, NJ 08619. 609-851-5216.*
2. *Garden Lawn Maintenance, 991 US Highway 22 STE 200, Bridgewater, NJ 08807, 908-922-5439.*
3. *Blue Grass Lawn Service, 100 Industrial Dr, Ivyland, PA 18974, (215) 712-1544; (215) 364-7000; (609) 362 2612 (NJ).*
4. *Ecosystems Total Outdoor Solutions, 900 NJ-33, Freehold, NJ 07728, 732-250-3367; (732) 210-9467.*
5. *BeLawnSmart Landscaping & Sprinkler Irrigation, 379 Princeton Hightstown Rd, East Windsor, NJ 08520, 856-438-3854.*
6. *Greenlawn Sprinkler LLC, 946 Adelpia Rd, Freehold, NJ 07728, (732) 294-9557; 800-372-3014.*
7. *Royal Irrigation, 8 Timber Ln, Marlboro, NJ 07746, 732-993-7300.*
8. *MVP Lawn Service and Landscape, Medford, NJ, 609-444-7470.*
9. *Infinite Landscapes, Sicklerville NJ 08081, 856-878-2700; 215-948-2513.*
10. *Carney Landcaping & Hardscaping, Hainesport, New Jersey 08036, 609-251-2384.*
11. *Lawn Doctor of SE Mercer & Middlesex County, 7F Jules Ln, New Brunswick, NJ 08901, (732) 246-1101; 732-355-3680.*
12. *Greener Turf Management LLC, Hatboro, PA, 888-360-8873; (215) 674-2310.*
13. *Cousin LawnCare LLC, Piscataway, NJ 08854, 908-510-1081.*
14. *Best Cut Lawn Care & Landscaping, PO Box 991, Delran, NJ 08075, 856-461-3169.*
15. *Expert Lawn Care Services inc., Edison, NJ 07080, 610-357-0512.*
16. *Intelliscape Landscaping and Lawn Care, 314 Dey Grove Rd, Monroe Township, NJ 08831, 732-620-7452.*
17. *Fisher Property Maintenance, 88 Springers Rd Suite C, Bridgeport, NJ 08014, 609-670-9005.*
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19. Erica Walker and Jamie L Banks. *Characteristics of Lawn and Garden Equipment Sound: A Community Pilot Study.* 2019; Available from: [https://pmc.ncbi.nlm.nih.gov/articles/PMC6707732/#:~:text=Commercial%2Dgrade%20machines%20account%20for,\(A\)%20at%2050%20feet](https://pmc.ncbi.nlm.nih.gov/articles/PMC6707732/#:~:text=Commercial%2Dgrade%20machines%20account%20for,(A)%20at%2050%20feet).
20. California Environmental Protection. Agency - Air Resources Board, *A REPORT TO THE CALIFORNIA. LEGISLATURE ON THE POTENTIAL HEALTH AND ENVIRONMENTAL IMPACTS OF LEAF BLOWERS.* 2000, Mobile Source Control Division.
21. Terra Nova Ecological Landscaping, *The Blow by Blow on Leaf Blower Abuse.* 2012.
22. Jackie Greger. *Fighting Artificial Turf in New Jersey.* 2024; Available from: <https://act.sierraclub.org/events/details?formcampaignid=701Po00000UHtBilAL&mapLinkHref>.

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23. Jim Beckerman. *North Jersey towns have put restrictions on gas leaf blowers. Will the state move next?* 2024; Available from: <https://www.northjersey.com/story/news/new-jersey/2024/08/16/nj-leaf-blower-restrictions-lisa-swain/74533246007/>.
24. Borough of Princeton, N.J. *Ordinance #2021-32*. 2021; Available from: <https://www.princetonnj.gov/1239/Landscape-Maintenance-Regulations#:~:text=Gas%20Powered%20Leaf%20Blower%20Regulations&text=Use%20is%20allowed%20March%2015,Sundays%20and%20Thanksgiving%20is%20prohibited.>
25. Chairman Council of the District of Columbia and Mayor, *D.C. ACT22-538, in the council of the District of Columbia*. 2018.
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27. Bob Smith - New Jersey Legislature, *Bill S437 - Session 2022 - 2023 Senate, No. 437 State of New Jersey, 220th Legislature (arrived - dead)*. 2022.
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34. HD Supply. *Leaf Blower Regulations*. 2024; Available from: <https://hdsupplysolutions.com/s/leaf-blower-noise-regulation>.
35. Sonrisa Cooper, *Portland, OR Ordinance 191653*. 2024.