



Agenda Report

February 28, 2022

TO: Honorable Mayor and City Council

THROUGH: Municipal Services Committee (December 14, 2021)

FROM: Interim City Manager

SUBJECT: CONSIDERATION OF PROHIBITING GAS-POWERED LEAF-BLOWING MACHINES

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the actions proposed herein are exempt from the California Environmental Quality Act (CEQA) in accordance with Section 15061(b)(3), the General Rule that CEQA only applies to projects that may have an effect on the environment; and
2. Direct the City Attorney to prepare an ordinance to amend Title 9 (Public Peace, Morals and Welfare), Chapter 9.37 (Leaf-Blowing Machines) of the Pasadena Municipal Code to prohibit the use of gas-powered leaf-blowing machines within Pasadena and related amendments.

EXECUTIVE SUMMARY:

On October 18, 2021 the City Council discussed the topic of gas-powered leaf-blowing machines and whether the regulations in the Municipal Code should be amended to prohibit their use in Pasadena. At the conclusion of the discussion it was the City Council's direction to staff to bring a presentation regarding a prohibition on the use of gas-powered leaf-blowing machines to the Municipal Services Committee for discussion.

The Municipal Services Committee discussed the potential prohibition on December 14, 2021. At the conclusion of the meeting, the Committee voted to support the staff recommendation for a citywide prohibition of gas-powered leaf-blowing machines and asked for follow-up on several issues such as prohibiting the use of any leaf-blowing machine on holidays, restricting the surfaces on which any leaf-blowing machine can be used on, along with the impact such a prohibition could have on City operations at city facilities, and a phased implementation timeline for City operations and then the rest of the city.

Staff continues to recommend a citywide prohibition on gas-powered leaf-blowing machines but does not recommend a holiday prohibition or restricting the surfaces on which a leaf-blowing machine can be used. Staff also recommends an exemption from the leaf-blowing machines ordinance for emergency responders when clearing downed trees and other emergency situations

Finally, staff recommends the prohibition on gas-powered leaf-blowing machines go into effect in two phases: ten months from the effective date of an ordinance for City operations and one year for the rest of the City.

BACKGROUND:

The issue of gas-powered landscaping equipment, specifically gas-powered leaf-blowing machines (i.e. 'leaf blowers'), has been an matter of concern for the Pasadena community for the past several years; concerns that have predominantly focused on air and noise pollution. Due to more recent advances in technology, electric leaf-blowing machines (corded and battery-powered) have become more viable alternatives, which has again raised the possibility of prohibiting gas-powered leaf-blowing machines.

Current Local Regulations

Currently, all gas and electric leaf-blowing machines are regulated in Chapter 9.37 – Leaf-Blowing Machines of the Pasadena Municipal Code (Attachment A). Chapter 9.37 includes the following:

- Prohibits when a leaf-blowing machine can be used in a residential area or within 500 feet of one (before 8:00 a.m., after 6:00 p.m., Monday through Friday; before 9:00 a.m., after 5:00 p.m. on Saturday; or at any time on Sunday);
- Limits how many leaf-blowing machines can be used on a parcel (one) and for how long they can be used (no more than 15 minutes per hour on a parcel less than 1/2 acre, and 30 minutes per hour on a parcel greater than 1/2 acre);
- Prohibits the debris resulting from the use of a leaf-blowing machine from being blown onto adjoining properties or public rights-of-way and to remain there for more than 15 minutes;
- Limits the sound level of a leaf-blowing machine to 65 decibels when measured from a distance of 50 feet; and
- Requires annual certification of all leaf-blowing machines by the City's Public Health Department.

The Code Compliance Division of the Planning & Community Development Department enforces these regulations.

Recent State Legislation/Regulations

Assembly Bill 1346 (Air pollution: small off-road engines) was approved by the Governor on October 9, 2021. This bill required the California Air Resources Board (CARB) to develop and adopt regulations to prohibit engine exhaust and evaporative emissions from new small gas-powered engines, such as the ones frequently found in lawn and garden equipment, as well as generators and similar equipment.

CARB completed its work on December 9, 2021 and the new zero-emission regulations will go into effect in 2024, with a second phase in 2028 for power generators and large pressure washers. \$30 million will be made available to sole proprietors and other small landscaping businesses to assist in the purchase of zero-emission small off-road equipment, including leaf-blowing machines, lawn mowers and string trimmers.

Although AB 1346, and the resulting CARB regulations, will address new equipment, it does not regulate the use of existing small gas-powered engines, regardless of current emission levels. In that absence of State regulation, it is within the City Council's authority to establish regulations specifically for Pasadena.

ANALYSIS:

Prohibition on Leaf-Blowing Machines

The issue of gas-powered landscaping equipment, specifically gas-powered leaf-blowing machines, has been an issue of concern for the Pasadena community in recent years, with concerns predominantly focused on air and noise pollution. The typical leaf-blowing machine uses a two-stroke engine, where the engine mixes gasoline and oil, which results in air emissions which are generally more impactful than that from a typical, recent year, automobile. For example, CARB estimates that the smog-forming pollution generated by the use of a leaf blower for one hour is comparable to driving a 2017 Toyota Camry 1,100 miles, which is the approximate distance from Los Angeles to Denver.

The sound, or decibel, level of a typical gas-powered leaf-blowing machine can be as loud as 95-155 decibels at the source, which over eight hours of exposure can lead to hearing damage. When measured from 50 feet away a leaf-blowing machine can be as loud as 65-80 decibels, which is still relatively loud and potentially bothersome.

Due to advances in technology, electric leaf-blowing machines (corded and battery-powered) have become more viable alternatives, which has led to renewed interest in prohibiting the use of gas-powered leaf-blowing machines. In response to this community interest, on October 18, 2021 the City Council directed staff to bring the topic to the Municipal Services Committee for further discussion.

On December 14, 2021 the Municipal Services Committee voted to support a staff recommendation for a citywide prohibition of gas-powered leaf-blowing machines. The

Committee also raised some additional recommendations and questions about the use of electric leaf-blowing machine such as prohibiting the use of a leaf-blowing machine on specified holidays, restricting the surfaces on which a leaf-blowing machine can be used on, along with the impact such a prohibition could have on City operations at City facilities, as well as a phased implementation timeline for City operations and citywide.

Holidays

The current regulations permit the use of leaf-blowing machines Monday through Friday, 8:00 a.m. to 6:00 p.m. and Saturdays 9:00 a.m. to 5:00 p.m.; they cannot be used on Sundays.

For comparison, Chapter 9.36.070 (Construction projects), limits the hours of construction, within a residential zoning district or within a radius of 500 feet of a residential district, to Monday through Friday, 7:00 a.m. to 7:00 p.m., Saturday, 8:00 a.m. to 5:00 p.m., with no construction allowed on Sundays or holidays. Eleven holidays are defined in this section: New Year's Day, Martin Luther King Jr. Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving, and Christmas.

In consultation with city staff responsible for park and open space maintenance, and representatives of the Rose Bowl, a prohibition on the use of leaf-blowing machines on holidays would be a significant negative impact on clean-up operations, not only in parks and other public facilities, but also after events at the Rose Bowl.

For example, there is a significant effort after the Rose Parade, both along the route itself and in the nearby vicinity, to clean up the trash and debris that invariably accumulates. Given that the Rose Parade occurs on New Year's Day (except when New Year's Day is a Sunday), to limit the tools that can be used would potentially result in delays to re-opening the parade route and the sidewalks and areas adjacent to homes and businesses near the route. Similarly, Pasadena residents frequent City parks on holidays, particularly those in the summer months, and expect their parks to be as clean as possible. To not permit the use of leaf-blowers on holidays would result in either delays in maintaining City facilities and/or the need to increase staffing resources to use brooms and rakes, as the time to clean a park would increase significantly.

The time to maintain a hardscape area that is one acre in size with a leaf-blowing machine is estimated to be one hour with 1:20 to maintain a turf area of the same size. Those times would increase to 2.5 hours and four hours respectively, without the use of a leaf-blowing machine. Based on an hourly rate of \$45.91 for a Maintenance II position, which equates to \$61.21 for the turf/vegetated areas, the cost increases to \$114.78 for hardscape areas and \$183.64 for turf/vegetated areas, which are increases of 250 percent and 300 percent, respectively. This is summarized in the Table 1 below:

Table 1: Time and Cost Summary of Clean-Up Activities

Clean-Up Activity	Hardscape	Turf/Vegetated
With Leaf-Blowing Machine	1:00 Hour (per acre)	1:20 Hour (per acre)
Cost with blower	\$45.91	\$61.21
Without Leaf-Blowing Machine	2.5 Hours (per acre)	Four Hours (per acre)
Cost without blower	\$114.78	\$183.64
Cost Increase	250 percent	300 percent

Finally, several of the holidays identified above lend themselves to outdoor gatherings at residents' homes. As such, it is reasonable to expect residents would prepare for their gatherings by using landscape equipment, such as leaf-blowing machines. In addition, over the last two years many traditionally indoor gatherings have taken place outdoors, as a measure of added safety given the prevalence of COVID-19.

Staff does not recommend a prohibition on the use of leaf-blowing machines on holidays. However, should the City Council decide to institute such a prohibition, staff would recommend the list of holidays be the same as listed above for construction hours and that there be an exemption for the Rose Bowl and City operations.

Surfaces

At the October 18, 2021 City Council meeting, and again at the Municipal Services Committee meeting, the case was made that leaf-blowing machines should only be used on hardscape surfaces, such as driveways and walkways, and not be allowed on vegetated areas. The stated reason for this is that contaminants in the dirt and soil could be made airborne, as well as the potential loss of top soil and impacts to biodiversity.

Staff does not dispute this position, but does not recommend this limitation on leaf-blowing machines be included in the ordinance. First, many residents and landscape gardeners use their leaf-blowing machines specifically for removing leaves and debris from landscaped areas, and secondly, such a limitation would be near-impossible to enforce. Given the time it would take for a complaint to be received at the City and then for a Code Enforcement Officer to respond it is highly unlikely the Officer could verify such a violation.

Finally, similar to the above-discussion about City parks and facilities and the Rose Bowl, to limit where a leaf-blowing machine can be used would have a significant impact on the ability of the City and Rose Bowl to maintain their facilities. It is expected there would be delays in maintaining City facilities and/or the need to increase staffing resources to use brooms and rakes, as the time to clean a park would increase.

As an alternative to inclusion in an ordinance, staff recommends that the impacts of using a leaf-blowing machine on vegetated areas could be included in outreach and informational materials, such as 'In Focus', with recommended "best practices" for the use of leaf-blowing machines.

Staff does not recommend limiting the use of leaf-blowing machines to hardscape areas. However, should the City Council decide to institute such a limitation, staff would recommend an exemption for the Rose Bowl and City operations.

Phased Implementation Timeline

The Municipal Services Committee discussed the possibility of a two-phase implementation of the prohibition of gas-powered leaf-blowing machine; one for use by property owners and/or landscape professionals on private property and the other for City operations. The staff recommendation is ten months for City operations and one year for the rest of the city.

A phased approach would allow for the City to educate and inform the community about the prohibition and in-turn, allow time for those with gas-powered leaf-blowers to purchase electric ones.

Violations

Staff recommends that any violation of the proposed leaf-blower ordinance, including the use of a gas-powered leaf-blowing machine and using any leaf-blowing machine in a manner contrary to what is allowed (e.g. outside of allowed hours, etc.) be the responsibility of the person who authorized the use of the leaf-blowing machine. The operator will not be held liable, nor a tenant at the location that did not authorize the use of the leaf-blowing machine, unless the operator is also the person who authorized its use.

The financial penalty for violations would be the same as those for all other Code Compliance violations, as in the City's adopted General Fee Schedule. For Fiscal Year 2022, the financial penalty for the first violation is \$116, \$238 for the second, \$599 for the third, and \$1,000 for the fourth and subsequent violations.

Exemption for Emergency Use

Staff recommends an exemption for the use of any leaf-blowing machine by emergency responders, to include when a leaf-blowing machine can be used. As evidenced by the recent Santa Ana wind event, there is always a risk that a tree can fall and do damage. As such, it is expected that there will be a need for gas-powered leaf-blowing machines when clearing downed trees, given that they tend to be more efficient than those that are electric, and last longer than battery powered ones. Further, regardless of the type of leaf-blowing machine, their use for clearing downed trees will be at all times of day. Similarly, there can be a need for gas-powered leaf blowers when clearing other types

of emergency situations, such as vehicle accidents. Therefore, staff recommends an exemption for the use of any type of leaf-blowing machine by emergency responders from the leaf-blowing machine ordinance.

COUNCIL POLICY CONSIDERATION:

This project is consistent with the City Council's strategic goals to increase conservation and sustainability, while supporting and promoting a high quality of life.

ENVIRONMENTAL ANALYSIS:

The project has been reviewed for compliance with the California Environmental Quality Act (CEQA) and is exempt per Section 15061(b)(3). The project is covered by the general rule that CEQA only applies to projects that have the potential for causing a significant effect on the environment. The prohibition of gas-powered leaf-blowing machines will not result in any significant effect on the environment.

FISCAL IMPACT:

If the ordinance is adopted, there would be direct costs to the City in the form of replacing all of the gas-powered leaf-blowing machines with electric (corded and/or battery-powered) as well as the cost of the informational outreach program, which would involve staff resources and printing and publishing costs.

It is estimated that the cost to replace the City's 40 gas-powered leaf-blowing machines with electric would cost approximately \$66,000. This is based on the cost per electric leaf-blowing machine (~\$750) and three batteries per machine (~\$300 per battery). As the batteries can be expected to last two years, the replacement of the batteries would total approximately \$36,000 every two years, at the current cost of batteries. Additional cost would be incurred to purchase and install battery charging stations, both at City maintenance facilities, and portable ones on City maintenance vehicles. The cost of these charging stations is unknown at this time.

Some of the cost could potentially be off-set through the South Coast Air Quality Management District (SCAQMD) Commercial Electric Lawn and Garden Program. Through this program, the cost of new electric landscaping equipment is discounted (up to 75 percent) through pre-authorized dealerships. However, it is unknown whether the equipment that is available for purchase through this program would satisfy the City's needs. Finally, while there are four equipment vendors on the SCAQMD website, funds for two of them are depleted.

Lastly, the Public Works Department contracts with outside companies to provide maintenance services, which includes the use of leaf-blowing machines. The cost to the contractors to replace their equipment can reasonably be expected to be passed along to the City, although at this time it is unknown what that cost would be.

Respectfully submitted,



CYNTHIA J. KURTZ
Interim City Manager

Attachment: (1)

Attachment A – Pasadena Municipal Code: Chapter 9.37 Leaf-Blowing Machines