# Report to City Council: **Proposed Code and Policy Changes regarding Leaf Blowers** November 29, 2002

#### Background

The City Council adopted the recommendations of the Noise Control Task Force (NCTF) and the Noise Review Board (NRB) in July 2001. At this time, the City Council passed an ordinance which limits the use of leaf blowers at night: leaf blowers cannot be used in residential areas between 10 pm and 7 am; leaf blowers used in non-residential areas at night must meet the nighttime noise standards in the noise code.

In addition, the City Council directed the NRB to:

- 1. establish a daytime decibel level standard that all leaf blowers must meet
- 2. research the possibility of a limit on the duration and frequency of use of leaf blowers and to develop specific code language to address this issue
- 3. reexamine maximum decibel levels for leaf blowers every three years
- 4. work with industry and educational institutions to develop an educational program for commercial and government operators to certify knowledge in operating techniques that reduce noise.
- The NRB has been working on leaf blower issues and is now making recommendations to City Council on both code changes and program implementation. A public hearing is scheduled for Wednesday, December 18, 2002.

The original NCTF/NRB recommendations regarding leaf blowers approved by Council and the current/specific NRB recommendations.

## Current Code Language

For background, here is the current code language:

**18.10.35** From 10:00 pm until 7:00 am, leaf blowers shall not be operated on residential property. Operation of leaf blowers on all other property shall meet sound levels for night hours set forth in 18.10.010 A and 18.10.010B.

# **Provisions of the Proposed Ordinance**

The proposed ordinance is attached as Attachment B. The following is a summary of the provisions of the ordinance:

# New code language:

- 1. For the purposes of leaf blower use only, changes "nighttime hours" to "7 pm to 7 am" (from the current 10 pm to 7 am).
- 2. Requires that as of August 1, 2005, ALL leaf blowers meet 65dBA sound level at 50 feet as tested using the American National Standards Institute (ANSI) testing methodology. (ANSI establishes national/international testing standards used by independent labs and the general public.) The city will maintain a list of these

blowers. This provision applies to use of ALL leaf blowers, including commercial, industrial, residential, and personal use.

# **Programmatic recommendations:**

- 1. Review the permitted decibel levels using the ANSI methodology every three years to reflect the quietest equipment available that maintains a reasonable level of effectiveness as a tool.
- 2. Continue to work with industry and educational institutions to develop an educational program for commercial and public agency leaf blower operators that certifies them as knowledgeable of operation techniques that reduce noise.
- 3. Continue to work with industry on a specific third party decibel labeling program for leaf blowers.

Permissible Nighttime Sound Levels for Leaf Blower Use Current noise code is 10 pm - 7 am Proposed change is 7 pm - 7 am				
Zone Categories of Source	Zone Categories of Receiver (measured at property line)			
	Residen tial	Open Space	Commercial	Industrial
Residential	Not allowed	Not allowed	Not allowed	Not allowed
Open Space	50 dBA	50 dBA	55 dBA	60 dBA
Commercial	55 dBA	55 dBA	65 dBA	65 dBA
Industrial	60 dBA	60 dBA	65 dBA	70 dBA

# Field Testing and the ANSI Standard

Leaf blowers are tested using the ANSI methodology, by an independent lab or the actual manufacturer to establish a single number sound level rating. The ANSI sound rating is available from most leaf blower manufacturers. The Noise Review Board recommendations would require the manufacturer to have the unit independently tested. Leaf blowers tested by the manufacturer themselves would not be allowed even if the manufacturer claims that it meets the 65 dBA ANSI standard. ANSI is working on a standardized labeling sticker protocol to attach to the certified leaf blower.

Paul Van Orden, Noise Control Officer, worked with staff from the Bureau of Parks and Recreation and the Maintenance Bureau to test some of their leaf blowers that are rated by ANSI to meet 65 dBA within 50 feet. Our field tests of this equipment showed that they were significantly louder--73 dBA to 78.75 dBA. This is approximately twice as loud from an average person's perception of the noise (65 decibel compared to 75 decibels). Similar findings were noted by the City of Vancouver, B.C. when they tried to repeat the ANSI test. We do not know why we cannot replicate the ANSI testing nor does the City of Vancouver.

We understand that there are 9 leaf blowers that meet the 65 dBA ANSI standard. Two of these models are not available locally. Of the 7 remaining models, 3 were definitely testing by a third party and 1 was tested by the manufacturer. Three of the models are awaiting the final ANSI findings. (See attachment D.)

#### **Other Cities**

Many cities have already undertaken the challenge of regulating the use of leaf blowers. A few smaller cities have chosen an outright ban on the use of gas powered leaf blowers. The cities with full bans are much smaller than Portland, and they do not face the same challenges that we face related to the need to move wet leaves. San Diego, Palo Alto, and Sunnyvale California all have incorporated a requirement to meet an ANSI standard of 65 dBA. Montgomery County, Maryland uses an ANSI standard of 70 dBA, which was established in 1990. Attachment C summarizes research on cities that currently regulate leaf blowers.

#### Input from Community and Businesses

This has been a very long process to get us to the final recommendations. The issue has been open to public discussion since the first Noise Control Task Force meetings in October 2000.

Along the way the NCTF and the NRB have listened closely to the community and have offered numerous opportunities for public input. The public input was an essential part of the formulation of a set of standards that protect our citizens from excessive noise, while still respecting the needs of the business community.

The Noise Office has done outreach to a leaf blower manufacturer's association and professional landscaping industry interests. One particular manufacturer, Shindaiwa Inc., has had its representative present at the greater majority of meetings on the topic.

The NCTF held a number of public meetings where leaf blowers were discussed and testimony from the public was received. The NRB held a public hearing on leaf blowers on January 9<sup>th</sup>, 2002. They discussed this issue at six subsequent public meetings and allowed informal public input at most of those meetings.

#### **Controversial Issues**

# **Citizens Requesting a Total Ban of Leafbowers**

A number of citizens attended nearly every NCTF and NRB meeting on this issue. There is still a very vocal constituency for an outright ban of leaf blowers. We expect that representatives of this group will attend the City Council meeting and voice their opinion. Both the NRB and the NCTF decided not to recommend a total ban on leaf blowers, because it would have a negative impact on business and because both groups believe that they recommended an acceptable alternative to an outright ban.

# **Nighttime Restrictions**

The ordinance does not ban leaf blowers at night in commercial/industrial areas; it sets limits on how loud leaf blowing can be. However, some businesses, including the Portland Business Alliance, are concerned about the nighttime restrictions on leaf blower

use. Many businesses do their cleaning at night and believe that the allowable decibel levels are too restrictive. Actual landscaping and maintenance companies may contend that the quieter blowers do not offer the same performance that the louder units allow.

Leaf blowers that meet the ANSI 65 dBA (decibel) level can be operated at night on commercial and industrial property, however, the blower operator must be sensitive of the proximity to nearby residences. In order to meet the nighttime standard, a leaf blower operated on Commercially Zoned property adjoining a Residential Zone would need to be approximately 200 feet from the closest residential property line; for Industrial Zoned property, this distance would be approximately 100 feet.

# Need to Purchase New Leaf blowers

Some citizens may be very concerned that by August 1, 2005, they must use a leaf blower that meets the ANSI 65 dBA standard. Many residents will need to purchase new leaf blowers to replace their existing ones if they wish to continue to blow their leaves/debris rather than rake or sweep. This may cause a hardship for some citizens.

Businesses and governmental agencies will need to replace many of their leaf blowers by 2005. We heard from some segments of industry that they replaced their leaf blowers every three to five years, however, some businesses may need to purchase new leaf blowers prior to their planned replacement. Giving them until 2005 should help, but it will not fully mitigate this issue. In addition, some of the quieter models are not as powerful as the models with a higher sound level rating.

New gas powered leaf blowers which meet the 65 dBA ANSI standard cost between \$189 - \$460 (local retail prices). (See Attachment D.) Homeowners may chose to purchase electric units which are close to half the price of the compliant gas powered units. These units are not as sturdy as the gas powered units and would not generally meet the needs of the commercial users.

# Variance Process

Businesses that believe that it is necessary to operate their leaf blowers during the nighttime hours have the option of applying for a variance. A variance has the benefit of allowing individual cases to exceed the noise code. For example, a few years ago the Maintenance Bureau applied for and received a Noise Variance to use leaf blowers and street sweepers in the downtown core. A downtown business may wish to apply for a variance to use a leaf blower in the early morning hours. Variances are usually granted with conditions and do not give unrestricted approval to exceed the code.

# Notification of Council meeting

Throughout the entire NCTF process, the Bureau of Development Services has maintained a large mailing list of interested citizens. Currently there are approximately 375 citizens on this list. BDS sends information out to this mailing list whenever the NRB addresses issues from the NCTF recommendations. Everyone on this mailing list is being notified of the time and date that the leaf blower ordinance will be before Council. In addition information is available on the bureau's website.