PORTER RANCH





Issam Najm, President; Susan Gorman-Chang, Vice President; Gabriel Khanlian, Secretary; Andrew Krowne, Treasurer; David Balen, Signer; Jason Hector; Alex Kim; Becky Leveque; Jennifer Milbauer, Asaad Alnajjar

Porter Ranch Neighborhood Council (PRNC)
Sustainability Committee Meeting
Tuesday, August 1, 2017
Los Angeles Porter Ranch Branch Library
11371 Tampa Avenue
Porter Ranch, CA
7:00 pm

Sustainability Committee Meeting Minutes

Item #1 -- Meeting called to order by Co-Chair Susan Gorman-Chang at 7:07pm.

Item #2 –Welcome & Introductions
We welcomed Leeor Alpern, from SCAQMD, who joined us for the meeting.

Item #3 --Roll Call

Present were Susan Gorman-Chang, Co-Chair Sustainability, Jason Hector, Committee Member, and Lane Semper Committee Member and absent was David Balen. We have quorum.

Item #4 Comments from the Chairs

We are meeting here again in public library this month, since no room was available for us at Porter Ranch Community School during their summer break.

Item #5 – Approval of June 6, 2017 Minutes

Lane made a motion to approve the June 6, 2017 Sustainability Committee Minutes and Jason seconded the motion. Motion was approved unanimously as follows.

Yes	Susan Gorman-Chang, Jason Hector, Lane Semper
No	None
Abstain	None

Item #6 – Leaf Blower: Report out from Neighborhood Council Sustainability Alliance (NCSA) Working Group Susan gave a brief update on what the NCSA Working Group has found, including the fact that LAMC 112.04 (Attachment 1) is a law on the books but LAPD is not enforcing this law. LAMC 112.04 makes it illegal to operate a gas powered leaf blower within 500 feet of a residence, subject to a \$100 fine for the landscaper and \$100 fine to the person who hired the landscaper. Susan reiterated that gas powered leaf blowers are very polluting, and according to an article (Attachment 2), "by 2020 leaf blowers and other small gas engines will create more ozone pollution than all of the passenger cars in the state." In addition, "Exhaust pollution per leaf

PORTER RANCH neighborhood council



blower per hour is the equivalent of the amount of smog from 17 cars driven one hour and is localized in the area of blower usage." (See Attachment 3) Benzene and other carcinogens are emitted by gas powered leaf blowers, and wearing a mask does NOT filter out these carcinogens. The person operating the gas powered leaf blower is damaging their health, as is anyone in the vicinity who breaths the pollutants emitted from them. In addition, blowers shoot other particles into the air such as insecticides, feces, fertilizers, and anything that happens to be on the ground where they are used and furthermore they dry out the soil.

Leeor, from SCAQMD, shared flyers with us for the SCAQMD Gas Leaf Blower Exchange Program and Susan said she would bring these to our PRNC Board Meeting next week and share them with the public. Leeor reminded us that the program is for commercial landscapers and Jason pointed out that this fact is in very small print on the flyer and he is not too sure that people would catch that easily. Leeor also emphasized that anyone wanting to exchange their gas powered blower for a battery powered one must register ahead of time before the exchange date/location mentioned on the flyer.

We brainstormed for ideas on how to make the gas leaf blower exchange easier for the public, and Lane suggested asking LADWP to put an insert in each bill advertising the exchange. Jason suggested getting retailers involved in the exchange program, whereby a landscaper could go to a retailer and exchange his gas leaf blower for a battery one at the retail location itself rather than having to go to a designated location on a designated day.

We discussed possibility of meeting with HOAs and asking them to ensure their landscapers use only battery powered leaf blowers.

Leeor also gave us information and a flyer on the gas lawn mower exchange program and that exchange is for anyone and is not limited to commercial landscapers. That program is also year round and is a rebate program. (See Attachment 4)

Item # 7 – Calendar for PRNC Retreat: Earth Day in April & Net Zero Porter Ranch in February During the Retreat we will, as an entire PRNC Board, schedule out events and town halls that we know of ahead of time for the remainder of the fiscal year. This helps us budget, plan and promote these events better.

We decided Porter Ranch Clean Up and Earth Day Celebration should be on a different weekend than the official, national Earth Day, so people can attend other city events on the actual Earth Day.

Net Zero Porter Ranch is a Town Hall we envision where Lauren Faber-O'Conner can give our entire community the Net Zero Porter Ranch presentation that she gave Sustainability Committee in December 2016. Such a Town Hall would be a good venue for residents to discuss what each of us can do to move towards Net Zero Porter Ranch. Net Zero refers to a community which creates, through solar and other renewable energy sources, as much energy as it utilizes. This is an exciting concept and per Lauren, Porter Ranch has more than enough roofs to become Net Zero using solar energy alone!

Item #8 – Sustainability Committee: Nominations for awards given by others?

Susan spoke to our DONE liaison, and while our Committee and PRNC cannot ourselves give out an award, we can nominate individuals for awards given/sponsored by others. For example SCAQMD gives out a Clean Air Award in July and the County of Los Angeles gives out a Green Leadership Award in April. Leeor, SCAQMD, offered that the Clean Air Award categories are as follows:

PORTER RANCH

neighborhood council



- Innovative Clean Air Technology
- Model Community Achievement
- Clean Air Education & Outreach
- Business Leadership in Air Quality
- Youth Leadership in Air Quality

Leeor stated an example of an award would be one given to a company such as TIG/m which manufacturers electric trolley cars.

We will keep these awards in mind and place the nomination due dates on our calendar for the remainder of this fiscal year.

Item #9 –General Public Comments None

Item #10- Committee Member Comments

Lane reminded everyone of the upcoming premier of An Inconvenient Sequel: Truth to Power which will be showing in many theaters in Los Angeles. Lane went to a showing in West Los Angeles followed by an interview and Q & A with Al Gore.

Item # 11- Motion to Adjourn Meeting was adjourned at 7:57 pm.

Los Angeles Police Department

Van Nuys Community Police Station 6240 Sylmar Avenue, Van Nuys CA 91401 (818) 374-1995

Leaf Blower Information



If you use a LEAF BLOWER you need to understand and follow the rules that apply to their usage.

The LAPD will issue you a citation if you Violate this section.

SEC. 112.04. POWERED EQUIPMENT INTENDED FOR REPETITIVE USE IN RESIDENTIAL AREAS AND OTHER MACHINERY, EQUIPMENT, AND DEVICES.

(Title and Section Amended by Ord. No. 161,574, Eff 9/8/86.)

- (a) Between the hours of 10:00 p.m and. 7:00 a.m. of the following day, no person shall operate any lawn mower, backpack blower, lawn edger, riding tractor, or any other machinery, equipment, or other mechanical or electrical device, or any hand tool which creates a loud, raucous or impulsive sound, within any residential zone or within 500 feet of a residence.

 (b) Except as to the equipment and operations specifically mentioned and related elsewhere in this Chapter or for emergency work as that term is defined in Section 111.01(d), and except as to aircraft, tow tractors, aircraft auxiliary power units, trains and motor vehicles in their respective operations governed by State or federal regulations, no person shall operate or cause to be operated any machinery, equipment, tools, or other mechanical or electrical device, or
- engage in any other activity in such manner as to create any noise which would cause the noise level on the premises of any other occupied property, or, if a condominium, apartment house, duplex, or attached business, within any adjoining unit, to exceed the ambient noise level by more than five (5) decibels.
- (c) Notwithstanding the provisions of Subsection (a) above, no gas powered blower shall be used within 500 feet of a residence at anytime. Both the user of such a blower as well as the individual who contracted for the services of the user, if any, shall be subject to the requirements of and penalty provisions for this ordinance. Violation of the provisions of this subsection shall be punishable as an infraction in an amount not to exceed One Hundred Dollars (\$100.00), notwithstanding the graduated fines set forth in L.A.M.C. § 11.00(m). (Amended by Ord. No. 171,890, Eff. 2/13/98.)

By <u>David Gorn</u> February 13, 2017 Share

They may look pretty innocuous — those leaf blowers, hedge trimmers and gas mowers wielded by a small army of gardening crews across the state.

Yes, really, there will be more pollution from gas-powered gardening equipment than from cars.

They're not.

According to state air quality officials, those machines are some of the biggest polluters in California. In fact, by 2020, leaf blowers and other small gas engines will create more ozone pollution than all of the passenger cars in the state.

Yes, really, there will be more pollution from gas-powered gardening equipment than from cars, confirms Michael Benjamin, division chief at the California Air Resources Board.

"We expect that ozone-contributing pollutants from small off-road engines will exceed those same emissions from cars around the 2020 time frame," says Benjamin.

There's a reason for that: Regulations on car exhaust have gotten tighter and tighter over the years, substantially reducing their ozone-damaging emissions. At the same time, while there have been some controls on the smaller gas engines, there haven't been enough, says Benjamin.

Pollutants from all of those hedge trimmers and gas chainsaws across the state add up.

"There are about 16 million pieces of small off-road equipment in California. That compares to a vehicle population of about 18 million statewide," he says.

So the state is planning some sweeping changes to fix that. The <u>California Air</u> <u>Resources Board</u> just proposed a <u>new rule change</u>—to lower emissions from small gas engines by 85 percent within a decade, starting in 2020.

That will affect landscaping and gardening crews across the state. Noe Bautista of Los Angeles has been on the front line of that pollution most of his life. He has worked on a gardening crew for decades—inhaling the formaldehyde, benzene and particulate matter in the equipment fumes, and enduring up to 100 decibels of noise and constant machine vibration all day, six days per week.

"It's pretty bad," says Bautista. "You have to be smelling that smoke all the time, and it can cause you a lot of health problems, allergies and getting sick all the time."

Now he runs Bautista's Landscaping in western L.A., so he doesn't run the gear himself anymore, but he sees his workers facing the same hazards every day.

"You can feel it right away," he says. "You have a headache right away with all that smoke."

Bautista is determined that his workers won't endure the same health problems he's had. <u>Cal/OSHA</u> does have workplace safety guidelines in place and that helps, he says. But on many small gardening crews, most of the young workers either don't know they should be wearing face masks or earplugs, or they refuse to wear them.

That's why Bautista agreed to work with a nonprofit based in Santa Monica called <u>American Green Zone Alliance</u> (AGZA), which is trying to get these crews to switch to electric machinery.

Dan Mabe heads the AGZA group. At an expansive backyard in western Los Angeles, he has spread out a wide lawnful of equipment for Bautista's workers to test. Once they try out the green machinery — which has less vibration, less noise and no fumes — they're hooked, says Mabe.

And breakthroughs in technology have given the electric equipment additional power with longer battery life, so it makes sense financially to switch, too, he says.

Dan Mabe and Noe Bautista talk about replacing his crew's gas-powered equipment with electric versions. (*David Gorn/KQED*)

Mabe has worked these gardening crews himself — "since I was 7 years old" — and has the health scares and breathing problems to prove it. Mabe's crusade to trade in gas for electric machinery is based on a desire to improve air quality and

workers' health. But there's another motivation for him. Many gardening crews across California are Latino, he says, and that takes the discussion to another level.

"You can call it environmental justice. It's a demographic that isn't really being addressed."

Of course, cost will be the sticking point. Many small crews could have trouble affording an upgrade to cleaner equipment.

That's why the air quality board is putting \$200,000 as seed money toward an incentive program to help landscape crews upgrade their gas equipment or convert to electric gear.

But according to Sandra Giarde, executive director of the <u>California Landscape</u> <u>Contractors Association</u>, those incentive programs usually fall woefully short of actual replacement cost.

And, she adds, the association is worried that manufacturers could pass on costs from new air quality requirements, in the form of higher prices.

Bautista, for one, is ponying up the cash now and making the switch.

Not only for health reasons, and not only to get ahead of impending new regulations. He says the economics are actually in his favor. With huge recent improvements in battery life and power, he hopes in the long run he's going to save a little money.

More Pollution Than Cars? Gas-Powered Gardening Equipment Poses the Next Air Quality Threat 10 May,2017David Gorn

Explore: <u>Environment</u>, <u>News</u>, <u>Science</u>, <u>CARB</u>, <u>gardening</u>, <u>greenhouse emissions</u>, <u>leaf blowers</u>

LEAF BLOWER POLLUTION HAZARDS IN ORANGE COUNTY

SUMMARY

he widespread daily usage of two-cycle gasoline engine leaf blowers in the cities and unincorporated areas presents a health hazard to all citizens of Orange County. The hazards are four-fold:

- Toxic exhaust fumes and emissions are created by gas-powered leaf blowers. Exhaust pollution *per leaf blower* per hour is the equivalent of the amount of smog from 17 cars driven one hour and is localized in the area of blower usage.
- The high-velocity air jets used in blowing leaves whip up dust and pollutants. The particulate matter (PM) swept into the air by blowing leaves is composed of dust, fecal matter, pesticides, fungi, chemicals, fertilizers, spores, and street dirt which consists of lead and organic and elemental carbon. About five pounds of PM per leaf blower per hour are swept into the air and take hours to settle.
- The quantity of pollution products that are injected into county air.

 The total amount of pollutants injected into the environment by blower usage in the county is significant. The ARB calculates that leaf blowers inject 2.11 tons of combustion pollutants per day into Orange County air. Leaf blowers in the County sweep twenty tons per day of small size particulate matter into the air.
- Blower engines generate high noise levels.

 Gasoline-powered leaf blower noise is a danger to the health of the blower operator and an annoyance to the non-consenting citizens in the area of usage.

In light of the evidence, the Grand Jury determined the health hazards citizens are exposed to by the use of leaf blowers outweigh the questionable economic benefit blowers may bring to the cities and the County. The Grand Jury recommends that the cities, school districts, community college districts, and the County cease using gas powered blowers in their maintenance and cleanup operations.

INTRODUCTION AND PURPOSE

he focus of this study was to describe and assess the health hazards caused by gasoline-powered leaf blowers used in Orange County. The Grand Jury assessed the air and noise pollution introduced into the county by gasoline-powered leaf blowers (hereinafter-called leaf blowers).

The purpose of this report is to recommend that cities take actions to reduce health hazards presented by leaf blowers. School districts and community college districts should do likewise since children are most vulnerable to the pollution and noise caused by leaf blowers. The Board of Supervisors should take similar action in the unincorporated areas. Additionally, such actions would improve the quality of life in Orange County.

METHOD OF STUDY

The Grand Jury gathered information and data from a variety of sources including:

- Leaf blower manufacturers
- California Air Resources Board (ARB)
- South Coast Air Quality Management District (AQMD)
- U.S. Environmental Protection Agency (EPA)
- American Lung Association
- Consumer Reports magazine
- Various newspaper and magazine articles
- Personal activities and observations

Quantitative assessments were made of the nature and scope of leaf blower pollution to the Orange County environment. The contribution of an individual leaf blower was easy to determine. The Grand Jury utilized data obtained from the Air Resources Board, the EPA and the Air Quality Management District to establish the *total* pollution contributed by leaf blowers to the county environment.

BACKGROUND AND HISTORY

wo-cycle gasoline-powered leaf blowers were introduced into the United States in the 1970s. By 1985, 75,000 blowers were sold and by 1989, 464, 000 were sold. California leads the nation in the number of leaf blowers used, estimated to be in the millions, and sales are growing at 6 to 8 percent a year.

The city of Laguna Beach bans the use of leaf blowers, and over a dozen other California cities have done likewise. Health and quality of life concerns related to leaf blower use became an issue in California cities prior to 1975.

LEAF BLOWER OUTPUT

Leaf blowers are usually powered by a 2-cycle gasoline engine that provides the motive power for a high velocity stream of air guided by a tubular duct toward the leaves or debris to be swept or blown. The blower unit is either carried by hand or backmounted on the operator depending on the size of the engine and the power desired. Generic output characteristics (averaged over several manufacturers) include:

LEAF BLOWER NOISE OUTPUT

TABLE 1

	Hand Held	Back Pack	
Noise level at blower	>95 dBA ¹	>90 dBA	
Noise level @ 50 feet	>65 dBA	>75dBA	
Airjet velocity at nozzle	~180 miles per hour	up to 250 miles per hour	
¹ dBA = acoustic decibels, frequency-weighted measures of audible noise volume or power used in noise			
analysis.			

HAZARDS FROM BLOWER OPERATIONS

There are four major health hazards from the use of leaf blowers. They are

- exhaust pollution
- particulate pollution
- quantity of pollutants
- noise

EXHAUST POLLUTION

One gasoline-powered leaf blower generates as much exhaust pollution in one hour as would 17 cars traveling slowly. Cars disperse their pollutants over long stretches of road, while a blower concentrates its pollutants in one neighborhood. Two-stroke engine fuel is a gas-oil mixture that is especially toxic compared to automobile emissions.

Exhaust pollution from two-cycle engines is a large contributor of carbon monoxide (CO), nitrous oxides (NO_x), hydrocarbons (HC), and particulate matter (PM). The particulate matter from combustion is small in size (2.5 or microns or less).² Combustion exhaust particulate matter remains suspended in the air for hours—sometimes days—and is easily assimilated in the lungs. The EPA and ARB state that such PM can increase the number and severity of asthma attacks, bronchitis and other lung diseases and reduce ability to fight infections. Those particularly effected are children and the elderly.

PARTICULATE POLLUTION

The airjet generated by blowers with velocities of 185 miles per hour or more spreads dust, dirt, pollens, animal droppings, herbicides and pesticides into the air. The effect lasts for hours on particulate matter that is 10 microns in diameter or smaller. The ARB has estimated that each leaf blower entrains (puts into the atmosphere) 5 pounds of particulate matter per hour about half of which is 10 microns or smaller. The EPA and ARB state that such particulate matter can create the same health risks as does the exhaust pollution.

QUANTITY OF POLLUTANTS

The ARB calculates that leaf blowers inject some 2.11 *tons* of combustion pollutants per day into Orange County air. These pollutants contain organic gases, carbon monoxide, nitrous oxides and exhaust-size particulate matter (PM2.5) as described previously. Additionally, twenty *tons* per day of small size particulate matter (PM10) are swept into the air by blower airflow.

Noise

Noise interferes with communications, sleep, and work. The EPA claims noise degrades quality of life by impairing social interaction. It also reduces work accuracy and creates stressful levels of frustration and aggravation. The average blower generates noise that measures 65 to 75 dBA or more at 50 feet, and even louder at close range. Leaf blowers are often used fewer than 50 feet from non-consenting people. Neighboring homes may be occupied by home workers, retirees, day sleepers, children and the ill or disabled. The World Health Organization (WHO) recommends general outdoor noise levels of 55 dBA or less, and 45 dBA or less for sleeping. Thus, a 65-decibel leaf blower would be 100 times too loud³ for healthful sleep. Blower noise can, and probably does, impair the user's hearing. A blower generates upward of 95 decibels of noise at the operator's ear (see Table 1 above). Office of Safety and Health Administration requires hearing protection for noise over 85 dBA. Hearing protectors as worn in the field provide only a fraction of the attenuation needed for hearing protection. There is an increased risk of hearing damage and deafness from repeated exposure to noise above 75 dBA. Deafness caused by noise is irreversible.

² PM2.5 microns refers to particulate matter size diameter in millionths of a meter or microns. PM2.5 particles are 2.5 microns in diameter or smaller. PM10 particles are 10 microns in diameter or smaller and include PM2.5 particles. A PM10 particle is about 1/17th the diameter of a human hair.

³ A decibel change from 45 to 65 dBA, is a 100-fold change in volume.

ALTERNATE EQUIPMENT AND TECHNIQUES

Rakes, brooms and electric blowers are alternate equipment that can perform leaf cleanup tasks. The first two have been in use since antiquity and have been proven performers since that time. Rakes and brooms are quiet and consume no resources. They produce minimal dust and little debris into the atmosphere and no pollutants from the power source. Electric blowers are a recent technical innovation that minimize engine pollution, lessen noise, but leave intact the hazards associated with airjet entrained particulate matter.

ECONOMICS

It has been argued by leaf blower operators that the use of rakes and brooms would cause cleanup jobs to take up to twice as long to complete. This allegation is not supported by facts. For example, the city of Claremont decided not to use leaf blowers (1990) in the maintenance of city property. They quantified the increase in workload using rakes and brooms as 1/16 over using blowers, an increase of about 6%. Other jurisdictions banning leaf blowers have experienced no increase in cleanup-job hours.

COMPLIANCE IN CITIES BANNING LEAF BLOWERS

The Grand Jury surveyed four cities that banned or partially banned leaf blowers in or near Orange County.

- 1. Los Angeles (population ~3.6 million) banned gasoline powered leaf blowers on July 1, 1998. The city reported that compliance is good despite the fact that the police enforce violations as an infraction, which puts them as a low priority. Alternatively, the Public Works Department uses street enforcement inspectors as citing officials. Citizen participation provides license plate numbers and times of violations for subsequent violation citations.
- 2. Santa Barbara banned gasoline leaf blowers and regulated other types of blowers since 1997. The city Parks Department incurred a one-time cost of \$90,000 out of a budget of \$4 million (2.25%) to replace equipment and has seen little or no additional impact on city cleanup.
- 3. Laguna Beach has banned all types of blowers since 1993 and enjoys 95% compliance. The city uses brooms and rakes to maintain city parks with no impact on costs or cleanliness.
- 4. Claremont banned gas-powered blowers in 1991, but allows electric blowers. Positive citizen involvement is high.

FINDINGS

Under California Penal Code § 933 and §933.05, responses are required to all findings.

Based on documented evidence, it is the finding of the Grand Jury that leaf blower operations represent health hazards to the citizens of Orange County. The hazards include pollution from engine exhaust and the pollution caused by entrained particulate matter being discharged from the blowers. The quantity of pollution injected into the air represents health dangers to all citizens of the county. Additionally, operators risk suffering permanent hearing loss from the high noise levels in close proximity to the blowers. Non-consenting citizens are subject to loss of quality of life from the noise forced upon them by blower operation in their area.

1. Exhaust pollution from two-cycle engines is a large contributor of carbon monoxide (CO), nitrous oxides (NO_x), hydrocarbons (HC), and particulate matter (PM). Exhaust pollution *per leaf blower* per hour is the equivalent to the amount of smog from 17 cars driven one hour. Leaf blower exhaust pollution remains localized in the neighborhood in which it is generated. Combustion exhaust PM remains suspended in the air for hours and is easily assimilated in the lungs. Leaf blowers contribute to total Orange County pollution.

A response is required to Finding 1 from Board of Supervisors and the Cities of Anaheim, Brea, Buena Park, Costa Mesa, Cypress, Dana Point, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, Laguna Hills, Laguna Niguel, La Habra, Lake Forest, La Palma, Los Alamitos, Mission Viejo, Newport Beach, Orange, Placentia, San Clemente, San Juan Capistrano, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster, and Yorba Linda, and School Districts of Anaheim City, Anaheim Union High, Brea-Olinda Unified, Buena Park, Capistrano Unified School District, Centralia, Cypress, Fountain Valley, Fullerton Joint Union High, Fullerton, Garden Grove Unified, Huntington Beach City, Huntington Beach Union High, Irvine Unified, La Habra City, Laguna Beach Unified, Los Alamitos Unified, Lowell Joint, Magnolia, Newport-Mesa Unified, Ocean View, Orange Unified, Placentia-Yorba Linda Unified, Saddleback Valley Unified, Santa Ana Unified, Savanna, Tustin Unified, Westminster, and Community College Districts Coastline Community, North Orange County, Santiago, and South Orange County.

2. The particulate matter swept into the air by the high velocity air jet used in sweeping or blowing leaves is composed of dust, fecal matter, pesticides, fungi, chemicals, fertilizers, and street dirt consisting of lead and organic and elemental carbon. These PM constituents are documented health hazards.

A response is required to Finding 2 from **Board of Supervisors** and the Cities of **Anaheim**, **Brea**, **Buena Park**, **Costa Mesa**, **Cypress**, **Dana Point**, **Fountain Valley**, **Fullerton**, **Garden Grove**, **Huntington Beach**, **Irvine**, **Laguna Hills**, **Laguna Niguel**, **La Habra**, **Lake Forest**, **La Palma**, **Los Alamitos**, **Mission Viejo**, **Newport**

Beach, Orange, Placentia, San Clemente, San Juan Capistrano, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster, and Yorba Linda, and School Districts of Anaheim City, Anaheim Union High, Brea-Olinda Unified, Buena Park, Capistrano Unified School District, Centralia, Cypress, Fountain Valley, Fullerton Joint Union High, Fullerton, Garden Grove Unified, Huntington Beach City, Huntington Beach Union High, Irvine Unified, La Habra City, Laguna Beach Unified, Los Alamitos Unified, Lowell Joint, Magnolia, Newport-Mesa Unified, Ocean View, Orange Unified, Placentia-Yorba Linda Unified, Saddleback Valley Unified, Santa Ana Unified, Savanna, Tustin Unified, Westminster, and Community College Districts Coastline Community, North Orange County, Santiago, and South Orange County.

3. Noise from gasoline-powered leaf blowers is a significant danger to the health of the blower operator and a severe annoyance to the non-consenting citizens nearby.

A response is required to Finding 3 from Board of Supervisors and the Cities of Anaheim, Brea, Buena Park, Costa Mesa, Cypress, Dana Point, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, Laguna Hills, Laguna Niguel, La Habra, Lake Forest, La Palma, Los Alamitos, Mission Viejo, Newport Beach, Orange, Placentia, San Clemente, San Juan Capistrano, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster, and Yorba Linda, and School Districts of Anaheim City, Anaheim Union High, Brea-Olinda Unified, Buena Park, Capistrano Unified School District, Centralia, Cypress, Fountain Valley, Fullerton Joint Union High, Fullerton, Garden Grove Unified, Huntington Beach City, Huntington Beach Union High, Irvine Unified, La Habra City, Laguna Beach Unified, Los Alamitos Unified, Lowell Joint, Magnolia, Newport-Mesa Unified, Ocean View, Orange Unified, Placentia-Yorba Linda Unified, Saddleback Valley Unified, Santa Ana Unified, Savanna, Tustin Unified, Westminster, and Community College Districts of Coastline Community, North Orange County, Santiago, and South Orange County.

RECOMMENDATIONS

Under *California Penal Code* § 933 and §933.05, the Grand Jury requires responses from the appropriate agencies and officials to each of the following recommendations.

Based on the findings, the Grand Jury recommends that:

1. The Orange County Board of Supervisors ceases the County use of gasoline-powered leaf blowers in maintenance and cleanup operations in the unincorporated areas of the County. (Findings 1 through 3)

(A response to Recommendation 1 is required from **Orange County Board of Supervisors.)**

- The 30 county cities, except Laguna Beach, which already does so, cease the use of gasoline-powered leaf blowers in their city maintenance and cleanup operations. (Findings 1 through 3)
 - (A response to Recommendation 2 is required from Anaheim, Brea, Buena Park, Costa Mesa, Cypress, Dana Point, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, Laguna Hills, Laguna Niguel, La Habra, Lake Forest, La Palma, Los Alamitos, Mission Viejo, Newport Beach, Orange, Placentia, San Clemente, San Juan Capistrano, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster, and Yorba Linda.)
- 3 The 28 School Districts cease the use of gasoline powered leaf blowers in their school maintenance and cleaning operations (Findings 1 through 3.)
 - A response to Recommendation 3 is required from 28 School Districts of Anaheim City, Anaheim Union High, Brea-Olinda Unified, Buena Park, Capistrano Unified School District, Centralia, Cypress, Fountain Valley, Fullerton Joint Union High, Fullerton, Garden Grove Unified, Huntington Beach City, Huntington Beach Union High, Irvine Unified, La Habra City, Laguna Beach Unified, Los Alamitos Unified, Lowell Joint, Magnolia, Newport-Mesa Unified, Ocean View, Orange Unified, Placentia-Yorba Linda Unified, Saddleback Valley Unified, Santa Ana Unified, Savanna, Tustin Unified, Westminster.
- 4. The four Community College Districts cease the use of gasoline powered leaf blowers in their school maintenance and cleaning operations (Findings 1 through 3.)
 - (A response to Recommendation 4 is required from the four Community College Districts of Coastline Community, North Orange County, Santiago, and South Orange County.)

BIBLIOGRAPHY

- Facsimile Transmission from Air Resources Board to the Grand Jury, *Leaf Blowers-1997 Orange County*, Dec 10, 1998.
- South Coast Air Quality Management District, *Base and Future Year Emission Inventories Report*, Appendix III, November 1996.
- Internet Posting, SCAQMD AQMD Funds Development of Zero-Emission Mower, Leaf Blower Website.
- Pamphlet, Best Available Control Method (BACM) *Particulate Matter Air Pollution: A Threat to Our Health Working Group* (Membership includes ARB, SCAQMD, EPA), January 1997.
- California Air Resources Board Public Information Office, Facts About Air Pollution and Health Pamphlet, 1991.
- American Lung Association of Sacramento-Emigrant Trails, Fact Sheet Leaf Blower Air Pollution Impacts Study Results, undated.
- Letter, from Technical Support Division, ARB, to Air Quality Management Division, *Air Pollution from Leaf Blowers*, Sacramento Metropolitan Air Quality Management District; July 9, 1991.
- U.S. Environmental Protection Agency, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, 550/9-74-004, March 1974.
- U.S. Environmental Protection Agency, NTID 300.7, NTIS Document No. PB-206723 *Effects of Noise on People*, December 1971.
- Consumer Reports, *Power Blowers*, September 1995, p. 586-9.
- Consumer Reports, The world's quietest power blower? April 1997, p. 8.
- Briggs and Stratton Corporation, *Emissions*, Internet Posting website (www.briggsandstratton.com/emissions), December 1, 1998.
- Tanaka Power Equipment Catalog, *Blowers*, Internet website: (www.tanakapowerequipment.com), 1998, p. 8.
- RedMax Catalog-Part Number A01098, *Pro Power Blowers* Komatsu Zenoah America, Inc., Norcross, Georgia.
- Echo Master Products Catalog, Part No. 999222-02916, *Power Blowers*, Echo Incorporated, Lake Zurich, IL, 1998, p. 16–21.
- Husqvarna Forest and Garden, Charlotte NC, *Blowers*, Husqvarna Catalog #531 03 05-50, 1998, page 22.



SCAQMD is pleased to offer a year-round program that allows consumers to purchase new cordless electric lawn mowers at any retail center or online. There are many electric lawn mower models available. Eligibility is open to residents of South Coast AQMD's jurisdiction.

Purchase your new, cordless electric lawn mower

- Begin the online application, uploading your purchase receipt (www.aqmd.gov/lawnmower)
- Select a certified scrapper from our list and print your certification form
- Take your old working gas mower to the scrapping location and have the scrapper sign and return the certification form to you
- Upload the signed certification form to your application
- Sign and submit your final application electronically for processing

Rebate amounts are based on the purchase price of the new electric lawn mower, not including taxes and delivery. The electric lawn mower purchased must include a battery and charger.

What You'll Need: Proof of purchase and signed scrap certificate.

*Rebate amount cannot be greater than the purchase price.

continue until all program funds have been exhausted.

The rebate program is first-come, first-served and rebates will

Please visit our website www.aqmd.gov/lawnmower to access the lists of Lawn Mower Manufacturers, and certified scrappers as well as Frequently Asked Questions. You can also email us at lawnmower@aqmd.gov or call us (Tuesday-Friday) at 888-425-6247.