## REGULATORY AUTHORITY OF THE SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT OVER LEAF BLOWERS

## May 2017

The Sacramento Metropolitan Air Quality Management District (SMAQMD) occasionally receives calls from citizens concerned about the use of leaf blowers, inquiring if there are any regulations prohibiting or limiting the use of leaf blowers. These inquiries have come from people who are adversely impacted by the dust, noise, and exhaust created by the use of this equipment. Anyone who has ever witnessed the use of this type equipment recognizes that a considerable amount of dust, noise, and exhaust is, in fact, generated which can impact local residents, businesses, pedestrians, and others who may be in the immediate area at the time when this equipment is being used.

Given that the SMAQMD's primary authority is to regulate emissions from stationary sources and that it has no legal authority to establish emission standards for this type of equipment, the SMAQMD has no regulations that clearly and specifically prohibit, restrict, or affect the use of landscape maintenance equipment of this size and nature.

The SMAQMD does have a general nuisance rule which prohibits the discharge of any air contaminant which causes a public nuisance with some very specific restrictions. However, given the typically short duration of use, the relatively small area impacted, and the number of people who need to complain to substantiate a public nuisance, this type of activity has not risen to the level of a *public* nuisance. The use of this equipment can create *private* nuisances to people who are enduring the noise, dust, and exhaust and who suffer eye irritation, aggravation of sinuses, asthma, and sleep deprivation which they may directly attribute to the use of this equipment in their neighborhood. An informal survey of air districts has shown that no air district has ever cited a leaf blower for a *public* nuisance.

The SMAQMD does have a fugitive dust rule. However, the language in this rule suggests that the scope is limited to construction related activities, and the rule was adopted before the widespread use of leaf blowing equipment, also suggesting the intent was not to apply to lawn and garden maintenance activities. An informal survey of air districts has found only one instance of an air district ever citing someone for excessive dust from leaf blowing activities, and it was limited to a commercial site.

There is no question that based on a simple visual observation of the fugitive dust kicked up by this equipment, particularly if operated over dusty surfaces or dry soil beds, that a significant amount of particulate matter can be raised, albeit over a short duration in some cases. In addition, given their high air velocities, the use of this equipment causes a re-suspension of pollen and mold spores which become components of the total suspended particulate seen, potentially exacerbating allergies and respiratory problems. Other substances that have been alleged to be part of the dust re-suspended by leaf blowers include fecal material, fertilizers, pesticides, herbicides, and other biological substances. The SMAQMD estimates that on average 0.4 tons per day of particulate matter is blown into the air from the use of leaf blowers in Sacramento County. In addition to particulate matter emissions, leaf blower engine exhaust and gasoline vapors from refueling leaf blowers are another source of emissions. SMAQMD

<sup>&</sup>lt;sup>1</sup> A Report to the California Legislature on the Potential Health and Environmental Impacts of Leaf Blowers, Air Resources Board (February 2000)

<sup>&</sup>lt;sup>2</sup> 2016 Leaf Blower Emissions in Sacramento County, Sacramento Metropolitan Air Quality Management District (December 2016)

estimates that in Sacramento County, leaf blowers contribute a combined total of two tons per day of emissions of particulate matter, engine exhaust and vapors from refueling the equipment.

To address combustion exhaust emissions from the blower engine itself, the South Coast Air Quality Management District (SCAQMD) has adopted an incentive program designed to replace older 2-stroke engines with cleaner 4-stroke engines. The Yolo-Solano AQMD had a similar program in 2006. Electric leaf blowers are another option to reduce the combustion emissions. Changing the type of engine will not eliminate the particulate matter associated with leaf blowing, but it would significantly reduce the overall emissions. Common complaints from industry in the past regarding electric leaf blowers revolved around the reduced power of battery-powered leaf blowers. However, there are corded electric leaf blowers that can be used and new battery technology may offer a cleaner outlook. With advances in battery technologies, electric leaf blowers are as effective as their petroleum-fueled counterparts. Additionally, electric models are being designed to operate at lower decibels, so quiet in fact that they may be safely operated indoors.<sup>3</sup> As electric leaf blowers become more widely available in the marketplace and more commonly used, overall nuisance issues associated with engine fumes and noise will likely decrease.

Given that the primary mission of local air districts is to regulate stationary sources (factories, industrial sources, etc.), no air district has, to date, adopted a regulation specifically targeting the use of leaf blowers or attempted to use existing regulations to control their use in any concerted way. However, at least twenty California cities have banned leaf blowers by city codes to address citizen concerns over the negative impacts of leaf blowers. Another eighty cities have ordinances on the books restricting either usage or noise level or both.<sup>4</sup> The City of Santa Barbara has not only banned gasoline-powered leaf blowers but also specifically prohibits the use of any leaf blower to blow cuttings, refuse, or debris onto neighboring property or onto a street or gutter. This type of language would help reduce re-entrained road dust and many of the negative adjacent property impacts caused by leaf blowers. The City of Sacramento has not banned the use of leaf blowers but has restricted their use to 9am–6pm Monday-Saturday and 10am-4pm on Sunday due to noise concerns.<sup>5</sup>

Based on informal discussions with local landscape maintenance companies, the main alternative to leaf blowing (rake or broom) involves quite a significant increase in labor and, therefore, cost to the client. Other types of equipment (leaf broom and vacuum systems) involve an increase in labor because of the frequency at which the collection bag must be emptied or they are not feasible for certain terrains and ground cover conditions.

In summary, given the problems associated with the use of this equipment, the SMAQMD supports any effort by cities to adopt ordinances banning or restricting the use of leaf blowers and supports approaches that will reduce excess emissions and improve the health for Sacramento residents.

<sup>&</sup>lt;sup>3</sup>Demonstration Of The Greenstation Lithium Battery Powered Commercial Backpack Leaf Blower Final Report, August 31, 2015

<sup>&</sup>lt;sup>4</sup> A Report to the California Legislature on the Potential Health and Environmental Impacts of Leaf Blowers, Air Resources Board (February 2000)

<sup>&</sup>lt;sup>5</sup> Sacramento City Code 8.68.180