

## AB 118: Air Quality Improvement Program (AQIP)

### **Lawn and Garden Equipment Replacement (LGER) Program Development February 11, 2009 LGER Working Group Meeting**

The Air Quality Improvement Program (AQIP), authorized by Assembly Bill 118 (Nunez, 2007), is a new, innovative ARB air quality incentive program to reduce criteria and toxic air pollutants. At its November 5-6, 2008 AQIP public workshops, ARB staff signaled its intent to pursue a Lawn and Garden Equipment Replacement (LGER) program as part of the AQIP FY 2009-10 Funding Plan. This discussion paper describes potential eligibility and implementation options for the LGER program. Concepts described in this document are for discussion purposes only and are intended to solicit stakeholder input. For more information regarding development of the FY 2009-10 Funding Plan and the AQIP Guidelines, please visit [www.arb.ca.gov/msprog/aqip/aqip.htm](http://www.arb.ca.gov/msprog/aqip/aqip.htm).

#### Background

The small off-road engine (SORE) category consists of off-road spark-ignition engines below 25 horsepower, including small utility equipment and lawn and garden equipment. Lawn and garden equipment contribute to California's current ozone and particulate matter (PM) air quality problems. Lawn and garden equipment contribute approximately 45% of reactive organic gas (ROG), 3% of oxides of nitrogen (NO<sub>x</sub>), and 5% of PM emitted from off-road equipment statewide.

On November 21, 2008, ARB approved proposed amendments to the California regulations and test procedure for small off-road engines (SORE). The most significant modifications that potentially impact the LGER program included the addition of Zero Emission Equipment (ZEE) credits to encourage manufacturers to develop commercial ZEE. Under the proposed AB 118 LGER program, SORE families that have been granted emission reduction credits (ERC) may not be eligible for funding. Staff welcomes stakeholder comments regarding ways to ensure surplus reductions can be achieved for ERC-eligible SORE families.

AB 118 identifies lawn and garden equipment as one of the source categories eligible for funding and staff is considering the following definition of lawn and garden equipment for the purposes of the LGER program:

- Equipment used to prepare and maintain lawns and gardens. This equipment is traditionally, but not exclusively, powered by spark-ignition engines. This equipment includes applications such as lawnmowers, edgers, trimmers, leaf blowers, and chainsaws. Examples of applications that do not fall into this category are golf carts, specialty vehicles, generators, pumps, and other small utility equipment.

Several large air districts currently implement successful and highly visible lawn and garden equipment replacement programs; however, these programs are limited by funding. Staff is considering a program to replace internal combustion lawn and garden equipment with cordless zero emission residential lawn and garden equipment as part of the FY 2009-10 Funding Plan. Funding zero emission (e.g. battery-powered) lawn and garden equipment will also allow zero-emission equipment (ZEE) to be more cost competitive with internal

combustion equipment and make it more affordable for consumers. Limiting the program to zero emission lawn and garden equipment will provide immediate reductions of criteria pollutant and greenhouse gas emissions and help stimulate the development and commercialization of other electric off-road equipment. While we expect the LGER will mostly fund currently available residential lawn and garden equipment, LGER incentives could accelerate development of electric commercial lawn and garden equipment.

### Program Implementation

Staff is considering directing LGER funding to local air districts because of their experience implementing lawn and garden replacement programs locally. Districts would likely be considered for funding based on factors such as: federal 8-hour ozone classification; EJ designation; success with current lawn and garden replacement program; staff experience with lawn and garden manufacturers and vendors to successfully implement the program within the district boundaries; equipment demand within district boundaries; potential criteria emission reductions within district boundaries; cost-effectiveness; ability to provide match funding; program simplicity and transparency; and administrative costs.

Based on the equipment and population currently being replaced in local air district programs, ARB staff believes approximately \$1-2 million should be allocated to the LGER program during the first funding cycle. Staff is proposing 5-10% of this amount could be used for program administration and outreach.

Cordless zero emission lawn and garden equipment for residential and commercial use are eligible for the LGER program; however, staff anticipate only cordless residential electric lawn mowers will be available for the first funding cycle. Cordless electric residential lawn mowers typically cost about \$400 plus tax and staff is considering up to \$300 in incentive funding per mower. Staff is also proposing a 1:1 match requirement for local air districts. ARB will provide districts with one dollar toward their local program for every dollar a district spends on a cordless electric residential lawn mower.

Staff welcomes comments on the proposed eligibility criteria of the LGER Program as well as suggestions on the appropriate funding amount.