

May 3, 2006

Contact – Stella Ononiwu

Workgroup Recommendations and Other Potential Control Measures
Non-Automobile Gasoline Engines Workgroup

NA004 – Public Education and Outreach on Best Management Practices that will
Reduce Emissions from Small Engines

DESCRIPTION

This measure would focus on educating the public on behaviors that will reduce emissions. This would include Best Management Practices to reduce emissions from gasoline engines by using the equipment less and by using equipment with lower emissions. These materials could point out that the use of non-automobile gasoline engines is usually highest on high ozone days, and encourage the public to refrain from using the engines on these days.

Best Management Practices to reduce emissions from gasoline engines can be utilized in both the landscape and marine industries. Flyers, posters, fact sheets, handouts and pamphlets would be developed to distribute to the public at locations frequented by those using non-automotive gasoline engines. Existing websites or new ones would be developed to include Best Management Practices. Other program outreach efforts would be updated to include an air quality component. For instance, in addition to the fuel handling Best Management Practice, an air component, for example, ‘Minimize boating on high ozone days’, can be added to NJDEP’s current Clean Marina Program and the “Grass – Cut it and leave it” brochure.

Public education on alternative and low maintenance landscapes would target both the commercial and residential sectors. Homeowners, corporate park owners, and developers in New Jersey would be encouraged to participate.

The program will provide education on the emission benefits associated with planting low-growing ground covers, trees and low height turf grasses. The purpose of this type of strategy is to reduce the amount of lawn mowing by replacing grass with alternative landscapes, thereby reducing the emissions from landscaping equipment. This effort could be coordinated with water conservation outreach since ground covers do not generally require as much watering as grass lawns.

IMPLEMENTATION

Implementation of these programs would be on a voluntary basis. The focus would be on educational and outreach efforts to raise the general public’s awareness on the emission benefits of certain behavior modifications. The emission benefits would include a reduction in VOC and CO. In addition, other benefits may include a reduction in watering, in the use of fertilizers, herbicides, and pesticides. Ultimately, this would reduce the time and cost of lawn maintenance for the homeowner.

May 3, 2006

Contact – Stella Ononiwu

Workgroup Recommendations and Other Potential Control Measures
Non-Automobile Gasoline Engines Workgroup

NA004 – Public Education and Outreach on Best Management Practices that will
Reduce Emissions from Small Engines

The general potential implementation issues the State may face appear to be funding issues for developing materials, media outreach and staff participation.

NJDEP can partner with industry, homeowners associations, businesses, educational institutions, and organizations to implement these programs. Rutgers Cooperative Extension Service has a great tool on their website that provides educational information to the general public on various important environmental topics. NJDEP could explore partnering with them to add an air component to their current program or initiate a similar program.

COST

The cost would be for the State to develop materials, media outreach and staff participation. Partnership efforts could help alleviate these costs. Also, grants and some funding through Supplemental Environmental Projects (SEP)¹ could be used, if and when available.

Replacing grass with alternative and low maintenance landscapes may have an initial positive impact on the landscaping industry, by increasing sales of certain types of plant material in the short-term, but may have a negative impact because alternative landscapes can reduce the amount of lawn that would require mowing.

EFFECTIVENESS

The emission benefits from these measures will depend on the rate at which habits change. A well-organized and effective education and outreach program will provide a wider public exposure, which would result in a greater positive impact on the public.

Based on the 2002 New Jersey Emission Inventory, the following are contributions from non-road sources that would be impacted by these practices:

Lawn and Garden Equipment (Commercial) – 68.46 tons of VOC and 9.84 tons of NO_x per summer day.

Lawn and Garden Equipment (Residential) – 21.16 tons of VOC and 3.04 tons of NO_x per summer day.

Pleasure Craft – 64.01 tons of VOC and 4.08 tons of NO_x per summer day.

¹ An environmentally beneficial project that a violator agrees to perform as part of a settlement of an enforcement action.

May 3, 2006

Contact – Stella Ononiwu

Workgroup Recommendations and Other Potential Control Measures
Non-Automobile Gasoline Engines Workgroup

NA004 – Public Education and Outreach on Best Management Practices that will
Reduce Emissions from Small Engines

SOURCE

1. A Collaborative Report Presenting Recommended Air Quality Strategies for Further Consideration by the State of New Jersey, prepared by the Non-Automotive Gasoline Engines Workgroup, October 31, 2005, pg. 14 and pg. 15.
http://www.nj.gov/dep/airworkgroups/docs/final_na_workgroup_report.pdf
2. Rutgers University Cooperative Research & Extension,
<http://www.rcrc.rutgers.edu/extension/>