

MAYOR CROTTY'S GREEN GOVERNMENT INITIATIVE SPEARHEADS PROJECT TO REDUCE DIESEL SCHOOL BUS EMISSIONS

While school buses may be the primary way for kids to get to school, but through innovative partnerships we can also ensure that school buses are the cleanest way to get to school. In accordance with Mayor Crotty's *Orange to Green* initiative, a pilot project to reduce school bus diesel emissions has evolved. Through a collaborative effort between the OC EPD's Air Quality Management section (AQM), Orange County Head Start and Orange County Public Schools (OCPS), 94 school buses were retrofitted with "high performance" diesel oxidation catalysts (DOC) in early 2007. Eleven Head Start buses and eighty-three OCPS buses were involved in this project. Emission reduction is achieved by placing state-of-the-art controls on the existing school bus fleet. The AQM section has dedicated over \$100,000 toward the project as part of a campaign to bring awareness of available and practical solutions to diesel engine emissions.

DOCs, which are similar to the catalytic converters on our cars, were selected due to their low maintenance requirements, non-specific fuel requirements, and long-term durability. By installing oxidation catalysts on older buses, further emission reductions are achieved: up to 50% Particulate Matter (PM), 50% unburned hydrocarbons (HC), and 50% Carbon Monoxide (CO) will be eliminated annually. This equates to greater than two tons of CO, over one half ton of HC, and an additional half ton of PM.

In October 2007, EPD was awarded a grant from the EPA in the amount of \$199,200 to retrofit 258 additional older model school buses (model years 1999-2000) with emission control devices. EPD will match a portion of this grant.

Currently, the OCPS operates a school bus replacement program that phases out the older buses within the fleet. Through the retrofit project, the oldest school buses that will be operating for several more years have been targeted. With these new catalysts up to 40% PM, 70% unburned HC, and 40% CO will be eliminated annually. This equates to nearly four tons of CO, almost two tons of HC, and over one ton of PM.

With the efforts of this project, the Orange County EPD, Orange County Head Start, and the OCPS are taking steps toward cleaner air for our children and the community. The EPA classifies 44% of the population in Orange County, as "sensitive groups," which consists of children and the elderly, who are at the greatest risk when the air quality begins to degrade. This is an opportunity to introduce the area to the existing technologies for reducing emissions from other types of diesel vehicles, with the hopes of launching more voluntary efforts with area businesses and municipalities.