

SCAQMD School Bus Demonstration

Description: A test fleet of thirty-nine 1978-1998 school buses within the Los Angeles Unified School District, the Anaheim Union High School District, and the Hemet Unified School District are undergoing retrofitting to demonstrate the effectiveness of diesel particulate trap systems. Thirteen buses will be retrofitted with the Johnson-Matthey CRT filter system and thirteen buses will be fitted with the Engelhard DPX filter technology. At least one school bus will be retrofitted with the Ceryx Quadcat system, which may offer additional control of NOx emissions. The remaining buses will operate with low-sulfur ECD diesel fuel and no filter system. These transit buses operate on both city and suburban routes, often in stop-and-go conditions. The demonstration program is expected to begin in November 2000, and will run for approximately one year.

Participants SCAQMD, BP, Johnson-Matthey, Engelhard, Ceryx

Funding: SCAQMD, BP, Johnson-Matthey, Engelhard, Ceryx

Vehicles: Various manufacturers (1978-1998) – includes Thomas, IHC, Blue Bird, Crown

Engines: Cummins 8.3, Navistar 466, Caterpillar 3208, Detroit Diesel 6V92, Caterpillar 3116, Detroit Diesel 6/71

Status: As of October 2000, retrofitting of filter systems has begun by Johnson-Matthey and Engelhard. Once retrofitting has been completed, emission testing will commence at ARB's Emission Test Facility (ETF). Unlike other demonstrations, the SCAQMD school bus project will investigate the use of the CRT and DPX systems on a wide range of engine technologies and age. Additionally, by demonstrating these technologies in three different school districts, a more comprehensive analysis of the technology's application should be realized. To gain a sense of the diversity of vehicle/engine test configurations, below is the current list of seven buses under the L.A. Unified School District demonstration that will be equipped with the CRT system.

Bus	Engine	Year	Vehicle ID
IHC	Navistar 466	1986	3330
Blue Bird	Navistar 466	1995	3910
IHC	Caterpillar 3208	1978	1900
IHC	Caterpillar 3208	1978	1934
Crown	Det. Diesel 6V92	1990	6270
Crown	Det. Diesel 6V92	1990	6272
Blue Bird	Caterpillar 3116	1995	6310