

	MTA Puts Environmental Benefits, Reliability under Microscope in Year-Long Test of Low-Sulfur Diesel Fuel
Decal will identify buses using low-sulphur fuel	<ul style="list-style-type: none">• New ARCO Fuel aimed at reducing particulate emissions

By Ed Scannell
([March 9](#)) The MTA began a year-long trial today to determine the environmental benefits of using low-sulfur fuel in diesel transit buses.

The MTA is one of seven agencies and companies in Southern California that will test ARCO's new EC-Diesel fuel which the company says can reduce particulate emissions from diesel engines up to 90 percent when used in conjunction with a device that traps particulate matter.

Test will use 20 diesel buses

The trial will employ 20 diesel buses operating from Division 5, the Arthur Winston Division. Purchased in 1998, they are the newest diesel buses in the MTA's active fleet. More than 800 Metro Buses now operate on compressed natural gas (CNG).

Of the 20 buses, four will operate on EC-Diesel fuel and will be equipped with a Continually Regenerating Trap (CRT) designed to reduce particulate matter emissions. Eight other buses will operate on EC-Diesel fuel but without the CRT device.

The remaining eight buses will serve as the control group and will operate on Number 2 diesel fuel, the industry standard diesel fuel as regulated by the California Air Resources Board (CARB). These buses will not be equipped with the CRT device.

Four-day battery of tests

After about three weeks of operation in regular service, three of the buses will undergo a four-day battery of tests at CARB's emissions testing facility located at the MTA's Regional Rebuild Center.

The facility's dynamometer will simulate driving environments of increasing intensity: Central Business District, Arterial conditions that resemble city and freeway driving conditions and a New York City Test, which models the more demanding conditions experienced by buses operating in New York City.

The three buses undergoing the dynamometer testing will include one bus from the control group that operates on regular Number 2 CARB-approved diesel and one bus operating on EC-Diesel fuel with the CRT trap.

Three fueling configurations

The third bus will undergo the dynamometer testing using three fueling configurations in succession: EC-Diesel with the trap device, EC-Diesel without the trap device, and regular Number

2 diesel without the trap device. The buses operating on EC-Diesel will be tested at the end of one year to determine whether any degradation in emissions reduction has occurred.

The trial not only is intended to determine the emissions benefits of

EC-Diesel and CRT traps, but also whether the low-sulfur fuel has any impact, over time, on the reliability of diesel engines. The 17 buses not undergoing dynamometer testing will be tested strictly to measure reliability.

The California Air Resources Board has adopted a regulation that will require transit agencies, beginning Jan. 1, 2003, to retrofit their existing diesel buses with devices capable of reducing diesel particulate emissions by 85 percent.

Test will provide useful data

The MTA's participation in the testing of EC-Diesel diesel fuel and the Continually Regenerating Trap (CRT) will provide useful data about their effectiveness in reducing the level of diesel particulate emissions.

While current MTA Board policy calls for the purchase of buses that operate exclusively on alternative fuels, such as CNG, the MTA still will have approximately 1,000 diesel buses in its fleet when all existing contracts for CNG buses are completed. These diesel buses eventually will operate on EC-Diesel or other low-sulfur fuel prior to their replacement with new alternative fuel buses.

The anticipated benefits of EC-Diesel and the CRT device will support the MTA's long-standing commitment to using the cleanest technology available.

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