in the public docket indicated above. Docket items may be inspected from 8:00 a.m. until 5:30 p.m., Monday through Friday. As provided in 40 CFR Part 2, a reasonable fee may be charged by the Agency for copying docket materials.

## FOR FURTHER INFORMATION CONTACT:

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## SUPPLEMENTARY INFORMATION:

## I. Background

On April 21, 1993, the Agency published final Retrofit/Rebuild Requirements for 1993 and Earlier Model Year Urban Buses (58 FR 21359). The retrofit/rebuild program is intended to reduce the ambient levels of particulate matter (PM) in urban areas and is limited to 1993 and earlier model year (MY) urban buses operating in metropolitan areas with 1980 populations of 750,000 or more, whose engines are rebuilt or replaced after January 1, 1995. Operators of the affected buses are required to choose between two compliance options: Program 1 sets particulate matter emissions requirements for each urban bus engine in an operator's fleet which is rebuilt or replaced; Program 2 is a fleet averaging program that sets out a specific annual target level for average PM emissions from urban buses in an operator's fleet.

A key aspect of the program is the certification of retrofit/rebuild equipment. To meet either of the two compliance options, operators of the affected buses must use equipment which has been certified by the Agency. Emissions requirements under either of the two options depend on the availability of retrofit/rebuild equipment certified for each engine model. To be used for Program 1, equipment must be certified as meeting a 0.10 g/bhp-hr PM standard or as achieving a 25 percent reduction in PM. Equipment used for Program 2 must be certified as providing some level of PM reduction that would in turn be claimed by urban bus operators when calculating their average fleet PM levels attained under the program.

Under Program 1, additional information regarding cost must be submitted in the notification of intent to certify, in order for certification of that equipment to initiate (or trigger) program requirements for a particular engine model. In order for the equipment to serve as a trigger, the certifier must guarantee that the equipment will be offered to affected operators for \$7,940 or less at the 0.10 g/bhp-hr PM level, or for \$2,000 or less for the 25 percent or greater reduction in PM. Both of the above amounts are based on 1992 dollars and include life cycle costs.

## II. Notification of Intent To Certify

By a notification of intent to certify dated May 15, 1995, Lubrizol Corporation has applied for certification of equipment applicable to certain petroleum-fueled diesel engines used in urban buses of 1993 and earlier model years. The notification of intent to certify states that the candidate equipment will comply with the 0.10 g/ bhp-hr particulate matter (PM) standard on petroleum fueled diesel engines that have been rebuilt to the engine manufacturer's specifications. No life cycle cost data is submitted with the notification of intent to certify, therefore, the equipment will not trigger program requirements. The use of the equipment by transit operators to meet program requirements is discussed further below.

Major components of the candidate equipment are: (1) A ceramic particulate filter assembly for the diesel exhaust, which in most installations takes the place of the original system muffler; (2) a proprietary diesel fuel soluble catalyst (additive); (3) gold plated fuel injectors; and, (4) a sensor to monitor engine exhaust backpressure. In operation, copper in the fuel additive (EZ-ADD<sup>TM</sup>) is deposited on the ceramic exhaust filter along with exhaust particulates. The copper acts as a catalyst to lower the oxidation temperature of the particulates and thus promotes autoregeneration of the trap under a variety of operating conditions. The nozzle tips of the fuel injectors are gold plated to minimize formation of deposits.

The notification of intent to certify states that the candidate equipment is applicable to the following engines:

| Manufacturer   | Engine model                                    | Model Year   |
|--|---|--|
| Cummins<br>Cummins<br>Cummins<br>Cummins<br>MAN<br>Caterpillar | L-10<br>L-10 EC<br>C-Series<br>B-Series<br>3208 | 1985–1991<br>1992–1993<br>1990–1992<br>1990–1992<br>1979–1992<br>1982–1992 |

Lubrizol Corporation presents exhaust emission data from testing the equipment on a recently rebuilt 1987 model year Cummins L–10 engine documenting PM emissions from one cold start cycle plus seven hot start cycle transient exhaust emission tests. During one of the hot cycles the trap experienced significant regeneration. The PM emissions from this cycle, the highest of all cycles (including the cold cycle), was 0.028 g/bhp-hr. Exhaust testing with the equipment installed also showed that hydrocarbon (HC), carbon monoxide (CO), and oxides of nitrogen (NO<sub>x</sub>), emissions were less than the federal emission standards for 1987. Smoke emission measurements for the engine with the candidate equipment installed indicates compliance with applicable standards, with smoke opacity measurements of less than 1 percent for the acceleration, lugging, and peak modes.

Lubrizol Corporation has submitted no life cycle cost information for this equipment because it is not intended to trigger program requirements. Therefore, its use will be at the option of urban bus operators and will not be required if the Agency approves the request for certification of this candidate equipment.

Section 85.1406(d) of the regulations governing urban bus equipment certification states, in part, "\* \* installation of any certified retrofit/ rebuild equipment shall not cause or contribute to an unreasonable risk to the public health, welfare or safety \* \* Information on health effects related to the candidate equipment has been provided by Lubrizol with its notification of intent to certify, and this has been reviewed by the Agency's Office of Research And Development (ORD). In its report entitled "Inhalation Risk Assessment Of Lubrizol Corporation's EZ-TRAP TM System" ORD indicates the potential for dioxin formation. The report states:

'ORD's major concern is whether the use of the EZ-TRAPTM system with Lubrizol would, or would not, result in dioxin formation and emissions. Although there are no data relating to dioxin formation in diesel engines generally, ORD's concern in this instance is based on the similarity of the experimental evidence defining the requisite conditions for dioxin formation in combustion processes, post-combustion, with the conditions anticipated with the use of the copperbased additive in diesel fuel burned by buses. Specifically, with regard to the latter; (1) particles are retained in the filter trap at temperatures associated with formation in other combustion sources; (2) the particles provide reactive surfaces for chemical reactions to transpire; (3) trace levels of chlorine may be present in the diesel fuel; and, (4) copper is the most potent catalyst identified to date in the overall dioxin formation reactions.

"Therefore, based on a review of the available information, ORD concludes