TRT notification of intent to certify nor provided to TRT as part of that agreement. In general, the Agency has concerns when a certifier is not aware of the technical specifications of equipment it wants to certify and when the potential exists for a change in equipment specifications to adversely affect emissions reduction performance. Such a change in specifications may occur, for example, with a change in catalyst production which may not be known to the certifier. In a letter provided to the Agency, Engelhard states that it will notify both TRT and the Agency in the event of changes to specifications of the catalytic converter muffler provided to TRT. The specifications for the catalyst have been provided to the Agency as a confidential part of Engelhard's notification of intent to certify its CMX™ catalyst muffler. A copy of this letter can be found in the public docket at the address indicated above. This provides the Agency with assurance that changes to catalyst specifications will be brought to the Agency's attention, and the Agency proposes to restrict certification for candidate TRT equipment to use of catalyst muffler units supplied by Engelhard and covered by Engelhard's certification, and require that use of catalysts supplied by any other supplier be the subject of a separate notification of intent to certify.

TRT presents exhaust emission data from testing the candidate equipment configurations on three engines using the federal engine-dynamometer test procedures of 40 CFR Part 86, as well as chassis dynamometer testing. A 1977 model year DDC 6V71N and 1988 model year DDC 6V92TA DDEC II were tested on engine dynamometers, and another 1988 model year DDC 6V92TA DDEC II was tested on a chassis dynamometer. The 6V71N engine was selected to represent a ''worst case'', with respect to PM, for most of the engines for which certification of the equipment is being sought, and also to represent engines equipped with MUI. Based on a pre-rebuild PM level for the 6V71N of 0.50, from the table in 40 CFR section 85.1403(c)(1)(iii)(A), TRT states that the 6V71N qualities as ''worst case'' for all two-stroke/cycle engines with the exception of the 1990 DDC 6L71TA. The 1988 6V92TA DDEC engines were tested to show the results of the biodiesel fuel on engines having electronic fuel control, and also to represent the ''worst case'' engine configuration for such engines, based on their ''pre-rebuild'' level of 0.31 g/bhp-hr. The notification states that the fuel used for testing, both the biodiesel and diesel, are representative of commercially available biodiesel and low-sulfur diesel fuels.

Baseline testing was conducted after two of the test engines were rebuilt to the original engine manufacturer's configurations. A third engine had not been used prior to testing. Baseline testing was conducted using low sulfur test fuel having a maximum sulfur level of 0.05 weight percent. Subsequent testing of the engines was done after the candidate equipment was installed.

Table 1A below summarizes the emission levels from the engine dynamometer testing. Table 1B summarizes the chassis testing in terms of range of impact on exhaust emissions of the candidate equipment from three driving cycles. The driving cycles used for the chassis testing were the Central Business District, New York Bus Composite Cycle, and the Arterial Cycle. A report attached to TRT's notification provides specific emission rates measured for each driving cycle and equipment configuration. Table 2 summarizes, for each test engine, the changes in PM and NO_X emissions with use of each configuration of the equipment. The reductions listed for the chassis testing include double weighting of the emission data from the Arterial Cycle, because TRT believes the resultant combination of the chassis driving cycles is more representative of the Agency's Urban Dynamometer Driving Schedule for Heavy-Duty Vehicles (40 CFR Part 86, Appendix I). Table 3 provides a summary of all engine models for which TRT intends the equipment to apply, and the associated percent reductions in PM emissions for these models, based on the test data. Table 4 summarizes the PM certification levels for each engine model for which certification is sought, based on reductions of Table 3 applied to the pre-rebuild levels established in the program regulations. Additional testing information is provided in reports from the facilities which conducted the emission testing (these reports are attachments to the notification).

TABLE 1A.—TEST ENGINE EMISSIONS

Engine	Gaseous and Particulate				Smoke			Comment
	HC	CO	NO_X	PM	ACC	LUG	Peak	
	g/bhp-hr				percent opacity			
Engine Dyno	1.3	15.5	10.7	0.60	20	15	50	1988 EPA stds.
1977 6V71N MUI	0.86	3.18	11.72	0.282	1.2	1.8	1.8	Baseline (low S, 2D).
1977 6V71N MU	0.38	0.86	12.11	0.166	0.9	1.7	1.7	B20 + cat.
1977 6V71N MU	0.42	0.94	8.47	0.213	2.2	2.8	2.9	B20, cat + 4° retard.
1988 6V92TA DDEC II	0.60	1.60	8.52	0.20	6.0	5.3	8.7	Baseline (low S, 2D).
1988 6V92TA DDEC II	0.21	0.95	9.12	0.11	3.7	1.7	6.9	B20 + cat.
1988 6V92TA DDEC II	0.25	1.05	8.35	0.12	5.1	2.5	8	B20, cat + 1° retard.

TABLE 1B.—CHASSIS TESTING: RANGE OF PERCENTAGE CHANGE [1] IN EMISSIONS FROM BASELINE (LOW SULFUR DIESEL)

Pollutant	B20 + catalyst	B20 + catalyst + 1.5° retard
HC	−59 to −39	−33 to +3
CO	−85 to −54	−38 to −19
NO_X	+4 to +8	−5 to −2
PM	−56 to −22	−46 to −7

[1] Three different chassis driving cycles were used.