

Local Law 38 of 2015

**Annual Report on Use of Ultra Low Sulfur Diesel in Diesel Fuel-Powered School Buses
and Report on Retrofitting of and Age Limitations on Diesel Fuel-Powered School Buses**

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Annual Report on Use of Ultra Low Sulfur Diesel in Diesel Fuel-Powered School Buses

§24-163.7 of NYC Administrative Code required that by September 1, 2006, certain General Education (GE) diesel fuel-powered school buses be powered by a specific diesel fuel, ultra-low sulfur diesel fuel (ULSD). In addition, §24-163.7 required that by September 1, 2007, all of these school buses use best available retrofit technology (BART) to reduce emissions.

Finally, §24-163.7 requires the DOE to submit a report each year regarding the use of ultra low sulfur diesel fuel and the use of the best available retrofit technology by school buses during the immediately preceding fiscal year and answering the specific questions below.

Of NYCDOE's contracted GE diesel fueled fleet, 95.2% are using emission control devices with 87.8% using the best available devices.

Below are responses to the specific questions in Section 24-163.7(j)(1):

1. *What is the total number of school buses used to fulfill the requirements of school bus contracts? (Ad. Code 24-163.7(j)(1)(i))*

There is a fleet of 2142, Type C and D, general education school buses used to fulfill the requirements.

2. *What is the total number of such buses that were powered by ULSD? (Ad. Code 24.163.7 (j)(1)(ii))*

All buses are powered by ULSD.

3. What is the number of such buses that used BART, including a breakdown by vehicle model, engine year, and the type of technology used for each vehicle? (Ad. Code 24.163.7(j)(1)(iii))

886 buses used this technology. Please see Table 1 for further breakdown.

Year	Retrofitted with DPF Count	
1998*	1*	*these 30 vehicles are being used as spare vehicles
1999*	29*	
2000	78	
2001	59	
2002	27	
2003	126	
2004	119	
2005	184	
2006	263	
Grand Total	886	

4. What is the number of such buses that used other authorized technology in accordance with the law, including a breakdown by model and engine age technology? (Ad. Code 24.163.7 (j)(1)(iv))

104 buses used other authorized technology. Please see Table 1 for the breakdown.

5. What is the number of such buses that are equipped with an engine certified to the applicable 2007 EPA standard for particulate matter in accordance with the law? (Ad. Code 24.163.7(j)(1)(v))

995 buses are equipped with the applicable 2007 EPA standard engines.

6. Where were the locations of the school districts where such buses were powered by ULSD, used BART or other authorized technology in accordance with this section, or were equipped with an engine certified to the applicable 2007 EPA standard for particulate matter? (Ad. Code 24.163.7(j)(1)(vi))

All 32 community school districts within the five boroughs of New York City used these buses as well as school districts in Westchester, Rockland, Nassau, and Suffolk counties in New York.

7. Were any waivers granted pursuant to 24-163.7(h) of this law? (Ad. Code 24.163.7(j)(1)(vii))

Yes; three (3) vehicles cannot be retrofitted due to the technology not being compatible with the engine type.

Table 1 - DPF

Technology	Manufacturer	Engine-Type	ULSD	Meets 2007 EPA Standard	No. of Buses*
Diesel Particulate Filter (DPF)	IC, Bluebird, Thomas	Cummins/IC-Navistar/Caterpillar/Freightliner/Ford	Yes	995	1881
Diesel Oxidation Catalyst (DOC) with Closed Crankcase Ventilation System (CCVS)	IC, Bluebird, Thomas	Cummins/IC-Navistar/Caterpillar/ Freightliner/Ford	Yes		104
DOC Only	IC, Bluebird, Thomas	Cummins/IC-Navistar/Caterpillar/Freightliner/Ford	Yes		3
CCVS Only	IC, Bluebird, Thomas	Cummins/Navistar/Caterpillar/Freightliner/Ford	Yes		52
NONE	IC, Bluebird, Thomas	Cummins/Navistar/Caterpillar/Freightliner/Ford	Yes		102
Retrofit in Process	IC, Bluebird, Thomas	Cummins/Navistar/Caterpillar/Freightliner/Ford	Yes		41
Not Required to Retrofit	IC, Bluebird, Thomas	Cummins/Navistar/Caterpillar/Freightliner/Ford	Yes		116
Total GE Diesel Fueled Bus Fleet	See Above	Cummins/Navistar/Caterpillar/Freightliner/Ford	Yes	995	2142

*bus count from Dec 20, 2016

Report on Retrofitting of and Age Limitations on Diesel Fuel-Powered School Buses

- §24-163.9 of the New York City Administrative Code requires the following:**

b. Diesel fuel-powered school buses shall utilize a closed crankcase ventilation system, selected from among the mobile sources devices identified and approved as part of the diesel retrofit verified technologies list by the United States environmental protection agency or the list of currently verified diesel emission control strategies by the California air resources board, to reduce engine emissions to the school bus cabin, in accordance with the following schedule:

- (1) fifty percent of diesel fuel-powered school buses used to fulfill each school bus contract shall be equipped with such a closed crankcase ventilation system by September 1, 2010;*
- (2) one hundred percent of diesel fuel-powered school buses used to fulfill each school bus contract shall be equipped with such a closed crankcase ventilation system by September 1, 2011;*

f. No later than December 31, 2011, and no later than December 31 of every year thereafter, the department of education shall submit a report to the mayor and the speaker of the council on compliance with this section. Such report shall include, but not be limited to, data on the age and crankcase ventilation retrofit status of every school bus pursuant to a school bus contract.

2. Background:

In December 2015, DOE's fleet was in compliance. In January 2016, as part of an effort to increase supports to families residing in homeless shelters, the Mayor announced that DOE would make available yellow school bus service to all students in shelters. Per the McKinney-Vento Homelessness Assistance Act (1987), students who become homeless may continue to attend their school of origin, regardless of shelter placement. DOE had previously fulfilled its obligation to transport these students by providing a MetroCard to both the student and parent when a bus route was not available. Per the new initiative, DOE was required to add hundreds of additional bus routes to transport students residing in shelters to their schools across the city.

The addition of these 363 bus routes in a short period of time, a 17% increase in the number of General Education buses, was only possible by allowing bus contractors some temporary flexibility. This included authorizing vendors to use as spare buses vehicles that were more than 16 years old or vehicles that were not equipped with a closed crankcase ventilation system. This was a temporary measure to fulfill a Mayoral initiative and steps are being taken to bring the fleet back to full compliance.

3. Conclusion

Regarding §24-163.9,b above: As of December 2016, 97.5% of all vehicles operated by vendors contracting with the Office of Pupil Transportation to fulfill contracted routes are either retrofitted with a closed crankcase ventilation system or are newer vehicles delivered with such a system by the manufacturer. There remain 229 vehicles that require retrofitting and DOE is working with the vendors to schedule the retrofits under an existing New York State Office of General Services contract.

Finally, there are at present time 9,043 vehicles listed by the bus contractors, of which 139 (1.5%) are older than the 16 year maximum allowed vintage. As noted above, this was a temporary necessity to meet a Mayoral directive.

In summary, DOE will ensure compliance with the requirements under this section before December 31, 2017 when the next report is due.