



December 29, 2020

Honorable Bill de Blasio
Mayor
The City of New York
City Hall
New York, NY 10007

Vincent Sapienza, P.E.
Commissioner

Re: **Local Law 77 Air Report for Fiscal Year 2019**

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Flushing, NY 11373

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Dear Mayor de Blasio:

Attached is the Local Law Air Report for Fiscal Year 2019 as required by Local Law 77 of 2003. As this report involves multiple agencies to submit data as to the use of ultra-low sulfur diesel fuel and best available control technologies to reduce particulate matter and nitrogen oxides in the environment, it is being submitted after the reports required by Local Law 38, 39, 40, 41 and 42 of 2005 and LL 43 of 2010. These prior reports were submitted for your review in February.

Sincerely,

A handwritten signature in black ink, appearing to read 'Vincent Sapienza'.

Vincent Sapienza, P.E.

c: Hon. Corey Johnson, Speaker, New York City Council
Hon. Scott Stringer, Comptroller
Dean Fuleihan, First Deputy Mayor
Lisette Camillo, Commissioner DCAS
Edward Grayson, Acting Commissioner DSNY
Lorraine Grillo, Commissioner DDC
Mitchell Silver, Commissioner DPR
Margaret Forgione, Acting Commissioner, DOT



Local Law 77 Annual Report for Fiscal Year 2019

Local Law 77 of 2003 (LL77) requires that any diesel powered off road vehicle used by the City use Ultra Low Sulfur Diesel (ULSD) Fuel. It also requires these vehicles be retrofitted with an Emissions Control Device to reduce the release of harmful pollutants into the environment.

Federal regulations required ULSD in on road diesel vehicles by July 1, 2006, and required ULSD in off road diesel vehicles by 2010.

As of Fiscal Year 2019, all City vehicles are using ULSD, alone and in combination with biodiesel blends and the City continues to install best retrofit technology on its vehicles. As technology improves and the universe of devices increases, there have been less operational issues with implementing this law. More city contractors and city agencies are coming into compliance by retrofitting their equipment or by purchasing EPA certified, OEM installed Tier 4 interim or Tier 4 Final Engines.

Below are answers to the questions in Section 24-163.3 (g) (1) of the Administration Code and describes the City's status in achieving these milestones. Table 1 summarizes the data.

1. *What is the total number of diesel-powered off road vehicles owned by, operated by or on behalf of, or leased by each city agency or used to fulfill the requirements of a public works contract for each city agency? (Ad. Code 24-163.3(g)(1)(i))*

Please see Table 1 for information.

2. *What is the number of such off road vehicles that were powered by ULSD? (Ad. Code 24-163.3(g)(1)(ii))*

All 1,138 off road vehicles were powered by ULSD.

3. *What is the number of such off road vehicles that used BAT for reducing the emission of pollutants, including a breakdown by vehicle model and the type of technology used for each vehicle? (Ad. Code 24-163.3(g)(1)(iii))*

Please see Tables 1 and 2 for information.

Table 1

Agency	Vehicles Owned as of 6.30.19	Vehicles Leased as of 6.30.19	Vehicles Owned Retrofitted with BAT	Vehicles Leased Retrofitted with BAT	Vehicles Owned Retrofitted with Other Technology*	Vehicles owned and not Retrofitted**
DEP	38	4	21	4	2	17
DDC	N/A	87	0	87	0	0
DCAS	15	0	8	0	8	7
DSNY	455	0	455	0	87	0
DPR	217	0	217	0	9	0
DOT	322	0	295	0	45	27
Total	1047	91	996	91	151	51

* These technologies are not verified or were formerly verified. Re-evaluation of technologies are still pending. **These vehicles are pending retrofits and/or situated outside city limit and/or ready to be relinquish in near future. All Owned and Leased vehicles are using ULSD in combination with biodiesel blends.

Table 2

Manufacturer	Technology	Agency
ESW Technologies ThermaCat/Cleancat XP	Active DPF	DOT, DEP, DSNY and DDC Contractors throughout the five boroughs
Huss	Active Diesel Particulate Filter (ADPF)	DOT DEP Contractor
Johnson Matthey	CRT, DPF & DOC	DSNY, DOT
DCL International	DPF/Mine-X-Sootfilter	DSNY, DDC Contractors, DEP Contractors
Cleaire	ADPF/DPF	DOT
CDTI/ECS (Engine Control System)	DPF/Purifilter, DOC/Purimuffler	DEP and DDC Contractors throughout the five boroughs. DOT, DSNY, DEP, DCAS

* **Note:** This chart represents a sampling of best available technology. The complete list of BAT can be obtained by contacting DEP.

4. *What is the number of such off road vehicles that used other authorized technology in accordance with this section, including a breakdown by vehicle model and the type of technology used for each vehicle? (Ad. Code 24-163.3(g)(1)(iv))*

151 off road vehicles used other authorized technology at DEP, DCAS, DSNY, DOT and DPR. A sample of this technology is listed in the table below.

EQ Type	Mfg.	Model	MY	BAT Mfg.	BAT Type
Front End Loader	Doosan	DL200	2009	NETT	DOC
Front End Loader	Doosan	DL200	2009	ESW	FTF
Skid Steer / Front End Loader	Deutz / GEHL	5640E	2009 2008	DCL International	DOC
Fel Medium	Daewoo	M200-5	2004	Johnson Matthey	DOC

Please contact DEP for the full list.

5. *What were the locations in Lower Manhattan where such off road vehicles that were powered by ULSD¹ and/or used BAT for reducing the emission of pollutants or other authorized technology were used? (Ad. Code 24-163.3(g)(1)(v))*

All City off road vehicles were used citywide. DEP contractors used off road vehicles at Gilboa Dam, Malboro, Valhalla, Carmel, Wappingers Falls and Croton N.Y. Also DDC and DEP contractors are using off road equipment throughout the five boroughs.

6. *Were any findings issued that there was an insufficient amount of ULSD¹ pursuant to § 24-163.3(k) (1)? If so, please describe those findings.¹ (Ad. Code 24-163.3(g)(1)(vi))*

No findings were made.

7. *Were any findings issued that the best available technology for reducing the emission of pollutants was unavailable for a particular vehicle pursuant to §24-163.3 (k) (1)?*

No waivers were issued in Fiscal Year 2019 for Unavailability.

8. *Were any findings issued that the use of best available technology for reducing the emission of pollutants might endanger the operator of such vehicle or those working near such vehicle, due to engine malfunction?*

Yes, three safety waivers were issued in Fiscal Year 2019.

¹ If ULSD that contains no more than 15 parts per million was unavailable, DEP would grant a waiver to an agency allowing them to use diesel fuel that has a sulfur content of more than 30 parts per million.