



Rohit Aggarwala
Commissioner

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-6565
Fax (718) 595-3525
raggarwala@dep.nyc.gov

November 4, 2022

Honorable Eric L. Adams
Mayor
The City of New York
City Hall
New York, NY 10007

Re: **Local Law 77 Air Report for Fiscal Year 2021**

Dear Mayor Adams:

Attached is the Local Law Air Report for Fiscal Year 2021 as required by Local Law 77 of 2003. As this report involves multiple agencies and their contractors 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 'Rohit Aggarwala', written in a cursive style.

Rohit Aggarwala

c: Hon. Adrienne E. Adams, Speaker New York City Council
Hon. Brad Lander, Comptroller
Lorraine Grillo, First Deputy Mayor
Dawn Pinnock, Commissioner DCAS
Jessica Tisch, Commissioner, DSNY
Thomas Foley, Commissioner DDC
Ydanis Rodriguez, Commissioner, DOT
Susan Donoghue, Commissioner, DPR



Local Law 77 of 2003 Annual Report for Fiscal Year 2021

Local Law 77 of 2003 (LL77/2003) 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. To meet these nationwide requirements, DEP and other City agencies have worked to improve air quality by going beyond the emission requirements in LL77/2003. The Department of Sanitation has been using ULSD, alone and in combination with biodiesel blends and emissions controlling devices well in advance of the effective dates of LL77/2003. DCAS also has in place a pilot project that uses Renewable Diesel in several city fleet vehicles. Renewable Diesel reduces greenhouse gas emissions over 60% and reduces tailpipe pollution.

As of Fiscal Year 2021, all City vehicles were using ULSD, alone and in combination with biodiesel blends and the City continues to install best retrofit technology on its vehicles. Unlike for on road vehicles, it took time for industry to standardize best available emission control technology for off road vehicles and the processes necessary to comply with this Local Law. This industry delay, in turn, caused delays in implementation of the law's measures. 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 974 off road vehicles were powered by ULSDF.

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	Compliance Vehicles Owned as of 6.30.21	Compliance Vehicles Leased as of 6.30.21	Vehicles Owned Retrofitted with BAT	Vehicles Leased Retrofitted with BAT	Vehicles Owned Retrofitted with Other Technology*	Vehicles Owned and Not Retrofitted**
DEP	NA	5	NA	0	NA	NA
DDC	NA	43	NA	1	0	0
DCAS	7	0	7	0	7	6
DSNY	445	0	17	0	33	1
DPR	231	0	1	0	7	0
DOT	291	0	39	0	38	18
Total	974	48	64	1	85	25

* 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 ULSDF in combination with biodiesel blends.

Table 2

Manufacturer	Technology	Agency
ESW Technologies ThermaCat/Cleancat XP	Active DPF	DOT, DSNY
Huss	Active Diesel Particulate Filter (ADPF)	DSNY
Donaldson	DOC	DPR
DCL International	DPF/Mine-X-Sootfilter	DSNY, DDC Contractors
Cleaire	ADPF/DPF	DOT
CDTI/ECS (Engine Control System)	DPF/Purifilter, DOC/Purimuffler	DOT, 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))*

85 off road vehicles used other authorized technology at 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
Backhoe	Case	580M	2006	Donaldson	DOC
Front End Loader	Doosan	DL200	2009	ESW	FTF
Skid Steer / Front End Loader	Deutz / GEHL	5640E	2009 2008	DCL International	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 2021 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, one safety waiver was issued in Fiscal Year 2021 for Contract WFF-BT-2.

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.