



June 16, 2023

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

**Rohit Aggarwala**  
Commissioner

59-17 Junction Blvd.  
Flushing, NY 11373

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

Re: **Local Law 77 Air Report for Fiscal Year 2022**

Dear Mayor Adams:

Attached is the Local Law Air Report for Fiscal Year 2022 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 March.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rohit T. Aggarwala'.

Rohit T. Aggarwala

c: Hon. Adrienne E. Adams, Speaker New York City Council  
Hon. Brad Lander, Comptroller  
Sheena Wright, 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 Annual Report for Fiscal Year 2022**

Local Law 77 (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. To meet these nationwide requirements, DEP and other City agencies have worked to improve air quality by going beyond the emission requirements in LL77. 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. 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 2022, 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.

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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 1149 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**

Note: Leased vehicles are not part of owned vehicles. Also owned retrofitted vehicles could have other technology installed.

Agency	Total Vehicles Owned as of 6.30.22	Compliance Vehicles Owned as of 6.30.22	Compliance Vehicles Leased in ***FY 2022	Vehicles Owned Retrofitted with BAT	Vehicles Leased Retrofitted with BAT	Vehicles Owned Retrofitted with Other Technology*	Vehicles owned and not Retrofitted**
DEP	139	125	17	N/A	1	N/A	N/A
DDC	0	N/A	32	N/A	1	0	0
DCAS	14	7	0	7	0	4	7
DSNY	445	444	0	15	0	33	1
DPR	242	235	0	1	0	6	0
DOT	309	291	0	36	0	38	18
<b>Total</b>	<b>1149</b>	<b>1102</b>	<b>49</b>	<b>59</b>	<b>2</b>	<b>81</b>	<b>26</b>

\* 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 limits and/or ready to be relinquish in the near future. All owned and leased vehicles are using ULSD in combination with biodiesel blends.

\*\*\*Leased are contractors vehicles for fiscal year 2022 count only.

**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
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))*

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

<b>EQ Type</b>	<b>Mfg.</b>	<b>Model</b>	<b>Mfg. Y</b>	<b>BAT Mfg.</b>	<b>BAT Type</b>
Backhoe	Case	580M	2006	Donaldson	DOC
Skid Steer / Front End Loader	Deutz / GEHL	5640E	2009 2008	DCL International	DOC
Front End Loader	Doosan	DL200	2009	NETT	DOC
Front End Loader	Doosan	DL200	2009	ESW	FTF

Please contact DEP for the full list.

5. *What were the locations in Lower Manhattan where such off road vehicles that were powered by ULSD<sup>1</sup> 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, Marlboro, 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 ULSD<sup>1</sup> pursuant to § 24-163.3(k) (1)? If so, please describe those findings.<sup>1</sup> (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 2022 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?*

No findings were made.

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<sup>1</sup> 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.

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