

April 10, 2015

Emily Lloyd Commissioner

59-17 Junction Boulevard Flushing, NY 11373 T: (718) 595-6565 F: (718) 595-3525 elloyd@dep.nyc.gov Honorable Bill de Blasio Mayor The City of New York City Hall New York, NY 10007

Re: Local Law 77 Air Report for Fiscal Year 2014

Dear Mayor de Blasio:

Pursuant to the New York City Administrative Code, I am pleased to submit to you the Annual Report required by Local Law 77 of 2003 that documents the use of ultra-low sulfur diesel fuel in diesel-powered nonroad vehicles owned by the City and its public works contractors, and the use of best available technology for reducing the emission of pollutants from such vehicles. This report is sent separately from the other Local Law Air Reports of Fiscal Year 2014, Local Laws 38, 39, 40, 41, and 42 of 2005, as it involves collecting data from multiple agencies and contractors that utilize off-road vehicles at city construction projects.

Very truly yours,

Emily Lloyd

c: Anthony Shorris, First Deputy Mayor
Melissa Mark-Viverito, Speaker, New York City Council
Scott Stringer, Comptroller
Stacey Cumberbatch, Commissioner, DCAS
Feniosky Pena-Mora, Commissioner, DDC
Polly Trottenberg, Commissioner, DOT
Mitchell J. Silver, Commissioner, DPR
Kathryn Garcia, Commissioner, DSNY



Local Law 77 Annual Report for Fiscal Year 2014

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.

The milestones in the legislation are as follows:

- <u>June 2004</u>: Diesel powered off road vehicles used by the City in Lower Manhattan must meet LL77's requirements.
- <u>December 2005</u>: Any diesel-powered off road vehicle, 50 horsepower and greater, that the City used must meet the requirements.

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.

As of Fiscal Year 2014, all City vehicles are using ULSD, alone and in combination with biodiesel blends and the City continue to install best retrofit technology in its vehicles. Unlike for on road vehicles, it took time for industry to standardize best available emission control equipment 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.

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 for the first three questions.

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 ULSDF? (Ad. Code 24-163.3(g)(1)(ii))

Please see Table 1 for information.

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 6.30.14	Vehicles Leased as of 6.30.14	Vehicles Owned Using ULSD	Vehicles Leased Using ULSD	Vehicles Owned Retrofitted with BAT	Vehicles Leased Retrofitted with BAT	Vehicles Owned Retrofitted with Other Technology*	Leased Vehicles Retrofitted with other Technology
DEP	143	18	143	18	123	18	0	0
DDC	N/A	396	N/A	396	N/A	308	N/A	0
DCAS	5	0	5	0	3	0	0	0
DSNY	329	0	329	0	324	0	185	0
DPR	92	0	92	0	92	0	0	0
DOT	222	0	222	0	150	0	0	0
Total	791	414	791	414	692	326	185	0

Note: This table reflects retrofits to date, but for the DEP leased vehicles it is for Fiscal Year 2014 only.

Table 2

Manufacturer	Technology	Agency
ESW Thermacat	Active DPF	DOT, DEP, and DDC Contractors throughout the five boroughs
Donaldson	DOC, DPF	Parks & DSNY
Huss	Active Diesel Particulate Filter (ADPF)	DSNY, DOT, DEP Contractor at Croton, Bronx
Johnson Matthey	CRT, DPF & DOC	DSNY, DOT and DEP Contractors
DCL	DPF	DSNY, DDC Contractors, DEP Contractors
Clearie	ADPF/DPF	DOT
CDTI/ECS Engine Control System	DPF	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 can be obtained by contacting DEP.

^{*} These are technology that are not verified or were formerly verified, but are OEM installed.

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))

185 DSNY off road vehicles uses "other authorized technology" (not verified) as they are listed in the table below.

Unit	EQ Type	Mfg.	Model	MY	# Units	BAT Mfg.	BAT Type
21CB	Front End Loader	Doosan	DL200	2009	27	NETT	FTF / DOC
21BT	Skid Steer	Bobcat		2003	1	AirFlow Catalyst	DOC
21CB	Front End Loader	Doosan	DL200	2009	71	ESW	FTF
21CC	Skid Steer	Deutz	5640E	2009	2	DCL International	DOC
13E	Backhoe	Case		2007	14	ECS/CDTI	DOC
21BY	Fel Medium	Daewoo		2005	70	JM	DOC

5. What were the locations in Lower Manhattan where such off road vehicles that were powered by ULSDF 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, Croton, Valhalla, Carmel and Wappingers Falls NY. 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 ULSDF pursuant to § 24-163.3(k) (1)? If so, please describe those findings. (Ad. Code 24-163.3(g)(l)(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 2014, for unavailability.

8. Were any findings issued that the use 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.

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.