LOCAL LAW AIR REPORTS

FISCAL YEAR 2012

Environmental Protection

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Local Law 38 Annual Report

This report details New York City's purchase of fuel efficient light and medium duty cars (typically, cars and vans respectively). The aim of Local Law 38 (LL38) is to achieve a 20% reduction in fuel consumption by 2015 and thereafter as compared to baseline fuel efficiency data from 2004. This drop in fuel consumption would reduce the amount of greenhouse gas being released and would also improve the city's air quality.

The milestones in the legislation are as follows:

- October 1, 2005: The City will complete a fuel economy inventory of all light-duty vehicles purchased by the City during Fiscal Year 2005 and will calculate the average fuel economy of these vehicles.

- July 1, 2006: Each light-duty vehicle and medium-duty vehicle that the City purchases will achieve the highest California Low Emission Vehicle (LEV) II standards. The City will also achieve a 5% increase in average fuel economy in all light duty vehicles.

- January 1, 2007: The City will report for the last time, whether it has complied with the Local Law standard that 80% of the light duty vehicles are alternative fuel vehicles.

- Purchase 95% of all light and medium duty vehicles in the lowest polluting class.

Following the July 2006 fuel economy milestone, the City is to achieve an increase of 8% in average fuel economy in 2007; 10% in 2008; 12% in 2009; 15% in 2010; 18% by 2012; and 20% for fiscal year 2015 and thereafter.

As of Fiscal Year 2012, the City exceeded the mandated 18% increase in fuel economy for light duty vehicles. Gasoline and diesel usage by light and medium duty vehicles has increased from the baseline as established in 2005 but decreased in FY 2011 and FY 2012, when DCAS implemented a better tracking system. The City exceeded the legislative goal that 95% of purchases be of the lowest polluting vehicles in their class, by purchasing 96.2% of the City's fleet in the lowest polluting class.

The answers below describe the status of the City's implementation of the law and respond to the specific questions posed in the legislation.[1]

1. *What is the total number of light-duty vehicles and medium-duty vehicles purchased by each agency?*

[1]Section 24-163.1 (e)(1) of the Administrative Code sets forth seven questions to which the Annual Report is required to provide an answer.

Agency	Light Duty	Medium Duty	Total
Dept. of Health & Mental Hygiene (DOHMH)	7	0	7
Dept. of Citywide Administrative Services (DCAS)	34	41	75
Dept. of Sanitation (DSNY)	117	4	121
Dept. of Parks & Recreation (DPR)	77	77	154
Police Dept. (NYPD)	268	6	274
Fire Dept. (NYFD)	0	1	1
Dept. of Correction (DOC)	37	0	37
Total	575	163	738*

2. *What is the total number of light and medium duty vehicles purchased in each rating category, disaggregated by vehicle model?*
   a. The total number of zero emission vehicles (ZEV) purchased;
   b. The total number of advanced technology partial zero emission vehicles (ATPZEV) purchased;
   c. The total number of partial zero emission vehicles (PZEV) purchased;
   d. The total number of super ultra low emission vehicles (SULEV) purchased;
   e. The total number of ultra low emission vehicles (ULEV) purchased; and
   f. The total number of low emission vehicles (LEV) purchased.

Total ZEV	Total ATPZEV	Total PZEV	Total SULEV	Total ULEV	Total LEV	Vehicle Total
2	488	0	7	232	9	738

Note: Please see Attachment A for the breakdown of the above numbers disaggregated by vehicle model. It shows that the vehicles purchased were within the highest fuel efficiency ratings.

3. *How many Alternative Fuel Buses were purchased?*

There were no buses purchased last year that had to comply with LL38.

4. *What is the percentage of light and medium duty vehicles purchased as the lowest polluting vehicle in each category? Target of 95%.*

Lowest Category	Other	Vehicle Type
395	8	Medium Size Sedan
3	12	Regular Size Van
130	7	Mid Size Sports Utility
13	0**	Large Size Sports Utility
97	0	Medium Duty Vans
61	0	Medium Duty Pick-ups
12	0	Light Duty Pick-ups
Total: 711	**Total**: 27	
Total: 96.2%		

Notes:
* Thirty-seven out of the forty-five Volts are being counted in the lowest polluting category as these are allowed under the 5% waiver provision as per LL 38.
** There were three Yukons purchased by NYPD and are exempt under the emergency vehicles exemption and are therefore counted in the lowest polluting vehicle column.

5. *What is the average fuel economy of light duty vehicle purchases?*

   The average fuel economy is 42.3 miles per gallon. Please see Attachment B for details.

6. *If a vehicle was not purchased in the highest fuel rating category, what was the basis for purchasing a vehicle in the next highest fuel rating category?*

   A waiver is needed from DEP in order to select a vehicle in the next rating category. In FY 2012, DEP issued a waiver allowing DCAS to purchase 45 Chevy Volts. The waiver was approved because the Volts are expected to primarily run on battery and not on fuel, thereby reducing emissions.

7. *What is the percentage increase in fuel economy? Target of 5% to 20%.*

   The increase in average fuel economy was 42.3%, which exceeds the required target to reduce overall fuel use by 18% by Fiscal Year 2012. The baseline 2005 average fuel economy was 31.1 miles per gallon; the 2011 average fuel economy was 36.7 miles per gallon.

8. *What is the estimated amount of fuel consumed by motor vehicle, disaggregated by vehicle type?*

   The chart below is based on the Gas Card System which shows an increase in consumption across the entire city fleet (light and medium duty vehicles).

2005 Gallons of Diesel	2012 Gallons of Diesel
337,554	769,401

2005 Gallons of Gasoline	2012 Gallons of Gasoline
2,828,217	2,930,796

This data and apparent trend likely reflects incomplete information for the baseline year and currently. While more agencies are using gas cards that directly measure the consumption of gasoline/diesel, many agencies such as DSNY have their own filling stations. The quantity of gasoline/diesel used at the agency filling stations measures what is purchased and may over-estimate the actual quantity of gasoline/diesel fuel consumed by the fleet. Gas card data is a better representation of the actual fuel consumed, as reflected in the following year over year comparison, which reflects the expected reduction in fuel use:

Diesel, Gascard		Unleaded, Gascard	
FY11	**FY12**	**FY11**	**FY12**
798,500	769,401	3,079,193	2,930,796

In addition, as hybrid vehicles are purchased, less gasoline is consumed as evidenced by the fact that gas has decreased from FY 2011 to FY 2012.

9. *What is the estimated total amount of equivalent carbon dioxide emitted for each type of fuel consumed by motor vehicles, disaggregated by fuel type?*

CO_2 Calculations for LL38 Fiscal 2012		
Year	**2005**	**2012**
Gasoline Consumed (gal)	2,828,217	2,930,796
CO_2 Emissions (lbs)	54,867,410	56,857,442.4
Diesel Consumed (gal)	337,554	769,401
CO_2 Emissions (lbs)	7,493,699	17,080,702.2
Total CO_2 Emissions (lbs)	62,361,109	73,938,144.6
Reduction (lbs)	*N/A*	(11,577,035.6)
Reduction (%)	*N/A*	(1.85)%

See the note above. As apparent fuel consumption increased, so too did the emission of CO_2. However, the same qualifications about the quality of the data apply.

Emissions Ratings on City Requirements Contracts for FY 12

Vehicle Type	ZEV	AT PZEV	PZEV	LEV II SULEV	LEV II ULEV	LEV II LEV
Light Duty Vehicles						
Medium Sedan						
Ford Fusion Hybrid		269				
Toyota Camry Hybrid		1				
Chevrolet Volt					45	
Toyota Prius Hybrid		83				
Toyota Prius Hybrid Plug-In		5				
Regular Size Van						
Ford E-150					6	
Ford Transit Connect EV	3					
Chevrolet Express						6
Mid-Size Sports Utility Vehicles						
Ford Escape Hybrid		130				
Toyota Highlander				7		
Large Sport Utility Vehicles						
Ford Expedition					6	
Chevrolet Tahoe Hybrid					4	
GMC Yukon Hybrid						3
Subtotal						
Medium Duty Vehicles						
Medium Duty Vans						
Ford E-250					3	
Ford E-350					94	
Medium Duty Pickups						
Ford F-250 8500 GVW					61	
Light Duty Pickups						
Ford F-150					2	
Chevy Silverado Hybrid					11	

Emission Ratings
(as defined by the California Air Resources Board)
http://www.driveclean.ca.gov/

ZEV: Zero Emission Vehicles
ZEVs have zero tailpipe emissions and are 98% cleaner than the average new model year vehicle. These include battery electric vehicles and hydrogen fuel cell vehicles.

AT PZEV: Advanced Technology PZEVs
AT PZEVs meet the PZEV requirements and have additional "ZEV-like" characteristics. A dedicated compressed natural gas vehicle or a hybrid vehicle with engine emissions that meet the PZEV standards would be an AT PZEV.

PZEV: Partial Zero Emission Vehicle
PZEVs meet SULEV tailpipe emission standards, have zero evaporative emissions and a 15 year/150,000 mile warranty. No evaporative emissions means that they have fewer emissions while being driven than a typical gasoline car has while just sitting.

SULEV: Super Ultra Low Emission Vehicle
SULEVs are 90% cleaner than the average new model year car.

ULEV: Ultra Low Emission Vehicles
ULEVs are 50% cleaner than the average new model year car.

LEV: Low Emission Vehicle
Minimum rating that will meet California Air Resources Board standards.

Citywide Light Duty Vehicle Purchases FY '12 Calculation Of Average City Mileage As Required For LL38 Reporting				
Type Vehicle	**Number Procured In FY '12**	**Fuel Type**	**EPA MPG City**	**Weighted Factor (Number Procured * EPA MPG City)**
Chevrolet Silverado Hybrid (6.0L)	2	Electric/Gas	20	40
Chevrolet Suburban (5.3L)	1	Gas	15	15
Chevrolet Tahoe Hybrid	11	Electric/Gas	20	220
Chevrolet Volt (1.4L)	50	Electric/Gas	94	4700
Ford E-150 (4.6L)	13	Gas/Ethanol	13	169
Ford Escape Hybrid (2.5L)	137	Electric/Gas	30	4110
Ford Expedition (5.4L)	6	Gas	13	78
Ford F-150 (3.7L)	17	Gas	16	272
Ford Fusion Hybrid (2.5L)	318	Electric/Gas	41	13038
Ford Taurus (3.5L)	2	Gas	18	36
Ford Transit Connect EV	2	Electric	106*	212
GMC Yukon (5.3L)	1	Gas	15	15
GMC Yukon Hybrid (6.0L)	2	Electric/Gas	20	40
Toyota Camry Hybrid (3.5L)	1	Electric/Gas	40	40
Toyota Highlander Hybrid (3.5L)	24	Electric/Gas	28	672
Toyota Prius Hybrid (1.8L)	106	Electric/Gas	51	5406
Toyota Prius Plug-In Hybrid (1.8L)	5	Electric/Gas	95	475

Grand Totals	698	29538
Average City Mileage for Light Duty Vehicles Purchased in FY'12		42.3

* This is the EPA MPG for Nissan Leaf. There is no current EPA Rating for the Ford Transit Connect

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Local Law 39 Annual Report

Local Law 39 (LL39) requires all City owned and operated diesel powered vehicles greater than 8,500 lbs., such as garbage collection trucks and DEP's truck fleet, to use ultra low sulfur diesel (ULSD) to reduce pollutants. In order to lower the emission of harmful pollutants into the environment, these vehicles also must install emission reduction devices.

All on-road diesel vehicles are powered by ULSD (since the passage of LL39, the EPA has required ULSD to be sold nationwide for the on-road fleet). As of Fiscal Year 2012, 93% of the required vehicles used an emission reduction device, which falls short of the required mandate of 100% by Fiscal Year 2012.

The answers below describe the status of the City's implementation of the law and respond to the specific questions set forth in Section 24-163.4 (g)(1) of the Administrative Code.

1. *What is the total number of diesel fuel-powered motor vehicles owned or operated by each City agency? (Ad. Code 24-163.4(g)(1)(i))*

Agency	Vehicles Owned as of June 30, 2012
DEP	487
DSNY	3,743
DPR	475
DOT	897
DCAS	62
Total	5,664

2. *What is the number of such diesel fuel-powered motor vehicles that were powered by ULSD? (Ad. Code 24-163.4(g)(1)(ii))*

Agency	ULSD Vehicles as of June 30, 2012
DEP	487
DSNY	3,743
DPR	475
DOT	897
DCAS	62
Total	5,664

3. *What is the number of such diesel fuel-powered motor vehicles that used best available retrofit technology (BART) to reduce the emission of pollutants, including a breakdown by vehicle model and the type of technology used for each vehicle? (Ad. Code 24-163.4(g)(1)(iii))*

Agency	Vehicles Owned as of 06-30-2012	Vehicles Retrofitted with BART	Vehicles Retrofitted with Other Technology	2007 or Newer Vehicles	Number of Vehicles to be retrofitted	% Complete
DEP	487	218	159	110	0	100%
DSNY	3,743	383	155	2,818	387	90%
DPR	475	0	238	237	0	100%
DOT	897	111	481	275	30	97%
DCAS	62	30	0	32	0	100%
Total	5,664	742	1,033	3,472	417	93%

Notes:

- DCAS numbers are as they provided. Details of vehicles not available.
- All other agency numbers were calculated from their detailed submissions.
- "Other technology" includes Diesel Oxidation Catalysts (DOCs), relinquished vehicles, and exempt vehicles.
- The Cummins DOC in DOT does not have the Closed Crankcase Ventilation (CCV)

4. *What is the number of such diesel fuel-powered motor 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 24-163.4(g)(1)(iv))*

Agency & Vehicle	BART Manufacturer	BART Type
DSNY Collection Truck	Clearie	Diesel Particulate Filter (DPF)
DSNY Collection Truck	Fleetguard	DPF
DSNY Mechanical Truck	Engine Control Systems	DPF
DPR 16 Yard Packer	Donaldson	Diesel Oxidation Catalyst (DOC)
DPR 16 Yard Dump	OEM	DEP
DOT Utility Truck	ESW Thermacat	DPF
DOT Mack Dump Truck	Clearie	DPF
DOT Collection Truck	Engine Control Systems	DPF
DOT Dump Truck Crew Cab	Nelson	DOC
DEP Mack CV713	Clearie	DPF
DEP Freightliner FL 70	HUG	DPF
DEP Sterling Acterra	HUG	DPF
DEP CAT L9500	Engine Control Systems	DPF
DOT International 4700 LP	Cummings	DOC (CCV not installed as there are technological concerns)

Note: For a complete list of diesel equipment, engine details, and agency-specific vehicle counts, please contact DEP.

5. *What were the number of such motor vehicles equipped with the applicable 2007 EPA standard for particulate matter as set forth in §86.007-11 of title 40 of the CFR? (24-163.4(g)(1)(v))*

As the chart for question three shows, there were 3,472 vehicles from 2007 or newer certified to these requirements.

6. *Were any findings made or waivers issued pursuant to §24-163.4(g)(1)(vii)?*[2]

No waivers were issued.

[2]These waivers are granted for vehicles that do not use ultra low sulfur diesel fuel. These waivers were contemplated during the enactment of this legislation as it was uncertain a sufficient supply of vehicles that run on ULSDF would be available.

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Local Law 40 Annual Report

Local Law 40 (LL40) requires all contractors managing the solid waste disposal program or recycling program for the Department on Sanitation to use ultra low sulfur diesel fuel (ULSD). It also requires these vehicles to be equipped with emissions reduction technology to reduce the pollutants their vehicles emit into the environment.

As of Fiscal Year 2012, all contractor vehicles were in compliance with this legislation or had received an appropriate waiver.

Below are answers to the questions posed in the Section 24-163.5 (j)(1) of the Administrative Code and the City's status in achieving the statutory milestones. The data for these questions was provided by the Department of Sanitation.

1. *What is the total number of diesel fuel-powered motor vehicles and diesel powered off road vehicles, respectively, used in the performance of solid waste contracts or recyclable materials contracts? (Ad. Code 24-163.5(j)(1)(i))*

   There were 59 vehicles used for these contracts and all of them are off road vehicles.

Type of Vehicle	Model	Engine Year	Technology
Loader	CAT 966	1998	ESW/Thermacat ADPF
Loader	CAT 950	1994	ESW/Thermacat ADPF
Front Loader	WA-500	1998	DCL MINE-X Sootfilter
Front Loader	WA-500	1997	DCL MINE-X Sootfilter
Excavator	PC 200	1998	DCL MINE-X Sootfilter
Excavator	PC 300	1998	DCL MINE-X Sootfilter
Waste Handler	WA-470	2010	DCL MINE-X Sootfilter
Waste Handler	CAT-966H	2008	DCL MINE-X Sootfilter
Wheel Loader	L180F	2008	HUSS/ADPF
Wheel Loader	L180F	2008	HUSS/ADPF
Railcar Switcher	SS4600	2000	HUSS/ADPF
Container Handler	TEC 950L	1993	HUSS/ADPF
Reach Stacker	RSD4521-4TI	1996	HUSS/ADPF
Railcar Switcher	SWX 465	2002	HUSS/ADPF
Forklift	H80FT	2007	HUSS/ADPF
Excavator	EC290	2009	HUSS/ADPF
Wheel Loader	L70E	2005	HUSS/ADPF
Wheel Loader/VOLVO	L220	2007	HUSS/ADPF
Compactor	BC772RB	2007	HUSS/ADPF
Excavator	EC330	2007	HUSS/ADPF
Excavator	325MH	2005	HUSS/ADPF
Railcar Switcher	SWX5252BE	2003	HUSS/ADPF
Railcar Switcher	SWX605C	2007	HUSS/ADPF
Wheel Loader/Volvo	L180G	2012	Tier 4I

Type of Vehicle	Model	Engine Year	Technology
Compactor	826G/CAT	2005	ESW/Thermacat ADPF
Wheel Loader	L180F	2008	HUSS/ADPF
Wheel Loader	L180F	2008	ESW/Thermacat ADPF
Wheel Loader	L180F	2002	HUSS/ADPF
Forklift	H80FT	2007	HUSS/ADPF
Wheel Loader	L150	2012	Tier 4i
Loader	CAT 966D	1987	DCL/DOC
Loader	CAT 966E	1990	DCL/DOC
Material Handler	MHL 350D	2007	HUSS/ADPF
Loader	L120F	2008	HUSS/ADPF
Front Loader	CAT 962G	1999	DCL Mine-X Sootfilter
Front Loader	CAT 966G	2002	JM CCRT
Front Loader	CAT 966H	2010	DCL Mine-X Sootfilter
Skid Loader	Bobcat 863	2002	Custom Doc is in order
Front Loader	CAT 966H	2010	DCL Mine-X Sootfilter
Front Loader	CAT 966G	1999	DCL Mine-X Sootfilter
Front Loader	CAT 966G	2002	JM CCRT
Front Loader	CAT 966H	2010	DCL Mine-X Sootfilter
Skid Loader	Bobcat 863	2002	Custom Doc is in order
Front Loader	CAT 966H	2010	DCL Mine-X Sootfilter
Top Pick / Kalmar	DCF410CSG	2006	Cleaire Phoenix
Top Pick / Kalmar	DCF410CSG	2006	Cleaire Phoenix
Skid Loader	Bobcat S220	2006	Custom ECS Purimuffler
Switcher Yard Jocky	Ottawa 4X2	2007	Cleaire Phoenix
Switcher Yard Jocky	Ottawa 4X2	2007	Cleaire Phoenix
Switcher Yard Jocky	Ottawa 4X2	2007	Cleaire Phoenix
Mech. Broom	Elgin / Pelican	2006	Cleaire Phoenix
Loader / CAT	966 FII	1998	DCL Mine-X Sootfilter
Excavator / Komatsu	PC 220	2004	DCL Mine-X Sootfilter

2. *What is the number of such vehicles that were powered by ultra low sulfur diesel fuel?(Ad. Code 24-163.5(j)(1)(ii))*

   All 59 vehicles used for these contracts were powered by ULSD.

3. *What is the number of such vehicles that used the best available retrofit technology (BART), including a breakdown of such vehicles by model, engine year, and technology? (Ad. Code 24-163.5(j)(1)(iii))*

   Out of the 59 vehicles, two model year 2012 engines were certified to a Tier IV engine which came with OEM installed technology.

   The above chart shows that 54 of these vehicles used Classification Level IV Diesel Particulate Filters. Of the five remaining vehicles, two used a Diesel Oxidation Catalyst (DOCs) because of the age of the equipment, and the other three used small custom made DOCs. These classification levels are a hierarchical structure for reducing particulate matter. Classification Level IV is the most effective way to decrease pollutants as it uses a diesel particulate filter as compared to Level II which uses a diesel oxidation catalyst.

4. *What is the number of such vehicles that used other authorized technology? (Ad. Code 24-163.5(j)(1)(iv))*

   No technology, other than those discussed above, was used.

5. *What is the number of vehicles equipped with an engine certified to the applicable 2007 EPA standard for particulate matter as set forth in section 86.007-11 of title 40 of the Code of Federal Regulations (CFR)? (Ad. Code 24-163.5(j)(1)(v))*

   There are 29 vehicles certified to comply with section 86.007-11 of Title 40 of the CFR as they are model engine year 2007 or later.

6. *What were the locations where such vehicles were used? (Ad. Code 24-163.5(j)(1)(vi))*

   The locations were as follows:

   1) Brooklyn Transfer Inc. / Action / Waste Export Brooklyn
      105-115 Thames Street, Brooklyn, NY

   2) American Recycling Mgmt. / DSNY Transfer Station
      172-33 Douglas Ave, Queens, NY

   3) Tully Environmental Inc. / Export of MSW from Queens
      127-20 34th Ave, Queens, NY

   4) Waste Management of NY LLC / Varick 1
      221 Varick Ave, Brooklyn, NY

   5) Waste Management of NY LLC / Harlem River Yard,
      98 Lincoln Ave, Bronx, NY

   6) Waste Management of NY LLC / Review Ave
      38-50 Review Ave, Queens, NY

   7) Waste Management of NY LLC / BQE
      475 Scott Ave, Brooklyn, NY

   8) Regal Recycling / Regal Recycling
      172-02 Douglas Ave, Queens, NY

   9) Sims Municipal Recycling of NY
      850 Edgewater Road, Bronx, NY

   10) Sims Municipal Recycling of NY
       30-27 Greenpoint Ave, Long Island City, NY

11) IESI NY Corporation / DSNY Transfer Station
110 50th Street, Brooklyn, NY

12) IESI NY Corporation / DSNY Transfer Station
577 Court Street, Brooklyn, NY

13) Republic Services / Staten Island Transfer Station
600 West Service Road, Staten Island, NY

14) Action Carting
941 Stanley Avenue, Brooklyn NY

7. *What waivers were issued for ULSDF?[3] (Ad. Code 24-163.5(j)(1)(vii))*

No waivers were issued.

8. *What waivers were issued for the use of other authorized technology in lieu of the best available technology?[4] (Ad. Code 24-163.5(j)(1)(viii))*

No waivers were issued, but several are pending.

[3] These waivers would have been granted for off road vehicles that did not need to be equipped with an emissions reducing device because they already had a 2007 or later engine that EPA has certified as reducing particulate matter according to the standard in this law.
[4] These waivers would be granted by DEP if a City agency documents that best available technology is unavailable for purchase.

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Local Law 41 Annual Report

Local Law 41 (LL41) requires all City-licensed sightseeing diesel buses to use ultra low sulfur diesel (ULSD) to reduce pollutants. In addition, to lower the emission of harmful pollutants into the environment, these vehicles must install emission reduction devices.

As of Fiscal Year 2012, 100% of the required vehicles use best available retrofit technology. Also, all diesel vehicles are powered by ULSD (since the passage of LL41, the EPA has required ULSD to be sold nationwide).

LL41 codified at Section 24-163.6 (g) (1) of the Administrative Code, sets forth seven questions to be answered in the Annual Report. The questions and the charts below summarize those responses from city agencies.

1. *What is the total number of diesel fuel-powered sightseeing buses licensed pursuant to subchapter 21 of chapter 2 of title 20 of the administrative code? (Ad. Code 24-163.6(g) (1) (i))*

   There are 238 diesel sight-seeing buses.

2. *What is the number of such buses that utilized the best available retrofit technology? (24-163.6(g) (1) (ii))*

Sight Seeing Bus Company	Number Licensed by DCA	Number with BART	Type of Technology
Community Bus Lines Inc.	8	8	Eight are model engine year 2008 that meet applicable United States Environmental Protection Agency (EPA) standards for particulate matter as set forth in section 86.007-11 of title 40 of the Code of Federal Regulations.*
CitySights	66	66	There are 60 Classification Level IV Diesel Particulate Filter (DPF) Continuous Regenerating Traps (CRTs) except for six which are retrofitted with DOCs because the engines are pre-1990 and cannot accept DPFs.
Experience the Ride	4	4	All four are certified as 2008 model year engines.
Gray Line New York Tours Inc ("Coach USA")	70	70	There are 64 Classification Level IV Johnson Matthey CRTs & six are certified with 2010 model year engine.
MCIZ	20	20	Three are certified with 2008 model year, four are certified with 2009 model year, and two are Classification Level IV DPFs with CRTs. In addition, there are six 2010 model year engines and five are 2012 model year engines.
Olympia	1	1	One certified with 2008 model year engine.
Skyliner Travel and Tour Bus Corp	19	19	Seven are certified with 2009 model year engines, two are certified 2010 model year engines and one certified certified with 2011 model year engines. There are nine 2012 model year engine.
Taxi Tours Inc	6	6	All six are retrofitted with DOCs on pre-1991engines.

Sight Seeing Bus Company	Number Licensed by DCA	Number with BART	Type of Technology
Safe Coach Bus Inc.	1	1	One is certified as 2008 model year engine.
NY City Airport Express Bus/Big Apple Fire Engine Tours	1	0	Waiver requested and granted as it is a 1964 bus with a 1982 engine.
Travel Plan USA Inc./See USA Tours	4	4	One is certified as 2008 model engine year, two are certified as 2009 model engine years and one is certified as 2010 model engine year.
Fischbach Limo Tours	1	1	One is certified as a 2010 model engine year.
Go NY Tours	8	8	Eight with Level IV DPFs with CRTs.
Skyline Tours LLC	6	6	Six certified as 2012 model engine year.
Sprinter Tours	2	2	One with a 2011 model engine year and one with a 2013 model engine year.
Total Sightseeing	2	1	One with Level IV DPF and one granted a waiver as it is a gas vehicle.
TOTAL	238	236 with 2 waivers	

* Pursuant to EPA regulations, all 2007 and later model engine years are certified to be at least as stringent as "BART" requirements because the manufacturer pre-retrofits the majority of them with DPFs. These engines, therefore, meet LL41 requirements.

3. *What is the number of such buses that utilized other authorized technology? (24-163.6(g)(1)(iii)?*

Not applicable. All were either Level IV (DPF) or Level I (DOC) BART.

4. *What is the number of such buses that are equipped with engines certified to the applicable 2007 USEPA standard for particulate matter as set forth in §86.007-11 of title 40 of the CFR? (24-163.4(g)(1)(iv)*

There are 91 such buses out of the 238 that are certified to the applicable 2007 USEPA standard. The remainder with the exception of one 1964 bus utilizing a 1982 engine are equipped with BART and one that utilizes gasoline.

5. What were the locations where such buses utilized the best available retrofit technology? (24-163.6(g)(1)(v))

These buses tour all of New York City, and as a result, this report provides the permanent addresses for the sightseeing companies.

Sight Seeing Bus Co.	Permanent Address	Mailing Address
Community Bus Lines Inc.	160 S. Rte. 17 North Paramus, NJ 07652	49 West 45th Street, 5th Floor New York, NY 10036
City Sights	33 Second Avenue, Brooklyn, NY 11215	Same
Experience the Ride	311 W 43rd Street (Suite 206) New York, NY 10036	Same
Gray Line New York Tours Inc.	1500 Clinton Street, Hoboken, NJ 07030	1430 Broadway (5th Floor) New York, NY 10018
MCIZ Corp.	15 Second Avenue, Brooklyn, NY 11215	Same
Olympia Trails Bus Company Inc.	349 First Street, Elizabeth, NJ 07206	Same
Skyliner Travel and Tour Bus Corp.	19-41 42nd Street, Astoria, NY 11105	Same
Taxi Tours Inc.	52-15 11th Street, Long Island City, New York, NY 11101	333 5th Avenue NY 10016
Suburban Trails Inc.	750 Somerset Street New Brunswick, NJ 08901	Same
Golden Touch Transportation of NY, Inc.	45-02 Ditmars Boulevard Astoria, NY 11105	Same
Safe Coach Bus, Inc.	1040 Rockaway Avenue Brooklyn, NY 11236	Same
NYC Airport Express Bus/Big Apple Fire Engine Tours	928 Flushing Avenue Brooklyn, NY 11206	19 Leary Lane Nesconset, NY 11767
Travel Plan USA Inc./See USA Tours	153-04 Rockaway Boulevard Jamaica, NY 11434	Same
Fischbach Limousine Service Inc.	160 Cabrini Boulevard,(Apt.32) New York, NY 10033	Same
Go New York Tours	348W 57th Street New York, NY 10019	Same
Skyline Tours, LLC	1934 East 18th Street Brooklyn, NY 11229	Same
Sprinter Tours, LLC	888C 8th Avenue #157 New York, NY 10019	Same
Total Sight Seeing, LLC	Pier 83 West 42nd Street New York, NY 10036	Same

6. *What was the age of the engine that did not utilize BART? (§ 24-163.6(g)(l)(vi))?*

   All were certified to 2007 and later model engines, which are exempt from BART pursuant to 40 C.F.R. § 86.007-11, except for one 1964 bus using a 1982 engine.

7. *Were any waivers issued for failure to use BART? (§24-163.6(g) (1)(vii))?*

   There was one waiver granted for a 1964 bus using a 1982 engine that due to the age of the bus and engine, such technology is unavailable.

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Local Law 42 Annual Report

Local Law 42 (LL42) required that by September 1, 2006, certain general education diesel fuel-powered school buses be powered by a specific diesel fuel, ultra low sulfur diesel fuel (ULSD). In addition, LL 42 required that by September 1, 2007, all of these school buses use best available retrofit technology (BART) to reduce emissions.

As of Fiscal Year 2012, the Department of Education was using ULSD for their fleet of school buses with vehicles manufactured after 2001. DOE is also going beyond the scope of the requirements of the legislation to reduce the emission of pollutants from Type C and D general education school buses by retrofitting special education buses with BART. Of DOE's total fleet, 96% are using emission control devices with 43% using the best available devices.

Below are answers to the questions posed in Section 24-163.7 (j)(1) of the Administrative Code, which describe the City's status in achieving the statutory milestones. Table 1 summarizes the answers to questions one through five.

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 was a fleet of 2,157, 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 2,157 buses were 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))*

   384 buses used this technology. Please see Table 1 for the breakdown.

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))*

   609 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))*

824 buses were equipped with the applicable 2007 EPA standard engines.

6. *Where were the locations of the school districts where such buses were powered by ULSDF, 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 in the city used these buses.

7. *Were any waivers granted pursuant to 24-163.7(h) of this law?*

   Pursuant to Section 24-163.7(h), which authorizes DEP to grant such a request when best available technology is unavailable, DEP granted a waiver to DOE on September 14, 2007, based on DOE's documentation that diesel particulate filters (DPFs), which constitute the best available technology, would have caused serious operational issues. On May 24th, 2010, that waiver was extended to March 15, 2011 and expires March 15, 2014. DOE is currently in the process of obtaining DPFs.

Table 1

Technology	Manufacturer	Engine-Type	ULSD	Meets 2007 EPA Standard	No. of Buses
Diesel Particulate Filter (DPF)	IC, Bluebird, Thomas & Freightliner	Unavailable	Yes	824	1,208
Diesel Oxidation Catalyst with Crankcase Filtration System	IC, Bluebird, GMC, Thomas, Ford & Freightliner	Unavailable	Yes	Unknown	609
Diesel Oxidation Catalyst Only (DOC)	IC, Bluebird, GMC, Thomas, Ford, Chevy & Freightliner	Unavailable	Yes	Unknown	133
Total General Education Bus Fleet				824	2,157

152 = older buses without both DOC and CCVS (not detailed in table, only included in total)
55 = older buses without DOC but with CCVS (not detailed in table, only included in total)

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Local Law 77 Annual Report

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:

- June 2004: Diesel powered off road vehicles used by the City in Lower Manhattan must meet LL77's requirements.

- December 2005: 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, and DEP, as a voluntary measure, has been using this fuel and these devices at the Croton Water Filtration Plant construction site.

As of Fiscal Year 2012, all City vehicles are using ULSD and the City continues 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 and more 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 6.30.11	Vehicles Leased as of 6.30.11	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	163	90	163	90	120	90	0	0
DDC	N/A	297	N/A	297	N/A	64	N/A	0
DCAS	6	0	6	0	6	0	0	0
DSNY	299	4	299	4	294	4	98	0
DPR	90	0	90	0	90	0	0	0
DOT	232	0	232	0	132	0	0	0
Total	790	391	790	391	642	158	98	0

Note: This table reflects retrofits to date, but for the leased vehicles it is for Fiscal Year 2012 only. There are 27 certified Tier IV leased and city owned vehicles.

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 DEP Contractor at Croton, Bronx, DOT
Johnson Matthey	CRT, DPF & DOC	DSNY, DOT and DEP Contractors
DCL	DPF	DSNY, DDC Contractors, DEP Contractors
Clearie	ADPF/DPF	DOT & DSNY
ECS Engine Control System	DPF, DOC	DEP Contractor at Wards Island, Manhattan; Croton, Bronx; and Avenue V , Brooklyn; Manhattan; DOT; DSNY; DEP; DCAS

Note: This chart represents a sampling of best available technology. The complete list 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))*

98 DSNY off road vehicles use "other authorized technology" and are listed in the table below.

Unit	EQ Type	Mfg	Model	MY	# Units	BAT Mfg	BAT Type
21CB	Front End Loader	Doosan	DL200	2009	25	NETT	FTF
21CB	Front End Loader	Doosan	DL200	2009	71	ESW	FTF
21CC	Skid Steer	Deutz	5640E	2009	2	DCL International	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 and DSNY used off road vehicles at Fresh Kills Landfill. DDC 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.*[5] *(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 as there were no technical reasons for such waivers to be granted.

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.

[5] 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.