

Covered Purchase Requirements

How many CFVs do I have to purchase?

Since you have determined that you operate a covered fleet, your fleet is now required to purchase Clean Fueled Vehicles (CFVs) if your fleet makes new covered vehicle purchases. The number of CFVs required to be purchased is based on a percentage of the covered fleet vehicles acquired in a given model year. The table below shows the CFV purchase percentage requirements according to model year*.

	<u>Purchase Percentages</u>		
	<u>Model Year*</u>		
	1999	2000	2001+
LDV/LDT	30%	50%	70%
HDV	50%	50%	50%

* Model Year:
Sept. 1 - Aug. 31.

LDV = Light Duty Vehicles
LDT = Light Duty Trucks
HDV = Heavy Duty Vehicles

For Example, if 100 covered LDVs are purchased in the 1999 model year, 30 must be CFVs.

What is a covered fleet purchase?

A covered fleet purchase is a vehicle purchase that meets the covered fleet vehicle requirements:

- Vehicles under 26,000 lbs. Gross Vehicle Weight Rating (GVWR).
- Centrally fueled, or are capable of being centrally fueled, per instructions in **Section 2**.
- Operate more than 50% of their annual miles in the covered area.
- Vehicles that do not fall into an exempt vehicle category.

How to meet Purchase Requirements

Covered fleet operators must comply with the purchase requirements of the Clean Fueled Fleets Program (CFFP). These requirements may be met in three different ways:

1. **Purchasing** Clean Fueled Vehicles (CFVs)
2. **Converting** existing vehicles to CFVs

There are currently very few conversion kits available that meet CFV emissions standards.

3. **Using Purchase Credits**

*Information on the Purchase Credit Program may be found in **Section 4: Purchase Credit Program**.*

Covered Purchase Requirements

What vehicles are considered Clean Fueled Vehicles?

Vehicles are classified as Clean Fueled Vehicles (CFVs) if they are certified by the US Environmental Protection Agency (EPA) to meet the clean fueled emissions standards for their vehicle class. The charts on *page 3-10* list the emissions standards for Light Duty Vehicles, Light Duty Trucks and Heavy Duty Vehicles.

For a vehicle to be classified as CFV, it must be certified as a Low Emission Vehicle (LEV) or cleaner. Ultra Low Emission Vehicle (ULEV) and Zero Emission Vehicle (ZEV) are considered “cleaner” emissions levels.

Vehicles that have flexible fuel or dual fuel (bi-fuel) capabilities must be certified to meet the CFV emissions standards *on at least one fuel* and must operate on the certified fuel 100%* of the time in the covered area, or as recommended by the manufacturer.

* Documentation of this is required in the annual report, explained in **Section 6**.

How do I know if I am purchasing a CFV?

1. Request documentation from the manufacturer.
2. Look at the EPA website (www.epa.gov/OMS/cff.htm).
3. Call the Georgia Environmental Protection Division (EPD) for a list of CFVs currently available: (404) 363-7028, or call Clean Cities - Atlanta at (404) 524-4400.

The remainder of this section will help you to determine how many CFVs your fleet needs to purchase for coming model years.

Definition of “Purchase”



Buy, lease, re-locate to the covered area or otherwise acquire possession or control of a motor vehicle or non-covered vehicle, excluding:

- A vehicle manufactured before the start of the Clean Fueled Fleets Program (CFFP).
- A vehicle transferred due to the purchase of a company or due to a consolidation of business operations.
- A vehicle transferred as part of an employee transfer.
- A vehicle transferred for seasonal requirements of a period of less than 120 days.

Instructions Instructions Instructions

Question 3-1:

What type of new vehicles will be purchased?

Determine the number of covered Light Duty Vehicle (LDV) / Light Duty Truck (LDT) and Heavy Duty Vehicle (HDV) purchases by following the steps below. This process must be repeated each model year.

Total Vehicle Purchases	
Exempt Vehicles <i>(subtract)</i>	-
	=
Vehicles operated outside of the covered area <i>(subtract)</i>	-
	=
Covered Purchases	



Of the "Covered Purchases", how many vehicles are centrally fueled (Light and Heavy Duty)?

Centrally Fueled	
Light Duty Centrally Fueled	
	1 a
Heavy Duty Centrally Fueled	
	1 b

Of the "Covered Purchases", how many vehicles are not centrally fueled (Light and Heavy Duty)? Multiply these vehicles by the Average Ratio. (Step 2-10, page 2-12)*

Light Duty	
Average Ratio* x	
Total Light Duty	
	1 c
<i>Round down to the nearest whole number</i>	
Heavy Duty	
Average Ratio* x	
Total Heavy Duty	
	1 d
<i>Round down to the nearest whole number</i>	

** If you do not have an Average Ratio from completing the steps in Section 2, use "1" as a default. Section 2 may only be completed prior to the current model year.*

Example Example Example Example

Question 3-1:

What type of new vehicles will be purchased?

Determine the number of covered Light Duty Vehicle (LDV) / Light Duty Truck (LDT) and Heavy Duty Vehicle (HDV) purchases by following the steps below. This process must be repeated each model year.

Total Vehicle Purchases	<u>20</u>
Exempt Vehicles <i>(subtract)</i>	- <u>6</u>
	<u>= 14</u>
Vehicles operated outside of the covered area <i>(subtract)</i>	- <u>5</u>
Covered Purchases	<u>= 9</u>



Of the "Covered Purchases", how many vehicles are centrally fueled (Light and Heavy Duty)?

Centrally Fueled	<u>6</u>
Light Duty Centrally Fueled	<u>4</u> 1a
Heavy Duty Centrally Fueled	<u>2</u> 1b

Of the "Covered Purchases", how many vehicles are not centrally fueled (Light and Heavy Duty)? Multiply these vehicles by the Average Ratio. (Step 2-10, page 2-12)*

Light Duty 1

Average Ratio* x .65 (assumed)

Total Light Duty = .65 = 0 **1c**

Round down to the nearest whole number

Heavy Duty 2

Average Ratio* x .65 (assumed)

Total Heavy Duty = 1.3 = 1.0 **1d**

Round down to the nearest whole number

** If you do not have an Average Ratio from completing the steps in Section 2, use "1" as a default. Section 2 may only be completed prior to the current model year.*

Question 3-2:

How many Clean Fueled Vehicles must be purchased in the 1999 Model Year?
(Sept. 1, 1998 - Aug. 31, 1999)

1999 Model Year

	Purchase Percentages		
	Model Year*		
	1999	2000	2001+
LDV/LDT	30%	50%	70%
HDV	50%	50%	50%

You must complete the steps in **Question 3-1** for the information needed below.

Required Clean Fueled Vehicle Purchases

Light Duty Purchases (under 8,500 lbs. GVWR)


$\frac{\text{1a}}{\text{1a}} + \frac{\text{1c}}{\text{1c}} = \frac{\text{Light Duty Vehicles}}{\text{Light Duty Vehicles}} \times 30\% = \text{Light Duty CFV purchases}$

Round down **Light Duty CFV purchases** to the nearest whole number: _____

Heavy Duty Purchases (8,501 lbs. - 26,000 lbs. GVWR)

$\frac{\text{1b}}{\text{1b}} + \frac{\text{1d}}{\text{1d}} = \frac{\text{Heavy Duty Vehicles}}{\text{Heavy Duty Vehicles}} \times 50\% = \text{Heavy Duty CFV purchases}$

Round down **Heavy Duty CFV purchases** to the nearest whole number: _____



Example Example Example Example

Question 3-2:

How many Clean Fueled Vehicles must be purchased in the 1999 Model Year?
(Sept. 1, 1998 - Aug. 31, 1999)

1999 Model Year

	Purchase Percentages Model Year*		
	1999	2000	2001+
LDV/LDT	30%	50%	70%
HDV	50%	50%	50%

You must complete the steps in **Question 3-1** for the information needed below.

Required Clean Fueled Vehicle Purchases

Light Duty Purchases (under 8,500 lbs. GVWR)

$$\frac{4}{1a} + \frac{0}{1c} = \frac{4}{\text{Light Duty Vehicles}} \times 30\% = 1.2 \text{ Light Duty CFV purchases}$$

Round down **Light Duty CFV purchases** to the nearest whole number: 1



Heavy Duty Purchases (8,501 lbs. - 26,000 lbs. GVWR)

$$\frac{2}{1b} + \frac{1}{1d} = \frac{3}{\text{Heavy Duty Vehicles}} \times 50\% = 1.5 \text{ Heavy Duty CFV purchases}$$

Round down **Heavy Duty CFV purchases** to the nearest whole number: 1

Question 3-3:

How many Clean Fueled Vehicles must be purchased in the 2000 Model Year?
(Sept. 1, 1999 - Aug. 31, 2000)

2000 Model Year

	<u>Purchase Percentages</u>		
	<u>Model Year*</u>		
	1999	2000	2001+
LDV/LDT	30%	50%	70%
HDV	50%	50%	50%

You must complete the steps in **Question 3-1** for the information needed below.

Required Clean Fueled Vehicle Purchases

Light Duty Purchases (under 8,500 lbs. GVWR)

$$\frac{\text{1a}}{\text{1a}} + \frac{\text{1c}}{\text{1c}} = \frac{\text{Light Duty Vehicles}}{\text{Light Duty Vehicles}} \times 50\% = \text{Light Duty CFV purchases}$$

Round down **Light Duty CFV purchases** to the nearest whole number: _____

Heavy Duty Purchases (8,501 lbs. - 26,000 lbs. GVWR)



$$\frac{\text{1b}}{\text{1b}} + \frac{\text{1d}}{\text{1d}} = \frac{\text{Heavy Duty Vehicles}}{\text{Heavy Duty Vehicles}} \times 50\% = \text{Heavy Duty CFV purchases}$$

Round down **Heavy Duty CFV purchases** to the nearest whole number: _____

Important Information

Light Duty Vehicle Weight Classes

LDV 1	LDV / LDT ≤ 6,000 lbs. GVWR ≤ 3,750 lbs. LVW
LDT 2	LDT ≤ 6,000 lbs. GVWR > 3,750 lbs. LVW ≤ 5,750 lbs. LVW
LDT 3	LDT > 6,000 lbs. GVWR ≤ 3,750 lbs. TW
LDT 4	LDT > 6,000 lbs. GVWR > 3,750 lbs. TW ≤ 5,750 lbs. TW
LDT 5	LDT > 6,000 lbs. GVWR > 5,750 lbs. TW

Heavy Duty Vehicle Weight Classes

Light HDV	8,501 - 19,500 lbs. GVWR
Medium HDV	19,501 - 26,000 lbs. GVWR
Heavy HDV	over 26,000 lbs. GVWR

Emissions Classifications

LEV	Low Emission Vehicle
ULEV	Ultra Low Emission Vehicle
ILEV	Inherently Low Emission Vehicle
ZEV	Zero Emission Vehicle

Fuel Type

Gasoline
Natural Gas
Propane
Electric
Ethanol
Methanol
Diesel
Other (write in fuel)

Fuel System

Dedicated
Dual Fuel (bi-fuel)
Flexible Fuel

Vehicle Type

Car
Truck
Sport Utility Vehicle (SUV)
Passenger / Cargo Van
Step Van
Bus / Shuttle

Vehicle Weight

GVWR	Gross Vehicle Weight Rating
LVW	Loaded Vehicle Weight
TW	Test Weight

Exempt Vehicles

Law	Law Enforcement Emergency Vehicles
Non-Road	Non-Road vehicles
26,000+	Over 26,000 lbs. GVWR
Test	Manufacturer Testing
Lease	Leased or Rented to public
Home	Garaged at Home <i>Not centrally fueled</i>
Pre-1999	Vehicles manufactured before the 1999 MY.
Less 50%	Vehicles driven less than 50% annual miles in covered area

Pollutants

NMOG	Non-Methane Organic Gases
CO	Carbon Monoxide
NO_x	Nitrogen Oxides
PM	Particulate Matter
HCHO	Formaldehyde

Emission Standards

Vehicles must be certified by the US Environmental Protection Agency (EPA) to meet the emissions standards in the tables below to be classified as Clean Fueled Vehicles (CFVs). Emissions data is recorded in grams per mile (g/mi) for Light Duty Vehicles (LDVs) and in grams per brake horsepower hour (g/BHP) for Heavy Duty Vehicles (HDVs).

Table 6: Emissions Standards for Light Duty Clean Fueled Vehicles

	LDV 1		LDT 2		LDT 3		LDT 4		LDT 5	
	I	II	I	II	I	II	I	II	I	II
LEV:										
NMOG	0.075	0.09	0.1	0.13	0.125	0.18	0.16	0.23	0.195	0.28
CO	3.4	4.2	4.4	5.5	3.4	5.0	4.4	6.4	5.0	7.3
NO _x	0.2	0.3	0.4	0.5	0.4	0.6**	0.7	1.0**	1.1	1.5**
PM*	0.08	0.08	0.08	0.08	—	0.08	—	0.1	—	0.12
HCHO	0.015	0.018	0.018	0.023	0.015	0.022	0.018	0.027	0.022	0.032
ULEV										
NMOG	0.04	0.055	0.05	0.07	0.075	0.107	0.1	0.143	0.117	0.167
CO	1.7	2.1	2.2	2.8	1.7	2.5	2.2	3.2	2.5	3.7
NO _x	0.2	0.3	0.4	0.5	0.2	0.3**	0.4	0.5**	0.6	0.8**
PM*	0.08	0.04	0.08	0.04	—	0.04	—	0.05	—	0.06
HCHO	0.008	0.011	0.009	0.013	0.008	0.012	0.009	0.013	0.011	0.016
ZEV										
All of above	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

I	50,000 mi. standard for vehicles 6,000 lbs. GVWR
II	100,000 mi. standard for vehicles 6,000 lbs. GVWR
	120,000 mi. standard for vehicles >6,000 lbs. GVWR

Table 7: Emissions Standards for Heavy Duty Clean Fueled Vehicles

LEV	Light HDV	Medium HDV	Heavy HDV
NMHC + NO _x	3.8	3.8	3.8
CO	15.5	15.5	15.5
ULEV			
NMHC + NO _x	2.5	2.5	2.5
CO	7.2	7.2	7.2
P M	0.05	0.05	0.05
HCHO	0.05	0.05	0.05
ZEV			
All of above	0.00	0.00	0.00

Heavy Heavy Duty Vehicles are not subject to the CFFP requirements. If Heavy Heavy Duty CFVs are purchased, however, they do generate credit in the Purchase Credit Program.

Vehicle Availability

EPA-Certified Clean Fueled Vehicles for the 1999 Model Year

The following vehicles can be used to meet purchase requirements under the Clean Fueled Fleets Program (CFFP). Vehicles are regularly added to these lists - please consult the US Environmental Protection Agency's website for an updated list of EPA-certified CFVs (www.epa.gov/OMS/cff.htm).

Table 8: Light Duty Clean Fueled Vehicles - LEV or cleaner

Manufacturer	Engine	Fuel	Model	Certification
Ford	XFMXT00.02Z5	Electric	Ranger Electric 2WD	ZEV / ILEV
	XFMXT05.46FF	Gasoline	Expedition 2WD & 4WD Lincoln Navigator 2WD & 4WD	LEV
	XFMXT05.46FG	Gasoline	Lincoln Navigator 2WD & 4WD	LEV
	XFMXT04.66FF	Gasoline	Expedition 2WD & 4WD	LEV
	XFMXT05.46FG 30LDT67	Gasoline	Lincoln Navigator 2WD & 4WD	LEV
Honda	XHNXV0000ELF	Electric	EV Plus	ZEV / ILEV
Suzuki	XSKXT2.49LHA	Gasoline	Grand Vitara 4-Door 4WD Grand Vitara 4-Door 2WD	LEV
Toyota	XTYXV03.0GBE	Gasoline	Lexus: RX300, RX300 4WD	LEV

current as of 11/98

Table 9: Heavy Duty Clean Fueled Vehicles / Engines - LEV or cleaner

Manufacturer	Engine	Fuel	Model	Certification
Baytech	WBYTH04.3ILV	Natural Gas	Contact manufacturer	LEV
	WBYTH04.3LEV	Natural Gas		LEV
	WBYTH04.3IUV	Natural Gas		ULEV / ILEV
Cummins	WCEXH0505CAG	Natural Gas	See workbook attachment	LEV
	WCEXH0505CAH	Natural Gas	See workbook attachment	LEV
	WCEXH0359BAJ	Natural Gas	See workbook attachment	LEV
	WCEXH0359BAL	Propane	See workbook attachment	LEV
	WCEXH061LAC	Natural Gas	See workbook attachment	LEV
	WCEXH0505CAI	Natural Gas	See workbook attachment	ULEV
	WCEXH0359BAK	Natural Gas	See workbook attachment	ULEV
	WCEXH0611LAB WCEXH0611LAD	Natural Gas	See workbook attachment	ULEV
General Motors	Vortec 5700 engine 8600 GVWR and above	Gasoline	Isuzu NPR - HD / W3500, W4500	LEV
Navistar	XNVXH07.3ACB	Diesel	Ford Heavy Duty F-Series	LEV

current as of 11/98

Vehicle Availability

Targeted LEV for the 1999 Model Year

The following vehicles are targeted to meet Low Emission Vehicle (LEV) standards for the 1999 model year. At the publication of this document, they had not received final EPA certification. Vehicles must receive full EPA-certification before they can meet CFFP requirements. Certain vehicles may have received EPA-certification to LEV standards since the publication of this document. Please contact the manufacturer if you have questions regarding certification status.

Table 10: Light Duty Clean Fueled Vehicles - Targeted LEV or cleaner

Manufacturer	Fuel	Model	Target
Chrysler	Natural Gas	RAM Van 2500	ULEV
	Natural Gas	RAM Van Maxi	ULEV
	Natural Gas	RAM Wagon	ULEV
Ford	Natural Gas	5.4L F-250 4x2 Regular Cab	ULEV / ILEV
	Natural Gas	4.6L Crown Victoria	ULEV / ILEV
	Natural Gas / Gasoline	5.4L E250 Extended Van	LEV on CNG
	Natural Gas / Gasoline	5.4L F-150 4x2 Regular Cab	LEV on CNG
	Natural Gas / Gasoline	5.4L F-250 4x2 / 4x4 Reg / Super Cab	LEV on CNG
	Propane / Gasoline	5.4L F-150 4x2 Regular Cab	LEV on Propane
	Propane / Gasoline	5.4L F-250 4x2/4x4 Reg. / Super Cab	LEV on Propane
	Propane / Gasoline	5.4L E250 Extended Van	LEV on Propane
	Gasoline	3.0L / 3.8L Windstar Van	LEV
	Gasoline	3.0L Taurus / Sable (2-V only)	LEV
	Gasoline	2.5L /4.0L Ranger (Auto Trans)	LEV
	Gasoline	5.0L Explorer / Mercury Mountaineer	LEV
	Gasoline	4.0L OHV / 4.0L SOHC Explorer	LEV
General Motors	Natural Gas / Gasoline	Chevrolet Cavalier	LEV
	Electric	EV1	ZEV
	Electric	Chevrolet S-10	ZEV
Honda	Natural Gas	Civic GX	ULEV / ILEV
	Gasoline	Accord	LEV
	Gasoline	Civic	LEV
Solectria	Electric	E-10 Pickup	ZEV
	Electric	Force	ZEV

current as of 11/98

Vehicle Availability

Targeted LEV for the 1999 Model Year

The following vehicles and engines are targeted to meet Low Emission Vehicle (LEV) standards for the 1999 model year. At the publication of this document, they had not received final EPA certification. Vehicles and engines must receive full EPA-certification before they can meet CFFP requirements. Certain vehicles and engines may have received EPA-certification to LEV standards since the publication of this document. Please contact the manufacturer if you have questions regarding certification status.

Table 11: Heavy Duty Clean Fueled Vehicles / Engines - Targeted LEV

Manufacturer	Engine	Fuel	Model	Target
Chrysler		Natural Gas	RAM Van 3500	ULEV
		Natural Gas	RAM Van Maxi	ULEV
		Natural Gas	RAM Maxi	ULEV
Cummins	ISB 5.9 175	Diesel	see appendix	LEV
	ISB 5.9 190	Diesel	see appendix	LEV
	ISB 5.9 210	Diesel	see appendix	LEV
	ISB 5.9 215	Diesel	see appendix	LEV
Ford	HD F-Series w/ 7.3L Navistar Diesel	Diesel		LEV
	5.4L	Natural Gas	E250 / E350 Van / Wagon	LEV
	5.4L	Natural Gas / Gasoline	E250 Regular Van	LEV on CNG
	5.4L	Natural Gas / Gasoline	E350 SD Van / Wagon	LEV on CNG
	5.4L	Propane / Gasoline	E250 Regular Van	LEV on Propane
	5.4L	Propane / Gasoline	E350 SD Van / Wagon	LEV on Propane
General Motors	Vortec 5700 V-8	Natural Gas / Gasoline	Sierra C-K 4x2 Regular Cab	LEV
	Vortec 7400 engine 8600 GVWR and above	Gasoline		LEV

current as of 11/98