

Federal and California Light-Duty Vehicle Emissions Standards for Air Pollutants

Tier 3 and LEV III Program

Standard ¹		MY Fully Implemented Tier/LEV	Vehicles	Emission Limits at Full Useful Life ²				
				Maximum Allowed Grams Per Mile				
				NO _x + NMOG	CO	PM (Tier/LEV) ³		HCHO
Bin 0	N/A ⁴	2025/2015	LDV, LDT, MDPV	0	0	0	0	0
Bin 20	SULEV20	2025/2015	LDV, LDT, MDPV	0.02	1	0.003	0.01	0.004
Bin 30	SULEV30	2025/2015	LDV, LDT, MDPV	0.03	1	0.003	0.01	0.004
Bin 50	ULEV50	2025/2015	LDV, LDT, MDPV	0.05	1.7	0.003	0.01	0.004
Bin 70	ULEV70	2025/2015	LDV, LDT, MDPV	0.07	1.7	0.003	0.01	0.004
Bin 125	ULEV125	2025/2015	LDV, LDT, MDPV	0.125	2.1	0.003	0.01	0.004
Bin 160	LEV160	2025/2015	LDV, LDT, MDPV	0.16	4.2	0.003	0.01	0.004

[Tier 3 Final Rule](#)

[LEV III Final Order](#)

[CARB ZEV Program](#)

Tier 2 Program^{5,6}

Standard	MY	Vehicles	NO _x + NMOG	CO	PM	HCHO
Bin 1	2004+	LDV, LLDT, HLDT, MDPV	0	0	0	0
Bin 2	2004+	LDV, LLDT, HLDT, MDPV	0.03	2.1	0.01	0.004
Bin 3	2004+	LDV, LLDT, HLDT, MDPV	0.085	2.1	0.01	0.011
Bin 4	2004+	LDV, LLDT, HLDT, MDPV	0.11	2.1	0.01	0.011
Bin 5	2004+	LDV, LLDT, HLDT, MDPV	0.16	4.2	0.01	0.018
Bin 6	2004+	LDV, LLDT, HLDT, MDPV	0.19	4.2	0.01	0.018
Bin 7	2004+	LDV, LLDT, HLDT, MDPV	0.24	4.2	0.02	0.018
Bin 8a	2004+	LDV, LLDT, HLDT, MDPV	0.325	4.2	0.02	0.018
Bin 8b	2004-2008	HLDT, MDPV	0.356	4.2	0.02	0.018
Bin 9a	2004-2006	LDV, LLDT	0.39	4.2	0.06	0.018
Bin 9b	2004-2006	LDT2	0.43	4.2	0.06	0.018
Bin 9c	2004-2008	HLDT, MDPV	0.48	4.2	0.06	0.018
Bin 10a	2004-2006	LDV, LLDT	0.756	4.2	0.08	0.018
Bin 10b	2004-2008	HLDT, MDPV	0.83	6.4	0.08	0.027
Bin 10c	2004-2008	LDT4, MDPV	0.88	6.4	0.08	0.027
Bin 11	2004-2008	MDPV	1.18	7.3	0.12	0.032

[Tier 2 Rule](#)

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LEV II Program

Standard	MY	Vehicles	NOx + NMOG	CO	PM	HCHO
ZEV	2004+	LDV, LDT	0	0	0	0
PZEV *	2004+	LDV, LDT	0.03	1	0.01	0.004
SULEV II	2004+	LDV, LDT	0.03	1	0.01	0.004
ULEV II	2004+	LDV, LDT	0.125	2.1	0.01	0.011
LEV II	2004+	LDV, LDT	0.16	4.2	0.01	0.018
LEV II Option 1	2004+	LDV, LDT	0.19	4.2	0.01	0.018
SULEV II	2004+	MDV4	0.2	3.2	0.06	0.008
ULEV II	2004+	MDV4	0.343	6.4	0.06	0.016
LEV II	2004+	MDV4	0.395	6.4	0.12	0.032
SULEV II	2004+	MDV5	0.317	3.7	0.06	--
ULEV II	2004+	MDV5	0.567	7.3	0.06	--
LEV II	2004+	MDV5	0.63	7.3	0.12	--

[LEV II Rule](#)

Tier 1 Program

LDV	1994 2003	LDV	0.91	4.2	0.01	--
LDT1	1994 2003	LDT1	0.91	4.2	0.01	0.8
LDV diesel	1994 2003	LDV	1.56	4.2	0.01	--
LDT1 diesel	1994 2003	LDT1	1.56	4.2	0.01	0.8
LDT2	1994 2003	LDT2	1.37	5.5	0.01	0.8
LDT3	1994 2003	LDT3	1.44	6.4	0.01	0.8
LDT4	1994 2003	LDT4	2.09	7.3	0.12	0.8

[Tier 1 Rule](#)

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LEV I Program

Standard	MY	Vehicles	NOx + NMOG	CO	PM	HCHO
ULEV I diesel	2001-2006	LDV, LDT1	0.355	2.1	0.04	0.011
ULEV I	2001-2006	LDV, LDT1	0.355	2.1	n/a	0.011
SULEV I	2001-2006	MDV2	0.372	3.2	0.05	0.006
LEV I diesel	2001-2006	LDV, LDT1	0.39	4.2	0.08	0.018
LEV I	2001-2006	LDV, LDT1	0.39	4.2	n/a	0.018
ILEV		LDV, LDT1	0.39	4.2	0.08	--
ULEV I	2001-2006	MDV2	0.407	2.5	0.04	0.012
LEV I	2001-2006	LDV, LDT1	.456/.61	4.2	0.08	--
SULEV I	2001-2006	MDV3	0.534	3.7	0.06	0.008
ULEV I diesel	2001-2006	MDV2	0.57	2.8	0.05	0.013
ULEV I	2001-2006	MDV2	0.57	2.8	n/a	0.013
SULEV I	2001-2006	MDV4	0.6	4.1	0.06	0.01
ILEV		LDT2	0.63	5.5	0.08	--
LEV I diesel	2001-2006	LDT2	0.63	5.5	0.1	0.023
LEV I	2001-2006	LDT2	0.63	5.5	n/a	0.023
ULEV I	2001-2006	MDV2	0.743	6.4	0.05	0.013
TLEV I diesel	2001-2003	LDV, LDT1	0.756	4.2	0.08	0.018
TLEV I	2001-2003	LDV, LDT1	0.756	4.2	n/a	0.018
LEV I	2001-2006	MDV2	0.83	6.4	0.1	0.027
SULEV I	2001-2006	MDV5	0.83	5.2	0.06	0.013
ULEV I	2001-2006	MDV3	1.067	7.3	0.06	0.016
TLEV I diesel	2001-2006	LDT2	1.1	5.5	0.1	0.023
TLEV I	2001-2006	LDT2	1.1	5.5	n/a	0.023
LEV I	2001-2006	MDV3	1.18	7.3	0.12	0.032
ULEV I	2001-2006	MDV4	1.197	8.1	0.06	0.021
LEV I	2001-2006	MDV4	1.33	8.1	0.12	0.04
ULEV I	2001-2006	MDV5	1.697	10.3	0.06	0.026
LEV I	2001-2006	MDV5	1.93	10.3	0.12	0.052

¹Doesn't Include Tier 3 transitional bins (Bin 85 and Bin 110)

²Tier and LEV III are certified to 150,000 mi life, not 100-120,000 as in previous programs

³Starting in 2017, LEV PM standards drop to 0.003g/mi, with 100% certifying by 2021, and drop further starting in 2025

⁴ZEVs are handled separately under CARB's ZEV Program

⁵Prior to Tier 3 and LEV VIII, NOx and NMOG had separate standards, but are shown here as combined for easier comparison

⁶Doesn't include federal NLEV standards which applied MY 1999 to 2003 LDV and LLDV vehicles