

Proposed Jamaican Motor Vehicle Exhaust Emission Standards
(Extracted from Motor Vehicle Emission Standards for Jamaica Report 1997 &
Updated Motor Vehicle Emission Standards for Jamaica Report 2003)

Proposed Jamaican Motor Vehicle Exhaust Emission Standards For New and Future
Imported Vehicles (Light Duty Vehicles and Trucks)

Vehicle type	Model Year	Durability Mileage (years) ¹	THC	NMHC	CO	NO _x	PM
LDV gasoline	1991- 1995 (Tier 0)	50,000 (5 years)	0.41		3.4	1	0.2
LDV diesel	1991- 1995 (Tier 0)	50,000 (5 years)	0.41		3.4	1	0.2
LDV gasoline	1996 and later (Tier 1)	50,000 (5 years) 100,000 (10 years)	0.41	0.25 0.31	3.4	0.4	0.08 0.10
LDV diesel	1996 and later (Tier 1)	50,000 (5 years) 100,000 (10 years)	0.41	0.25 0.31	3.4	1.0 1.25	0.08 0.10
LDV (Tier 2 2004)	2004 (Tier 2)			0.125	1.7	0.2	0.08
LDT 0 - 3750 lb gas	1991 - 1997 (Tier 0)	50,000 (5 years)	0.80 0.80		101 0	1.2 1.2	- -
LDT 0 - 3750 lb diesel	1991 - 1997 (Tier 0)	50,000 (5 years)	0.80 0.80		101 0	1.2 1.2	0.26 0.26
LDT 0 - 3750 lb gas	1997 and later (Tier I)	50,000 (5 years) 100,000 (10 years)	0.80 0.80	0.25 0.31	3.4 4.2	0.4 0.6	0.08 0.10
LDT 0 - 3750 lb diesel	1997 and later (Tier I)	50,000 (5 years) 100,000 (10 years)	0.80 0.80	0.25 0.31	3.4 4.2	1.0 1.25	0.08 0.10
LDT > 3750 lb gas	1991 - 1997 (Tier 0)	50000100000	0.80 0.80		101 0	1.7 1.7	- -
LDT > 3750 lb diesel	Tier 0	50000					0.13 0.13
LDT 3751 -5750 lb gas	1991 - 1997 (Tier 0)	50000100000	0.80 0.80		101 0	1.7 1.7	0.10 0.10
LDT 3751 -5750 lb diesel	1991 - 1997 (Tier 0)	50000100000	0.80 0.80		101 0	1.7 1.7	0.10 0.10
LDT 3751 -5750 lb gas	1991 - 1997 (Tier I)	50000100000	0.80 0.80	0.4 0.4	5.5 5.5	0.97 0.97	0.10 0.10
LDT 3751 -5750 lb diesel	1991 - 1997 (Tier I)	50000100000	0.80 0.80	0.4	106	1.7 0.97	0.10 0.10
LDT 5751 -8500 lb gas	1991 - 1997 (Tier 0)	50000100000	0.80 0.80	0.32 0.40	4.4 5.5	0.7 0.97	- -
LDT 5751 - 8500 lb gas	1997 and later (Tier I)	50000120000	0.80 0.80	0.39 0.56	5.0 7.3	1.1 1.53	0.12 0.12
LDT 5751 - 8500 lb diesel	1997 and later (Tier I)	50000120000	0.80 0.80	0.39 0.56	5.0 7.3	1.53 1.53	0.12 0.12

¹ Which ever is first
¹ NMOG. Also there is a HCHO standard of 0.015 g/mile

Proposed Jamaican Motor Vehicle Emission Standards For Imported Heavy Duty
Vehicles

Vehicle type	Model Year	Durability Mileage (years) ¹	Emission Limit (g/bhp.h)			
			THC	CO	NO _x	PM
HDV gasoline <14,000 lb	1991-1997	120000	0.9	14.4	5.0	
HDV gasoline > 14,000 lb	1991-1997	120000	1.7	37.1	5.0	
HDV gasoline <14,000 lb	1998	120000	0.9	14.4	4.0	
HDV gasoline > 14,000 lb	1998	120000	1.7	37.1	4.0	
HDV diesel	1991-1993	120000	1.3	15.5	5	0.25
HDV diesel	1994-1997	120000	1.3	15.5	5	0.1
diesel 8500-28000 lb	1998	120000	1.3	15.5	3.15	0.1
HDV buses	1993	120000	1.3	15.5	5	0.1
HDV buses	1994		1.3	15.5	5	0.07
HDV buses	1996		1.3	15.5	5	0.05
HDV buses	1998		1.3	15.5	4	0.05
HDV buses	1994		1.3	15.5	5	0.07
	1996 buses		1.3	15.5	4	0.05

Proposed Jamaican Motor Vehicle Exhaust Emission Standards For Future Used
Imported Vehicles

*It is recommended that all future imports of **used** vehicles meet the in-use emission standards for the country or jurisdiction of origin based on at least tailpipe measurements made in the most recent required Inspection and Maintenance test or other test required*

Jamaican Emission Standards For New and Used Imported Motorcycles

It is proposed that the Jamaican emission standards for new imported motorcycles be the same as the U.S. EPA standards

Proposed Jamaican Motor Vehicle Emission Standards for Existing Vehicles

It is recommended that the emission standards for the existing fleet of gasoline vehicles without catalytic converters be at the levels that predated catalytic converters.

These levels were 1.5 g HC/mi, 15 g CO/mi and 2.0 g NO_x/mi for light duty vehicles and 1.7 g HC/mi, 18 g CO/mi and 2.3 g NO_x/mi for light duty trucks.

It is recommended that vehicles older than the 1968 model year be exempted from the emission requirements and do not have to be tested.

Proposed standard for older vehicles & diesel fuelled vehicles

For vehicles with catalytic converters model-year specific emission limits is recommended.

Few countries have implemented in-service testing for diesel fuelled vehicles. Since diesel fuelled vehicles account for such a high proportion of PM and NO_x emissions in Jamaica, control of these emissions by establishing emission limits and through in-service testing are recommended. There are European Union standards for naturally aspirated and turbo-charged diesel engines but some individual countries have introduced their own standards for in-use diesel vehicles. In the U.S., opacity limits of 40% based on the snap -idle tests have been set in California.

Most emission tests for diesel fuelled vehicles are for particulate emissions measured by visual observation or as smoke or opacity measurements such as in snap-idle and dynamometer based tests. CO, NO_x, PM and HC measurements in addition to opacity measurements are also performed in dynamometer tests. In the snap idle test, the diesel

engine is accelerated rapidly from idle to full (governor limited) speed according to a specified protocol (SAE J1667).

Bearing in mind the practicality of testing the setting of opacity emission limits only for in-use diesel vehicles is recommended in Jamaica.
