

## Appendix - 2

Vehicle emission standards for Bangladesh are given in gazetted Schedule 6, September 2005 of GoB.

Schedule –6(Ka): Emission standards for new locally made and new and imported used diesel driven vehicles.  
(Refer to Rules 4 & 12)  
(Bangladesh-1)

Vehicle type	Emission Standards (g/km)			Test Procedure	
	CO	HC + NO <sub>x</sub>	PM*		
Light duty vehicles (Not more than 8 seats in addition to driver & max. GVW 2.5 tons)					
New Type Approval (TA)	2.72	0.97	0.14	91/441/EEC 91/441/EEC	
Conformity of Production (COP)	3.16	1.13	0.18		
Imported used diesel	3.16	1.13	0.18		
Medium duty Vehicles (More than 8 seats in addition to driver but less than 15 seats & GVW more than 2.5 tons but max.3.5 tons)					
New TA	6.9	1.7	0.25	93/59/EC	
COP	8.0	2.0	0.29	93/59/EC	
Imported used diesel	8.0	2.0	0.29		
Heavy Duty Vehicles (More than 15 seats in addition to driver & GVW more than 3.5 ton)					
Vehicle type	Emission Standards ( g/kWh)				Test Procedure
	CO	HC	NO <sub>x</sub>	PM*	
New TA	4.5	1.1	8.0	0.36	91/542/EEC and ECE R 49.02
New COP	4.9	1.23	9.0	0.4	
Imported used	4.9	1.23	9.0	0.4	

For the diesel engines with 85kW or less power the limit is to be increased by a factor of 1.7.

Abbreviation:

COP: Conformity of Production; ECE: Economic Commission for Europe; EEC: European Economic Community; GVW: Gross Vehicle Weight; TA: Type Approval

Schedule: 6(Kha) Emission standards for new locally made and new and imported used petrol and CNG driven vehicles  
(Refer to Rules 4 & 12)  
(Bangladesh -2)

Vehicle type	Emission Standards (g/km)		Evaporation emissions (g/test)	Test Procedure
	CO	HC + NO <sub>x</sub>		
2 and 3 wheelers				
4stroke petrol/CNG	4.5	3.0	-	ECE-40
Light duty vehicles (Not more than 8 seats in addition to driver & max. GVW 2.5 tons)				
Petrol/CNG	2.2	0.5	2.0	94/12/EC
Imported used petrol /CNG	2.2	0.5	2.0	94/12/EC

Medium duty Vehicles (More than 8 seats in addition to driver but less than 15 seats & GVW more than 2.5 tons but max. 3.5 tons)				
New and imported used Petrol/CNG	5.0	0.7	2.0	96/69/EC

Heavy Duty Vehicles  
(More than 15 seats in addition to driver & GVW more than 3.5 ton)

Vehicle type	Emission Standards (g/kWh)			Evaporation emissions (g/test)	Test Procedure
	CO	HC/ NMHC*	NO <sub>x</sub>		
New TA (Petrol/ CNG)	4.5	1.1	8.0	2.0	91/542/EEC and ECE R 49.02 and 13- mode test cycle*
New COP(Petrol/ CNG)	4.9	1.23	9.0	2.0	
Imported used (Petrol/ CNG)	4.9	1.23	9.0	2.0	

\* Applicable for CNG driven vehicles

Abbreviation:

CNG: Compressed Natural Gas; COP: Conformity of Production; EC: European Council; ECE: Economic Commission for Europe; EEC: European Economic Community; TA: Type Approval.

Schedule-6(Ga): Emission inspection standards for new locally made and new and imported used light, Medium duty and heavy duty (Petrol, Diesel and CNG driven) Vehicles (during registration)

(Refer to Rules 4 & 12)

Vehicle type	Parameter	Emission Standard
4 wheeled Petrol and CNG driven vehicles	Idle CO Idle HC	0.5 %v/v 1200 ppm
	No load, 2500<RPM<3000CO HC Lambda	0.3 %v/v 300 ppm 1± 0.03
	Visual check	3-Way catalytic converter fitted in the exhaust
Diesel Naturally aspirated	Free acceleration smoke	1.2 m <sup>-1</sup> smoke density (40 HSU)
Diesel Turbo-charged	Free acceleration smoke	2.2 m <sup>-1</sup> smoke density (61 HSU)

HSU: Hartridge Smoke Unit  
ppm: Parts per million

Schedule-6(Gha): Emission Standards for In-Service Vehicles registration after 1<sup>st</sup> July 2004.

(Refer to Rules 4 & 12)

Vehicle Type	Test	CO(% by volume)	HC (ppm)	Lambda (λ)	Smoke
All 4-wheeled Petrol and CNG vehicles.	Idle Speed	1.0	1200	-	-
	No load, 2500<RPM < 3000	0.5	300	1.0 ± 0.03	-
4 Stroke Engine Petrol Two and Three Wheelers	Idle Speed	4.5	1200	-	-
All CNG Three Wheelers	Idle Speed	3.0	-	-	-
All naturally aspirated diesel vehicles	Free acceleration	-	-	-	65 HSU or 2.5 m <sup>-1</sup>
All turbocharged diesel vehicles	Free acceleration	-	-	-	72 HSU or 3.0 m <sup>-1</sup>

Note: Idle Speed RPM specified by the manufacturer.

Schedule-6(Uma) : Emission Standards for In-Service Petrol and CNG Vehicles registration after July 1, 2004.  
(Refer to Rules 4 & 12)

Vehicle Type	Test	CO( % by volume)	HC(ppm)
All 4-wheeled Petrol Vehicles	Idle Speed	4.5	1,200
All CNG driven Vehicles	Idle Speed	3.0	-
2 Stroke Engine Petrol Two and Three Wheelers	Idle Speed	7.0	12,000
4 Stroke Engine Petrol Two and Three Wheelers	Idle Speed	7.0	3,000

Note: Idle Speed RMM specified by the manufacturer.

Schedule-6(Cha): Emission Standards for In-Service Diesel Vehicle registration after July 1, 2004.  
(Refer to Rules 4 & 12)

Vehicle Type	Test	Smoke Opacity		
		Commencing January, 2004	Commencing January, 2007	Commencing January, 2009
Buses	Free acceleration	80 HSU or 3.7 m <sup>-1</sup>	70 HSU or 2.8 m <sup>-1</sup>	65 HSU or 2.4 m <sup>-1</sup>
Trucks and all other diesel vehicles	Free acceleration	90 HSU or 5.3 m <sup>-1</sup>	80 HSU or 3.7 m <sup>-1</sup>	65 HSU or 2.4 m <sup>-1</sup>

General instruction:

Importer must submit Emission Compliance Certificate from an internationally recognized independent agency at the time of clearance of the imported vehicles under schedule 6 (Ka) or 6(Kha) as relevant to the vehicle type.