

Remote Sensing Technology for On-Road Motor Vehicle Emissions Monitoring and Enforcement in Kolkata



PIONEERING USE OF RST IN KOLKATA

1. Remote Sensing Technology (RST) is being used in Kolkata since 2009 to measure pollution from vehicles. The device checks emissions without stopping vehicle on road and records pollutant levels (CO, HC, NOx & Smoke) along with photograph of the vehicle.
2. Moving transport vehicles depict more correct data on emission .
3. The device has capacity to check pollution from around 3,000 vehicles in one hour of continuous traffic in day light.



REMOTE EMISSIONS SENSOR

1. The device takes up to 50 readings of pollution levels from a moving vehicle on-road in less than one second .
2. Measures pollution from all fuel types (petrol, Diesel, CNG, LPG) with accuracy and consistency .
3. Takes picture of the vehicle with license plate using high speed camera.
4. Measures tailpipe emissions (CO%, CO2%, HC ppm, NOx ppm and Smoke.



NOTICE AND SMS ALERT



The offending vehicle owners are issued notice by post with the picture of vehicle and readings of pollutants. The offending vehicle is also locked in the system by the State Administrator by centralized locking system



The vehicle owners are notified with the picture of vehicle and readings of pollutants

201010104654WBDHRM00149 10:58:45:310



WB04E 3133

Speed	Accel	Flag	CO	CO2	HC	NOX	Smoke	MaxCO2	Samples
41.18	1.82	0	0.83	15.81	83	581	0.16	80.31	48

Speaker icon

Sample Notice

Number: XX/0X/1X/000XX/ RTO

To :

Mr. ABC ADDRESS 1

ADDRESS 2 CITY - PIN

Sub: Notice to show cause for plying of the Vehicle found to be emitting smoke beyond permissible level of pollution

Your vehicle bearing registration number WB02Y 8972 was found violating air pollution limits at XX LOCATION on 1X June, 20XX set as per Rules 115 and 116 of the Central Motor Vehicles Rules, 1989, as shown below. You are requested to bring your vehicle at the below mentioned Inspection Center for verification within 15 days of receipt of this notice otherwise requisite fines under section 190(2) of MVA Act will be imposed and such other actions as per law would be taken.

Picture showing the registration number of your vehicle with noted emissions violations are as below:



Sample Notice

Picture showing the registration number of your vehicle with noted emissions violations are as below

201307194644WBEM B00786

09:56:10:000

A front-facing view of a light blue Chevrolet car, likely a hatchback, parked on a paved surface. The car's front grille features the Chevrolet bowtie logo. The license plate is white with black text, reading 'WB 02' on the top line and 'Y 8972' on the bottom line. The background shows a concrete wall and some outdoor equipment.

Speed	Accel	Flag	CO	CO2	HC	NOX	Smoke	MaxCO2	Samples	Stat
42.82	-0.27	U	-0.01	15.00	1868	71	0.02	21.22	7	U



MOTOR VEHICLES ACT & RULES

1. As per Rule 116(1) of CMVR 1989 , If any vehicle is found emitting excess smoke on road , the authority will direct the owner/occupant of the vehicle to produce his vehicle before respective RTO after necessary rectification within 7 days from the date of the receipt of the notice, failing which will be penalized as per law admissible.
2. If the owner produces his vehicle after necessary rectification and with a fresh valid PUC certificate within 7 days on the date of the receipt of the notice, RTO will release the vehicle and unlock the vehicle from the database.



PERFORMANCE AND PENALTIES

1. If it is more than 7 days the owner is penalized as per section 190(2) of MV Act 1988 amounting Rs.1000/- for first offence and Rs. 2000/- for subsequent offences.
2. Average monthly penalty realized Rs. 8.00 lakh during 2019-20 .
3. On an average, 52000 vehicles are checked and 4200 notices are issued per month .



THANK YOU

Transport Department
West Bengal

