

GITE REGIONAL WORKSHOP ON VEHICLE INSPECTION AND MAINTENANCE POLICY IN ASIA

10 - 12 DECEMBER 2001
BANGKOK, THAILAND

VEHICLE INSPECTION IN MALAYSIA

BY
AMINUDDIN ISHAK
DEPARTMENT OF ENVIRONMENT
MALAYSIA



Department of Environment

1. MOTOR VEHICLE STATISTICS

Number of registered motor vehicles in Malaysia: June 2001
(average growth rate of 9 % per year)

PETROL VEHICLES	9.8 million	90 %
DIESEL VEHICLES	1.1 million	10 %
TOTAL	10.9 million	100 %

Breakdown according to Vehicle Type

Motorcycles	5.5 million	50.5 %
Passenger Cars	4.2 million	38.5 %
Commercial Vehicles	1.2 million	11 %
TOTAL	10.9 million	100 %



2. MOTOR VEHICLE INSPECTION

- (i) New Vehicles - Type Approval Inspection**
- (ii) In-use Vehicles - Periodical Inspection**
 - Roadside Inspection**

2.1 NEW VEHICLES – TYPE APPROVAL INSPECTION

New vehicles are subjected to ‘type approval’ inspection

- Type Approval Inspection is conducted by examining the documentations submitted to DOE by the vehicle manufacturers or assemblers on:-**
 - (i) vehicle type approval certificate – issued by internationally recognized emission test labs, e.g. TUV, TNO,.....**
 - (ii) vehicle emission test report – conducted by vehicle manufacturers test labs**

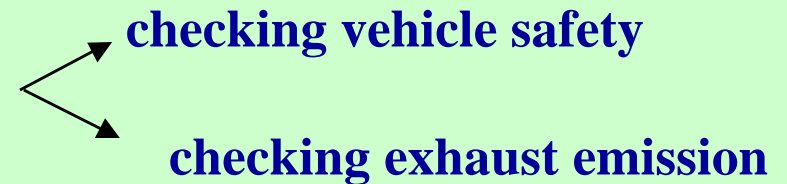


2.2 IN-USE VEHICLES INSPECTION

Conducted through:-

- **(i) Periodical Inspection at Inspection Centres (scheduled inspection)**

To ensure the vehicles roadworthiness



Focus : vehicles with high kilometerage

e.g. - public service vehicles(taxis, buses)

- goods carrying vehicles (trucks/lorries, vans)

- Periodical Inspection Law:

Motor Vehicles (Periodic Inspection Equipments and Inspection Standards) Rules 1995

- only commercial vehicles are subjected to this periodical inspection

- Inspection Frequency :

(i) New vehicles - once annually for the first 2 years,

(after 1995) and thereafter once in every 6 months

(ii) Existing (older) vehicles - once in every 6 months

(before 1995)



Vehicle Inspection In Malaysia

- **Vehicle Safety Inspection test**
 - Side-slip test - to ensure the safety of vehicle movement
 - Suspension test - to ensure the passengers comfortability
 - Brake test - to ensure vehicle safety control
 - Speedometer test - to ensure exact speed of the vehicle
 - Headlight test - to ensure vehicle is suitable for night driving
 - Axle play check - to ensure comfortability and vehicle safety
 - Under carriage check - to ensure vehicle safety

- **Vehicle Exhaust Emission checked:**
 - (i) **Diesel Vehicles** -**black smoke level** (by free acceleration method)
Permissible limit/standard: **50 HSU or % opacity**

 - (ii) **Petrol Vehicles** -**CO and HC concentrations** (at idle speed)
Permissible limit:

	<u>CO</u>	<u>HC</u>
- new models (after 1-1-1997)	: 3.5 %	600 ppm
- existing models (before 1-1-1997)	: 4.5 %	800 ppm



Vehicle Inspection In Malaysia

- **Periodical inspection in Malaysia was started in 1970s and was initially conducted by the Road Transport Department**
- **In 1994, periodical inspection programme was privatized under the Government's Privatization Policy where:**
 - **Government franchises a single independent contractor to:-**
 - (i) build and operate the inspection centres**
 - (ii) charging a set fee for the inspections**
- **Under this policy, the establishment of the inspection centres was awarded to a private company PUSPAKOM**

▪ Inspection Fee	<u>Cars, Vans</u>	<u>Trucks/Lorries</u>
Routine Inspection :	RM 40	RM 50 - 60
Reinspection :	RM 15	RM 20 – 30
Exhaust Emission :	RM 15	RM 20 – 30



Vehicle Inspection In Malaysia

- Currently there are 31 computerised PUSPAKOM Inspection Centres located throughout the country
- Inspection Centres are of centralised type - only inspection, no repair works
- The inspection/testing activities by these private centres is overseen by:-
 - Road Transport Department - for vehicle safety inspections
 - Department of Environment - for exhaust emission testing



Vehicle Inspection In Malaysia

Periodical Inspection

- Automated reading of measurements
- Computerised “pass-fail” decision

Pass

Fail

Vehicle Inspection
Sticker

Rectification Work
and comeback for Retest

Pass

- commercial vehicles without sticker(disc) - is an offence under the RTA

Renewal of Licence
(road tax) at the RTD Office

- RTD office situated next to inspection centre



Vehicle Inspection In Malaysia

- **ROAD-SIDE INSPECTION (Random “Spot Checks”)**
 - to supplement the effectiveness of the periodical inspection, e.g. discourage tampering to vehicle engines
- **Beginning 1977 – set up road blocks to check black smoke emission from diesel vehicles exhausts**
- **By 1995 – Introduction of AWASI Program (Area Watch And Sanction Inspection) where:**
 - **DOE’s Mobile Squad would be patrolling the streets to conduct visual observation on vehicular emissions**
 - **stopping and testing vehicles spotted emitting excessive black smoke using the smokemeter**
 - **taking legal actions “on the spot” (includes issuing compounds and also prohibition orders)**



Vehicle Inspection In Malaysia

- **FUTURE PLAN**
- **Extending the periodical inspection to cover all vehicle categories**
 - especially the private cars and motorcycles
- **Improving the emission test procedures**
 - considering the loaded dynamometer test
- **Establishing emission testing facilities**
- **Improving the situation in the service and repair sector to support/ complement the Inspection & Maintenance Program by having:-**
 - increasing the number of skillful mechanics (through training on vehicle maintenance and repair procedures required for emission control)
 - equipments to diagnose vehicle engine malfunctions
 - emission test equipments similar to the inspection centres

