Emission Standards and Certificate of Conformity for Motor Vehicles
OUTLINE OF PRESENTATION

- Legal Basis
- Background
- Emission Standards
- Certificate of Compliance to Emission Standards (CCES)
- Certificate of Conformity (COC)
Guarantee the PEOPLE’S right to breathe CLEAN AIR
PROGRAM ON AIR POLLUTION MANAGEMENT

DATA AND INFORMATION ON AIR QUALITY

INTEGRATED AIR QUALITY IMPROVEMENT FRAMEWORK

AIR QUALITY ACTION PLAN
AIR QUALITY MONITORING and INFORMATION NETWORK

DATA AND INFORMATION AIR QUALITY STATUS REPORT

AMBIENT AIR QUALITY MONITORING STATIONS

NATIONAL AIR QUALITY STATUS REPORT

1) Extent of Pollution (type and source)

2) Critical Areas, Activities and Projects

3) Status, Trends and Projections

4) Recommendations for Legislative and Executive Actions
INTEGRATED AIR QUALITY IMPROVEMENT FRAMEWORK

Official blueprint with which all government agencies must comply with to attain and maintain air quality standards

Permissible standards
Economic incentives
Control strategies/measures
Management strategies
Collective action
Education and information

EMISSION REDUCTION GOALS
AIR QUALITY ACTION PLAN

INTEGRATED AIR QUALITY IMPROVEMENT FRAMEWORK

EMISSION LIMITS AND OTHER CONTROL MEASURES

AMBIENT AIR QUALITY MONITORING SYSTEM

AIRSHED
<table>
<thead>
<tr>
<th>EMISSION CHARGE SYSTEM</th>
<th>STATIONARY SYSTEM</th>
<th>MOBILE SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collecting agency (Department)</td>
<td>DENR</td>
<td>DOTC</td>
</tr>
<tr>
<td>As part of</td>
<td>Emission Permit</td>
<td>Vehicle registration</td>
</tr>
<tr>
<td>Based</td>
<td>Volume and Toxicity of emissions</td>
<td></td>
</tr>
<tr>
<td>Objective</td>
<td>Encourage industries and motor vehicle owners to abate, reduce or prevent pollution</td>
<td></td>
</tr>
</tbody>
</table>
AIR QUALITY MANAGEMENT FUND (AQMF)

SOURCES

- Fines and damages
  Awarded to the government
- Proceeds of licenses and permits
- Emission fees
- Donations, Endowments and grants

USES

- Restoration and rehabilitation of Affected areas
- Containment, Removal or clean-up operations
- Research, Enforcement and Monitoring activities
- Technical assistance To relevant agencies

DENR administered Special Account in the National Treasury
MOBILE SOURCES

TYPE APPROVAL OF NEW MOTOR VEHICLES

EMISSION TEST before registration

ROADSIDE INSPECTION AND APPREHENSION
• Type Approval Standards for new vehicles
• Emission standards – in use, rebuilt and imported 2\textsuperscript{nd} hand vehicles
No rebuilt or second hand or pre-registered CBU imported into the country or pre-registered vehicles retrofitted with second hand engines shall be allowed registration or renewal without valid Certificate of Compliance to Emission Standard (CCES) issued by the DOTC.

- **Rebuilt MV - locally assembled vehicle using new or used engine, major parts or component as allowed by law**
Certificate of Compliance to Emission Standards (Section 10, DAO 2010-23)

- **Rebuilt Vehicles**
  - Inspection by DOTC Vehicle Type Approval System if available, or initially by LTO-MVIS.

- **Imported second-hand vehicles**
  - Certificate of Emission Compliance from the country of origin
# Emission Standards for In-Use Vehicles with Spark-Ignition Engines*

<table>
<thead>
<tr>
<th>Vehicle Registration</th>
<th>CO (% by volume)</th>
<th>HC (ppm as hexane)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered for the first time after December 31, 2007</td>
<td>0.5</td>
<td>250</td>
</tr>
<tr>
<td>Registered for the first time on or after 01 January 2003 but before January 1, 2008</td>
<td>3.5</td>
<td>600</td>
</tr>
<tr>
<td>Registered for the first time prior to December 31, 2002</td>
<td>4.5</td>
<td>800</td>
</tr>
</tbody>
</table>

* at idle ** subject to Sec 8, validity of COC
# Emission Standards for In-Use Vehicles with Compression-Ignition Engines*

<table>
<thead>
<tr>
<th>Vehicle Registration</th>
<th>Light absorption coefficient, m(^{-1}), k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered for the first time after December 31, 2007</td>
<td>2.0</td>
</tr>
<tr>
<td>Registered for the first time on or after 01 January 2003 but before January 1, 2008</td>
<td>2.5</td>
</tr>
<tr>
<td>Registered for the first time prior to December 31, 2002</td>
<td>2.5, 3.5 (turbocharged), 4.5 (1000 m increase in elevation)</td>
</tr>
</tbody>
</table>

* Free acceleration  ** subject to Sec 8, validity of COC
Emission Standards for In-Use Vehicles
Motorcycle/tricycle and Moped

<table>
<thead>
<tr>
<th>Vehicle Registration Date</th>
<th>CO (% by volume)</th>
<th>HC (ppm as hexane)</th>
<th>White smoke (% opacity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered for the first time prior to January 1, 2003</td>
<td>6.0</td>
<td>6,500</td>
<td>30</td>
</tr>
<tr>
<td>Registered for the first time from January 1, 2003 up to December 31, 2011</td>
<td>4.5</td>
<td>6,500</td>
<td>30</td>
</tr>
<tr>
<td>Registered for the first time on or after January 1, 2012</td>
<td>3.5</td>
<td>4,500</td>
<td>30</td>
</tr>
</tbody>
</table>
# Emission Standards for Rebuilt and Imported Used Vehicles*

<table>
<thead>
<tr>
<th>Vehicle Registration</th>
<th>CO$^a$ (% by vol)</th>
<th>Hc$^a$ (ppm as hexane)</th>
<th>Light absorption coefficient, (m$^{-1}$) k (turbo charged) $^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered for the 1$^{st}$ time after 31 Dec 2007</td>
<td>0.5</td>
<td>250</td>
<td>2.0</td>
</tr>
</tbody>
</table>

$a$-spark-ignition (gasoline)
$b$- compression-ignition (diesel)

*- vehicles listed in Section 3.1.1-3.1.5 of EO 156
Section 22, CAA
No new motor vehicle shall be allowed initial registration unless the EMB issues a valid Certificate of Conformity (COC).

DAO 2010-23
-EURO 2, II emission limits up to Dec. 2015
-EURO 4 for Light Duty Vehicles and Passenger Cars (except heavy duty) effective 1 January 2016
Certificate of conformity

- Complete and detailed description of motor vehicle and the engine;
- Description of the emission control system installed
- Details of the fuel system
- Emission test report
- Other particulars
Coverage of COC
[Section 1, Rule XXXI, DAO 2000-81]

- Motor vehicles designed and manufactured in the Philippines using brand new engines and spare parts
- Motor vehicles assembled in the Philippines using original and brand new parts and components imported into the country completely knocked down (CKD)
- New motor vehicles completely built up (CBU) imported into the country
PROPONENT

Screening Officer (COC Requirements) Letter Request for COC

Complete? Y

Records (Receiving) — For encoding to Database

Chief, EQD — For routing

Chief, AQMS — Evaluation of compliance to emission standards

Chief, EQD — Review and endorsement to EMB Director by the Division Chief

Office of the Director — Final Approval of the Certificates

Chief, EQD — Release of the Certificates
CERTIFICATE OF CONFORMITY

Pursuant to Section 22, Chapter II of Republic Act 8749 (Clean Air Act of 1999) in relation to Part IX, Rule XXXI of DENR Administrative Order 2000-81 (Implementing Rules and Regulations of RA 8749), this

Certificate of Conformity (COC) No. 07-1193

is hereby issued to:

COC Holder: HYUNDAI ASIA RESOURCES, INC.  
Address: Hyundai National Headquarters  
315 Sen. Gil Puyat Avenue, Makati City 1200  
Tel. No: 830 0010 to 12

for having submitted requirements to the satisfaction of this Bureau of the Department of Environment and Natural Resources (DENR).

This COC covers new motor vehicle types described hereunder:

1. Category of vehicle: M2
2. Engine fuel requirement: Diesel oil
3. Trade name/mark of the vehicle: Hyundai
4. Vehicle type/Model: Grand Starex 2.5 VGT
5. Engine capacity: 2497 cm³
6. Engine type: D4CB, compression ignition, four (4)-stroke, four (4) cylinders (in line), liquid cooled
7. Manufacturer’s name and address: Hyundai Motor Company  
771-2, Jangdu-Dong, Hwaseong-Si  
Gyeonggi-Do, 445-706 Korea
8. Name and address of manufacturer’s representative: Ms. Ma. Fe Perez-Agudo  
EVP, Chief Operating Officer  
HYUNDAI ASIA RESOURCES, INC.  
Hyundai National Headquarters  
315 Sen. Gil Puyat Avenue, Makati City 1200
9. Maximum mass of the vehicle (kg): 3310
10. Reference mass of the vehicle (kg): 2440
11. Number of seats including driver: 12
12. Wheel Drive: 2WD, rear
13. Transmission: five (5) speed, automatic
14. Fuel feed system: Direct injection

Protect the environment... Protect life...
Thank you