

### Appendix 3: Quality Control Requirements for Motorcycle Mass Production

1. Applicants for engine family emissions certification for mass produced vehicles shall implement mass production vehicle quality control measures pursuant to the Appendix to ensure that the emissions of vehicles satisfy emission standards during the emissions control system's useful life warranty period. The motorcycle emission air pollutant quality control plan shall be implemented in accordance with the following specified items and requirements:
  - 1.1 Self-conducted selective testing method.
  - 1.2 Selective sampling ratio.
  - 1.3 Testing items.
  - 1.4 Organization name that conducts the test.
  - 1.5 Instruments and equipment.
  - 1.6 Test results and a complete record of the testing.
  - 1.7 Deployment data for personnel implementing the Conformity of Production plan and the personnel information who will cooperate with the new vehicle random inspection and the recall and correction investigation testing.
  - 1.8 Plan implementation flowchart.
  - 1.9 Improvement plans for problems or issues.
  - 1.10 Other supplementary notes and information about after-sale service centers for the mass production vehicles (e.g. maintenance, service and repair centers (stations)).
2. Commissioned test regulations
  - 2.1 The quality control test shall be performed by a test laboratory approved by the central competent authority.
  - 2.2 If a quality control test is performed, the quality control test results of the test laboratory shall be submitted to the online transmission application system designated by the central competent authority.
3. New vehicle quality control measures
  - 3.1 Tested items

This includes the driving cycle test, idle status test, and OBD disconnection test.
  - 3.2 New vehicle Conformity of Production testing sampling ratio
    - 3.2.1. For those implementing the quality control test independently, based on the sampling ratio, each engine family shall select at least one vehicle per 500 manufactured or imported vehicles for a random test. If it is impossible to implement the quality control test independently, the test laboratory approved by the central competent authority shall be contracted to execute an emission test. Based on the sampling ratio, for each engine family, at least one vehicle per 200 manufactured or imported vehicles shall be selected for a random test.
    - 3.2.2. For an engine family that uses designated deterioration factors and is only applicable in the case of an annual sales volume of 600 units, based on the sampling ratio of those who can implement the quality control test independently, for each engine family, at least one vehicle per 250 manufactured or imported vehicles shall be selected for a random test. If it is impossible to implement a quality control test independently, a

test laboratory approved by the central competent authority shall be contracted to execute the emission test. Based on its sampling ratio, for each engine family, at least one vehicle per 100 manufactured or imported vehicles shall be selected for a random test.

3.2.3. Vehicles used for the voluntary quality control test shall be those that have never been tested before. Repeated tests are not allowed.

3.2.4. If each engine family fails the quantity specified in the preceding subparagraph before ceasing to manufacture or import vehicles, at least one vehicle shall be selected for a random test. If all vehicles have already been tested before they cease to manufacture or import vehicles, related documentation shall be submitted to facilitate the application with the central competent authority for exemption from the test.

3.3 The applicant shall complete the quality control test before the sales volume reaches the controlled threshold limits that are defined in paragraph 3.2: Random Test Ratio, and present the test report within the prescribed time limit.

#### 4. In-use vehicle quality control measures

##### 4.1 Tested items:

###### 4.1.1. Maintenance and Warranty information.

The applicant shall compile relevant service information for the record, in case of customer complaints concerning warranty or repairs and OBD fault codes of the emission control system that occur during the effective term and warranty period of the emission control system of the vehicle each year, and maintain the record for five years. The OBD fault code statistical data shall include the OBD family, engine family, vehicle configuration, engine number or body number, fault code, mileage at the time of freeze fault codes, and frequency of occurrence of individual fault codes, etc.

###### 4.1.2. OBD In-Use Performance Ratio

For the OBD family generating an annual sales volume of more than 1,000 units and equipped with the OBD Stage II-A or OBD Stage II-B, the applicant shall review the OBD in-use performance of the vehicles sold domestically and prepare the record and statistical report, which shall be maintained for five years, in accordance with Appendix 1 paragraph 5.10 "OBD In-Use Performance Ratio."

##### 4.2 Sampling ratio:

###### 4.2.1. OBD In-Use Performance Ratio

4.2.1.1. For the OBD family of OBD Stage II-A or OBD Stage II-B, when the vehicles are in use, the applicant shall select 6 vehicles if the family generates an annual sales volume ranging from 1,000 units to 5,000 units; 15 vehicles if the family generates an annual sales volume ranging from 5,000 units to 10,000 units; 30 vehicles if the family generates an annual sales volume ranging from 100,000 units to 200,000 units; and 45 vehicles if the family generates an annual sales volume more than 200,000 units, for investigation, statistics and analysis of the OBD in-use

performance ratio and for compliance with the requirements referred to in Appendix 1 paragraph 5.10.

4.2.1.2. For said selection of vehicles when they are in use, the vehicle configuration enjoying a larger sales volume or which serves as the representational configuration shall be considered the first priority. The tested vehicle shall run for 30,000 km (inclusive) or over 6 months (inclusive), whichever is later. In the meantime, the mileage or the service duration shall be guaranteed in terms of the emission control system.

4.3 The applicant shall complete a quality control test before the sales volume reaches the controlled threshold limits that are defined in paragraph 4.2: Random Test Ratio, and present the test report within the prescribed time limit.

5. Test result and data reporting schedule

5.1 The applicant shall report and log in the test results and related data in the format established for the online transmission system designated by the central competent authority and then submit the same to the central competent authority for future reference.

5.2 New vehicle quality control: Before the 20th of each month, the applicant shall report the production quantity of new vehicles, imported quantity and new vehicle quality control test results of the previous month.

5.3 In-use vehicle quality control: Before the 31st of March each year, the applicant shall report the warranty record and OBD in-use performance record for the previous year.

5.4 Upon completion of the quality control test, the applicant shall not attempt to change the test objectives of the vehicles failing the test.