**AUSTRALIAN** 

**MOTOR VEHICLE** 

**CERTIFICATION BOARD** 

**COMPRISING AUSTRALIAN AND STATE AUTHORITIES** 

# CIRCULAR NO. 36-2-1 RECOMMENDED APPLICATION PROCEDURES FOR APPROVAL BY THE ADMINISTRATOR OF COMPLIANCE WITH AUSTRALAN DESIGN RULE NO. 36 EXHAUST EMISSION CONTROL FOR HEAVY DUTY VEHICLES (PART 1)

- This circular describes the first phase of the recommended procedure to be adopted by manufacturers seeking the approval of the Administrator for compliance of their vehicles with Australian Design Rule No. 36 Exhaust Emission Control for Heavy Duty Vehicles.
- This phase covers the selection and approval of test engines representative of an engine family. It also includes the submission of other information relating to matters for which prior approval of the Administrator is required before testing can commence. Other Circulars will be issued at appropriate times covering the second and third phases of the procedures dealing, inter alia, with the submission of test results and the final consolidated submission. This first phase covers the following subjects:
  - a. Application for Selection of Test Engines Form EC36
  - b. Engine Family Identification Form EC36, Annex A
  - c. Service Accumulation Procedures Form EC36, Annex B
  - d. Laboratory Data Form EC36, Annex C
  - e. Test Fuels Form EC36, Annex D.

### FORM EC36:

3 This initial application form must be submitted no later than the receipt by the

Administrator of any Annex. The Administrator would prefer that the first phase be submitted in its entirety at the one occasion. However, where this is not practicable the application shall indicate the extent of the documentation still to be submitted.

It is important that the applicant nominate a unique reference identification for his application and that this reference identification be used on all documentation relating to the application.

# FORM EC36 ANNEX A:

- A separate Annex A shall be furnished for each engine family. Each Annex A consists of seven parts, viz., Parts A, B, C, D, E, F and G:
  - a. Part A describes the common parameters of the engine family.
  - b. Part B details the individual parameters of each engine displacement exhaust emission control system combination.

If within a combination so defined, there exists variations in relation to any of the engine parameters listed in Part B, each engine configuration of unique parameters shall be identified by an engine configuration code, but may be included in the one Part B for the combination.

- c. Part C describes the exhaust emission control systems. In cases where a Part C is common to more than one Part B, either within the same engine family (same Annex A) or a different engine family (a different Annex A), it will be sufficient to merely cross-reference Annex A, Part B, at the appropriate place. Each Annex A may consist of one or more Part C's, each distinctively identified.
- d. Part D lists the engine family sales.
- e. Part E provides a description of the engine family sales.
- f. Part F lists the proposed test engine fleet.
- g. Part G details the scheduled maintenance proposed for each test engine, which will be incorporated ultimately in the written instructions required by Clause 36.2.3.
- It will be noted that Annex A, Parts D to F, are unique to each engine family (i.e. each Annex A). There may be one or more Parts G for each Annex A and it is permissible to cross-reference between different Annex A's. It is important to note that instructions for maintenance must be specific. It will not be sufficient to indicate that a particular maintenance item should be undertaken as required. The precise conditions which will render the necessity for this particular maintenance must be specified.

Additionally, it will be noted that Annex A, Parts A and B, relate to four stroke reciprocating engines. Similar formats will be available on request for two stroke reciprocating engines and for rotary engines.

### FORM EC36 ANNEX 3:

8 This Annex provides details of the service accumulation of the engine.

### **FORM EC36 ANNEX C:**

This Annex constitutes preliminary advice concerning the testing laboratory, it's equipment and procedures used. The Administrator reserves the right to have the facility inspected at any time, for the purpose of determining its adequacy to carry out the prescribed tests for the purpose of witnessing tests on data engines. It should be noted that, if during the currency of a testing program it becomes necessary to obtain new supplies of reference gases, analyses of the new reference gases must be submitted for approval of the Administrator.

## **FORM EC36 ANNEX D:**

This Annex calls up an analysis of the fuel proposed for the exhaust emission testing and requires that each fuel be covered by a specific analysis. If during the currency of a testing program it becomes necessary to obtain new supplies of fuel, then analyses of the new fuel must be submitted for the approval of the Administrator.