

TYPE APPROVAL

1.0 MODEL FAMILY

- 1.1 For the purpose of type approval and conformity of production certification, manufacturer engine range shall be divided into families, consisting of parent engine model and its variant(s).

(In case of import of complete genset, all the provisions of this document shall be applicable to the engine which form part of the genset)

- 1.2 The determination of an engine family and the decision regarding parent engine shall be taken according to the guidelines given in ISO 8178 – 7(Reciprocating internal combustion engines – exhaust emission measurement – part 7 :Engine family determination). However, the decision of selection of parent engine and family classification by the authorized agency shall be final.
- 1.3 For the purpose of identification, the supplier shall designate the families as F1, F2, F3 Fn.

2.0 SELECTION OF CERTIFICATION AGENCY

- 2.1 One supplier shall submit application for Type Approval to only one certification agency out of those prescribed in the Rule 6 of the GSR 771(E), dated 11th December 2013 and its amendment vide GSR 232(E) dated 31-Mar-2014 for all of its product models.
- 2.2 The same certification agency shall also be responsible for carrying out the verification of Conformity of Production (COP) for that manufacturer.
- 2.3 For any reason if any supplier wants to change the certification agency, he shall apply to the nodal agency well in advance with justifiable reasons. The nodal agency, after consultation with the existing certification agency / standing committee, may approve the change, if found justified. If approved, the nodal agency shall inform to all the parties concerned.
- 2.4 On receipt of information for change in certification agency, from the nodal agency, the previous certification agency shall authenticate all the relevant documents of the models (type approvals as well as COP verification) and forward the same to the new certification agency. The new certification agency shall be responsible for carrying out the type approval testing and COP verification for the supplier, in future.

- 2.5 Till the nodal agency gives approval for change in the certification agency, the previous certification agency will continue to carry out type approval and COP tests for the said supplier.

3.0 APPLICATION FOR TYPE APPROVAL

- 3.1 The application shall be made in the format prescribed in **Annexure V& II**, and must be complete in all respects. Annexure –V shall be submitted to Nodal Agency and on its written acceptance, annexure-II is to be submitted to the certification agency.

The supplier shall submit the details of the parent model and its variants for considering them as a family, with justification, to the certification agency.

Test results, if any, of the emission test done in accordance with the requirement of this document may also be submitted along with the application.

- 3.2. For each engine model, the supplier must submit an application to the certification agency, selected as above.
- 3.3. The application must be signed by the authorized representative of the supplier.

4.0 TYPE APPROVAL

- 4.1 The certification agency shall decide the family, the parent model and its variants depending on the information provided by the manufacturer.
- 4.2 Testing of the parent model, as defined in clause 1.0 of this part, shall, normally, be sufficient for type approval of the family. The certification agency has the option to carry out the testing of more than one model in the family to satisfy itself.
- 4.3 At later stage if the supplier submits the application for type approval of a model, the certification agency shall ascertain whether the model can be classified as belonging to a family of model(s) already certified.

If the model does not belong to a family already certified, the certification agency shall proceed with the testing of the model for type approval.

If the model belongs to a family already certified, the certification agency shall decide whether the specific testing of the model is required. In case the specific testing of the model is not required, the type approval certificate for the family may be extended to include the model. The Certification Agency should intimate the extension to the Nodal Agency

- 4.4 The certification agency shall intimate its decision to the applicant within a fortnight of receipt of the application, indicating need and plan (schedule) of testing for type approval endorsing a copy to the Nodal Agency.
- 4.5 The supplier shall submit an engine for testing, as intimated by the certification agency.
- 4.6 The testing shall be done as per the procedure and specifications given in Part III of this document.
- 4.7 The engine sample shall be deemed to have passed the test if the emission levels of all the species do not exceed their respective limits.

However, if the engine sample fails to complete the test or meet the acceptance criteria, as above, the supplier has the option to repair, modify or replace the same. If the design modifications reflect changes in the specifications given in the application, a revised application shall be submitted.

If the supplier is unable to repair, modify or replace the sample within a period of 3 months, the application for certification shall be deemed as withdrawn and a fresh application shall have to be submitted.

5.0 CERTIFICATE OF TYPE APPROVAL

- 5.1 After verification / testing for type approval, the certification agency shall issue a type approval report to the supplier, within one month from the date of testing, indicating acceptance or rejection decision and reasons thereof. If it is accepted, the certification agency shall issue the certificate of type approval for the model / family as per the format prescribed in **Annexure – III** along with the report. COP of the certificate as well as the report shall also be forwarded to the nodal agency.
- 5.2 The certificate shall be deemed to be valid for the model(s) included therein, unless explicitly withdrawn through a separate written order by the nodal agency.
- 5.3 The Type Approval certificate issued for an engine family to a diesel engine manufacturer shall be valid for the same model manufactured at any other plant of the same manufacturer. The nodal agency or authorised certification agency will visit the new plant to verify the adequacy of the infrastructure.

- 5.4 After the issue of Type Approval certificate of a family, the same shall be valid
- 5.4.1.1 Till the engine specifications change as mentioned in Annexure-III and
 - 5.4.1.2 Till further amendments to the notification.
 - 5.4.1.3 Till CoP is not missed
- 5.5 All the Type Approval tests shall be conducted in the test agency laboratory. In case the required test facilities are accredited by the test agency, the Type Approval / COP tests can be carried out at supplier's laboratory also if reasons call for. In case the test is to be carried out in any overseas test facilities, the same shall be informed to the Nodal Agency by the Certification agency. The Certification Agency will submit a copy of the accreditation letter highlighting the details of test facilities available in the suppliers' laboratory to the Nodal Agency.
- 5.6 In case the supplier approaches the test agency for the first time, such suppliers should complete the COP test/s within three months from the commencement of commercial production or importation of 100 units, whichever is earlier.

6.0 MODIFICATIONS IN THE ENGINE MODEL

- 6.1 Every modification in the characteristics or parameters of the engine model, which has been declared by the supplier as per **Annexure II**, shall be intimated by the supplier to the certification agency, which is responsible for carrying out TA & COP for that supplier. The certification agency may either
- 6.1.1 Consider that the engine with the modifications made may still comply with the requirements. In this case, the certification agency shall extend the type approval covering the modified specifications.
 - 6.1.2 Consider that the engine with the modifications proposed require a further test to ensure compliance. In case the engine with the modifications complies with the requirements on testing as per part III of this document, the certification agency shall extend the type approval.

Reference:

“System & Procedure for Compliance to Emission Limit for Genset Application (Up to gross mechanical power 800kWm)”, published by Central Pollution Control Board, Ministry of Environment & Forests, Govt. of India