SOP FOR APPROVAL OF EX-ELECTRICAL APPARATUS INSTALLED IN HAZARDOUS AREAS

A. Documents required for approval for indigenously manufacturing

- 1. Online application form duly signed by the authorized signatory of the firm / company. The person signing shall specify his name and designation below the signature.
- 2. Manufacturer shall submit following documents for purpose of approval:
 - a. Test certificate, test report and certified drawing issued by any of the Indian test laboratories recognized by the Chief Controller of Explosives or
 - b. IECEx Certificate of Conformity, IECEx Test Report and Drawing.

In case of fuel dispenser (petrol/diesel / ethanol /Aviation Turbine Fuel / Kerosene or any other blends as notified by MoRTH from time to time): EU Type Examination Certificate conforming the fuel dispenser to EN 13617-1: 2012 or EN 13617-1: 2021, a valid copy of Production Quality Assurance / Assessment Notification and Declaration of Conformity.

- 3. Technical manpower deployed for manufacturing, list of equipments and quality control instruments available with the manufacturing plant.
- 4. Scrutiny fees as specified in Part C of First Schedule of the Petroleum Rules, 2002. (Rs 2000 per certificate).

Note:-

- Quality surveillance document such as BIS license or IECEx Quality Assessment Report or certificate conforming to IS/IEC ISO 80079-34 standards shall not be mandatory for the manufacturer to submit along with online application.
- Inspection of the manufacturing premises is not mandatory.
- Approval shall be valid till any change in the product standard or change in the design of
 product and the manufacturer shall obtain subsequent approval for the Ex Electrical Apparatus
 in case of revision in product standard (other than base standard i.e. 60079-0: General
 Requirement) or change in the product design.

The approval of laboratory undertaking testing of Ex Electrical Apparatus recognized under Rule 2 (xxia) of the Petroleum Rules, 2002 shall be ten years.

B. Documents required for approval for electrical apparatus imported in India

- 1. Online application form duly signed by the authorized signatory of the firm. The person signing shall specify his name and designation below the signature.
- 2. For approval, the manufacturer shall submit following test certificates for approval:
 - a. IECEx Certificate of Conformity, IECEx Test Report and certified drawing
 - b. EU Type Examination Certificate, test report, certified drawing, valid copy of production quality assurance / assessment notification and declaration of conformity. (applicable only for the manufacturers based in the countries covered under the European Union).

In case of fuel dispenser (petrol/ diesel / ethanol /Aviation Turbine Fuel / Kerosene or any other blends as notified by MoRTH from time to time): EU Type Examination Certificate conforming the fuel dispenser to EN 13617-1: 2012 or EN 13617-1: 2021, a valid copy of Production Quality Assurance / Assessment Notification and Declaration of Conformity.

The Declaration of Conformity shall be signed by an official of the manufacturer who is resident of the country covered under European Union.

- 3. Documentary evidence of the Indian service provider / distributor such as:
 - a. Certificate of Incorporation issued by Registrar of Companies or
 - b. Registered Partnership deed or LLP or
 - c. GST Certificate with PAN in case of proprietorship firm
- 4. A letter of authorization addressed to the Chief Controller of Explosives issued by the original equipment manufacturer authorizing the Indian service provider / distributor to apply for approval on his behalf along with a service agreement for supply of spares, repairing, commissioning, after sales service after installation, etc.
- 5. Technical manpower deployed for manufacturing, list of equipments and quality control instruments.
- 6. Scrutiny fees as specified in Part C of First Schedule of the Petroleum Rules, 2002. (Rs 2000 per certificate).

Note:-

- Inspection of the manufacturing premises is not mandatory.
- Technical brochure / details of the Ex Electrical Apparatus: (optional. Only in certain cases for understating the Ex Electrical Apparatus).
- Approval shall be valid till any change in the product standard or change in the design of product and the manufacturer shall obtain subsequent approval for the Ex Electrical Apparatus in case of revision in product standard (other than base standard i.e. 60079-0: General Requirement) or change in the product design.

C. <u>Ex Electrical Apparatus Assemblies</u>

- 1. In case of assemblies (Ex electric apparatus pre-manufactured with combination of individual Ex-electrical components, together with other parts as necessary, that are electrically or mechanically interconnected or that are pre-assembled prior to being placed into service at the end-user site, or that can be disassembled and then re-assembled at the end-user site) including dispensers (other thanfuel dispenser i.e. petrol / diesel / ethanol / Aviation Turbine Fuel / Kerosene or any other blends as notified by MoRTH from time to time), a test report issued by any laboratory recognized by the Chief Controller of Explosives or IECEx Certificate of Conformity or a test report conforming to IS/IEC TS 60079-46 or IEC TS 60079-46 shall be considered.
- 2. The test certificate and report shall cover all the electrical components installed in the assembly / dispenser. Individual approval of the electrical components installed in the assembly shall not be mandatory to be submitted along with online application.
- 3. In case of dispensers for CNG / CBG / LCNG / LNG / Hydrogen, in addition to above mentioned test report a third Party Audit Report issued by any of the laboratories recognized by the Chief Controller of Explosives or IECEx Certifying Body or Notified Body recognized under the ATEX regulations shall be submitted. The third party audit report shall comply with the provisions of following as the case may as per type of fuel:

a.	Clause 11 of ISO 16923: 2016	for	CNG dispenser
b.	EN 14678-1:2013	for	Auto LPG dispenser.
c.	Clause 10 of EN ISO 16924: 2018	for	LNG dispenser.
d.	Clause 8 of ISO 19880-1: 2020	for	Hydrogen dispenser.

Auto LPG, LNG and Hydrogen dispenser shall also conform to the relevant provisions of the Static & Mobile Pressure Vessels (Unfired) Rules, 2016. The third party issuing the audit

report shall also cover relevant provisions of the SMPV (U) Rules.

The electrical components installed in the assembly shall conform to the latest harmonized standards only.

- 4. In case of special assemblies such as:
 - a. Vaporizers for liquefiable gas shall be approved under the SMPV (U) Rules, 2016.
 - b. Composite CNG dispensing Units shall be approved under the Gas Cylinders Rules,
 2016.
 - c. Portable Service Station shall be approved under the Petroleum Rules, 2002.

However, the electrical components used in it shall be of the type approved by the Chief Controller of Explosives.

Following standards are considered for approval as on date

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Sr No	BIS Standards	IEC Standards	EN Standards*	Description
1	IS/IEC 60079-0:2017	IEC 60079-0:2017	EN IEC 60079-0:2018	Equipment—General Requirements
2	IS/IEC 60079-1:2014	IEC 60079-1:2014	EN 60079-1:2014	Equipment Protection by Flameproof Enclosures "d"
3	IS/IEC 60079-2:2014	IEC 60079-2:2014	EN 60079-2:2014, EN 60079-2:2014/AC:2015	Equipment protection by Pressurized enclosure "p"
4	IS/IEC 60079-5:2015	IEC 60079- 5:2015/AMD1 2022	EN 60079-5:2015	Equipment protection by Powder filling "q"
5	IS/IEC 60079-6:2020	IEC 60079-6:2020	EN 60079-6:2015	Equipment protection by Liquid immersion "o"
6	IS/IEC 60079-7:2017	IEC 60079-7:2017	EN 60079-7:2015 EN IEC 60079 7:2015/A1:2018	Equipment protection by Increased safety "e"
7	IS/IEC 60079-11:2023	IEC 60079-11:2023	EN 60079-11:2012	Equipment Protection by Intrinsic Safety "i"
8	IS/IEC 60079-15:2017	IEC 60079-15:2017	EN 60079-15:2010	Equipment Protection by Non Sparking "n"
9	IS/IEC 60079-18:2014	IEC 60079-18:2014	EN 60079-18:2015, EN 60079- 18:2015/A1:2017	Equipment protection by Encapsulation "m"
10	IS/IEC 60079-25:2020	IEC 60079-25:2020	EN60079-25:2010, EN 60079- 25:2010/AC:2013	Intrinsically safe electrical Systems
11	IS/IEC 60079-26:2021	IEC 60079-26:2014	EN 60079-26:2015	Equipment with Equipment Protection Level (EPL) Ga
12	IS/IEC 60079-28:2015	IEC 60079-28:2015	EN 60079-28:2015	Protection of equipment and transmission systems using optical radiation
13	IS/IE C60079-29: Sec 1:2016	IEC 60079-29-1:2016	EN 60079-29-1:2016	Gas detectors Section 1 Performance Requirements of Detectors for Flammable Gases
14	IS/IEC 60079-29: Sec 4:2009	IEC 60079-29-4:2009	EN 60079-29-4:2010	Gas detectors: Sec 4 performance requirements of open path detectors for flammable gases
15	IS/IEC/IEEE 60079-30: Sec 1:2015	IEC/IEEE 60079-30-1: 2015	EN 60079-30-1:2017	Electrical Resistance Trace Heating Section 1 General and testing requirements
16	IS IS/IEC / TS 60079- 46 : 2017	IEC TS 60079-46 : 2017		Assembly of electrical components only

^{*}Applicable for manufacturing units located in the countries covered under European Union.