

MAHARASHTRA METRO RAIL CORPORATION LIMITED
(Nagpur Metro Rail Project)

No. NMRP-QAQC011(11)/3/2024-QC/147628

Dt. 04.09.2024

Procedure Order

Sub.: Procedure to approve Operation/Testing/Trial of New Products/Materials for Civil works.

1.0 Purpose:-

The rapid pace of innovation and development underscores the undeniable need for new products/materials in the construction and infrastructure sector. These products/materials can address a wide spectrum of needs, ranging from safety, quality and sustainability to aesthetics, functionality and cost-effectiveness.

Hence, a procedure is formulated that can be followed for approval of operation/testing/trial of new products/materials for civil works that are not currently identified, but the contractor may desire to use them or the vendor may want to register their product.

2.0 Procedure:-

2.1 OEM/Vendor's Request for use of new product/material

- i. The OEM/vendor will submit a formal request to GM/Design for the use of the proposed new product/material(s) along with its proposed utility.
- ii. A two-member committee comprising GM/Design & AGM/QC will examine the suitability of the proposed new product/material(s) and will put up the details to Director (Project) for further orders. The decision will be communicated to the vendor accordingly.

2.2 Contractor's Request for Approval of new product/material

If the use of proposed new product/material is agreed to by Maha-Metro, the contractor will submit a formal request to the Engineer for the proposed product/material and corresponding manufacturers/firms/vendors that they are proposing along with the following information.

- i. The name, address and contact information of the manufacturer.
- ii. The Type, name, and designation of product to be evaluated.
- iii. Two copies of documentation that includes the result of tests showing compliance with the Relevant BIS, ASTM, ISO, or applicable standards.
- iv. Copy of NABL Accreditation Program, Certification of Accreditation for the laboratory performing the testing. The laboratory must be independent, third party and must be NABL accredited for the testing of the Product. Documentation of NABL accreditation must be current and coincide with the dates during which the tests were performed.
- v. Materials safety Data Sheet.

Upon request, and if required and demanded the manufacturer shall submit one sample of the product/material for testing.

2.3 Material Review

Upon receipt of the sample as may be required and documentation, the Engineer will review the test results for conformity with relevant specifications. If any of the documentation is not acceptable, a letter will be sent to the product manufacturer describing the discrepancy and informing the manufacturer what further actions are required.

2.4 Materials Laboratory Testing

If the documentation and test results are acceptable, the Engineer will perform tests on the product in accordance with relevant procedures. These test results will be kept on file to compare future sample testing compliances with uniformity requirements.

The Engineer upon his satisfaction, will submit the case for Product approval to the "Evaluation Committee" formed for the product/manufacture approval. The committee upon scrutiny of the case will recommend the product/manufacture for approval to the Director (Project). The approval or otherwise will be communicated to the Engineer.

Accordingly, a letter will be sent to the contractor stating that the documentation was acceptable and that the test results submitted indicated that the product meets the requirements or otherwise the comments/rejection. Maha-Metro reserves full rights to accept, comment or reject the Product/Manufacturer and the decision of Maha-Metro cannot be challenged by the contractor/vendor.

It may be noted that approval of new product and corresponding firms/vendors/manufacturers will be contract specific, but once approved, the same can be used in other contracts of NMRP Phase-II by citing its reference and submission of formal case for its approval in new contract. The restrictions on quantity proposed to be used will apply independently to the new contract.

3.0 Procedure requirements:-

3.1 **Engineer** – The Engineer for the purpose of this procedure order is PD/GC to NMRP or his authorized representative nominated for the purpose. However, the final submission of the case to Maha-Metro has to be under the signature of PD/GC to NMRP, after due scrutiny.

3.2 **Evaluation Committee** – The Evaluation Committee for this procedure order will comprise of GM/Design (NMRP, Maha-Metro), AGM/Quality Control (NMRP, Maha-Metro) and Dy. PD/GC to NMRP, Maha-Metro.

3.3 Qualification

Qualification of a product does not constitute a blanket approval of the material. The product must be verified and approved in order to be used in the work. The Contractor for each proposed project/work must submit the product and source as specified. The Engineer will approve the product and source on a project-to-project basis based on the specifications for the project. The Engineer will sample, test and accept the material according to the applicable Standard product. A sample of the approved product will be taken periodically to determine compliance with the uniformity requirements of relevant standards.

3.4 Disqualification

The Engineer may disqualify the approved new product for non-conformance with specification requirements or for a documented history of poor field performance. The manufacturer shall notify the Engineer, in writing, of any change in product formulation. Failure to notify the Engineer of changes in product formulation will result in disqualification.

3.5 Requalification

The Engineer will reevaluate a new product which has been disqualified only after submission of a formal request along with acceptable evidence that the problems causing the disqualification have been resolved.

The Engineer may require the manufacturer to requalify the product for any of the following reasons:

- i. To ensure that the products have not gone obsolete, the Engineer may request written confirmation from the manufacturer that the product is still available and has not changed formulation. Failure to respond to the Engineer written request will result in the product being disqualified.
- ii. If the formulation of the product has changed, the Engineer may require that the new formulation be requalified.
- iii. If the Department's standard specifications change or if the referenced standards change, the Engineer may require requalification to ensure that the product meets the new specification.

3.6 Restrictions on the quantity proposed to be used

- i. If the new product/material is a replacement for a product/material already available in the contract or being used, then the replacement shall not be greater than 10% of the balance quantity of the product being replaced under a particular contract or total value upto Rs. 3.0 crore, whichever will govern for a given scenario.
- ii. If the new product/material is altogether a fresh product/material, the quantity of product/material will be decided based on total volume of the work (which shall be restricted to 10% of the total quantity assessed) or the total value upto Rs. 3.0 crore whichever will govern for a given scenario.

This has the approval of Director (Project).


GM (Design)

- Copy to:**
1. DP, for kind info. please.
 2. PD/GC for info. and n. a. please.
 3. ED/CPMs - R1&Track, R2, R3&R4, CRF-I, CRF-II, for info and n. a.
 4. ED/Procurement, for info.
 5. GM/Planning-II, for info. and n. a.
 6. AGM/QC, for info. and n. a.