# INDIANA DEPARTMENT OF TRANSPORTATION DIVISION OF MATERIALS AND TESTS

# QUALIFIED PRODUCT LIST PROCEDURES AND REQUIREMENTS FOR STRUCTURAL STEEL COATING SYSTEMS ITM No. 606-24

## 1.0 SCOPE.

- 1.1. This procedure covers the requirements for a coating manufacturer's products to be considered for inclusion on, maintained on, and removed from the Department's Qualified Products List (QPL).
- 1.2. This ITM may involve hazardous materials, operations, and equipment and may not address all of the safety problems associated with the use of the test method. The user of the ITM is responsible for establishing appropriate safety and health practices and to determining the applicability of regulatory limitations prior to use.

### 2.0 REFERENCES.

# 2.1. AASHTO Standards.

M 300 Specification for Inorganic Zinc-Rich Primer

### 2.2. ASTM Standards.

D16 Terminology for Paint, Related Coatings, Materials, and Applications

## 3.0 TERMINOLOGY.

- **3.1. Terms and Abbreviations.** Definitions for terms and abbreviations shall be in accordance with those listed below, the Department's Standard Specifications, Section 101, and ASTM D16.
- **3.2 PEAS.** AASHTO's Product Evaluation and Audit Solutions program
- **3.3 Structural Steel Coating System.** A system defined by the Department. It shall consist of one coat each of an inorganic zinc primer product, an epoxy intermediate product, and a polyurethane finish coat product. All coating products shall be manufactured by the same manufacturer.
- **4.0 SIGNIFICANCE AND USE.** This ITM includes the procedure a coating product must undergo for consideration for inclusion on the Department's QPL of Structural Steel Coating Systems. The products and coating systems require inclusion on the QPL prior to a manufacturer furnishing any of these materials.

# 5.0 REQUIREMENTS.

**5.1. Submittal of a Quality Control Plan (QCP).** In order for the Department to review coating products and coating systems for consideration for inclusion on the QPL a QCP shall be furnished by the manufacturer. The QCP shall include as appropriate to the coating product(s) and coating systems, but not limited to, the following:

- **5.1.1** Name and location of the source or manufacturer,
- 5.1.2 List of the coating product(s) and Standard Specification section reference for the coating product(s) that is being requested for consideration.
- **5.1.3** Name, address, and telephone number of the responsible contact person(s),
- **5.1.4** Production process of the coating product(s),
- **5.1.5** Quality parameters of the coating product(s),
- **5.1.6** Finished coating product(s) sampling and testing procedures, and frequency,
- **5.1.7** Titles and qualifications of sampling and testing personnel,
- **5.1.8** Location and telephone of the laboratory testing office.
- **5.1.9** Statistical analysis of test results for each coating product.

The QCP shall be signed and dated by the manufacturer's representative at the time the QCP is submitted for consideration. The QCP shall be maintained to reflect the current status and revisions shall be provided to the Division of Materials and Tests in writing or in an acceptable electronic format.

- **Regulations.** All coating products shall comply with current IDEM VOC regulations, and the cured film of each of the individual coating products shall not contain toxic heavy metals above IDEM regulatory levels that would require classification of the individual coating products or the coating system as a hazardous waste.
- **PEAS Report.** A certified report from PEAS, showing test results for all of the specified qualitative and resistance requirements within the specifications for each coating product in the coating system. The report shall state the manufacturer's name, coating products, dates of manufacture, batch numbers, and the beginning

- and ending dates of resistance tests. The test report shall be no more than two years old at the time of submittal.
- **5.4** Consideration for Inclusion on the QPL. A manufacturer requesting inclusion on the Department's QPL, shall provide to the Department's Division of Materials and Tests the following:
  - **5.4.1** A OCP in accordance with 5.1
  - **5.4.2** An SDS for each coating product
  - **5.4.3** A product data sheet for each coating product
  - **5.4.4** A test report in accordance with 5.3.
  - **5.4.5** An infrared spectrum of the extracted vehicle of each coating product. For multi-component coatings, an infrared spectrum of each liquid component and of the extracted vehicle of the mixed coating product shall be provided.
  - **5.4.6** The mix ratio by weight of each component for multi-component coatings. The mix ratio shall be provided for each of the three coating products.
  - 5.4.7 Documented information detailing the past history and experience with the specific coating products or coating system in terms of service life and specific conditions of use. The documentation shall include details about durability and that the coating system has performed successfully for a minimum of three years. The performance history shall include the name, address and telephone number of the structure owner including the name of a responsible contact person, location of the structure and dates of the application and inspection. A certified NACE coatings inspector or a certified SSPC protective coatings specialist shall have performed the inspections.
  - 5.4.8 Upon notification from the Department that the paperwork portion of the submittal is acceptable, the manufacturer shall provide at no cost to the Department samples of each of the coating products for initial verification testing. These samples will be used to establish the baseline for each of the respective coating products. The sample containers shall be clearly labeled with the coating product identification, manufacturer's name, date of manufacture, batch number, and all health and safety warnings as required by OSHA's Hazard Communication Standard.
  - **5.4.9** A manufacturer's request for consideration for inclusion of a coating system on the QPL will be limited to three submittals of the coating system during a calendar year. Each submittal shall include the results from testing for all the properties listed within the specifications.

**5.4.10** Upon review, consideration, and verification of the documents and information listed in 5.4 of this ITM, each structural steel coating system deemed to meet the requirements will be added to the QPL.

- 5.5 Maintaining Standing on the QPL. A list of structural steel coating systems qualified for use when the specifications require the structural steel coating system will be maintained on the QPL.
  - The manufacturer shall provide written notification of any changes, revisions, or updates of the SDS, source name or address, contact person or coating product name(s) to the Department's Division of Materials and Tests.
- **Removal from the QPL.** Reasons for removing a coating system from the QPL will be, but not limited to, the following:
  - **5.6.1** If any coating product of a structural steel coating system is determined by the Department to be non-compliant with the specifications or this ITM,
  - **5.6.2** Test failures determined by verification sampling,
  - 5.6.3 Any coating product that has a change in formulation after being placed on a QPL will result in the entire coating system being removed from the QPL. All coating products are subject to testing by the Department using chemical and physical methods other than those specified in the specifications.
  - 5.6.4 If ten consecutive years elapse without furnishing the coating or coating system, or if a manufacturer is no longer producing one or more components of a coating system currently listed on the QPL,
  - **5.6.5** Performance of the coating or coating system no longer meets the intended purpose.
  - 5.6.6 The removal of a Structural Steel Coating System from the QPL will be at the direction of the State Materials Engineer, Division of Materials and Tests. The manufacturer may appeal that decision of the State Materials Engineer by sending written notification of appeal to the Director of the Division of Materials and Tests within 15 days of the date of written or electronic notification of removal from the QPL. While not required, the manufacturer may also request an appeal meeting with the Director to discuss the details of the appeal. The manufacturer's written notification of appeal shall include a detailed basis for the appeal and the request for an appeal meeting, if desired.
- **5.7 Re-Application for Consideration of a Coating System.** If a coating system is removed from a QPL, a minimum of 13 full months shall elapse prior to the manufacturer resubmitting the coating system for consideration. If the product is

resubmitted after the 13 full months waiting period, it will be treated as a new submittal.

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