

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
MATERIALS CONTROL, SOILS AND TESTING DIVISION

MATERIALS PROCEDURE

MAINTAINING, RECORDING, AND TRANSMITTING AN APPROVED LIST OF
WELDING ELECTRODES AND FLUXES

1. PURPOSE

- 1.1 To establish a procedure to qualify manufacturers of welding electrodes and fluxes for use on West Virginia Division of Highways (WVDOH) projects.
- 1.2 To establish a procedure for maintaining a record of such information.
- 1.3 To establish a procedure for transmitting such information to the Districts and Contractors of WVDOH projects.

2. SCOPE

- 2.1 This procedure shall apply to all manufacturers of welding electrodes and fluxes for WVDOH projects.
- 2.2 The word electrode in this document refers to an electrode or an electrode/flux combination.

3. REFERENCED DOCUMENTS

- 3.1 *American National Standard Specifications/American Welding Society, ANSI/AWS:*
 - A5.1 Specification for Carbon Steel Electrodes for Shielded Metal Arc Welding
 - A5.5 Specification for Low-Alloy Steel Electrodes for Shielded Metal Arc Welding
 - A5.17 Specification for Carbon Steel Electrodes and Fluxes for Submerged Arc Welding
 - A5.18 Specification for Carbon Steel Electrodes for Gas Shielded Arc Welding
 - A5.20 Specification for Carbon Steel Electrode for Flux Cored Arc Welding
 - A5.23 Specification for Low-Alloy Steel Electrodes and Fluxes for Submerged Arc Welding
 - A5.28 Specification for Low-Alloy Steel Electrodes and Rods for Gas Shielded Arc Welding

- A5.29 Specification for Low-Alloy Steel Electrodes for Flux Cored Arc Welding

4. APPROVAL CRITERIA

- 4.1 For a manufacturer of an electrode to be included on the Approved Products List of Electrodes and Fluxes, the manufacturer shall submit a certification document acceptable to the WVDOH certifying that the electrode is currently being manufactured, and is manufactured to current AWS specifications.
- 4.2 After the certification document has been received, a review and evaluation to determine the compliance with ANSI/AWS Specification will be conducted.
- 4.3 After a review indicating specification compliance, a laboratory approval number shall be issued to the electrode, thereby indicating approval status.
- 4.4 An electrode may be retained on the Approved Products Lists of Electrodes and Fluxes for one year provided no unsatisfactory reporting is received concerning the electrode.
- 4.5 In January of each year, a new list of Approved Products List of Electrodes and Fluxes shall be generated indicating the manufacturer, electrode trade name, ANSI/AWS class, ANSI/AWS specification, and laboratory approval number.

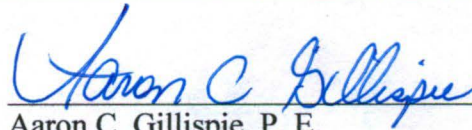
5. RETENTION OF APPROVED STATUS

- 5.1 All approved electrodes may be subject to periodic inspection and review to determine if the approved electrode is maintaining the same characteristics and quality as originally approved.
- 5.2 The criteria for re-approval is as follows:
 - 5.2.1 The manufacturer will receive an email that their electrode(s) on the Approved Products List of Electrodes and Fluxes will expire the first of the year. The email will also provide the current Approved Products List of Electrodes and Fluxes for the manufacturer to review and confirm that the electrodes listed are still currently being manufactured, and complies with current ANSI/AWS specifications.
 - 5.2.2 Retention of the electrode will continue if a newer version of an ANSI/AWS Specification is issued from the time of the original specification.
 - 5.2.3 After an electrode has been re-approved for another year, the Approved Products List of Electrodes and Fluxes shall retain the previous laboratory approval number and shall be used thereafter for as long as the material is re-approved.
 - 5.2.4 Once the electrode has met all criteria for re-approval, an update shall be made in the WVDOH mainframe indicating the date the material was re-approved.

6. DOCUMENTATION REPORT

- 6.1 The Approved Products List of Electrodes and Fluxes shall be updated at least once a year, but can be updated at any time with the addition of a new electrode or removal of an electrode.
- 6.2 A current Approved Products List of Electrodes and Fluxes s can be found on the Materials Control, Soils and Testing Division's web page under the "Division Approved Source/Product Listing" heading at the following link:

<http://www.transportation.wv.gov/highways/mcst/Pages/Listings.aspx>

A handwritten signature in blue ink, reading "Aaron C. Gillispie", is written over a horizontal line.

Aaron C. Gillispie, P. E.

Director

Materials Control, Soils and Testing Division