PROCEDURES FOR THE QUALIFICATION OF ARROW PANELS

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> that includes Arrow Panels. Arrow Panels shall conform to the following:

- Section 104.07 of MDOT SHA's Standard Specifications for Construction and Materials
- The applicable standards from the **Book of Standards for Highway and Incidental Structures**
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's Product Evaluation Listing (MPEL)</u> and then select "Vendor Registration" to begin the process.

No crash testing will be required for Arrow Panels until there is a MASH 2016 crash testing matrix developed for this category. MDOT SHA reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All Materials/Products/Devices approved are required to continue to meet the requirements mentioned above. MDOT SHA's MPEL coordinator must be informed immediately of any changes in the composition of the Materials/Products/Devices. After MDOT SHA has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

Materials/Products/Devices representing revised formulation/specifications/standards of currently approved Qualified Products/Devices will not be accepted for testing within six (6) months of the most recent evaluation unless requested by MDOT SHA.

Materials/Products/Devices evaluated and not accepted are not eligible for resubmission within six (6) months of the most recent submittal date, unless requested and approved by MDOT SHA.

RECERTIFICATION PROGRAM – EFFECTIVE SEPTEMBER 30, 2021:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on OOTS QPL. Materials/Products/Devices that were approved within 24 months of September 30, 2021 are exempt.

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PROCEDURES FOR THE QUALIFICATION OF ARROW PANELS

Recertification letters for Arrow Panels currently listed on the OOTS QPL must be submitted by September 30, 2021. If the recertification letter is not received by September 30, 2021, the Materials/Products/Devices will be removed from the OOTS QPL.

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

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PROCEDURES FOR THE QUALIFICATION OF AUTOMATED FLAGGER ASSISTANCE DEVICE

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a Qualified Products List (QPL) that includes Automated Flagger Assistance Device (AFAD). AFAD shall conform to the following:

- Section 104.22 of MDOT SHA's Supplemental Special Provision Insert
- The applicable standards from the <u>Book of Standards for Highway and Incidental</u> Structures.
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's Product Evaluation Listing (MPEL)</u> and then select "Vendor Registration" to begin the process.

No crash testing will be required for AFAD until there is a MASH 2016 crash testing matrix developed for this category. MDOT SHA reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free units/samples for the evaluation process.

MDOT SHA MPEL coordinator must be informed immediately of any changes in the composition of the Materials/Products/Devices. After MDOT SHA has reviewed the changes, a new unit or sample(s) may be requested and submitted along with the aforementioned information.

Materials/Products/Devices representing revised formulation/specifications/standards of currently approved Qualified Products/Devices will not be accepted for testing within six (6) months of the most recent evaluation unless requested by MDOT SHA.

Materials/Products/Devices evaluated and not accepted are not eligible for resubmission within six (6) months of the most recent submittal date, unless requested and approved by MDOT SHA.

RECERTIFICATION PROGRAM – EFFECTIVE SEPTEMBER 30, 2021:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on OOTS QPL beginning September 30, 2021. Materials/Products/Devices that were approved within 24 months of September 30, 2021, are exempt.

Recertification letters for AFAD currently listed on the QPL must be submitted by September 30, 2021. If the recertification letter is not received by September 30, 2021, the Materials/Products/Devices will be removed from the OOTS QPL.

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PROCEDURES FOR THE QUALIFICATION OF AUTOMATED FLAGGER ASSISTANCE DEVICE

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

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PROCEDURES FOR THE QUALIFICATION OF BARRICADES

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> that includes Barricades. Barricades shall conform to the following:

- Section 104.13 of MDOT SHA's Standard Specifications for Construction and Materials
- The applicable standards from the **Book of Standards for Highway and Incidental Structures**
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's Product Evaluation Listing (MPEL)</u> and then select "Vendor Registration" to begin the process.

Barricade evaluations require Manual for Assessing Safety Hardware (MASH) 2016 Federal Highway Administration (FHWA) Eligibility Letter before acceptance. In addition, OOTS reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All products approved are required to continue to meet the requirements mentioned above and in accordance with the FHWA Eligibility Letter. The MDOT SHA MPEL coordinator must be informed immediately of any changes in the design, hardware, or composition of the Materials/Products/Devices. After OOTS has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

In addition to the above requirements, MDOT SHA sets forth the following to all Manufacturers/Producers/Vendors currently approved and listed on the OOTS QPL:

• Provide a letter on the company's letterhead certifying that the design, hardware, and composition to be furnished to OOTS has the same chemistry, mechanical properties, and geometry as submitted and evaluated by FHWA in the MASH Eligibility Letter.

Any modifications made to the Materials/Products/Devices after receiving the FHWA Eligibility Letter will require one of the following options below for approval consideration:

- Resubmit the Materials/Products/Devices with the modifications to FHWA for MASH 2016 testing in accordance with the Barricades criteria. Please provide the FHWA Eligibility Letter after the testing is completed and passed.
- Hire an independent Licensed Engineer with no financial affiliation to the Manufacturer/Producer/Vendor to validate that the modification continues to meet the MASH 2016 requirements for Barricades. The Licensed Engineer will certify and sign that the Materials/Products/Devices meet the MASH 2016 criteria.

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PROCEDURES FOR THE QUALIFICATION OF BARRICADES

• Submit the Materials/Products/Devices to an independent certified testing facility with no financial affiliation to the Manufacturer/Producer/Vendor to certify the Materials/Products/Devices continue to meet the MASH 2016 requirements for Barricades. The facility will certify the Materials/Products/Devices meet the MASH 2016 testing criteria.

RECERTIFICATION PROGRAM - EFFECTIVE JULY 31, 2022:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on the OOTS QPL. Materials/Products/Devices that were approved within 24 months of July 31, 2022, are exempt.

Recertification letters for Barricades currently listed on the OOTS QPL must be submitted by July 31, 2022. If the recertification letter is not received by July 31, 2022, the Materials/Products/Devices will be removed from the OOTS QPL.

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

MASH 2016 IMPLEMENTATION - EFFECTIVE JANUARY 1, 2024:

MDOT SHA will only allow MASH 2016 compliant Barricades in contract bids and on new projects effective January 1, 2024.

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PROCEDURES FOR THE QUALIFICATION OF CONES

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> that includes Cones. Cones shall conform to the following:

- Section 104.14 of <u>MDOT SHA's Standard Specifications for Construction and Materials</u>
- The applicable standards from the **Book of Standards for Highway and Incidental Structures**
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's Product Evaluation Listing (MPEL)</u> and then select "Vendor Registration" to begin the process.

With their MPEL application submittal, manufacturers must provide a Self-Certification Letter on their company letterhead stating their Materials/Products/Devices is compliant with MASH 2016 requirements. In addition, MDOT SHA reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All Materials/Products/Devices approved are required to continue to meet the specification(s) mentioned above. In addition, <u>MdMUTCD</u> Section 6F.64 (14a) indicates that warning lights are not allowed on drums and cones. **MDOT SHA MPEL coordinator must be informed immediately of any changes in the composition of the Materials/Products/Devices.** After MDOT SHA has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

Materials/Products/Devices representing revised formulation/specifications/standards of currently approved Qualified Materials/Products/Devices will not be accepted for testing within six (6) months of the most recent evaluation unless requested by MDOT SHA.

Materials/Products/Devices evaluated and not accepted are not eligible for resubmission within six (6) months of the most recent submittal date, unless requested and approved by MDOT SHA.

RECERTIFICATION PROGRAM – EFFECTIVE JANUARY 31, 2022:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on OOTS QPL beginning January 31, 2022. Materials/Products/Devices that were approved within 24 months of January 31, 2022 are exempt.

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PROCEDURES FOR THE QUALIFICATION OF CONES

Recertification letters for Cones currently listed on the QPL must be submitted by January 31, 2022. If the recertification letter is not received by January 31, 2022, the Materials/Products/Devices will be removed from the OOTS QPL.

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

MASH 2016 IMPLEMENTATION - EFFECTIVE JULY 1, 2023:

MDOT SHA will only allow MASH 2016 compliant Cones in contract bids and on new projects effective July 1, 2023.

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PROCEDURES FOR THE QUALIFICATION OF DRUMS

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> that includes Drums. Drums shall conform to the following:

- Section 104.12 of MDOT SHA's Standard Specifications for Construction and Materials
- The applicable Category 1 standards from the <u>Book of Standards for Highway and</u> Incidental Structures.
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's Product Evaluation Listing (MPEL)</u> and then select "Vendor Registration" to begin the process.

With their MPEL application submittal, manufacturers must provide a Self-Certification Letter on their company letterhead stating their Materials/Products/Devices is compliant with MASH 2016 requirements. In addition, MDOT SHA reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All Materials/Products/Devices approved are required to continue to meet the specification(s) mentioned above. In addition, <u>MdMUTCD</u> Section 6F.64 (14a) indicates that warning lights are not allowed on drums and cones. **MDOT SHA MPEL coordinator must be informed immediately of any changes in the composition of the Materials/Products/Devices.** After MDOT SHA has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

Materials/Products/Devices representing revised formulation/specifications/standards of currently approved Qualified Materials/Products/Devices will not be accepted for testing within six (6) months of the most recent evaluation unless requested by MDOT SHA.

Materials/Products/Devices evaluated and not accepted are not eligible for resubmission within six (6) months of the most recent submittal date, unless requested and approved by MDOT SHA.

RECERTIFICATION PROGRAM – EFFECTIVE JANUARY 31, 2022:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on OOTS QPL beginning January 31, 2022. Materials/Products/Devices that were approved within 24 months of January 31, 2022 are exempt.

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PROCEDURES FOR THE QUALIFICATION OF DRUMS

Recertification letters for Drums currently listed on the QPL must be submitted by January 31, 2022. If the recertification letter is not received by January 31, 2022, the Materials/Products/Devices will be removed from the OOTS QPL.

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

MASH 2016 IMPLEMENTATION - EFFECTIVE JULY 1, 2023:

MDOT SHA will only allow MASH 2016 compliant Drums in contract bids and on new projects effective July 1, 2023.

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PROCEDURES FOR THE QUALIFICATION OF PORTABLE TRAFFIC SIGNALS

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a Qualified Products List (QPL) that includes Portable Traffic Signals (PTS). PTS shall conform to the following:

- Section 104.30 of MDOT SHA's Standard Specifications for Construction and Materials
- The applicable standards from the Book of Standards for Highway and Incidental Structures
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit Maryland's Product Evaluation Listing (MPEL) and then select "Vendor Registration" to begin the process.

No crash testing will be required for PTS until there is a MASH 2016 crash testing matrix developed for this category. SHA reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All Materials/Products/Devices approved are required to continue to meet the requirements mentioned above and the compatibility requirements of the SHA Signal Shop. **MDOT SHA MPEL coordinator must be informed immediately of any changes in the composition of the Materials/Products/Devices.** After MDOT SHA has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

Materials/Products/Devices representing revised formulation/specifications/standards of currently approved Qualified Products/Devices will not be accepted for testing within six (6) months of the most recent evaluation unless requested by MDOT SHA.

Materials/Products/Devices evaluated and not accepted are not eligible for resubmission within six (6) months of the most recent submittal date, unless requested and approved by MDOT SHA.

RECERTIFICATION PROGRAM – EFFECTIVE SEPTEMBER 30, 2021:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on OOTS QPL beginning September 30, 2021. Materials/Products/Devices that were approved within 24 months of September 30, 2021, are exempt.

Recertification letters for PTS currently listed on the QPL must be submitted by September 30, 2021. If the recertification letter is not received by September 30, 2021, the Materials/Products/Devices will be removed from the OOTS QPL.

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PROCEDURES FOR THE QUALIFICATION OF PORTABLE TRAFFIC SIGNALS

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

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PROCEDURES FOR THE QUALIFICATION OF PORTABLE VARIABLE MESSAGE SIGNS

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a Qualified Products List (QPL) that includes Portable Variable Message Signs (PVMS). PVMS shall conform to the following:

- Section 104.19 of MDOT SHA's Standard Specifications for Construction and Materials
- The applicable standards from the <u>Book of Standards for Highway and Incidental Structures</u>
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's</u> Product Evaluation Listing (MPEL) and then select "Vendor Registration" to begin the process.

No crash testing will be required for PVMS until there is a MASH 2016 crash testing matrix developed for this category. SHA reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All Materials/Products/Devices approved are required to continue to meet the specification(s) mentioned above. MDOT SHA MPEL coordinator must be informed immediately of any changes in the composition of the Materials/Products/Devices. After MDOT SHA has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

Materials/Products/Devices representing revised formulation/specifications/standards of currently approved Qualified Materials/Products/Devices will not be accepted for testing within six (6) months of the most recent evaluation unless requested by MDOT SHA.

Materials/Products/Devices evaluated and not accepted are not eligible for resubmission within six (6) months of the most recent submittal date, unless requested and approved by MDOT SHA.

RECERTIFICATION PROGRAM – EFFECTIVE SEPTEMBER 30, 2021:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on OOTS QPL beginning September 30, 2021. Materials/Products/Devices that were approved within 24 months of September 30, 2021, are exempt.

Recertification letters for products currently listed on the QPL must be submitted by September 30, 2021. If the recertification letter is not received by September 30, 2021, the Materials/Products/Devices will be removed from the OOTS QPL.

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PROCEDURES FOR THE QUALIFICATION OF PORTABLE VARIABLE MESSAGE SIGNS

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

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PROCEDURES FOR THE QUALIFICATION OF PROTECTION VEHICLE WITH TRUCK-MOUNTED ATTENUATOR OR TRAILER-TRUCK MOUNTED ATTENUATOR

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> which includes Protection Vehicle with Truck-Mounted Attenuator (TMA) or Trailer Truck-Mounted Attenuator (TTMA). TMA/TTMA shall conform to the following:

- Section 104.23 of <u>MDOT SHA Standard Specifications for Construction and Materials</u>
- The applicable standards from the Book of Standards for Highway and Incidental Structures
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your product qualified, please visit <u>Maryland's Product Evaluation Listing</u> (<u>MPEL</u>) and then select "Vendor Registration" to begin the process.

TMA/TTMA evaluations require Manual for Assessing Safety Hardware (MASH) 2016 Federal Highway Administration (FHWA) Eligibility Letter before acceptance. In addition, OOTS reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All products approved are required to continue to meet the requirements mentioned above and in accordance with the FHWA Eligibility Letter. The MDOT SHA MPEL coordinator must be informed immediately of any changes in the design, hardware, or composition of the Materials/Products/Devices. After OOTS has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

In addition to the above requirements, MDOT SHA sets forth the following to all Manufacturers/Producers/Vendors currently approved and listed on the OOTS QPL:

• Provide a letter on the company's letterhead certifying that the design, hardware, and composition to be furnished to OOTS has the same chemistry, mechanical properties, and geometry as submitted and evaluated by FHWA in the MASH Eligibility Letter.

Any modifications made to the Materials/Products/Devices after receiving the FHWA Eligibility Letter will require one of the following options below for approval consideration:

• Resubmit the Materials/Products/Devices with the modification(s) to FHWA for MASH 2016 testing in accordance with the TMA/TTMA criteria. Please provide the FHWA Eligibility Letter after the testing is completed and passed.

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PROCEDURES FOR THE QUALIFICATION OF PROTECTION VEHICLE WITH TRUCK-MOUNTED ATTENUATOR OR TRAILER-TRUCK MOUNTED ATTENUATOR

- Hire an independent Licensed Engineer with no financial affiliation to the Manufacturer/Producer/Vendor to validate that the modification(s) continue to meet the MASH 2016 requirements for TMA/TTMA. The Licensed Engineer will certify and sign that the Materials/Products/Devices meet the MASH 2016 criteria.
- Submit the Materials/Products/Devices to an independent certified testing facility with no financial affiliation to the Manufacturer/Producer/Vendor to certify the Materials/Products/Devices continue to meet the MASH 2016 requirements for TMA/TTMA. The facility will certify the Materials/Products/Devices meet the MASH 2016 testing criteria.

RECERTIFICATION PROGRAM – EFFECTIVE DECEMBER 31, 2023:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on the OOTS QPL. Materials/Products/Devices that were approved within 24 months of December 31, 2023 are exempt.

Recertification letters for TMA/TTMA currently listed on the OOTS QPL must be submitted by December 31, 2023. If the recertification letter is not received by December 31, 2023, the Materials/Products/Devices will be removed from the OOTS QPL.

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

MASH 2016 IMPLEMENTATION - EFFECTIVE JULY 1, 2027:

MDOT SHA will only allow MASH 2016 compliant TMA/TTMA in contract bids and on new projects effective July 1, 2027.

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PROCEDURES FOR THE QUALIFICATION OF SPEED DISPLAY TRAILER

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> that includes Speed Display Trailer (SDT). SDT shall conform to the following:

- Section 104.28 of MDOT SHA's Standard Specifications for Construction and Materials
- The applicable standards from the Book of Standards for Highway and Incidental Structures
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's</u> Product Evaluation Listing (MPEL) and then select "Vendor Registration" to begin the process.

No crash testing will be required for SDT until there is a MASH 2016 crash testing matrix developed for this category. MDOT SHA reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All Materials/Products/Devices approved are required to continue to meet the specification(s) mentioned above. MDOT SHA's MPEL coordinator must be informed immediately of any changes in the composition of the Materials/Products/Devices. After MDOT SHA has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

Materials/Products/Devices representing revised formulation/specifications/standards of currently approved Qualified Materials/Products/Devices will not be accepted for testing within six (6) months of the most recent evaluation unless requested by MDOT SHA.

Materials/Products/Devices evaluated and not accepted are not eligible for resubmission within six (6) months of the most recent submittal date, unless requested and approved by MDOT SHA.

RECERTIFICATION PROGRAM – EFFECTIVE SEPTEMBER 30, 2021:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on OOTS QPL beginning September 30, 2021. Materials/Products/Devices that were approved within 24 months of September 30, 2021, are exempt.

Recertification letters for SDT currently listed on the QPL must be submitted by September 30, 2021. If the recertification letter is not received by September 30, 2021, the Materials/Products/Devices will be removed from the OOTS QPL.

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PROCEDURES FOR THE QUALIFICATION OF SPEED DISPLAY TRAILER

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

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PROCEDURES FOR THE QUALIFICATION OF TEMPORARY CONCRETE TRAFFIC BARRIERS

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> that includes Temporary Concrete Traffic Barriers. Temporary Concrete Traffic Barriers shall conform to the following:

- Section 104.04 of MDOT SHA's Standard Specifications for Construction and Materials
- The applicable standards from the Book of Standards for Highway and Incidental Structures
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's Product Evaluation Listing (MPEL)</u> and then select "Vendor Registration" to begin the process.

Temporary Concrete Traffic Barriers evaluations require Manual for Assessing Safety Hardware (MASH) 2016 Federal Highway Administration (FHWA) Eligibility Letter before acceptance. In addition, OOTS reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All products approved are required to continue to meet the requirements mentioned above and in accordance with the FHWA Eligibility Letter. The MDOT SHA MPEL coordinator must be informed immediately of any changes in the design, hardware, or composition of the Materials/Products/Devices. After OOTS has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

In addition to the above requirements, MDOT SHA sets forth the following to all Manufacturers/Producers/Vendors currently approved and listed on the OOTS QPL:

• Provide a letter on the company's letterhead certifying that the design, hardware, and composition to be furnished to the OOTS has the same chemistry, mechanical properties, and geometry submitted and evaluated by FHWA in the MASH Eligibility Letter.

Any modifications made to the Materials/Products/Devices after receiving the FHWA Eligibility Letter will require one of the following options below for approval consideration:

• Resubmit the Materials/Products/Devices with the modification(s) to FHWA for MASH 2016 testing in accordance with the Temporary Concrete Traffic Barriers criteria. Please provide the FHWA Eligibility Letter after the testing is completed and passed.

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PROCEDURES FOR THE QUALIFICATION OF TEMPORARY CONCRETE TRAFFIC BARRIERS

- Hire an independent Licensed Engineer with no financial affiliation to the Manufacturer/Producer/Vendor to validate that the modification(s) continue to meet the MASH 2016 requirements for Temporary Concrete Traffic Barriers. The Licensed Engineer will certify and sign that the Materials/Products/Devices meet the MASH 2016 criteria.
- Submit the Materials/Products/Devices to an independent certified testing facility with no
 financial affiliation to the Manufacturer/Producer/Vendor to certify the
 Materials/Products/Devices continues to meet the MASH 2016 requirements for Temporary
 Concrete Traffic Barriers. The facility will certify the Materials/Products/Devices meet the
 MASH 2016 testing criteria.

RECERTIFICATION PROGRAM – EFFECTIVE JULY 31, 2024:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every three (3) years to remain on the OOTS QPL. Materials/Products/Devices that were approved within 12 months of July 31, 2024, are exempt.

Recertification letters for Temporary Concrete Traffic Barriers currently listed on the OOTS QPL must be submitted by July 31, 2024. If the recertification letter is not received by July 31, 2024, the Materials/Products/Devices will be removed from the OOTS QPL.

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

MASH 2016 IMPLEMENTATION - EFFECTIVE JULY 1, 2027:

MDOT SHA will only allow MASH 2016 compliant Temporary Concrete Traffic Barriers in contract bids and on new projects effective July 1, 2027.

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PROCEDURES FOR THE QUALIFICATION OF TEMPORARY CRASH CUSHIONS SAND FILLED PLASTIC BARRELS

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> which includes Temporary Crash Cushion Sand Filled Plastic Barrels (SFPB). SFPB shall conform to the following:

- Section 104.10 of MDOT SHA's Standard Specifications for Construction and Materials
- The applicable standards from the Book of Standards for Highway and Incidental Structures
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's</u> Product Evaluation Listing (MPEL) and then select "Vendor Registration" to begin the process.

SFPB evaluations require Manual for Assessing Safety Hardware (MASH) 2016 Federal Highway Administration (FHWA) Eligibility Letter before acceptance. In addition, OOTS reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All products approved are required to continue to meet the requirements mentioned above and in accordance with the FHWA Eligibility Letter. The MDOT SHA MPEL coordinator must be informed immediately of any changes in the design, hardware, or composition of the Materials/Products/Devices. After OOTS has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

In addition to the above requirements, MDOT SHA sets forth the following to all Manufacturers/Producers/Vendors currently approved and listed on the OOTS QPL:

• Provide a letter on the company's letterhead certifying that the design, hardware, and composition to be furnished to OOTS has the same chemistry, mechanical properties, and geometry as submitted and evaluated by FHWA in the MASH Eligibility Letter.

Any modifications made to the Materials/Products/Devices after receiving the FHWA Eligibility Letter will require one of the following options below for approval consideration:

 Resubmit the Materials/Products/Devices with the modification to FHWA for MASH 2016 testing in accordance with the SFPB criteria. Please provide the FHWA Eligibility Letter after the testing is completed and passed.

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PROCEDURES FOR THE QUALIFICATION OF TEMPORARY CRASH CUSHIONS SAND FILLED PLASTIC BARRELS

- Hire an independent Licensed Engineer with no financial affiliation to the Manufacture/Producer/Vendor to validate that the modification continues to meet the MASH 2016 requirements for SFPB. The Licensed Engineer will certify and sign that the Materials/Products/Devices meets the MASH 2016 criteria.
- Submit the Materials/Products/Devices to an independent certified testing facility with no financial affiliation to the Manufacturer/Producer/Vendor to certify the Materials/Products/Devices continues to meet the MASH 2016 requirements for SFPB. The facility will certify the Materials/Products/Devices meet the MASH 2016 testing criteria.

RECERTIFICATION PROGRAM – EFFECTIVE JANUARY 31, 2024:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every three (3) years to remain on the OOTS QPL. Materials/Products/Devices that were approved within 12 months of January 31, 2024 are exempt.

Recertification letters for SFPB currently listed on the OOTS QPL must be submitted by January 31, 2024. If the recertification letter is not received by January 31, 2024, the Materials/Products/Devices will be removed from the OOTS QPL.

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

MASH 2016 IMPLEMENTATION - EFFECTIVE JULY 1, 2026:

MDOT SHA will only allow MASH 2016 compliant SFPB in contract bids and on new projects effective July 1, 2026.

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PROCEDURES FOR THE QUALIFICATION OF TEMPORARY PORTABLE RUMBLE STRIPS

The Maryland Department of Transportation State Highway Administration's (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> that includes Temporary Portable Rumble Strips (TPRS). TPRS shall conform to the following:

- Special Provisions Insert 104.27 of MDOT SHA's Standard Specifications for Construction and Materials
- The applicable standards from the <u>Book of Standards for Highway and Incidental Structures</u>
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's Product Evaluation Listing (MPEL)</u> and then select "Vendor Registration" to begin the process.

MDOT SHA reserves the right to perform field evaluations or testing as part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All approved Materials/Products/Devices are required to continue to meet the requirements mentioned above. MDOT SHA's MPEL coordinator must be informed immediately of any changes in the composition of the Materials/Products/Devices. After OOTS has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

Materials/Products/Devices representing revised formulation/specifications/standards of currently approved Qualified Materials/Products/Devices will not be accepted for testing within six (6) months of the most recent evaluation unless requested by MDOT SHA.

Materials/Products/Devices evaluated and not accepted are not eligible for resubmission within six (6) months of the most recent submittal date, unless requested and approved by MDOT SHA.

RECERTIFICATION PROGRAM – EFFECTIVE SEPTEMBER 30, 2021:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on OOTS QPL beginning September 30, 2021. Materials/Products/Devices that were approved within 24 months of September 30, 2021, are exempt.

Recertification letters for TPRS currently listed on the QPL must be submitted by September 30, 2021. If the recertification letter is not received by September 30, 2021, the Materials/Products/Devices will be removed from the OOTS QPL.

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PROCEDURES FOR THE QUALIFICATION OF TEMPORARY PORTABLE RUMBLE STRIPS

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

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PROCEDURES FOR THE QUALIFICATION OF TEMPORARY STEEL TRAFFIC BARRIERS

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> that includes Temporary Steel Traffic Barriers. Temporary Steel Traffic Barriers shall conform to the following:

- MDOT SHA Special Provision Specifications for Construction and Materials
- The applicable standards from the <u>Book of Standards for Highway and Incidental Structures</u>
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's</u> Product Evaluation Listing (MPEL) and then select "Vendor Registration" to begin the process.

Temporary Steel Traffic Barrier evaluations require Manual for Assessing Safety Hardware (MASH) 2016 Federal Highway Administration (FHWA) Eligibility Letter before acceptance. In addition, OOTS reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All products approved are required to continue to meet the requirements mentioned above and in accordance with the FHWA Eligibility Letter. The MDOT SHA MPEL coordinator must be informed immediately of any changes in the design, hardware, or composition of the Materials/Products/Devices. After OOTS SHA has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

In addition to the above requirements, MDOT SHA sets forth the following to all Manufacturers/Producers/Vendors currently approved and listed on the OOTS QPL:

• Provide a letter on the company's letterhead certifying that the design, hardware, and composition to be furnished to the OOTS has the same chemistry, mechanical properties, and geometry submitted and evaluated by FHWA in the MASH Eligibility Letter.

Any modifications made to the Materials/Products/Devices after receiving the FHWA Eligibility Letter will require one of the following options below for approval consideration:

• Resubmit the Materials/Products/Devices with the modification(s) to FHWA for MASH 2016 testing in accordance with the Temporary Steel Traffic Barriers criteria. Please provide the FHWA Eligibility Letter after the testing is completed and passed.

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PROCEDURES FOR THE QUALIFICATION OF TEMPORARY STEEL TRAFFIC BARRIERS

- Hire an independent Licensed Engineer with no financial affiliation to the Manufacturer/Producer/Vendor to validate that the modification(s) continue to meet the MASH 2016 requirements for Temporary Steel Traffic Barriers. The Licensed Engineer will certify and sign that the Materials/Products/Devices meet the MASH 2016 criteria.
- Submit the Materials/Products/Devices to an independent certified testing facility with no financial affiliation to the Manufacturer/Producer/Vendor to certify the Materials/Products/Devices continue to meet the MASH 2016 requirements for Temporary Steel Traffic Barriers. The facility will certify the Materials/Products/Devices meet the MASH 2016 testing criteria.

RECERTIFICATION PROGRAM – EFFECTIVE JANUARY 31, 2024:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every three (3) years to remain on the OOTS QPL. Materials/Products/Devices that were approved within 12 months of January 31, 2024 are exempt.

Recertification letters for Temporary Steel Traffic Barriers currently listed on the OOTS QPL must be submitted by January 31, 2024. If the recertification letter is not received by January 31, 2024, the Materials/Products/Devices will be removed from the OOTS QPL.

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

MASH 2016 IMPLEMENTATION - EFFECTIVE JULY 1, 2026:

MDOT SHA will only allow MASH 2016 compliant Temporary Steel Traffic Barriers in contract bids and on new projects effective July 1, 2026.

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PROCEDURES FOR THE QUALIFICATION OF TEMPORARY TRAFFIC SIGNS

The Maryland Department of Transportation State Highway Administration's (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> which includes Temporary Traffic Signs. Temporary Traffic Signs shall conform to the following:

- Section 104.08 of MDOT SHA's Standard Specifications for Construction and Materials Manual
- The applicable standards from the **Book of Standards for Highway and Incidental Structures**
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your product qualified, please visit <u>Maryland's Product Evaluation Listing</u> (MPEL) and then select "Vendor Registration" to begin the process.

Temporary Traffic Signs evaluations requires Manual for Assessing Safety Hardware (MASH) 2016 Federal Highway Administration (FHWA) Eligibility Letter before acceptance. MDOT SHA reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Vendors must provide free samples for the evaluation process.

All approved Materials/Products/Devices are required to continue to meet the requirements mentioned above. MDOT SHA's MPEL coordinator must be informed immediately of any changes in the composition of the Materials/Products/Devices. After OOTS has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

Materials/Products/Devices representing revised formulation/specifications/standards of currently approved Qualified Products/Devices will not be accepted for testing within six (6) months of the most recent evaluation unless requested by MDOT SHA.

Materials/Products/Devices evaluated and not accepted are not eligible for resubmission within six (6) months of the most recent submittal date, unless requested and approved by MDOT SHA.

Materials/Products/Devices are required to recertify their products/devices every five (5) years to remain on MDOT SHA's QPL beginning January 2023.

RECERTIFICATION PROGRAM – EFFECTIVE JANUARY 31, 2023:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on OOTS QPL beginning January 31, 2023. Materials/Products/Devices that were approved within 24 months of January 31, 2023, are exempt.

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PROCEDURES FOR THE QUALIFICATION OF TEMPORARY TRAFFIC SIGNS

Recertification letters for Temporary Traffic Signs currently listed on the QPL must be submitted by January 31, 2023. If the recertification letter is not received by January 31, 2023, the Materials/Products/Devices will be removed from the OOTS QPL.

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

MASH 2016 IMPLEMENTATION - EFFECTIVE JULY 1, 2025:

MDOT SHA will only allow MASH 2016 compliant Barricades in contract bids and on new projects effective July 1, 2025.

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PROCEDURES FOR THE QUALIFICATION OF TRUCK MOUNTED VARIABLE MESSAGE SIGNS

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> that includes Truck Mounted Variable Message Signs (TVMS). TVMS shall conform to the following:

- Section 104.29 of MDOT SHA's Standard Specifications for Construction and Materials
- The applicable standards from the Book of Standards for Highway and Incidental Structures
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's</u> Product Evaluation Listing (MPEL) and then select "Vendor Registration" to begin the process.

No crash testing will be required for TVMS until there is a MASH 2016 crash testing matrix developed for this category. MDOT SHA reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Producers/Vendors must provide free samples for the evaluation process.

All Materials/Products/Devices approved are required to continue to meet the specification(s) mentioned above. MDOT SHA MPEL coordinator must be informed immediately of any changes in the composition of the Materials/Products/Devices. After OOTS has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

Materials/Products/Devices representing revised formulation/specifications/standards of currently approved Qualified Products/Devices will not be accepted for testing within six (6) months of the most recent evaluation unless requested by MDOT SHA.

Materials/Products/Devices evaluated and not accepted are not eligible for resubmission within six (6) months of the most recent submittal date, unless requested and approved by MDOT SHA.

RECERTIFICATION PROGRAM – EFFECTIVE SEPTEMBER 30, 2021:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their products/devices every five (5) years to remain on OOTS QPL beginning September 30, 2021. Materials/Products/Devices that were approved within 24 months of September 30, 2021, are exempt.

Recertification letters for TVMS currently listed on the OOTS QPL must be submitted by September 30, 2021. If the recertification letter is not received by September 30, 2021, the Materials/Products/Devices will be removed from the OOTS QPL.

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PROCEDURES FOR THE QUALIFICATION OF TRUCK MOUNTED VARIABLE MESSAGE SIGNS

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

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PROCEDURES FOR THE QUALIFICATION OF TUBULAR MARKERS

The Maryland Department of Transportation State Highway Administration (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> that includes Tubular Markers. Tubular Markers shall conform to the following:

- Section 104.06 of <u>MDOT SHA's Standard Specifications for Construction and Materials</u>
- The applicable standards from the **Book of Standards for Highway and Incidental Structures**
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your product qualified, please visit <u>Maryland's Product Evaluation Listing</u> (<u>MPEL</u>) and then select "Vendor Registration" to begin the process.

No crash testing will be required for Tubular Markers until there is a MASH 2016 crash testing matrix developed. With their MPEL application submittal, manufacturers must provide a Self-Certification Letter on their company letterhead stating their product is compliant with MASH 2016 requirements. In addition, MDOT SHA reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, Manufacturers/Products/Vendors must provide free samples for the evaluation process.

All Materials/Products/Devices approved are required to continue to meet the specification(s) mentioned above. MDOT SHA MPEL coordinator must be informed immediately of any changes in the composition of the Materials/Products/Devices. After OOTS has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information. Materials/Products/Devices representing revised formulation/specifications/standards of currently approved Qualified Materials/Products/Devices will not be accepted for testing within six (6) months of

Materials/Products/Devices evaluated and not accepted are not eligible for resubmission within six (6) months of the most recent submittal date, unless requested and approved by MDOT SHA.

RECERTIFICATION PROGRAM – EFFECTIVE JANUARY 31, 2022:

the most recent evaluation unless requested by MDOT SHA.

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every five (5) years to remain on OOTS QPL beginning January 31, 2022.

Recertification letters for Tubular Markers currently listed on the QPL must be submitted by January 31, 2022. If the recertification letter is not received by January 31, 2022, the Materials/Products/Devices will be removed from the OOTS QPL.

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PROCEDURES FOR THE QUALIFICATION OF TUBULAR MARKERS

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

MASH 2016 IMPLEMENTATION – EFFECTIVE JULY 1, 2023:

MDOT SHA will only allow MASH 2016 compliant Tubular Markers in contract bids and new projects effective July 1, 2023.

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PROCEDURES FOR THE QUALIFICATION OF WATER-FILLED BARRIERS

The Maryland Department of Transportation State Highway Administration's (MDOT SHA) Office of Traffic and Safety (OOTS) maintains a <u>Qualified Products List (QPL)</u> that includes Water-Filled Barriers. Water-Filled Barriers shall conform to the following:

- MDOT SHA Special Provision Specifications for Construction and Materials
- The applicable standards from the <u>Book of Standards for Highway and Incidental Structures</u>
- AASHTO/FHWA Roadside Hardware Policy Memoranda and Guidelines

If you are interested in having your Materials/Products/Devices qualified, please visit <u>Maryland's</u> Product Evaluation Listing (MPEL) and then select "Vendor Registration" to begin the process.

Water-Filled Barriers evaluations require Manual for Assessing Safety Hardware (MASH) 2016 Federal Highway Administration (FHWA) Eligibility Letter before acceptance. In addition, OOTS reserves the right to perform field evaluations or testing as a part of the evaluation process. If requested, manufacturers/vendors must provide free samples for the evaluation process.

All Materials/Products/Devices approved are required to continue to meet the requirements mentioned above and in accordance with the FHWA Eligibility Letter. The MDOT SHA MPEL coordinator must be informed immediately of any changes in the design, hardware, or composition of the Materials/Products/Devices. After OOTS SHA has reviewed the changes, new sample(s) may be requested and submitted along with the aforementioned information.

In addition to the above requirements, MDOT SHA sets forth the following to all Manufacturers/Producers/Vendors currently approved and listed on the OOTS QPL:

 Provide a letter on the company's letterhead certifying that the design, hardware, and composition to be furnished to the OOTS SHA has the same chemistry, mechanical properties, and geometry submitted and evaluated by FHWA in the MASH Eligibility Letter.

Any modifications made to the Materials/Products/Devices after receiving the FHWA Eligibility Letter will require one of the following options below for approval consideration:

• Resubmit the Materials/Products/Devices with the modification(s) to FHWA for MASH 2016 testing in accordance with the Water-Filled Barriers criteria. Please provide the FHWA Eligibility Letter after the testing is completed and passed.

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PROCEDURES FOR THE QUALIFICATION OF WATER-FILLED BARRIERS

- Hire an independent Licensed Engineer with no financial affiliation to the Manufacture/Producer/Vendor to validate that the modification(s) continue to meet the MASH 2016 requirements for Water-Filled Barriers. The Licensed Engineer will certify and sign that the Materials/Products/Devices meets the MASH 2016 criteria.
- Submit the Materials/Products/Devices to an independent certified testing facility with no financial affiliation to the Manufacturer/Producer/Vendor to certify the Materials/Products/Devices continues to meet the MASH 2016 requirements for Water-Filled Barriers. The facility will certify the Materials/Products/Devices meets the MASH 2016 testing criteria.

RECERTIFICATION PROGRAM – EFFECTIVE JANUARY 31, 2024:

MDOT SHA will implement a recertification program for all OOTS QPL categories. Manufacturers/Producers/Vendors are required to recertify their Materials/Products/Devices every three (3) years to remain on the OOTS QPL. Products that were approved within 12 months of January 31, 2024, are exempt.

Recertification letters for Water-Filled Barriers. currently listed on the OOTS QPL must be submitted by January 31, 2024. If the recertification letter is not received by January 31, 2024, the Materials/Products/Devices will be removed from the OOTS QPL.

The recertification letter shall be on the Manufacturers/Producers/Vendors company's letterhead and attest to the following:

- The Material/Product/Device is identical to the unit that has been approved by MDOT SHA
- The Material/Product/Device is still being produced and available for sale
- The Material/Product/Device properties have not changed or been altered
- Current MSDS if applicable

MASH 2016 IMPLEMENTATION - EFFECTIVE JULY 1, 2026:

MDOT SHA will only allow MASH 2016 compliant Water-Filled Barriers in contract bids and on new projects effective July 1, 2026.

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MARYLAND STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC AND SAFETY

7491 Connelley Drive Hanover, MD 21076

CATEGORY 100 PRELIMINARY

WATER FILLED BARRIER (WFB) FOR MAINTENANCE OF TRAFFIC

DESCRIPTION. This work shall consist of furnishing, placing, resetting, and removing WFBs for use at locations specified in the Contract Documents, or as directed by the Engineer.

MATERIALS.

Vertical Panels, Reflective Barrier Markers, Warning Lights and Water Filled Barrier As approved by the Office of Traffic and Safety

CONSTRUCTION. The Contractor shall maintain WFBs in alignment and in a like new condition acceptable to the Engineer.

Resetting WFBs shall consist of removing and relocating WFBs as directed by the Engineer.

Items such as reflective barrier markers, vertical panels (object markers), and warning lights shall be installed on the WFB as specified in the Contract Documents.

The WFB shall be tested and certified by FHWA, to conform to MASH 2016, Test Level (TL) 3 for barriers. The WFB shall be assembled in conformance with the manufacturer's instructions to conform to TL 3. All accessory kits necessary for the barrier to conform to TL 3 shall be provided.

Water to be used in the WFBs may be treated with anti-freeze. Water and anti-freeze solutions shall conform to the recommendations of the WFB manufacturer. Water shall not be drained onto open roadway at any time. Water treated with anti-freeze shall be pumped from the barrier and disposed of at a location that conforms to all applicable environmental regulations.

MEASUREMENT AND PAYMENT.

- (a) Water Filled Barrier will be measured and paid for at the Contract unit price per linear foot measured along the center line of the top of the barrier. The payment will be full compensation for furnishing, placing, maintaining, and removal from the project site as directed by the Engineer, water, anti-freeze, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.
- (b) Reflective Barrier Markers, Vertical Panels, and Warning Lights will be measured and paid for at the Contract unit price per each. The payment will be full compensation for furnishing, placing, maintaining and removal from the project site as directed by the Engineer and for all materials, labor, equipment, tools, and incidentals necessary to complete the work.
 - (c) Reset Water Filled Barrier will be measured and paid for at the Contract unit price per linear foot measured along the center line of the top of the barrier. The payment will be full compensation for removal from its original placement, transporting and resetting it in its new temporary location, applicable portions of (a) above, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

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