

AMERICAN ASSOCIATION
OF STATE HIGHWAY AND
TRANSPORTATION OFFICIALS

AASHTO

Introduction to AASHTO's NTPEP Audit Program for Thermoplastic Pipe

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NTPEP**

AASHTO

NTPEP
AASHTO NATIONAL TRANSPORTATION
PRODUCT EVALUATION PROGRAM

Introduction

What is AASHTO?

- Nonprofit association, founded 1914
- Members include:
 - Transportation departments of the 50 states, the District of Columbia, and Puerto Rico
 - 50 Associate Members from Federal, State, and Local agencies and other countries
- Covers all modes: Aviation, Rail, Highways, Transit, Water, and Active Transportation



Introduction – cont'd

AASHTO supports members in the:

- development of transportation solutions that...
- create economic prosperity,
- enhance quality of life, and
- improve safety in our communities, states, and the nation as a whole.



Introduction – cont'd

- Policy development
- Advocacy
- Technical services
- Leadership development
- Advancing partnerships
- Promoting innovation



2018-2019 Leadership



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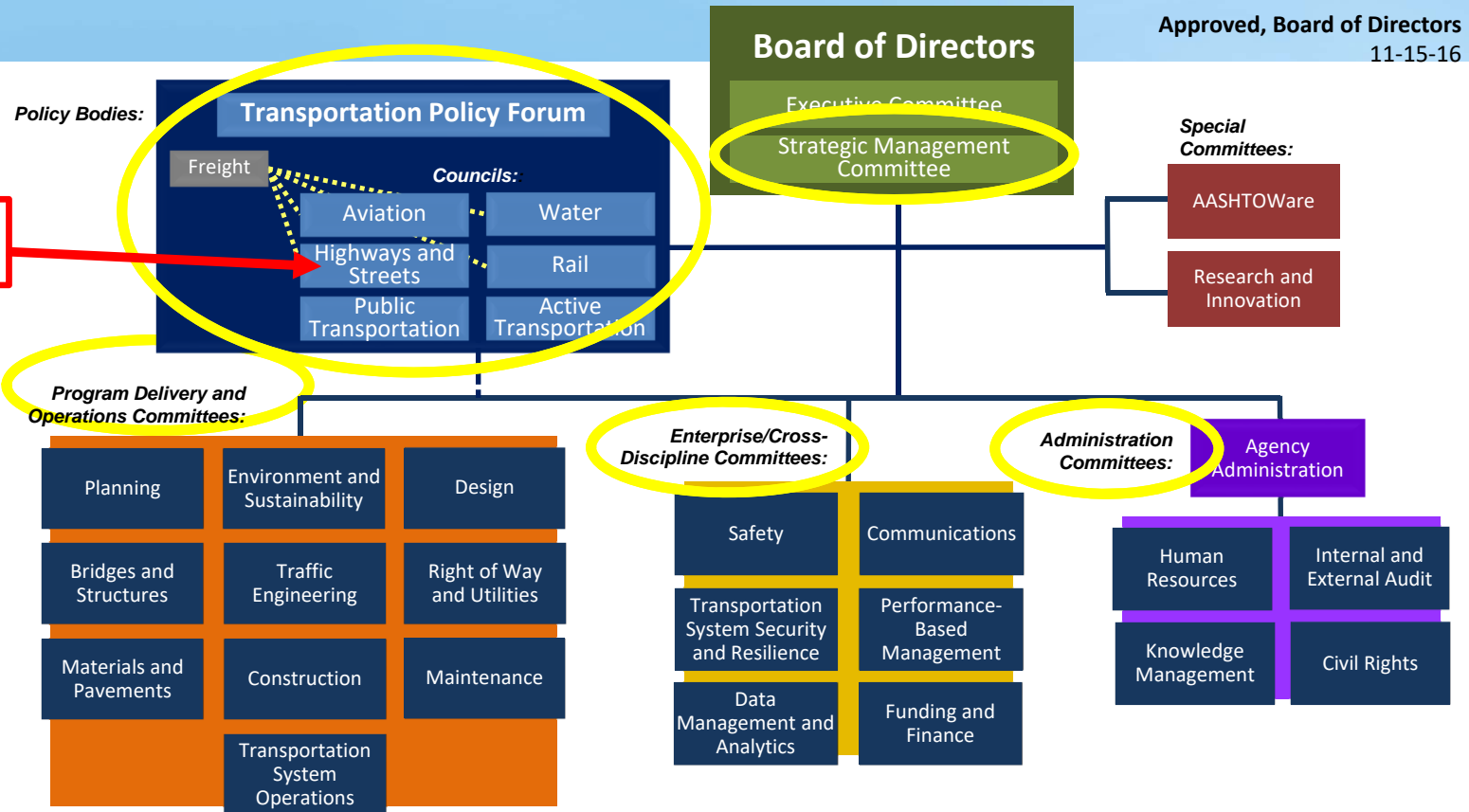


Regional Associations



Northeastern Association of State Transportation Officials (NASTO)
Southeastern Association of State Highway and Transportation Officials (SASHTO)
Mid-America Association of State Transportation Officials (MAASTO)
Western Association of State Highway and Transportation Officials (WASHTO)

New Committee Structure



What is NTPEP?

- NTPEP stands for the **N**ational **T**ransportation **P**roduct **E**valuation **P**rogram
- Established within AASHTO in 1994, as a technical service program, who reports to the Council on Highways and Streets
- A partnership between the AASHTO member agencies and industry participants
- Combines the professional and physical resources of the AASHTO member departments in order to evaluate materials, products and devices of common interest for use in highway and bridge construction
- Primary Goal- provide cost-effective evaluations for the AASHTO members (state DOTs)

- Simplify the product evaluation process
- Make it more cost-effective for both the manufacturer and the end user.
- Reduce duplication of effort by State DOTs.
- Serve as a “One Stop Shop” for Manufacturers of engineered products.

NTPEP Audit Programs

Goal:

To perform quality assurance audits of participating manufacturers and report on their compliance with the quality control and product testing requirements of the NTPEP program.

This document is available at www.ntpep.org in the “Documents” section.

Standard Practice for

Qualification of Highway Product Manufacturers Through the Use of NTPEP Audits

NTPEP Designation: SP01-17



National Transportation Product Evaluation Program
444 North Capitol Street N.W., Suite 249
Washington, D.C. 20001

NTPEP - NAP

SP01-17-0

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NTPEP Audit Process

1st

- Desktop Review is performed- Manufacturer submits Pre-Audit Application to AASHTO for review of Quality Management System

2nd

- On-Site Audit is conducted

3rd

- Final Audit Report- accessible through NTPEP DataMine website

Overview of the NTPEP Audit Programs

Quality Management System (QMS) Desktop Audit

- Manufacturer must follow an established quality control program.
- QMS should provide assurance that products will meet the requirements of:
 - applicable AASHTO/ASTM standards
 - The appropriate NTPEP technical committee work plan
 - NTPEP Standard Practice for audits.
- NTPEP review of the manufacture's QMS is performed prior to scheduling of the on-site audit.

Overview of the NTPEP Audit Programs

NTPEP on-site Audits

- NTPEP performs initial and annual quality control audit of each facility.
 - Evaluation of production and quality control testing
 - Review of QMS implementation, test reports, equipment calibration, verification of results, and a check of records.
- The NTPEP auditor welcomes participation from any member state.

Overview of the NTPEP Audit Programs

NTPEP on-site Audits

- On-site audits include:
 - Document review
 - Production inspection
 - Storage yard inspection
 - Quality control testing evaluation
 - Testing of products.
- NTPEP follow-up visits and testing.
- AASHTO Member Department surveillance visits and testing.

Overview of the NTPEP Audit Programs

Annual testing of products

- Random product samples tested for conformance during the annual audit.
- NTPEP selected samples from audit tested by NTPEP designated lab.
- NTPEP follow-up visits and testing as needed.
- AASHTO Member Department surveillance visits and testing.
- Test results are posted in the secured area (accessible by registered state users) of the NTPEP website.

Overview of the NTPEP Audit Programs

Resolution of testing/audit non-conformances and disputes

- Burden is on manufacturer to identify cause, correct issue, document resolution, and revise QMS.
- Additional testing to validate results.
- Corrective Action Reports.
- Documentation on secure area of NTPEP website.

NTPEP Audit Program For Thermoplastic Pipe

- Audits are conducted in accordance with:
 - AASHTO M294
 - Thermoplastic Pipe Technical Committee Work Plan

Standard Specification for

Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter

AASHTO Designation: M 294-18

Technical Section: 4b, Flexible and Metallic Pipe

Release: Group 2 (June)

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NTPEP Audit Program for Thermoplastic Pipe

Quality Management System (QMS) must include the following:

- Written procedure for documenting traceability of all material from the raw form to finished pipe.
- How product not manufactured by the facility is identified , tracked, and documented on mill test reports.
- Written procedure for labeling and storage of finished product.

NTPEP Audit Program for Thermoplastic Pipe

Samples are randomly selected for traceability and testing

- Resin tested for:
 - ❖ Density
 - ❖ Melt Index
- Finished pipe tested for:
 - ❖ Carbon Content
 - ❖ Inside Diameter
 - ❖ Liner thickness
 - ❖ Stiffness/Flattening
 - ❖ Brittleness
 - ❖ NCLS
 - ❖ Markings
 - ❖ Perforations
 - ❖ OIT
 - ❖ Elongation at Break
 - ❖ Density Melt Index
 - ❖ UCLS

Compliance Authentication

Compliance Authentication
NTPEP

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PRODUCT EVALUATION PROGRAM

This authenticates:
Advanced Drainage Systems, Inc
Muncy, PA, US

successfully complies with AASHTO's NTPEP
Thermoplastic Pipe Technical Committee Work Plan.

Katheryn L. Malusky January 2019 *Ryan Fragapane*
Date Administered
December 31, 2019
Date of Expiration

Katheryn L. Malusky Ryan Fragapane
Program Manager, Associate Program Manager,
NTPEP NTPEP

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To obtain information concerning AASHTO NTPEP's auditing program, please visit www.ntpep.org

Questions?

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www.ntpep.org
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