What is APEL

APEL Module

To provide information about innovative or proprietary materials, products, and devices of common interest for use in highway and bridge construction.

Currently 2 Mechanisms:
• Product Evaluation Reports
• State Certifications

Product Evaluations: Types of Products
• New and innovative products or materials
• Established products or materials with new applications
• Scientifically vetted products → implementation obstacles
• No existing specification or evaluation protocol
• R&D Completed → Market Ready

Current Challenges
• Outdated module
• Lack Manufacturer Recognition
• Lack State participation
What is NTPEP?

- Established within AASHTO in 1994, as a technical service program, who reports to the Standing Committee on Highways (SCOH)
- 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 state Departments of Transportation (DOT)

What NTPEP is NOT

- NTPEP does NOT evaluate “New Products” being introduced by industry for the first time
- NTPEP does NOT pass or fail products
- NTPEP does NOT replace the Quality Assurance activities of state DOT’s
- NTPEP does NOT supersede State Requirements for product approval. Any state can require additional testing of the product prior to approval. (If such additional testing is required, the state can appeal to NTPEP for inclusion into the Testing Program.)

NTPEP- In Summary

- 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.
2015 Collaboration Action Plan

- Examine the list of products being evaluated by NTPEP and identify others that can be added.
- Review current NTPEP evaluation work plan for each product being evaluated and provide input. The work plan is developed primarily by materials engineers so a fresh look by design engineers will be of value.
2016 Collaboration Action Plan

- Discuss NTPEP collaboration at technical committees meetings. To help with this effort, I attempted to link the NTPEP technical committees to their potential stakeholder/customer within SCOBS (table).
- Have each technical committee confirm the assumed link per table below (some may shift)
- Review the respective NTPEP technical committees work plan (assign to members). Need to complete and provide comments before the 2017 meeting!
- Identify other structures related products for NTPEP evaluation
<table>
<thead>
<tr>
<th>SCOBS Technical Committee</th>
<th>NTPEP Technical Committee/Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1 Security</td>
<td></td>
</tr>
<tr>
<td>T-2 Bearings and Expansion Devices</td>
<td>Elastic Bridge Bearing Pads</td>
</tr>
<tr>
<td>T-3 Seismic Design</td>
<td></td>
</tr>
<tr>
<td>T-4 Construction</td>
<td>All</td>
</tr>
<tr>
<td>T-5 Loads and Distribution</td>
<td></td>
</tr>
<tr>
<td>T-6 Fiber Reinforced Polymer Composites</td>
<td>Guardrail/Guiderail</td>
</tr>
<tr>
<td>T-7 Guardrail and Bridge Rail</td>
<td></td>
</tr>
<tr>
<td>T-8 Movable Bridges</td>
<td>Epoxy and Resin Based Adhesive Bonding Systems</td>
</tr>
<tr>
<td></td>
<td>Portland Cement Concrete Joint Sealants</td>
</tr>
<tr>
<td></td>
<td>Structural Steel Coatings/Concrete Coating Systems</td>
</tr>
<tr>
<td></td>
<td>High Friction and Thin Overlays</td>
</tr>
<tr>
<td></td>
<td>Rapid Set Concrete Patch Materials</td>
</tr>
<tr>
<td></td>
<td>Spray Applied Non-Structural Pipe Liners</td>
</tr>
<tr>
<td>T-9 Bridge Preservation</td>
<td>Concrete Admixtures</td>
</tr>
<tr>
<td></td>
<td>Concrete Curing Compounds</td>
</tr>
<tr>
<td></td>
<td>Reinforcing Steel/Welded Wire Reinforcement</td>
</tr>
<tr>
<td>T-10 Concrete Design</td>
<td>Corrugated Metal Pipe</td>
</tr>
<tr>
<td></td>
<td>High Density Polyethylene Plastic Pipe</td>
</tr>
<tr>
<td></td>
<td>Polypropylene Pipe</td>
</tr>
<tr>
<td></td>
<td>Polyvinyl Chloride Drainage Pipe</td>
</tr>
<tr>
<td>T-11 Research</td>
<td>Geosynthetics</td>
</tr>
<tr>
<td>T-12 Structural Supports for Signs, Luminaries, and Traffic Signals</td>
<td></td>
</tr>
<tr>
<td>T-13 Culverts</td>
<td>DataMine</td>
</tr>
<tr>
<td></td>
<td>APEL</td>
</tr>
<tr>
<td>T-14 Structural Steel Design</td>
<td></td>
</tr>
<tr>
<td>T-15 Substructures and Retaining Walls</td>
<td></td>
</tr>
<tr>
<td>T-16 Timber Structures</td>
<td></td>
</tr>
<tr>
<td>T-17 Welding</td>
<td></td>
</tr>
<tr>
<td>T-18 Bridge Management, Evaluation, and Rehabilitation</td>
<td></td>
</tr>
<tr>
<td>T-19 Software and Technology</td>
<td></td>
</tr>
<tr>
<td>T-20 Tunnels</td>
<td></td>
</tr>
</tbody>
</table>
T-19 Potential Collaboration

**DataMine**

- Online warehouse of data and audit reports for all NTPEP services.
- Provides the tools for performing queries that assist in analyzing and reporting on current and past NTPEP evaluations.
- Allows dynamic queries of multiple products and the ability to directly compare results to specification requirements.
- The application allows NTPEP Testing Facilities and Auditors to enter real time data online.
- Also industry partners and the NTPEP administration may review product information and preliminary reports online for timely reporting of all evaluations.
T-19 Potential Collaboration

APEL

• APEL is the AASHTO Product Evaluation List
• It provides information about new and innovative products or materials used in highway construction
• Scientifically vetted and market ready products but without existing specifications
• Based on product evaluation reports and state certifications