APPROVAL OF NEW MATERIALS TO BE USED ON TRANSPORTATION PROJECTS IN KENTUCKY

1. SCOPE:

- 1.1 With advances in technology comes the arrival of new and innovative products to be used in transportation projects. The Kentucky Transportation Cabinet (KYTC) receives numerous requests for the use of new materials or materials that have been improved or modified.
- 1.2 New products may not meet current specifications or may not have specifications approved by KYTC. If there is not a central approval process for new or modified materials, there is the potential for inferior or potentially dangerous products to be used on Kentucky's highways.
- 1.3 The New Product Review Committee (NPRC) has the duty to review new products to ensure that they are safe, durable and economical for the citizens of the Commonwealth. The NPRC decides what products are approved for use on Kentucky highways but does not make a recommendation that any particular product be used over another competing product.
- 2. COMMITTEE: The NPRC will be composed of:

Voting members:

Executive Director, Office of Project Delivery & Preservation Executive Director, Office of Project Development Director, Division of Construction Director, Division of Maintenance Director, Division of Traffic Operations Director, Division of Materials Director, Division of Structural Design Director, Division of Highway Design

Non-Voting Members:

KyPEL Administrator and Chairman of Committee Representative of Kentucky Association of Highway Contractors Representative of Plantmix Asphalt Industry of Kentucky Representative of Kentucky Concrete Pavement Association Representative of Kentucky Transportation Center

3. PRODUCTS REVIEWED BY THE COMMITTEE :

Any product that is new to the market or a product that has been substantially modified should be reviewed by the New Product Review Committee if it is to be used in the construction or maintenance of Kentucky highways. Products such as reflectors, barriers, asphalt additives, and concrete patching materials will come before the committee if they are not already approved for highway construction and maintenance. Items that are strictly used as equipment for construction or maintenance will not go before the committee.

4. **PROCESS**:

4.1 The approval process is broken into phases that allow for a product to advance to approval

and placement on the List of Approved Materials. The progress of a product is tracked with the Kentucky Product Evaluation List (KyPEL). KyPEL is an online application process that allows the manufacturer or vendor to see the progress of a product or to see comments about the product. The manufacturer or vendor can then update attachments, submit samples of the product, or make clarifications.

- 4.2 KyPEL is handled by an administrator who has the responsibility of ensuring that products are evaluated fairly and consistently. The administrator assigns a product to a particular phase based on a set of guidelines. It is also the responsibility of the administrator to disseminate information to all parties that must make recommendations concerning products. The administrator must track assignments to ensure that the products do not languish in any one phase for too long.
- 4.3 The process begins when a manufacturer or vendor accesses KyPEL via the internet at: <u>http://www.ktc.uky.edu/kytc/kypel/login.php</u>. The administrator reviews the information that is submitted and follows the guidelines in assigning phases.
- 4.4 Phases:
 - 4.4.1 Phase I- Product has been submitted and is pending initial review.

During Phase I, it is the responsibility of the administrator to ensure that there is enough information about the product for an initial review to be conducted. Vendors and manufacturers will have up to three months to submit the necessary information to enter into Phase II. If at the end of the second month there is no information on a product to review, the administrator will attempt to make contact with the person responsible for the submittal. If after three months there is no further information to review, the administrator will place the product in Phase XIII. 4.4.2 Phase II- The product is under preliminary review by appropriate section(s)/division(s) and awaiting recommendation(s) to the chair from the appropriate section(s)/division(s). Minimal study of available literature is necessary at this stage.

Phase II is begun with the administrator assigning the product to the appropriate section(s)/division(s). The personnel responsible for reviewing the information are to determine if the product falls under a current specification or if specifications do not exist. The appropriate personnel make a recommendation to the committee based on the initial information that has been provided. Personnel are to ensure that their comments are strictly based on whether there is potential for the product to be used in a KYTC project. The administrator must review the comments from the assigned personnel. If the product is not covered under an existing specification, then the administrator assigns the product to Phase III and sends the information to the committee members. If the product falls under existing specifications, then the product is placed in Phase VI.

4.4.3 Phase III- Product is under detailed laboratory and/ or literature review by the NPRC.

The administrator receives all comments and recommendations from committee members. If the majority of the committee members decide that a product has potential to be used in KYTC projects, then the material is assigned to Phase IV. If the committee determines that the product is already covered by another specification or does not need to be approved, then the product is assigned to either Phase VI or Phase VIII. If the committee determines that the product is not approved and placed into Phase XIII. Committee members will be given 14 days to vote on the product. If the committee feels that additional information is needed, the administrator will make contact with the manufacturer to obtain the necessary information.

4.4.4 Phase IV- Product has been approved for experimental use by the New Product Review Committee. The product may be used on a limited basis; however, change orders must be submitted and approved prior to use of the product. The product will be monitored for performance for two years, but the performance period may be changed depending on the type of product and susceptibility to weathering. If the product performs poorly and poses a safety risk, the product may be removed before scheduled replacement.

When a product is entered into Phase IV the product may be used in a construction or maintenance project provided it has been approved prior to use. It is up to the KM 64-003-10

product manufacturer/ vendor to approach the contractor about using the product. A change order will have to be approved and the administrator must be notified prior to installation. It may be necessary for the administrator and a representative of the manufacturer or vendor to be present during installation. The administrator will attempt to inspect the product periodically to ensure that the product is performing satisfactorily and is not posing a safety risk. At the end of Phase IV, the New Product Review Committee will review the performance of the product. If a product has been in Phase IV for two years and has not been used on a project, then the administrator will take the product back to the committee to determine if the phase should continue or if the evaluation should be terminated.

4.4.5 Phase V- The product has been approved for use by the New Products Review Committee. The contractor must have the product approved by the KYTC and the Federal Highway Administration (FHWA) (if applicable) prior to use of the product on a project. Standard Specifications or Special Notes are being developed for this type of material/product.

Prior to entering Phase V, a product has been tested experimentally and the results of the experimental usage have been reviewed by the NPRC. The Committee has approved the product for use on Kentucky highways. The administrator is working with others within KYTC to develop Standard Specifications or Special Notes.

4.4.6 Phase VI- Current specifications exist for this type of product. The manufacturer must submit samples and/ or provide required information to have the product approved and placed on the List of Approved Materials (if applicable).

Products that are placed in Phase VI typically will not have been reviewed by the committee. Products that are in Phase VI already have specifications and will be tested to determine if they meet the existing specifications. If the product meets the specifications then it can be placed on the List of Approved Materials.

- 4.4.7 Phase VII- Reserved
- 4.4.8 Phase VIII- Not a product to be evaluated by the New Products Review Committee.

If the product is not to be utilized in highway and bridge construction or maintenance then it does not fall under the review of the committee. If the product is considered to be equipment that will be used in the construction or maintenance of highways or bridges it will not be reviewed by the committee.

4.4.9 Phase IX- Reserved

4.4.10 Phase X- Product has been approved and special notes or specifications exist.

4.4.11 Phase XI- Reserved

4.4.12 Phase XII- Reserved

4.4.13 Phase XIII A-G Product not approved for use in Kentucky highway or bridge construction.

5. IMMEDIATE NEED:

If a product is in immediate need, the contractor and/or the KYTC office responsible for installation or use should notify the KyPEL administrator of the need. The request can be submitted by email, fax, or letter. The KyPEL administrator will notify the members of the committee of the urgent need. The product can be approved for a conditional Phase IV if two or more voting committee members agree that the product is needed immediately. The committee will review the product within six months of installation to determine if the product should remain in Phase IV. The product cannot be approved for phases V, VI, X, or XIII until it has been reviewed and approved by the full committee. If the product is not used within three months of the request then the NPRC will decide if the product should remain in Phase IV or be placed into another phase.

APPROVED

EXECUTIVE DIRECTOR OFFICE OF PROJECT DELIVERY & PRESERVATION

DATE

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