

**DEPARTMENT OF TRANSPORTATION**  
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*Flex your power!  
Be energy efficient!*

December 21, 2011

Mr. Jim St. Martin  
Mr. Jack Van Kirk  
Asphalt Pavement Association of California  
23332 Mill Creek Drive, Suite 200  
Laguna Hills, CA 92653

Dear Mr. St. Martin and Mr. Van Kirk:

The California Department of Transportation (Caltrans) currently uses the Hveem Mix Design process and the last one in the nation with 1930's technology. Due to the changing environmental conditions, changes in asphalt sources and grades, changing traffic patterning, and the impossible task of obtaining, repairing, and calibrating Hveem equipment, such as the California Stabilometer, and the Hydraulic Kneader Compactor, Caltrans is transitioning to Superpave.

Superpave allows the use of recycled asphalt pavement (RAP) as a source of asphalt binder and aggregate. Few Hot Mix Asphalt (HMA) producers utilize 100 percent virgin HMA, rather the opposite is true, contractors are requesting higher percentages of RAP in HMA as a way of saving on bitumen, raw aggregate, and production fuel costs. While we share your concern as stated in your letter regarding "so many moving parts", Caltrans' concern is if there are pilot projects without RAP, the data obtained from the projects would have little to no bearing on the HMA that would actually be produced utilizing Superpave. Superpave will have RAP by correcting the amount of RAP at the known gradation and binder content (RAP is eliminated as a variable in Superpave). The object of Superpave pilot projects is to produce and place HMA in a manner that will closely replicate the future Superpave specification.

In addition, the pending legislation of AB 812 proposes higher percentages of RAP in Caltrans HMA mixes by requiring 25 percent RAP in our Superpave HMA designs. Caltrans is moving in this direction and gaining valuable data on utilization of higher percentages of RAP.

Unfortunately, in the future Caltrans and Industry will find themselves in a situation where their Hveem equipment can't be repaired nor quality equipment found. Because of this, we need to move forward with an aggressive schedule, embracing Superpave and the design and testing methodologies that go with it.

This includes among other things the Hamburg Wheel Tracker for rutting and raveling resistance, minimum tensile values and tensile strength ratios to insure quality aggregates, and insure the HMA is not moisture sensitive, and checking volumetrics during production to insure air voids in mineral aggregate (VMA) and voids filled with asphalt (VFA) meet quality requirements thus insuring a stable HMA matrix.

The RPC Co-Chairs and ATG Co-Chairs meeting on December 12, 2011, proposed Superpave and High RAP as projects for the RPC's work plan for Fiscal Year (FY) 2012/2013. In fact, we want to kick off the RPC-ATG Sub Task Group in the first quarter of FY 2012 for Superpave and High RAP. This group will be tasked with reviewing data from the planned pilot projects, and make recommendations for changes to the Superpave pilot specification for incorporation into FY 2013 Superpave projects.

Caltrans appreciates Industries 130 comments on the Superpave pilot specification. As you know, we have incorporated many of your suggested changes into the latest revision which was sent to you on December 10, 2011. We are in the process of responding formally to your comments and will have a response to you no later than January 30, 2011.

We appreciate Industry's support and commitment to Caltrans efforts to move forward to implementation of Superpave with RAP. If you have any further questions, please contact Caltrans-ATG Co-Chairs, Peter Vacura via phone at (916) 274-6194 or email [Peter\\_Vacura@dot.ca.gov](mailto:Peter_Vacura@dot.ca.gov) or Joseph F. Peterson at via phone at (916) 227-7303 or email [Joe\\_Peterson@dot.ca.gov](mailto:Joe_Peterson@dot.ca.gov).

Sincerely,



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Division of Engineering Services

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