Utilizing Reclaimed Asphalt Pavement (RAP) Millings from the Same Project When Using a Portable Hot Mix Asphalt (HMA) Plant

This construction advisory serves to provide guidance for utilizing Reclaimed Asphalt Pavement (RAP) millings from the same project when using a portable Hot Mix Asphalt (HMA) plant.

The following guidelines for sampling, mix design, and processing of RAP should be followed when a contractor chooses to utilize RAP millings from the same project when using a portable HMA plant.

1. Sampling
   a. Samples to be taken a minimum of every mile in each lane by milling or coring.
   b. Sample areas to be repaired.
   c. Shoulder samples shall be taken if RAP from shoulder is to be used.
   d. Samples shall be taken if visual observations show significant variations in existing pavement mat.
   e. Sampling frequency required is based on the percentage/tonnage of RAP that will be utilized on the project.

2. Mix Design
   a. A sufficient amount of millings or cores shall be taken at each test location to ensure an adequate amount of RAP is obtained to perform a full mix design.
   b. No paving shall occur using RAP from the project until a mix design is approved.

3. Processing RAP
   a. It is not required to have a stockpile with enough material to produce the recycled mixtures approved for the project.
   b. RAP should be stockpiled* and tested according to existing requirements (one test per 1000 tons, minimum of three tests).
   c. If the millings have aggregates larger than what is required for the mix design, it should be processed (crushed and/or screened) prior to stockpiling*. If aggregates larger than what is required for mix design still exist after processing, the contractor must demonstrate that additional screens are installed on the RAP feed system to ensure that the RAP being introduced into the HMA mixture contains no aggregate larger than the top size aggregate allowed in the mix design.
   d. In addition, a RAP scalper screen is required**. The top size of the top scalping screen shall be 1.5" for top and leveling courses and 2" for base courses.
*If approved by the engineer, in line crushing and/or screening will be allowed in lieu of processing RAP into a stockpile. The contractor must demonstrate that additional screens are installed on the RAP feed system to ensure that the RAP being introduced into the HMA mixture contains no aggregate larger than the top size aggregate allowed in the mix design.

**If in line crushing and/or screening is being used to ensure that the RAP being introduced into the HMA mixture contains no aggregate larger than the top size aggregate allowed in the mix design a RAP scalper screen may not be required.

Please share this construction advisory with local agencies and consultants within your jurisdiction as well as TSC staff.