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Index: Asphalt

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## Asphalt Binder Witness Samples

The purpose of this advisory is to reinforce the importance of the asphalt binder witness samples. The number of witness samples must increase per region in order to maintain the integrity of the daily binder samples. These samples are the backbone of the Asphalt Binder Certification / Verification Program, and a safeguard against premature failures. The testing of these samples maintains certifiers' standing on the Asphalt Binder Certification List, and allows for enforcement of possible binder price adjustments for non-specification material.

The engineer can request to witness the sampling of the asphalt binder upon any visit to the HMA plant. The engineer takes immediate possession of the sample, completes Form 1923B, and delivers it to the Construction and Technology Support Area's HMA Laboratory in Lansing. The witness sample becomes the daily asphalt binder sample of record and replaces any other binder sample of that grade taken that same day. By testing these samples, it ensures that the certifier is producing and delivering

specification binder, and that the HMA contractor is using specification binder on MDOT projects.

Any MDOT employee or extension of MDOT's workforce can witness the sampling of the daily binder sample. The more witness samples obtained, the greater MDOT's knowledge of the contents in the pavement. The goal for each region is to obtain witness samples for at least 20 percent of the days of paving in their respective regions. Due to the high expense and importance of the high stress performance graded (PG) binders, extra emphasis should be made to obtain witness samples on these grades of asphalt.

The daily asphalt binder sample must be taken from a sampling spigot located on the pipeline supplying asphalt binder to the plant, in a position between the asphalt binder pump and the point where the asphalt binder enters the mixture.

In order to have enough asphalt cement to perform the PG binder tests, the asphalt cement sample must be collected in a one-pint (16 ounce), slip top, seamless ointment tin.

The tin must be at least three quarters full. When sampling binders with the "P" designation (e.g. PG 70-28P), you must obtain three one-pint containers. Mark one of these three containers with the letter "R" to designate it as a referee sample. This is described in the Special Provision for Polymer Modified Performance Grade Binders included in the contract documents. Label all of the containers in a legible format with the following information:

- MDOT control section and job number
- Binder grade
- Binder supplier certifier number
- Supplier name, city and state
- Date sampled
- Mix type

