



INDIANA DEPARTMENT OF TRANSPORTATION

Office of Materials Management
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Eric Holcomb, Governor
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April 12, 2018

TESTING MEMORANDUM 18-04

SUBJECT: Spring 2018 HMA Testing and Procedures FAQ Memo

TO: District Testing Staff
Consultant and INDOT Acceptance Labs
Certified HMA Producers

FROM: Matthew P. Beeson, State Materials Engineer *MPB*
Office of Materials Management

The following are a collection of items we feel need to be clarified before starting the HMA testing season. They are in no particular order, and not all items may apply to all recipients.

1. All binder content testing will be by extraction in accordance with ITM 571, regardless of when the contract was let. This has always been an option at the discretion of INDOT in the specifications. The only exception to this will be samples tested in Vincennes District labs on contracts let prior to 10/1/2017. These samples will be tested by ignition oven in accordance with ITM 586.
2. SMA and Open Graded mix designs shall still use the INDOT Gsb list. This information has been updated in the latest revision to Testing Memo 18-01.
3. SMA and Open Graded mixtures will also be tested by the Consultant Labs and the INDOT Acceptance Lab, in addition to dense graded HMA mixtures.
4. On contracts let prior to 10/1/17, dense graded pills or cores with greater than 2.00% water absorption will be paraffin coated in accordance with AASHTO T 275. Contracts let after 10/1/17 with dense graded pills or cores meeting this condition will be tested with CoreLok in accordance with AASHTO T 331. If needed, open graded pills or cores will be tested with Corelok, regardless of the letting date. If needed, SMA samples will be paraffin coated, regardless of the letting date.
5. ITM 571 was recently changed to allow the use of recycled trichloroethylene. This is not explicitly stated in ITM 571, but the requirement of reagent grade trichloroethylene was removed.
6. ITM 571 allows the use of "Approved Extraction Solvent." INDOT and the Consultant Labs performing acceptance testing will be using trichloroethylene. However, Contractors performing QC testing may use alternative solvents. The ITM currently as written is unclear regarding the approval process. A future edit will attempt to clear this up.



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7. Contractors are not required to perform T 84 and T 85 on the sample exchange samples sent out this spring. These are optional if the lab wants to be able to compare results to the acceptance labs.
8. Test strips require the same number of plate sample boxes as a regular acceptance sample (five).
9. INDOT will not be making any “adjustments” to extracted binder content as determined by ITM 571 to calculate VMA.
10. Directive 303 has been updated with the following changes:
 - Pine SGC Model AFG2A has been added.
 - Specimen is not required to cool in mold for 10 minutes. The specimen and base plate may now be removed from the mold immediately with specimen lift handles, and the specimen must sit in front of a fan on top of the base plate for 5 minutes before being removed.
11. ITM 580 has been updated to require plate sample boxes be laminated with non-absorbent material. Non-absorbent paper will no longer be allowed. However, this will be handled as a “soft rollout,” and will not be enforced as long as Contractors have remaining supply of the old boxes and paper. Contractors should not purchase any more of the old style boxes.
12. ITM 580 has also been updated to require plastic cylinder molds *with lid* to allow safe transport of cores.
13. When a DMF has had a test strip completed, it will be designated with a “T.”
14. The SMA draindown requirement in 410.09 of the specifications is a QC requirement only. INDOT will not be conducting any draindown testing.
15. INDOT has interpreted that the constant mass requirement in section 9 of AASHTO T209 is fulfilled by the 4 hr conditioning required on all plate samples per Directive 303.
16. ITM 590 will be updated soon to address 9.5 and 12.5 mm mix and the number of needed extractions. The minimum mass of coarse aggregate will be waived under the following conditions only:
 - 9.5 mm mix or 12.5 mm mix
 - At least 2 extractions are performed
 - The minimum HMA sample size in each extraction is 2800g to 3000g

It should be noted that for any extraction, the minimum sample size in ITM 571 is a minimum. The sample size can be increased to the capacity of the centrifuge bowl.



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17. There have been questions regarding the allowable alternatives in AASHTO T84:
 - a. Addition of 6% moisture in lieu of immersion in 7.1.1; INDOT and its delegates will use the immersion method for consistency.
 - b. Obtaining an extra “oven” sample of the fine aggregate in note 5 of 8.3; ITM 590 requires a 1200g sample to ensure there is enough material to run two bulk specific gravities of the fine aggregate. It is allowable to obtain more than the 1200g of fine material and follow the procedure described in note 5 of 8.3

If you have any additional questions, please contact Nathan Awwad at 317-610-7251x292, or nawwad@indot.in.gov