

<b>HMA Verification Responsibilities</b>			
<b>Duty</b>	<b>Task</b>	<b>Performed By / REQ'D. CERT.</b>	<b>Minimum Frequency</b>
1. Verify Aggregate Gradation.	<ul style="list-style-type: none"> <li>Direct and witness contractor sampling and splitting of cold feed combined aggregate.</li> <li>Secure and identify split sample for delivery to District Lab or take possession of split sample.</li> </ul>	Construction HMA SAMPLER + & AGG. I	1/Day
	<ul style="list-style-type: none"> <li>Test combined aggregate sample for gradation.</li> <li>Compare results to contractor test results per IM 216.</li> <li>Report validation results.</li> </ul>	District Materials or Construction AGG. II	1 <sup>st</sup> Day + 20%
	<ul style="list-style-type: none"> <li>Investigate validation issues.</li> </ul>	District Materials	As Needed
2. Verify Aggregate Quality.	<ul style="list-style-type: none"> <li>Obtain independent sample.</li> <li>Send sample to Office of Materials with documentation.</li> </ul>	District Materials AGG. I	1/20,000 Tons
3. Verify Asphalt Binder Quality.	<ul style="list-style-type: none"> <li>Direct and witness contractor sampling of asphalt binder.</li> <li>Secure and identify sample for delivery to District Lab.</li> </ul>	Construction HMA SAMPLER +	1/Day
	<ul style="list-style-type: none"> <li>Test asphalt binder samples on DSR.</li> <li>Report binder test results.</li> </ul>	District Materials	1 <sup>st</sup> 3 Days then 1/Week
	<ul style="list-style-type: none"> <li>Obtain binder sample from the pumping line with assistance from the contractor.</li> <li>Send sample to Office of Materials with documentation.</li> </ul>	District Materials HMA SAMPLER +	1/20,000 Tons
4. Verify Uncompacted Mixture Properties.	<ul style="list-style-type: none"> <li>Select random sample locations.</li> <li>Direct and witness contractor paired sampling of uncompacted mix as per IM 322 and IM 511.</li> <li>Secure and identify one of each paired sample for delivery to District Lab.</li> </ul>	Construction HMA SAMPLER +	1/Sublot
	<ul style="list-style-type: none"> <li>Randomly select paired sample for testing.</li> <li>Test selected sample for required mix properties.</li> <li>Compare results to contractor test results per IM 216.</li> <li>Report validation results.</li> </ul>	District Materials HMA I	1/Day
	<ul style="list-style-type: none"> <li>Investigate validation issues.</li> </ul>	District Materials	As Needed

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5. Verify Compacted Pavement Properties.	<ul style="list-style-type: none"> <li>Select random sample locations.</li> <li>Direct and witness contractor coring.</li> <li>Inspect cores for damage and thickness and direct replacement coring of damaged or unusable cores.</li> <li>Take possession of cores and transport to the contractors lab or secure core samples if contractor is transporting the cores.</li> <li>Measure cores for thickness.</li> <li>Test cores for density and record weights.</li> <li>Provide copy of thickness and weights to contractor for reporting.</li> </ul>	Construction HMA SAMPLER +	7 Cores/Lot
	<ul style="list-style-type: none"> <li>Select random sections for smoothness testing.</li> <li>Perform independent smoothness testing.</li> <li>Compare results to contractor test results per IM 216.</li> <li>Report validation results.</li> </ul>	District Materials PROFILOMETER	10% of Project
	<ul style="list-style-type: none"> <li>Investigate validation issues.</li> </ul>	District Materials	As Needed

### HMA Independent Assurance Responsibilities

Duty	Task	Performed By / REQ'D. CERT.	Minimum Frequency
1. Aggregate Gradation Independent Assurance.	<ul style="list-style-type: none"> <li>• Systematically distribute aggregate proficiency samples to contractor technicians who perform QC gradation testing for acceptance and construction technicians who perform verification gradation testing per IM 205.                             <ul style="list-style-type: none"> <li>○ Contractor and Construction certified technicians who perform gradation testing must pick up, test and report results of samples to the Central Lab approximately every three months.</li> </ul> </li> <li>• Record sample ID numbers and receiver for each sample distributed.</li> </ul>	District Materials	Monthly
2. HMA Independent Assurance.	<ul style="list-style-type: none"> <li>• Systematically distribute HMA proficiency samples to contractor technicians performing QMA testing of HMA per IM 205.                             <ul style="list-style-type: none"> <li>○ Contractor certified technicians who perform HMA testing must pick up, test and report results of samples to the Central Lab approximately every three months.</li> </ul> </li> <li>• Record sample ID numbers and receiver for each sample distributed.</li> </ul>	District Materials	Monthly
3. Core Density Independent Assurance.	<ul style="list-style-type: none"> <li>• Retest one set of cores for density and thickness.</li> <li>• Compare results to construction technician test results.</li> <li>• Report comparison of test results.</li> </ul>	District Materials HMA SAMPLER +	1/Project

01/31/07

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### Other Required HMA Acceptance Responsibilities

Duty	Task	Performed By / REQ'D. CERT.	Minimum Frequency
1. Qualify Laboratory.	<ul style="list-style-type: none"> <li>• Check condition of test equipment.</li> <li>• Check equipment calibration records.</li> <li>• Check for current test methods.</li> </ul>	District Materials HMA I	Every Two Years
2. Observe Plant Calibration.	<ul style="list-style-type: none"> <li>• Check for proper procedures per IM 508.</li> <li>• Check for approved JMF.</li> <li>• Check stockpile certifications.</li> <li>• Check plant settings.</li> </ul>	District Materials HMA I	As Per DME
3. Materials Certifications.	<ul style="list-style-type: none"> <li>• Check for approved aggregate sources.</li> <li>• Check certified aggregate truck tickets.</li> <li>• Check for approved asphalt binder source.</li> <li>• Check certified asphalt binder truck tickets.</li> <li>• Check for approved release agents per IM 491.15.</li> </ul>	District Materials HMA I	Check at Time of Calibration and When Material Changes
	<ul style="list-style-type: none"> <li>• Review entries in Plant Book for certified quantities of materials.</li> </ul>	Construction HMA I	Weekly
4. Documentation.	<ul style="list-style-type: none"> <li>• Review plant calibration.</li> <li>• Review job mix formulas.</li> </ul>	District Materials HMA II	At Startup of Each Mix
	<ul style="list-style-type: none"> <li>• Review entries in the Daily Plant Report.</li> <li>• Review entries in the Plant Book.</li> <li>• Review entries in Plant Program for pay quantities.</li> </ul>	Construction HMA I	First Day and Weekly Thereafter
	<ul style="list-style-type: none"> <li>• Review quality control charts.</li> </ul>	District Materials HMA I	Weekly
	<ul style="list-style-type: none"> <li>• Obtain files of project documentation:               <ul style="list-style-type: none"> <li>○ Daily Plant Reports</li> <li>○ Correlation Summary Sheets</li> <li>○ Quality Control Charts</li> <li>○ Delivery Tickets</li> <li>○ Submitted Forms</li> </ul> </li> </ul>	Construction	At End of Project
5. Inspect Stockpiles.	<ul style="list-style-type: none"> <li>• Observe stockpiling procedures per IM 508.</li> <li>• Check for segregation.</li> <li>• Check for contamination.</li> <li>• Check for intermingling of stockpiles.</li> </ul>	District Materials HMA I	First Day and Weekly Thereafter

### Other Required HMA Acceptance Responsibilities

Duty	Task	Performed By / REQ'D. CERT.	Minimum Frequency
6. Aggregate Proportioning.	<ul style="list-style-type: none"> <li>• Inspect method of securing cold-feed bin gate settings.</li> <li>• Monitor actual cold-feed gate and belt speed settings.</li> <li>• Monitor aggregate proportions.</li> <li>• Monitor interlocks.</li> </ul>	District Materials HMA I	At Startup and When Problems Arise
7. Plant Operations.	<ul style="list-style-type: none"> <li>• Observe coating of aggregates.</li> <li>• Observe mixing time (batch plant).</li> <li>• Prevent segregation:               <ul style="list-style-type: none"> <li>○ Observe truck loading.</li> <li>○ Observe level of mix in the silo.</li> <li>○ Observe operation of hopper/silo gates.</li> </ul> </li> </ul>	District Materials or Construction HMA I	At Startup and When Problems Arise
	<ul style="list-style-type: none"> <li>• Monitor trucks for improper use of cleaning fluids per specification 2001.01.</li> </ul>	District Materials or Construction HMA I	At Startup and Weekly Thereafter
8. Plant Adjustments.	<ul style="list-style-type: none"> <li>• Participate in discussion of mix design adjustments.</li> <li>• Document proportion changes.</li> </ul>	District Materials HMA II	Each Occurrence
9. Inspect Plant Facility.	<ul style="list-style-type: none"> <li>• Check if lab qualification is current.</li> <li>• Check for all required test equipment.</li> <li>• Check for computer, fax, copier, and phone.</li> </ul>	District Materials HMA I	At Startup
10. Check Weighing Equipment.	<ul style="list-style-type: none"> <li>• Monitor check weighing.</li> <li>• Monitor verification weighing.</li> <li>• Monitor sensitivity check.</li> </ul>	Construction HMA I	First Day and Once Per Week Thereafter
	<ul style="list-style-type: none"> <li>• Witness truck tare weighing at random.</li> </ul>	Construction HMA I	Once Per Project
11. Asphalt Binder Quantity Determination.	<ul style="list-style-type: none"> <li>• Monitor tank sticking procedures.</li> <li>• Witness the 4-hour meter calibration if In-Line Flow Meter is being used for asphalt binder quantity.</li> </ul>	Construction HMA I	First Day and Weekly Thereafter