

Specification	Committee	Due Date
NSSP BITU0029 WMA	OAPC – HMA TWG and Hot Mix Paving Tech. Committee	April 1 <sup>st</sup> , 2021
ORBA Comment		MTO Comment
<p>Please see ORBA comments and questions discussed at the OAPC-MTO Hot Mix Paving Committee Meeting regarding <b>NSSP BITU0029</b>.</p> <p>The discussions address the minor clarifications noted below, intent of the NSSP, and possible approach and timeline for implementation.</p> <ul style="list-style-type: none"> <li>• 135C max production temp OR 20C below control hot mix production temperature. <b>Is it correct that production temperature can be above 135C as long as it is 20C below the hot mix?</b> The SP requires a control hot mix section.</li> <li>• <b>Are changing weather conditions going to be considered if the hot mix is done in good weather and the warm mix is done in colder weather?</b></li> <li>• Fume worker exposure testing needs to be submitted by a <b>Certified Hygienist</b>. Proposal from <b>Environmental Consultant</b> required as part of pre-paving submission. Then report required from actual paving. <b>Clarify requirements for a Certified Hygienist versus Environmental Consultant. Does an environmental consultant need to be retained or can this all be done by certified hygienist?</b></li> <li>• Mix temperature measurements on site with either calibrated infrared thermometer or owner approved technology such as thermal camera (i.e., thermal cameras are approved technology). <b>We think calibration should be completed by the contractor, however, is the Ministry expecting calibration verification?</b></li> </ul>		<ul style="list-style-type: none"> <li>• Correct, in some circumstances the production temperature for WMA could be higher than 135, as long as it is at least 20 degrees lower than HMA production temperature.</li> <li>• This situation will need to be brought up at pre-pave meeting and approval obtained from the CA or the Owner.</li> <li>• Usually a certified hygienist works for an environmental consulting firm. It is important to have the measurements conducted by a certified entity. Details can be discussed at pre-pave meeting. We may alter the wording in the specification to clarify the intent. Recommendations from OAPC environmental committee are welcomed.</li> <li>• Agree, the expectation is that the Contractor uses a calibrated infrared thermometer or thermal camera along with a certificate of calibration that could be presented to the CA on site upon request.</li> </ul>

<ul style="list-style-type: none"> <li>• Additional samples for moisture and mix performance testing. Info. only. <b>Only warm mix is sampled and tested for additional performance testing. Will the hot mix also be tested and compared?</b></li> <li>• Additional samples for moisture and mix performance testing – field samples are being tested for AASHTO T283 moisture sensitivity. Currently moisture testing is only done on mix design samples. <b>Is the intent now to do it on field samples? Is there historical information on how hot mix field and warm mix samples do in T283?</b></li> <li>• Edge compaction testing required. <b>Will edge compaction specifications need to be met?</b></li> </ul>	<ul style="list-style-type: none"> <li>• Yes, both WMA and HMA will be sampled and tested by QA lab. The sampling is detailed in Table 2 whereas testing detailed in Table 4.</li> <li>• Table 2 of OPSS313 (or SSP103F03) included moisture sensitivity testing on 3 sublots of production WMA since 2012. Historically, we have noticed more variation of TSR results for WMA compared to HMA.</li> <li>• No, the sampling and testing are conducted for information and also to compare edge compaction results between HMA and WMA. This is another measure to evaluate any advantage of WMA over HMA.</li> </ul>
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- **Are changing weather conditions going to be considered if the hot mix is done in good weather and the warm mix is done in colder weather?**
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