WMA Technology Review Cargill Anova 1501 May 18, 2020 E-Vote

DATE: May 18, 2020

FROM: Craig Wieden, Materials and Geotechnical Branch Manager

TO: MAC Members and Industry Partners

SUBJECT: Final Decision on the Warm Mix Asphalt additive Cargill's Anova 1501

REFERENCE: www.codot.gov/business/apl/asphalt-warm-mix.html

<u>Overview</u>

The review panel for evaluation of Warm Mix Asphalt (WMA) submittals was provided documentation via email during the period of May 1, 2020 to May 15, 2020. In accordance with the Colorado Procedure 59 (CP-59), the submittal to approve Cargill's Anova 1501 was reviewed.

Quality of Submittal

Cargill's Anova 1501 WMA technology was submitted for CDOT consideration. The submittal was sufficiently complete to perform the review.

WMA Decision

Cargill's Anova 1501 additive has been approved by the panel, for use with a restriction of 5,000 tons per project.

This decision is based on the fact that the performance documentation is only from the NCAT test track - which in and of itself is fine, but it doesn't address the cracking or raveling, and the climate difference between Colorado and Alabama was not addressed. Also, the TSR dry strengths are lower on the WMA mix, then they are on the control mix, which give a false indication that the WMA has better TSR's overall - they also follow T-283 instead of CP-L 5109. Another concern is the data for the Hamburg Wheel Tracker is tested per AASHTO T324 instead of CP-L 5112 - and the rutting (although at 20,000 passes) far exceeds the CDOT requirements of 4 mm in 10,000 passes.

Addendum

This technology will be posted on the CDOT website under the category of WMA technologies, without restrictions.

Re-evaluation Date 05/18/2023