

Pavement & Materials Partnering Committee
Decision Document
Temporarily Eliminate Direct Sampling and Splitting Methods in
CT 125 and CT 306 for RHMA
June 16, 2022

Problem Statement

Caltrans received several comments from both Caltrans materials labs and Industry regarding the California Test (CT) 306, "Method of test for Reducing Samples of Asphalt Mixtures to Testing Size." Many of these comments covered the following concerns: lack of safety measures needed such as respirators or adequate lab ventilation system when heating rubberized mixes to higher compaction temperature rather than a lower traditional splitting temperature, segregation of material observed in the boxes being sampled using the new procedure in CT 125 for rubberized mixes, excessive reheating of material and its potential aging effects, lack of understanding of sampling and splitting methods by technicians, and potential increases in rubberized mix test results variability.

Background

California Test 306 was published in December 2019, but full implementation was seen towards the end of the 2020 paving season. Some concerns that have been shared by industry may be due to the fact that CT 306 is relatively new, and some technicians may lack knowledge or have different interpretations on how to perform the sampling and reduction correctly or how it was intended.

The PMPC Asphalt Task Group (ATG) created an ad hoc working group with members from Caltrans and Industry to review these comments and come up with potential short- and long-term solutions to the CT 306 concerns. The first short-term recommendation from this ad hoc working group was to leave CT 125 and CT 306 as is and create training videos. Creating the training videos was extremely challenging because there seemed to be some hesitance in performing the test in front of a camera for training purposes.

On May 18, 2022, the ad hoc group agreed to temporarily remove these new sampling and splitting requirements until a more comprehensive Inter-laboratory Study (ILS) is performed.

Recommendation

After several meetings and several attempts at creating training videos for these CTs, the ad hoc working group decided to recommend to the ATG to suspend CT306 until the interlaboratory study is completed, and that CT125 be revised to allow the blending of four containers of RHMA-G through a quartermaster, or large splitter, then to further reduce the mix to test sample size using R47. There would still be the sampling from four areas as before, and that a sample from each location be blended through the quartermaster/splitter. This requires revisions to CT125 and CT306.

Fiscal Impact

Pavement & Materials Partnering Committee

Decision Document

CT 306 Ad Hoc Working Group, Asphalt Subtask Group, Asphalt Task Group

Eliminate Direct Sampling and Splitting Methods in CT 125 and CT 306

06/16/2022

The proposed change has no fiscal impact. Both Industry and Caltrans laboratories currently have all the equipment needed to perform the sampling and splitting changes.

Stakeholder Impact

Stakeholders include Contractors, District and field laboratories, Construction, Headquarters Construction, Pavement Program, METS, Consultant Labs, PMPC, JTCP. The impact to stakeholders is minimal. Sampling and splitting for RHMA will be done in the same manner as for HMA Type A. JTCP will need to revise training material for RHMA.

Policy Impact

A CPD needs to be developed to inform Construction and District and field labs of the change. Change Orders will be needed on current projects.

Risks

The risks to implementing this change is low. Industry and Caltrans laboratories agree with this change.

Proposed Implementation Schedule

Stakeholder review and approvals by June 17, 2022

ADA compliance review by June 21, 2022

SME review and approval by June 24, 2022

Publish CT 125 and CT 306 by June 27, 2022

Implementation Coordinator(s)

Guadalupe Magana (METS): CT 125 and CT 306 publishing

Ragu Thangavelautham (HQ Construction): CPD and draft Change Order

Biplab Bhattacharya (IA): IA and JTCP coordination

APPROVAL RECOMMENDED BY:

<i>Guadalupe Magana</i>	12/05/2022	<i>Ronald Stickel</i> Ronald Stickel (Mar 10, 2023 10:00 PST)	03/10/2023
GUADALUPE MAGANA	Date	KEVIN MCNEIL	Date
Caltrans Decision Document Champion		Industry Decision Document Champion	
Materials Engineering and Testing Services		Granite Rock	
<i>Kee Foo</i>	12/05/2022	<i>Tony Limas</i>	01/23/2023
KEE FOO	Date	TONY LIMAS	Date
Asphalt Subtask Group Chair		Asphalt Subtask Group Lead	
Pavement Program			

Pavement & Materials Partnering Committee

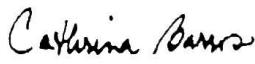


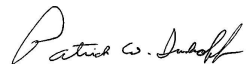


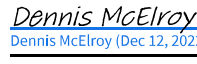
Decision Document

CT 306 Ad Hoc Working Group, Asphalt Subtask Group, Asphalt Task Group

Eliminate Direct Sampling and Splitting Methods in CT 125 and CT 306

06/16/2022

APPROVED BY ASPHALT TASK GROUP:

Caltrans Name (Recommendation)		Industry Name (Concurrence)	
 CATHRINA BARROS Caltrans Task Group Chair Pavement Program	12/12/2022 Date	 PHIL READER Industry Task Group Member	12/08/2022 Date
 JACQUELYN WONG Caltrans Task Group Member Materials Engineering and Testing Services	12/06/2022 Date	 PAT IMHOFF Industry Task Group Member	12/06/2022 Date
 JOSEPH DONGO Caltrans Task Group Member Construction	12/13/2022 Date	 SCOTT DMYTROW Industry Task Group Member	12/05/2022 Date
		 DENNIS MCELROY Industry Task Group Member	12/12/2022 Date