

Air Resources Board
1001 I Street
Sacramento CA 95814

Air Resources Board
P.O. Box 2815
Sacramento CA 95812

Peter Bruenke
President
Hug Engineering, Inc.
Phone +1 323 315 0290
Cell +1 760 835 1055
Peter.bruenke@hug-engineering.com

Liberty Hill, TX; April 18, 2016

Re: Public comment on the proposed California evaluation procedure for new aftermarket diesel particulate filters intended as modified parts for 2007 through 2009 model year on-road heavy-duty diesel engines.

Dear Chairwoman Nichols and Members of the Board:

Hug Engineering Inc. is submitting this comment for consideration regarding a change of language to the Air Resources Board proposed regulation on the evaluation procedure for new aftermarket diesel particulate filters (DPF) intended as modified parts for 2007 through 2009 model year on-road heavy-duty diesel engines.

Hug Engineering believes that we have been a serious and reliable partner with the Air Resources Board and the industries that rely on Hug Engineering products. With various verifications in stationary and on-highway applications, we have proven that Hug Engineering delivers reliable products that are widely accepted in the marketplace. With more than 30 years of experience and operations in Europe, Asia, Latin America and the United States, the Hug Group is a trusted partner when it comes to state-of-the-art emission reduction systems that include manufacturing of catalyst substrates, wash coat technologies, and complete DPF emission systems.

The proposed regulation currently allows a catalytic or wash coat formulation change and mandates a "like-for-like" approach for the substrate material requiring that the aftermarket DPF must be of the same material and equivalent physical dimension, segmentation, cell density, and shape as the OE DPF. With this focus on a "like-for-like" substrate and neglecting the impact on emission performance of the wash coat formulation and any precious metal loadings, we believe that the current approach of the proposed regulation is not consistent with an identical OE filter replacement since it already allows changes in the chemical makeup of the filter technology. In our assessment and based on the knowledge that we have gained over the years in manufacturing substrate material and wash coat technologies, a change in the wash coat formulation along with precious metal loadings will affect the performance of the filter greater than a substrate material change.

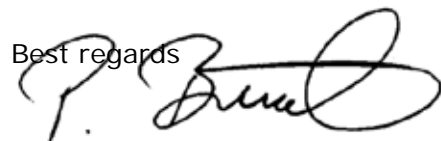
Hug Engineering is therefore requesting consideration for using alternative substrates in respect to physical material (not size or cell density) in place of the original OE substrate material (Summary of section (d)(1)(C) This subsection is requiring that the aftermarket DPF must be of the same material and possess equivalent physical dimension, segmentation, and shape as the OE DPF). We request the regulation to allow alternative substrate materials since the proposed regulation already allows different wash coat

formulations, understanding that the alternative substrates must meet or exceed the OE substrates in performance and durability without any effect on the OE engine or other emission systems.

We support extensive testing and verification of any aftermarket DPF presented to the Air Resources Board. Once the data is presented, the Air Resources Board would have the final approval on the verification. Hug Engineering does not see any detrimental effects caused by adopting this change in language since 1) any substrate change must meet or exceed the OE standards 2) testing and verification results would need to be approved by the Air Resources Board prior to being offered for sale in the California market and 3) proven technology exists supporting improved performance substrate manufacturing along with extensive in field operating data.

We believe that the proposed language change will improve the regulation and will allow access of new and improved future technologies being developed with even better performance factors.

Thank you for your time and efforts in considering this request

Best regards


Peter Bruenke
President
Hug Engineering, Inc.