For Industry Comment
Comment period ends on: January 16, 2006

CODE BULLETIN C-29

American Chemistry Council
Product Approval Code of Practice
April 2005 Edition

To: **Practitioners of the American Chemistry Council Product Approval Code of Practice**

Original Issue Date: **December 16, 2005**

Effective Date: **January 16, 2006**

Re: **Inclusion of Information Request to Tab 4 of the Product Approval Code of Practice – April 2005 Edition**

The American Chemistry Council's (ACC) Product Approval Protocol Task Group (PAPTG) includes Code of Practice (Code) information requests and responses in Tab 4 of the Code. Information requests and responses are generally not released to Code Practitioners on an interim basis, but are incorporated at the time the Code is revised and a new version released.

Given the scope of a recent request regarding Appendices H and I, PAPTG reached consensus to release the information request and PAPTG's responses (noted in blue text) in advance of the release of the next edition of the Code. This information request and responses will also be included in Tab 4 of the next edition of the Code.

Any comments to this Code Bulletin (C-29) should be directed to the PAPTG Manager, W.D. (Doug) Anderson (email: Doug_Anderson@americanchemistry.com Phone: (703) 741-5616).

Note: The text provided below has been transcribed from electronic mail received by W.D. Anderson and sent from A. Omar.

Dear Sir:

I'm asking for your help to understand some points mentioned in Appendix H & I. As we use the protocol to evaluate DI offered by additive companies I found that your help is needed on the following:

- Appendix H as a guide for minor formulation modification for developing PCMO engine test programs, does that mean if any changes during DEO testing program or changes in final formulation need retesting (Generally in case of any modifications DEO engine tests must be retested)?

Response: It is not mandated to retest DEO tests if minor modifications have been made to a formulation. An additive company applies fundamental knowledge of engine performance of their additive chemistry to determine if a DEO test needs to be repeated. Appendix H numbered guidelines apply only to the following tests as listed on Page H-2 of the Code of Practice: Sequences IIIF, IIIG (recently added), IVA, VG, VIB, and VIII.

Example
For CF performance level, after successful program testing the VIII and 1MPC, its needed to increase TBN for the final formulation App H guideline 4 may be applied for VIII (new component added) and not for the 1MPC, does that mean that IMPC need retesting?

Response: After a Core program is completed any formulation adjustments are then covered by Appendix I, Program Guidelines. Appendix H, Guidelines for Minor Formulation Modifications, applies only to the conduct of a Core program. For the example given, the TBN increase is covered by Appendix I, Guideline 1. The VIII and 1MPC do not need to be rerun, provided the TBN increase is covered by Level 2 support data for both tests which shows no harm.

In case of Appling appendix I guideline 1 amount of up treat is not restricted (restricted in App. H); it's not mentioned if that role applies for PCMO (VIII) or DEO (1MPC) engine tests or both?

Response: Appendix I applies to both PCMO and DEO tests.

Level 2 support in case it is needed, is it issued by ASTM or tests sponsor (Support Data)?

Response: Level 2 support data is supplied by the test sponsor.

Core Data Set
As mentioned in Appendix H using minor formulation modification (PCMO Sequences) with API 1509 App. E & F (PCMO and DEO) for developing core data set raises the question again if you need to rerun DEO tests in case minor formulation changes are done through that developing (program for fleet lubricants with both gasoline and diesel rating)?

Response: Numbered guidelines within Appendix H do not apply to DEO tests. They apply only to the tests listed on Page H-2 of the Code of Practice: Sequences IIIF, IIIG (recently added), IVA, VG, VIB, and VIII. It is not required to rerun DEO tests if minor modifications have been made to a formulation. An additive company applies fundamental knowledge of engine performance of their additive chemistry to determine if a DEO test needs to be repeated.

When using a matrix core data set on the PCMO Sequences, changes are restricted to four including BOI, its not mentioned in case of DEO program i.e. CI-4 how many changes can take place for the matrix data core as it mentioned in App. H illustration 0, is it restricted for 4 changes as PCMO Sequences or are there no restriction for the number of changes?

Response: For the PCMO tests that are part of a PCMO + DEO program as in Illustration 0 (Appendix H, page H-5 of the Code of Practice), only four minor formulation modifications are allowed. The number of minor formulation modifications in the DEO tests is unrestricted.

Matrix core data set, is it apply for the same formulation number or can it be used for reading between different formulation numbers as the treat rate of the DI is still the same?

Response: A Matrix Core Data Set will likely include several different oil blends, each with their own formulation code. It is common practice to give a formulation code to a specific base oil/VM/DI combination. When the base stock changes, then typically a new formulation code is assigned. Formulation encoding is addressed in the Code of Practice, Appendix B.

For example, the four oils in Appendix H, Illustration 0, might be identified as follows:

Base Stock (Group)	**A(I)**	**B(I)**	**C(I)**	**D(II)**
Formulation Code	**AP-1234-A-1**	**AP-1245-A-1**	**AP-1267-A-1**	**AP-1289-A-1**

Is it permitted during changes to replace VM (VII) even when its from the same chemistry and the same producer and how many times VII changes permitted

during changes, App. H guideline 8 limit the VII changes and App. I guideline 3, permit change with level 2 support?

Response: During the development of a Core Data Set, the VM must stay the same with Level 1 support. The level of the VM can change as needed to adjust for blend viscometrics. There is no restriction on the number of times the VM level can change. Appendix H, Guideline 8, will apply only to the PCMO tests.

Only after a Core Data Set is in place can the VM be changed to another VM of the same chemical family (type) by the same manufacturer with corresponding Level 2 support, according to Appendix I, Guideline 3.

As the first time addressing you, I hope you will accept my e-mail and the questions I have. I look forwarded for your reply.

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