

Mack/Volvo Surveillance Panel Meeting

June 16, 2020

10:00 AM – 11:30 PM EST

Attendees:

Afton: Bob Campbell, Christian Porter, Abaigael Ritzenthaler, Todd Dvorak

CAT: Hind Abi-Akar, Luke Moehling

Chevron Phillips Chemical: Jon VanScoyoc

ExxonMobil : Riccardo Conti, Paul Rubas

Haltermann : Prasad Tumati

Infineum : David Brass (secretary), Elisa Santos, Jim Gutzwiller

Intertek: Juan Vega

Lubrizol: Jim Matasic

Oronite: Mark Cooper (chair), Jo Martinez, Kevin Carabell

SWRI: Travis Kostan, Issac Leer, Bob Warden, Mike Lochte, Jose Starling

TEI: Derek Grosch, Mark Sutherland

TMC: Sean Moyer

Volvo: Will Miller, Patrick Holmes

Agenda:

1. Alternative fuel acceptance criteria
2. Oxidation inhibitor change for CP Chem PC9-HS and PC10
3. Parts Lists showing superseded parts
4. All Other Business

1. Alternative fuel acceptance criteria

- Mark Cooper (chair) presented (*Discussion List for T-11 Alternate Fuel Approval Requirements.pdf* which was supplied by Travis Kostan [SWRI])
- SWRI plotted the monitored parameters for the Mack T-11 test at the time of rebuild and the variation that occurs from these values over the next 3 tests. This data was collected from 8 recent rebuilds at SWRI.
- Question from SP Member: *Did you look at effect of tests 3 vs. 4 vs. 5?* No since the current proposal is the only to run the current fuel after rebuild and then follow up with 2 candidate fuel tests.
- Most changes in these monitored parameters were small except for a single rebuild for each parameter that showed a large variation. These variations set the range for each of the parameters and are shown in the gray boxes on the plots.
- *SP Member questioned if the plotted data was just from SWRI or if it is available from the other labs.* Data was only from SWRI.
- **ACTION: Other labs to take a look at their monitored parameter data after rebuild and the two subsequent tests to confirm or deny the spread of data found by SWRI.**
- A tighter window for injection timing was proposed for the Mack T-11 since it was deemed a critical parameter for the test. All other parameters are compared to the reference test completed after rebuild and the variation of the next couple of tests taken into account.
- If the candidate test falls out of these ranges it is not designed to kick out the test result, these deviations would force the Surveillance Panel to further evaluate the cause of the deviation to deem if acceptable.

- Question from SP Member: Is this the first time we have considered a new fuel supply? This is the first time that we have considered a new supplier. A few years back we had an issue with test severity that was tied back to the fuel in Mack T-11.
- The Surveillance panel discussed the use of the $E_i < 1.734$ limit for precision for the Mack T-11 as this is typically used for introduction of new critical test parts.
- Discussion was had around use of E_i , Z_i and Y_i parameters.
- There was concern about using a stand that had a hard time hitting the referencing targets for this activity.
- SP Member asked about looking at under what conditions the new fuel would pass or fail via E_i , Z_i and Y_i values.
- **ACTION: Sean (TMC) to provide LTMS level 2 spreadsheet when available**
- **ACTION: Travis (SWRI) to put together examples of what results would pass and fail E_i and Z_i limits to help the Surveillance Panel understand the limits being set in actual performance metrics.**
- SP Member mentioned that in PCMO fuel comparison testing they looked at the effect of the current fuel on properties on the engine parameters, like power output.
- **ACTION: Jon (CP Chem) to provide CofA for various fuel batches to allow analysis of fuel properties and how they relate to test parameters like Power.**
- **ACTION: Todd (Afton) agreed to help with analysis of fuel batch data in comparison to test parameters.**
- SP member stated that the Surveillance Panel should set the criteria that would give a free pass and no further data would need to be looked at. If the data fails outside that window, then there would be further review to determine why it deviated and if the deviation is acceptable or not.

2. Oxidation inhibitor change for CP Chem PC9-HS and PC10

- The oxidation inhibitor supplier (Innospec) offered to make the components available to make the oxidation inhibitor at CP Chem.
- One of the components to make the oxidation inhibitor is still about to go out of supply so this doesn't fix the issue.
- Innospec is looking to make a like material available for replacement
- CP Chem has about a 2-year supply of the current oxidation inhibitor and can get another 2-year supply from Innospec.

3. Parts Lists showing superseded parts

- Tests start off with a set of parts and there are often parts that get superseded by the supplier without notification. A list is being built with the superseded part numbers to be housed on the TMC website.
- Sean (TMC): Intension is that the part list would be pulled from the procedure and would live on the TMC website. Labs should tell TMC when they come across superseded part numbers.
- This list would contain the original part numbers from the procedures, the currently available part numbers and any changes that occur into the future.
- *SP Member questioned how the Surveillance Panel would be informed of changes if they are removed from the procedure.* Changes would be shared in the CPD Report and discussed at the SP meetings that would occur on at least every 6-month basis.

- **ACTION: Sean (TMC) to work up the procedure wording changes for each test and begin cataloguing parts numbers with assistance from the test labs.**

4. **All Other Business:**

Mack T-8 Correction Factors:

- IAR stated that they were in favor of correction factor changes.
- At last meeting the correction factor changes were tabled
- Surveillance Panel will revisit this Mack T-8 correction factors again at the next meeting.

Next Call: June 30, 10:30AM - 12 PM EST