LDEOC/EOEC SURVEILLANCE PANEL

A LDEOC/EOEC conference call was held on August 7th, 2012 at 9 am central standard time. The following members were on the call:

Jennifer Keiter – Lubrizol
Mike Kasimirsky – TMC
Jason Bowden – OHT
Matt Bowden – OHT
Dwight Bowden - OHT
Joe Franklin – Intertek
Kevin Rettmann - Intertek
Gill Reinhard - Intertek
Mike Lopez - Intertek
Peter Keiser – ISP
Renate Grussel - ISP
Doyle Boese - Infineum
Mike McMillan – Infineum
Andrew Ritchie - Infineum
Jeff Clark - TMC
Allison Athey – Volvo
Mike Birke – SwRI

New batch limit evaluation – Mike Birke read the current *proposed* method of reevaluating limits to the group (below):

1) When a new batch of material is procured by the CPD a sufficient sample will be provided to the test labs for 2 reference tests to be run at each lab. These tests should be started within 2 weeks of receipt of the new material.

2) The reference test will be reported as donated tests and the bath calibration status will not be affected by the results. Any currently running candidates will need to be validated with references run on previous batches of material as they should only be running on the previous batch.

3) Once a minimum of 3 labs have reported these initial results, the mean of each parameter (volume, hardness, tensile, elongation) shall be compared to the current mean for the material. This comparison will be done automatically by the TMC when the data is received. TMC will notify the chair as soon as sufficient initial data points have been received and provide statistics

4) If the mean of any parameter of the new batch data is ≤ 0.5standard deviations (using the current Standard Deviation for the parameter/material as published by the TMC) different (±) then the current target, we will use the same reference acceptance criteria as the previous batch

for that specific parameter. The results of this comparison will be reported by email to the SP as each material evaluation is completed.

5) Only those parameters >0.5 standard deviations will require further testing. In such cases, a minimum of 10 data points total will be generated by the participating labs to establish new acceptance criteria for those specific parameters on the new batch.
TMC will notify the chair as soon as sufficient initial data points have been received and provide statistics.

Since the labs appear to be the biggest driving factor in test severity, and that any differences found in elastomer batch can readily be explained by differences in lab performance, the group agreed that it is imperative that all labs submit data. Failure to incorporate all labs will result in a skewed data set. After all of the discussion, the following modifications (in red) were suggested:

Current proposed procedure based on group discussion:

1) When a new batch of material is procured by the CPD a sufficient sample will be provided to the test labs for 2 reference tests to be run at each lab. The CPD will inform the surveillance panel chair when the material has been shipped. The chair will then notify the participating labs. The labs will have 6 weeks from the time they are notified to submit two donated runs to TMC. If TMC does not receive the data within 6 weeks, they will stop assigning reference oils and process data for the delinquent lab.

Historically, labs have not been running the new batch material within a reasonable time frame. Allowing TMC to stop processing data for the offending lab should provide encouragement to get the data submitted in time. In the event that a lab chooses not to turn in the data, a backup plan of running against the old limits was discussed. However nothing in concrete was agreed upon.

2) The reference test will be reported as donated tests and the bath calibration status will not be affected by the results. Any currently running candidates will need to be validated with references run on previous batches of material as they should only be running on the previous batch.

Questions arose on how to compare the mean and standard deviation of 10 data points generated from the new elastomer batch to historical data, which could be hundreds of data points.

Action item: Doyle Boese will get together with Mike Kasimirsky to discuss the appropriate statistical approach. This approach will then be used in statistics below:

3) Once the 5 labs have reported these initial duplicate results, the mean of each parameter (volume, hardness, tensile, elongation) shall be compared to the current mean for the material.

This comparison will be done automatically by the TMC when the data is received. TMC will notify the chair as soon as sufficient initial data points have been received and provide statistics.

4) If the mean of any parameter of the new batch data is ≤ 0.5 standard deviations (using the current Standard Deviation for the parameter/material as published by the TMC) different (±) then the current target, we will use the same reference acceptance criteria as the previous batch for that specific parameter. The results of this comparison will be reported by email to the SP as each material evaluation is completed.

Discussion also ensued as to whether all parameters (volume, hardness, tensile, elongation) should be updated if only one is out of spec, or whether only the parameter out of spec should be changed. There are two schools of thought: TMC asserts it is not sound practice to change only the parameter out of spec, and that all parameters should be changed. Joe Franklin asserts only the out of spec parameter should be updated. As the rules are written above, only the affected parameter will be changed.

*Step 5 from the initial proposition has been removed, as TMC will have 10 data points to perform the calculations.

To address the issue of lab to lab variability, the group agreed that a workshop is in order. Southwest Research has agreed to host the meeting.

Action item: Mike Birke will be sending out potential dates in the near future.

Batch 9 LDEOC status – batch 9 has been run at most labs, although not as donated tests.

Action item: Mike Kasimirsky will get with Mike Birke and inform him which labs have not donated tests.

Batch 13 EOEC silicone – Dow Corning Product ID 24122V-BLK is no longer available. EMA has been notified regarding the fact that the industry will soon run out of the current material. At the last EMA meeting the members were asked to investigate which silicone elastomers their respective companies are using and report back.

Action item: Mike Birke will stay in touch with EMA on this subject.

There are three ways to move forward on this issue:

1) EMA will recommend a new elastomer,

2) The current “replacement” material is used per EMAs recommendation.

3) Silicone is dropped entirely from LDEOC.

All the above options will require modification of D7216.

EOEC VAMAC hardness parameter- there has been an ongoing industry trend for the hardness data to ride the edge of the lower limit (-10). The group agreed that the limits should be reassessed.

Action item: Mike Kasimirsky will reevaluated the limits based on data from Jan 1, 2006 to present.

The data will be discussed at the next teleconference.

The teleconference adjourned at 10:30 am.