To: PMP Informal Group From: Chris Parkin

Members

Cleaner Fuels & Vehicles

Location:

Tel: 2958 Fax: 2605

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Copies:

MINUTES OF 25TH PMP IMFORMAL GROUP MEETING

1. The chairman opened the meeting and welcomed the participants.

Heavy Duty Validation Exercise Revised Draft Report

- 2. The chairman introduced this agenda item explaining that the draft report had been revised to reflect the comments received and amendments agreed at the December 2009 meeting in Ispra. In addition, a number of previously blank sections had now been completed. The chairman presented a summary of the changes and additions to the report.
- 3. There were no comments from the group on the presentation. The chairman explained that the plan was to finalise the report for submission as a working document for GRPE 60, he requested any comments in writing by the end of February so that they could be considered prior to submission of the document.

Revised Draft Proposal To Insert PN Measurement Into Regulation 49

- 4. The chairman introduced the revised proposal explaining that the revisions made reflected the comments and amendments agreed in December at the Ispra meeting. He presented a summary of the changes included in the document.
- 5. OICA expressed a reservation about the inclusion of measurement of PN periodic regeneration in the proposal. The chairman expressed surprise since it was OICA members that had requested the inclusion of this during discussions in Brussels on Heavy Duty Euro VI, and that at the Ispra meeting all but one of the OICA members present supported this approach. OICA clarified that there was, as yet, no consensus within OICA on this point, hence their reservation. The chairman requested that OICA establish their formal position within the next 6 weeks so that it could be considered in finalising the proposal.
- 6. TUV noted that emissions measurement during regeneration was specified for all other emissions and that some political discussion was needed on this point. The chairman agreed and proposed asking the European Commission to place this item on the agenda (in the context of their Euro VI proposal) for their next Motor Vehicle Emissions Group meeting on 25th January. The group supported this proposal.
- 7. Korea noted that since the proposal required particle concentration measurements to be corrected to standard conditions that the PNC specification should include pressure and temperature measurement requirements. No PNC manufacturers were present to comment, but the chairman agreed to discuss this with instrument manufacturers prior to finalising the proposal.

Heavy Duty Round Robin Revised Test Schedule

8. The chairman presented the revised test schedule as requested by VTT and Scania. TUV confirmed that their revised test slot was acceptable, other labs were not present to comment. The chairman noted that he would confirm the acceptability of other labs' revised test slots with them by e-mail and, if acceptable, would issue the proposed schedule as a confirmed schedule.

UTAC Light Duty Round Robin Report

- 9. OICA presented the results of their light duty round robin testing managed by UTAC. They noted that the work confirmed that interpretations of and variations in particle number measurement permitted in Regulation 83 did not have a significant impact on measured PN levels. The recommendations from the work were that DPFs should where possible be stabilized before test, as per the Regulation 83 recommendation, that tunnel background levels should be monitored and minimised, that data should be quality checked for artefacts due to electrical spikes. They suggested that a full error analysis study would help identify other priorities for reducing variability in measured PN, and that back to back measurement with nominally identical measurement systems would help understand variability inherent in the production/calibration of the instruments (although they noted that observed differences between measurement systems were small compared to DPF stabilization effects).
- 10. The chairman asked if the recommendations were intended to inform a revision to Regulation 83. OICA responded that such a revision did not appear necessary or appropriate at present. TUV asked if there had been any investigation of the variations in tunnel background contributions seen at different labs in the programme. OICA responded that some leaks around HEPA filters had been found, but that there had been no further investigation. The chairman noted that the heavy duty validation exercise had shown tunnel background contributions to be significant in some labs, in particular where dilution tunnels had been exposed to high emissions engines or unusual fuels which deposited material that was resistant to removal by dilution tunnel preconditioning. OICA responded that there was no history of unusual testing at the labs immediately prior to the round robin testing, but that no specific tunnel pre-conditioning had been run.
- 11. Concawe asked if the non-valid test results showed any evidence of a learning curve at participating laboratories. UTAC responded that there was no evidence that this had been the case, but noted that tests were performed in quick succession. They noted that some tests were also rejected as invalid on the basis of outlying CO2 measurements and incorrect coast down matching.

Closing Comments

- 12. The chairman noted that in view of the small number of comments on the heavy duty validation report and Regulation 49 proposal that there did not appear to be a need for a further meeting to discuss these documents before they were finalised.
- 13. He noted that JRC had now sent out an invitation to instrument manufacturers to participate in a VPR calibration round robin and that, subject to their availability this was expected to start in March 2010. Subject to progress on this, a half day PMP informal meeting might be held at GRPE 60 to discuss initial results.

Actions

- I. Informal group members to submit any comments on the Heavy Duty Validation report to the chairman by the end of February.
- II. OICA to communicate an agreed position on inclusion of particle number measurement during regeneration in the Reg 49 proposal.
- III. Chairman to request the European Commission to include discussion of particle number during regeneration on the agenda for the MVEG meeting on 25th January.
- IV. Chairman to discuss inclusion of PNC temperature and pressure measurement requirements with PNC manufacturers.
- V. Chairman to confirm and issue a revised Heavy Duty Round Robin test schedule.

Chris Parkin PMP Chairman