## **CORRIGENDA TO GTR No. 4 (WHDC)**

The text reproduced below was prepared by the expert from OICA in order to propose the following corrigenda to gtr No. 4 on WHDC. The corrigenda equally apply to the relevant sections of ECE Regulation No. 49, annex 4B. The modifications to the current text are marked in **bold** for new or strikethrough for deleted characters.

Paragraph 8.6.2., amend to read:

8.6.2. Calculation of NMHC and CH<sub>4</sub>

The calculation of NMHC and  $CH_4$  depends on the calibration method used. The following methods are permitted.

(a) calibration gas – propane; propane bypasses NMC,

(b) calibration gas - methane; methane passes through NMC

The concentration of NMHC and CH<sub>4</sub> shall be calculated as follows for method (a):

$$c_{\underline{NMHC}} = -\frac{c_{\underline{HC}(w/\underline{NMC})} - c_{\underline{HC}(w/\underline{NMC})} \times (1 - E_E)}{r_h \times (E_E - E_M)}$$
(67)

$$c_{CH4} = \frac{c_{HC(w/oNMC)} \times (1 - E_M) - c_{HC(w/NMC)}}{E_E - E_M}$$
(68)

$$c_{NMHC} = \frac{c_{HC(w/oNMC)} \times (1 - E_M) - c_{HC(w/NMC)}}{E_E - E_M}$$
(67)

$$c_{CH4} = \frac{c_{HC(w/NMC)} - c_{HC(w/oNMC)} \times (1 - E_E)}{r_h \times (E_E - E_M)}$$
(68)

Paragraph 9.5.5, amend to read:

## 9.5.5. Total system verification

The total accuracy of the CVS sampling system and analytical system shall be determined by introducing a known mass of a pollutant gas into the system while it is being operated in the normal manner. The pollutant is analyzed, and the mass calculated according to paragraph 8.5.2.4. except in the case of propane where a u factor of 0.000472 0.000507 is used in place of 0.000480 for HC. Either of the following two techniques shall be used.

Annex 4, paragraph A.4.2, amend to read:

The standard error of estimate (SEE) (SEE) shall be calculated as follows:

$$SEE = \frac{\sqrt{\sum_{i=1}^{n} [y_i - a_0 - (a_1 \times x_i)]^2}}{n - 2}$$
(96)  
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(96)