Request for Confirmation by WLTP IWG on correction of corrigendum to GTR 19 Amend.1 (EVAP)

Apr., 2018

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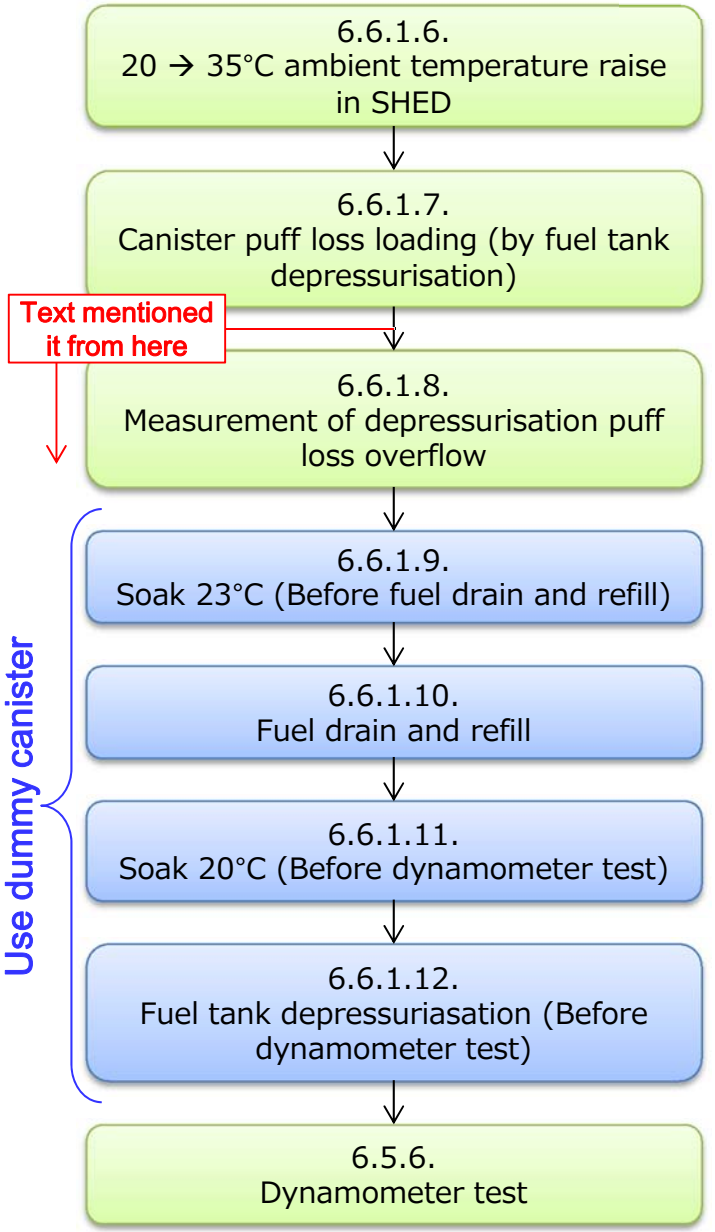
Reference errors found after Jan. GRPE approval

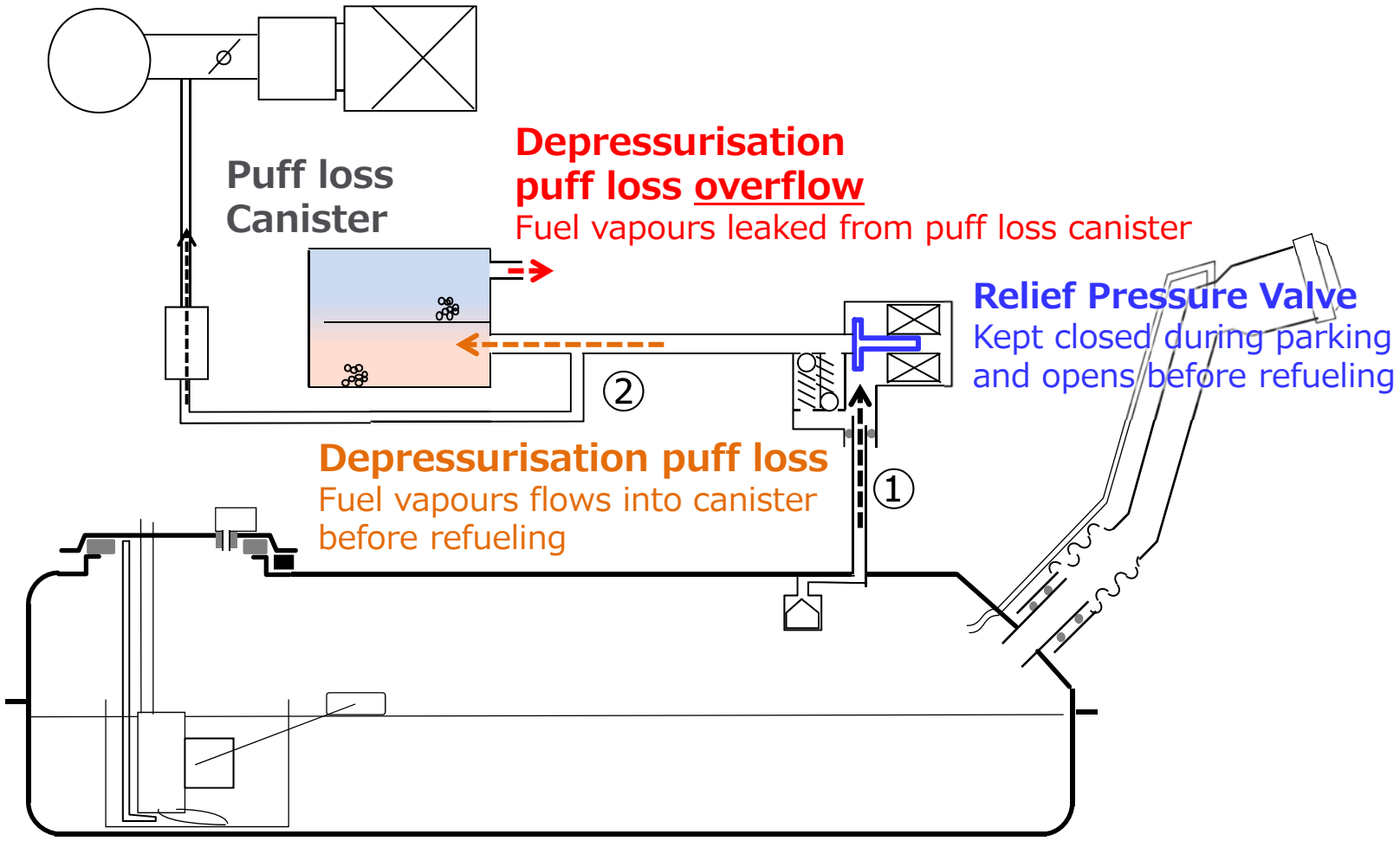
■ Reference errors

- **Annex 1 Paragraph 6.6.1.7.2.**
  Timing of a dummy canister installation after puff loss loading to the canister(s).
  × Before measurement of depressurisation puff loss overflow
  ○ After measurement of depressurisation puff loss overflow

- **Annex 1 Paragraph 6.6.1.8.2.**
  - Paragraphs referenced to explain the 20 → 35°C ambient temp. raise in SHED
    × Annex 1 Paragraph 6.6.1.7.2.
    ○ Annex 1 Paragraph 6.6.1.6.
  - Paragraphs referenced to explain the end of Canister puff loss loading
    × Annex 1 Paragraph 6.6.1.6.
    ○ Annex 1 Paragraph 6.6.1.7.2.



(Reference) Feature of Sealed Tank System and New Words



① No fuel vapour flow into the canister during parking because the control valve kept closed.
② Fuel vapour into the puff loss canister only before refueling.
(The relief pressure valve opens when the refueling event starts, then closes after tank pressure goes down.)

Copy & paste error found after Jan. GRPE approval

■ Copy & paste error

- Annex 1 Paragraph 7.1.
  Hydrogen to carbon ratio (H/C) used for calculating test results of hot soak losses. (H/C shall be different depending on temperature)

- Background:
  This equation and factors were first copy & pasted from UNR-83-07 for calculation of puff loss overflow measurement in SHED. (only needed 2.33)
  However, it was moved to Annex 1 Paragraph 7.1. to use in all calculation and avoid reference to UNR 83-07. (not knowing 2.20 for hot soak losses is missing)

[Calculation of evaporative test results]

$$M_{HC} = k \times V \times \left(\frac{C_{HCf} \times P_f}{T_f} - \frac{C_{HCi} \times P_i}{T_i}\right) + M_{HC,out} - M_{HC,in}$$

$$k = 1.2 \times 10^{-4} \times (12 + \mathbf{H/C}), \text{ in } (g \times K/(m^3 \times kPa));$$

× H/C is the hydrogen to carbon ratio and has the constant value of 2.33;

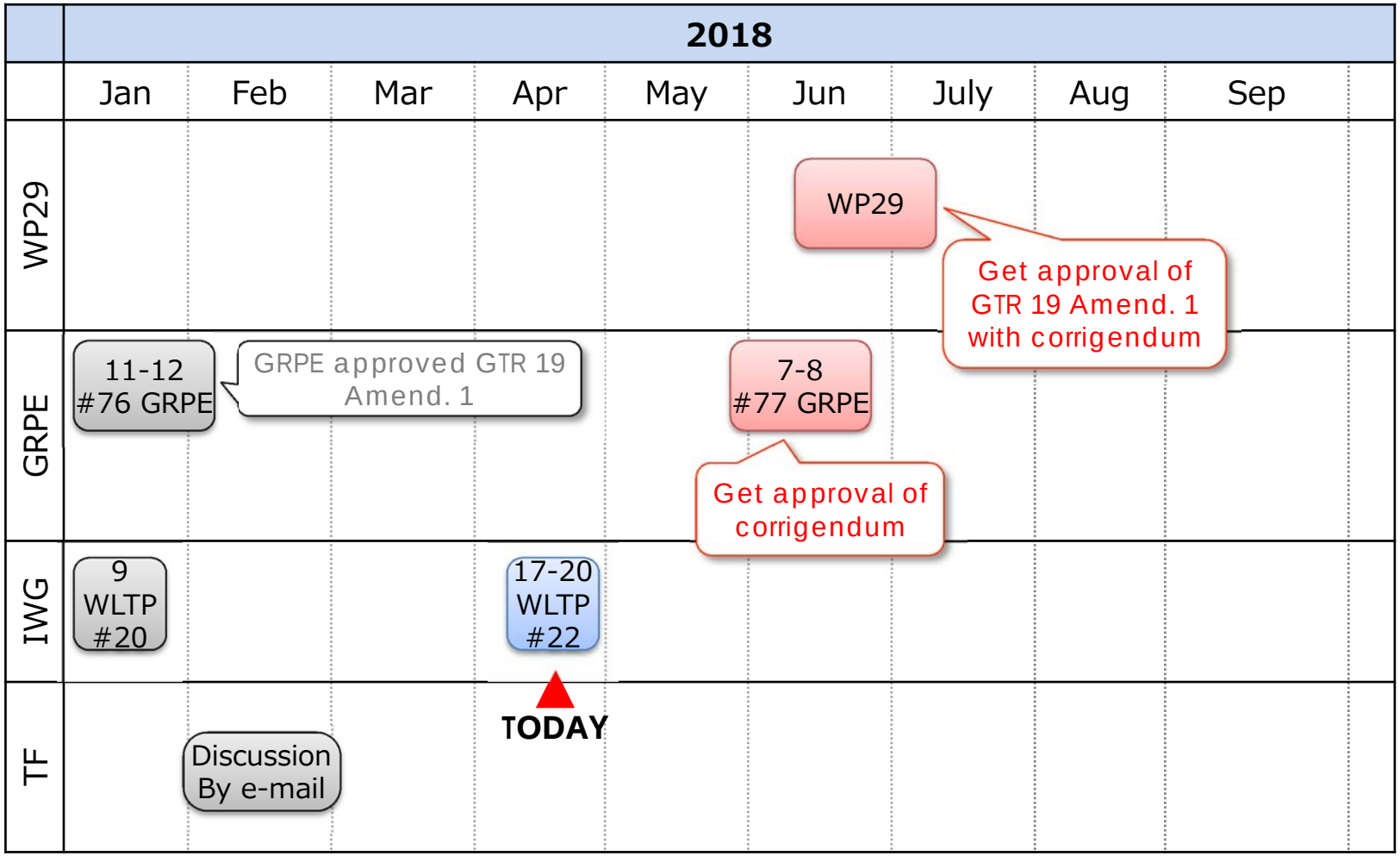
○ H/C is the hydrogen to carbon;

H/C is taken to be 2.33 for puff loss overflow measurement in SHED and diurnal test losses;

H/C is taken to be 2.20 for hot soak losses;

Schedule & Request for Confirmation

- The correction of corrigendum is already sent to June GRPE/WP29 as proposal by EC and Japan. (ECE/TRANS/WP.29/2018/73/Add.1)



Would like to ask for confirmation of these errors by WLTP IWG.

Thank you very much
for your attention!