

Evaluation of Refueling emissions and its OFP

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Refueling emissions have been considered one of the main VOC sources in Japan. However there is only a few study which discuss the emission mechanism and its detailed effect on total VOC emissions in Japan. We performed the experiments using sealed housing evaporative determination (SHED) to evaluate the refueling emissions. For the measurement devices, we adopted not only total hydrocarbon, but also the composition analysis using proton transfer reaction plus switchable reagent ion mass spectrometry (PTR+SRI-MS) to estimate the ozone formation potential of refueling emissions. We also tested some prevention devices of refueling emissions.

Keywords: Refueling emissions, VOC, Ozone formation potential, PTR-MS