

IMMA response to India's comments
on EPPR-11-21e-
IMMA on vapour storage volume

Background

- IMMA had proposed the following in the 11th EPPR regarding family definition on vapour storage volume.

“identical method of storage of the fuel vapour (i.e. trap form ~~and volume~~, storage medium, air cleaner (if used for evaporative emission control) etc.);

Identical or higher volume of the fuel vapour storage system”

- India had requested for additional justification/data in support of this proposal

Justification

- The evaporative emission control system basically store the vapour coming out from the fuel tank initially,
 - Without it being released to atmosphere
 - Till the storage volume becomes full.
- Once this storage volume becomes full, rest of the fuel vapour escapes into atmosphere.
- This fuel vapour storage volume is kept large enough so that the fuel vapour escaping to atmosphere (after it becomes full) is within permissible limit.
- The stored fuel vapour is emptied by purging when the engine is running.

justification

- Types of fuel storage systems:
 - Carbon Canister (most popular method)
 - A specially built space on the clean side of air filter (Useful only when the vapour release from the fuel tank is marginally more than the permitted limits. But rarely used)
- But, irrespective of the method used, the escape to atmosphere will be only after the vapour storage area is full.
- Therefore, evaporative emission test result of vehicle with a larger fuel vapour storage volume will be always lower than that with a smaller storage volume