Off-Road Spark Ignited Engine/Equipment Certification

2020 Truck and Engine Manufacturers Association Compliance Workshop
April 21 - 23, 2020
Use CA LEV III Gasoline for Off-Road Spark Ignited Engine/Equipment Testing

• New exhaust certification testing starting MY 2020
  • Small Spark-Ignited Engines
  • Large Spark-Ignited Engines
  • Spark-Ignited Marine Engines
• Production-line testing
• For MY 2021, any new zero-hour and deterioration factor (DF) testing
• Manufacturers encouraged to coordinate with CARB and EPA to use same test data
SSIE Evap: MY 2021+ Design-Based Certification Component EOs

- Previously for MY 2020 certification only, manufacturers were allowed limited use of previously certified components
- For MY 2021+ certification, manufacturers will **not** be allowed to use previously certified components
  - Manufacturers must provide MY 2020+ certified component EOs for fuel tanks, fuel lines and carbon canisters
  - Verify component EOs in the web link below before submitting:
Top Certification Issues
General

• Provide emission warranty statement that meets the regulatory requirements. Manufacturers must submit:
  • Manufacturers’ warranty statement
  • CARB’s warranty statement (verbatim as required in regulations)
  • A valid warranty service #
• Request manufacturers self evaluate Tamper Resistance Methods before submitting samples
Top SSIE Evap Certification Issues

• Submit bond worksheet and copy of bond (if applicable)
• Use updated naming convention for evap family name
• Provide a detailed description and schematics of the evaporative emission control system
  • Running loss control description and approval #
  • Include a schematic layout of how the evap system components are configured
Top SSIE Performance-based Evap Certification Issues

• Measure and report hot soak emissions
• Carbon canister must meet minimum working capacity specified in TP-902
  • At least 1.4 g/L of fuel tank nominal capacity for tanks $\geq$ 3.78L
  • At least 1.0 g/L of fuel tank nominal capacity for tanks $<$ 3.78L
• Report carbon canister working capacity in grams/Liter
• No more carry across allowed for evaporative emissions test data
Top SSIE Design-based Evap Certification Issues

• Continued use of 2019 and older MY component EO numbers
• Listing uncertified evap components in the cert application
• Carbon canister undersized for fuel tank volume
  • Check fuel tank limits specified on canister component EO
  • e.g. Maximum nominal fuel tank volume specified in carbon canister EO is 4L, but mfr using a fuel tank with nominal volume of 5L.