



2021 Truck and Engine Manufacturers Association Compliance Workshop

April 27, 2021

Outline

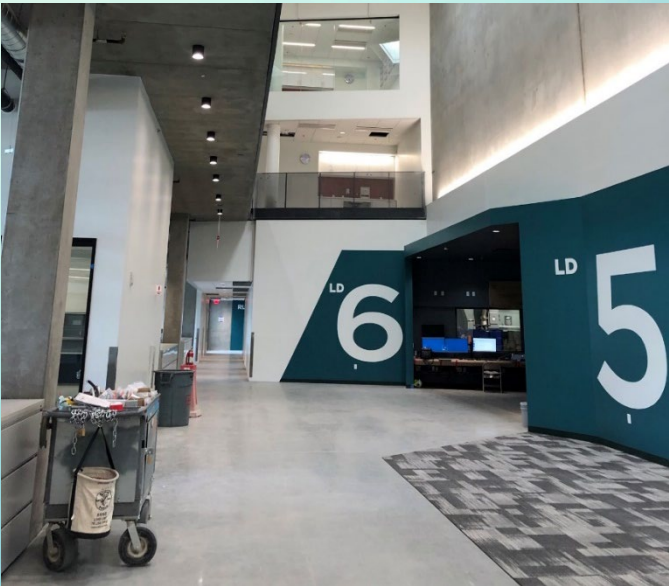
- Riverside Updates
- Organization Chart
- Certification Statistics
- Heavy Duty DF Validation
- MY22+ California Warranty
- Certification Fee Updates
- Refueling Requirements
- Manufacturer's Reports
- Certification Issues/Comments
- Update on ECERT, DMS, and the Executive Order Webpages
- Heavy Duty GHG Section Overview
- Off-Road Tier 5 Update
- In-Use Compliance Update
- EMA Q+A

Relocation to Riverside in June 2021

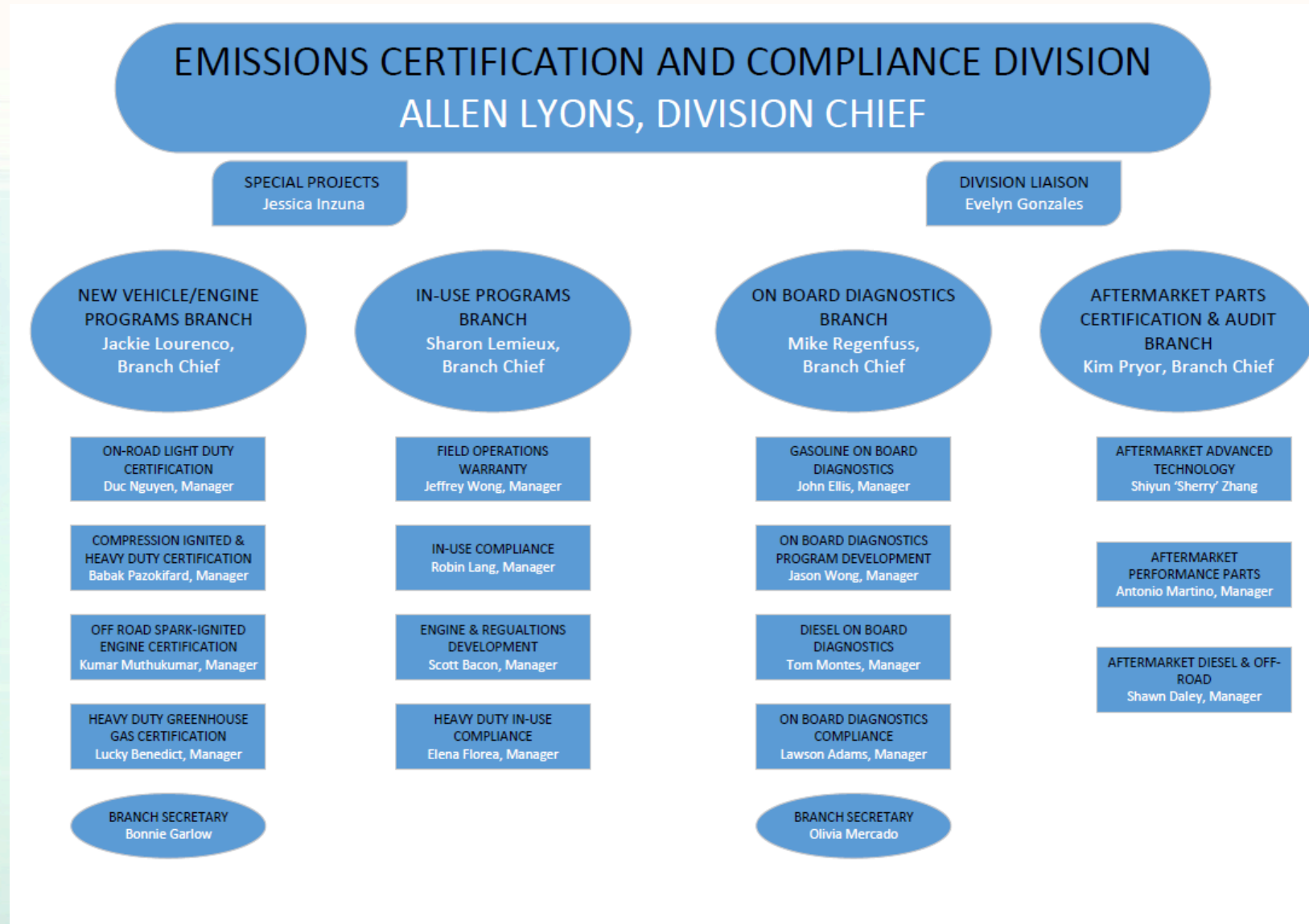
Picture Below: April 2021



Relocation to Riverside in June 2021



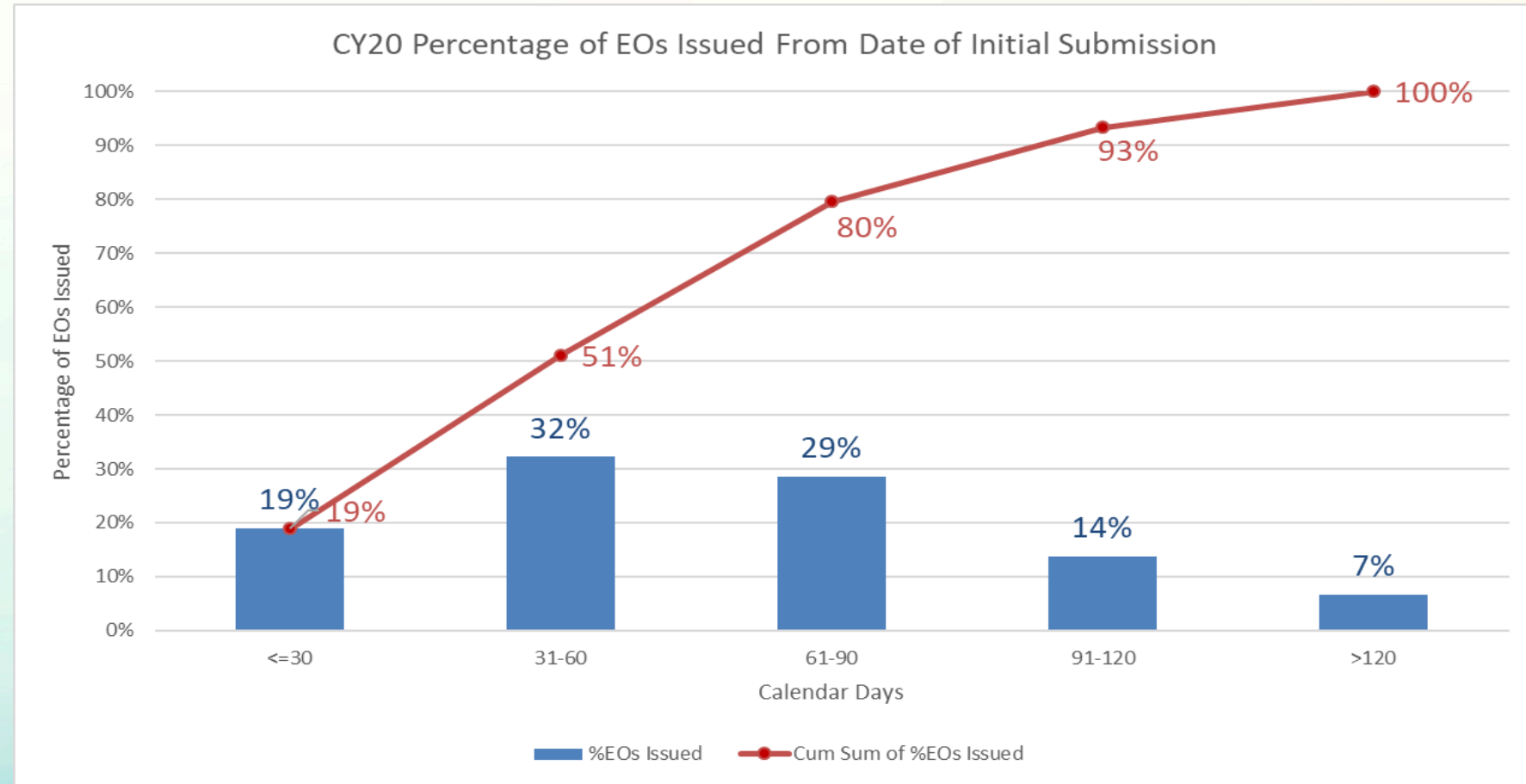
Emissions Certification and Compliance Division Organization Update



2020 Certification Timing

Application to EO Signature Averaged 65 Days

- 2958 EOs
- Categories:
 - Off-Road Gasoline
 - HD Otto Cycle
 - HD Diesel
 - HD Vehicles
 - Light Duty Vehicles



Diesel-SCR DF Validation Reminders

- All MY22 Diesel SCR-equipped engine families need:
 - DF Validation plan approved prior to testing
 - DF Validation data to be submitted and approved prior to first MY22 EO
- DF Validation Resource Links:
 - On-Road Certification Program Webpage:
<https://ww2.arb.ca.gov/our-work/programs/road-heavy-duty-certification-program>
 - Off-Road Compression Ignition Program Webpage:
<https://ww2.arb.ca.gov/our-work/programs/road-compression-ignition-certification-program>

Extended CA HD Emissions Warranty Begins with MY22

- MY2022 warranty mileage periods extended:
 - Light-Heavy Duty engines from 100,000 to 110,000 miles
 - Medium-Heavy Duty engines from 100,000 to 150,000 miles
 - Heavy-Heavy Duty engines from 100,000 to 350,000 miles
 - Or five years, whichever first occurs

Certification Fees Approved by CARB

- Board approved updated fees at April 22nd public hearing
- 15-day changes will be released for comments shortly
- Staff developing fee payment process
- Fees to begin with 2023 model year
- Contact Kathleen Mead for any questions: kathleen.mead@arb.ca.gov
- More information:

<https://ww2.arb.ca.gov/mobile-source-certification-and-compliance-fee-regulation-meetings-workshops>

New Refueling Requirements

- MY 2022 heavy-duty vehicles are subject to the new refueling testing requirements. 13 CCR 1978
 - Gasoline-fueled
 - Alcohol-fueled
 - Diesel-fueled
(optional compliance statement)
 - LPG
 - NG
 - Hybrid electric vehicles

Reminder to Submit Required Manufacturer's Reports

- The following reports are required to be submitted annually
 - Emergency Usage (OFCI)
 - ABT
 - Engine Replacement
 - Production
 - Service Information
 - Flex Engine
 - Warranty
 - Defect

Certification Issues

- DF testing needs to be performed on the engine family's parent rating that is intended to be entered into commerce
- Introduction of a new substrate material into an engine family's emissions control systems, requires new DF run, engineering evaluation, etc. to justify part durability and emissions impact
- Maintenance performed (parts and timing) on DF engine must be the same as required in owner's manual

Certification Comments

- CARB encourages manufacturers to present a Certification Preview Plan (CPP) yearly
- Manufacturers are encouraged to use streamline certification process when possible according to Mail-Out# ECARS 2015-7

E-CERT Updates

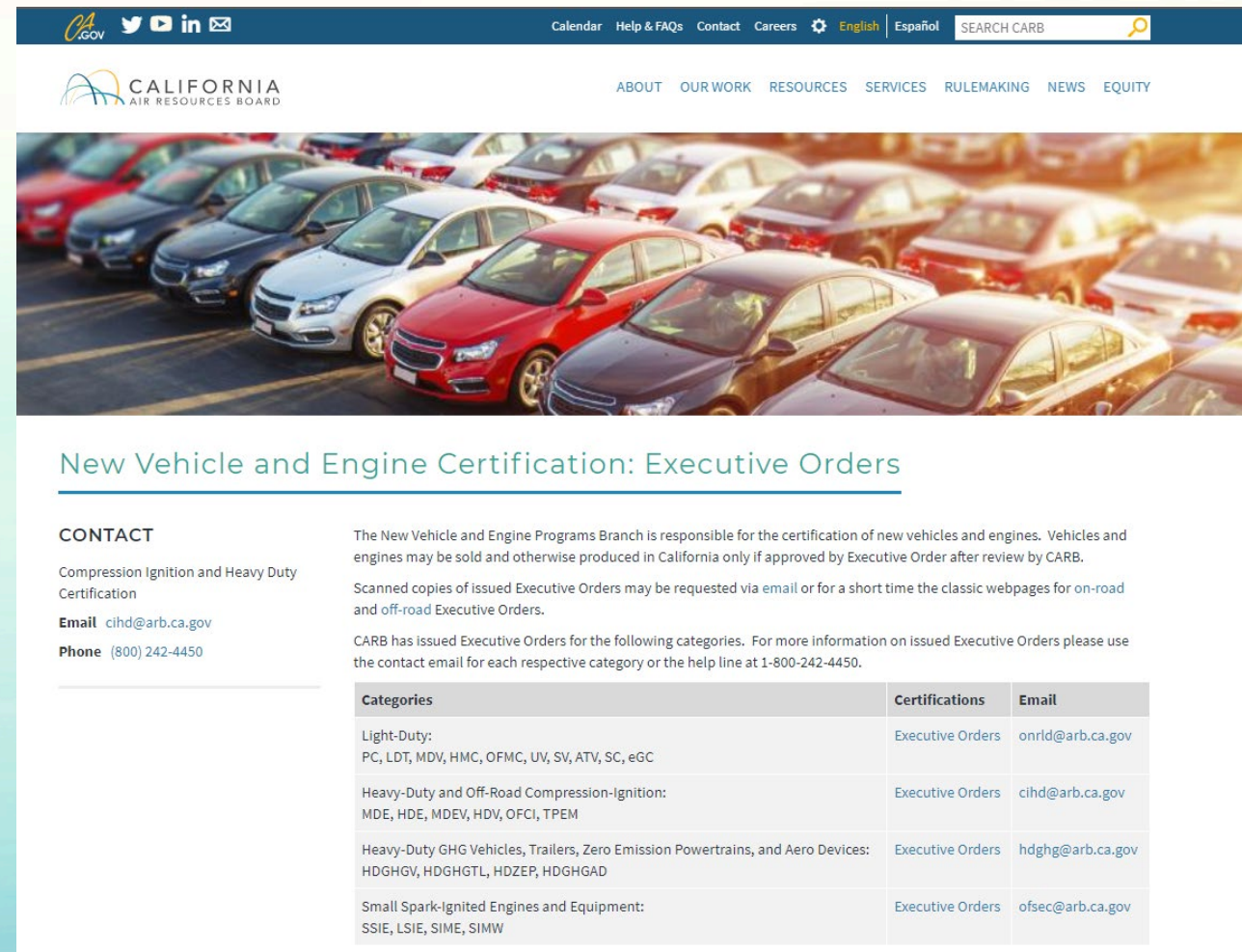
- Data requirements documents are currently being updated. CARB expects to submit these documents prior to E-CERT workshop
- CARB planning to schedule workshop this summer to present changes made and invite manufacturers to volunteer for system testing

DMS Updates

- CARB is developing replacement, M-Files, to current EDMS
- M-Files is a more Windows-friendly interface
 - Automatic file naming
 - Drag and drop files
- Target to finish project by late summer 2021 with a test launch target of some categories in fall 2021
- More information, workshops, and updates to follow

New Executive Order Webpage

- <https://ww2.arb.ca.gov/new-vehicle-and-engine-certification-executive-orders>
- Work in progress



CONTACT

Compression Ignition and Heavy Duty Certification

Email cihd@arb.ca.gov

Phone (800) 242-4450

The New Vehicle and Engine Programs Branch is responsible for the certification of new vehicles and engines. Vehicles and engines may be sold and otherwise produced in California only if approved by Executive Order after review by CARB.

Scanned copies of issued Executive Orders may be requested via email or for a short time the classic webpages for on-road and off-road Executive Orders.

CARB has issued Executive Orders for the following categories. For more information on issued Executive Orders please use the contact email for each respective category or the help line at 1-800-242-4450.

Categories	Certifications	Email
Light-Duty: PC, LDT, MDV, HMC, OFMC, UV, SV, ATV, SC, eGC	Executive Orders	onrld@arb.ca.gov
Heavy-Duty and Off-Road Compression-Ignition: MDE, HDE, MDEV, HDV, OFCI, TPEN	Executive Orders	cihd@arb.ca.gov
Heavy-Duty GHG Vehicles, Trailers, Zero Emission Powertrains, and Aero Devices: HDGHGV, HDGHGTL, HDZEP, HDGHGAD	Executive Orders	hdghg@arb.ca.gov
Small Spark-Ignited Engines and Equipment: SSIE, LSIE, SIME, SIMW	Executive Orders	ofsec@arb.ca.gov

Heavy Duty GHG Certification Section Overview

- Section Introduction (Staff and Certified Categories)
- Certification Activities
- Lessons Learned from MY2021 Certification (AC Leakage, etc.)
- Trailer Certification
- ZEP Certification
- Reminders to Manufacturers

More details will be presented Wednesday (4/28/21) during the on-road breakout session

2021 MY Lessons Learned

- Awareness of differences between CARB and EPA regulations in 40 CFR 1037
- Application reviews take longer than we all anticipated
- AC Documentation/Evaluation for CARB –
 - There are additional regulatory requirements
 - Improvements in submittal reviews
- Phase 2 application templates need to be complete

Tier 5 Elements Under Evaluation

Criteria pollutants and CO2 standards

- More stringent NOx and PM standards
- Add CO2 engine standard
- Consider idle limits
- Extend useful life periods
- Require OBD
- New low load cycle

More details will be presented Wednesday (4/28/21) during the off-road CI breakout session



In-Use Compliance Update

CARB Contacts and Recall Details for Voluntary, Influenced or Ordered Recalls

Point of Contact	Recall Details	Recall Plan Content
<p>In-Use Compliance Section</p>	<ul style="list-style-type: none"> • Emissions related • In-use compliance • HDIUT and HDIUC 	<p>California Code of Regulations</p> <ul style="list-style-type: none"> • 13 CCR § 2114 (voluntary and influenced recalls)
<p>Warranty Section</p>	<ul style="list-style-type: none"> • MST • OBD • EWIR • Safety 	<ul style="list-style-type: none"> • 13 CCR § 2125 (ordered recalls)

EMA Q+A

- Q: Can CARB provide information on timing of issuance and submission of in-use testing orders?
- A: **No 2020 Test Orders** were issued due to global situation
 - **2021 Test Orders**
 - To be issued by the end of June 2021
 - Manufacturers have 18 months to complete testing and reporting
 - Deadline--December 31, 2022

EMA Q+A

- Q: Can EPA and CARB provide a wrap-up summary of MY2021, and key compliance issues observed in the past year (including clarifications and guidance for addressing those issues)?
- A: Key compliance and certification issues will be covered in more detail during the On-Highway Breakout Session
 - HDIUT vehicle screening practices
 - DF Testing of parent engine intended for sale
 - Maintenance on test engines meeting requirements
 - Abuse of Emergency AECD
 - Prohibition of biodiesel less than 20%

EMA Q+A

- Q: What extra information is CARB or EPA planning to require as manufacturers submit for 2022 certification?
- A: CARB has provided some information through this general session (e.g. Warranty, DF Validation, etc.) More information will be presented through the breakout sessions.

EMA Q+A

- Q: Please provide an update on the COVID-19 guidance issued by the agencies in 2020, specifically, which elements of the guidance remain applicable. Manufacturers continue to face challenges related to the pandemic.
- A:
 - CARB letter CIHD 2020-009 provided general guidance for manufacturers with difficulty meeting requirements due to pandemic-In effect as needed.
 - Contact CARB with requests as needed.

EMA Q+A

- Q: Can used 49-state (Federal-certified) equipment and vehicles be used in California?
- A:
 - Generally yes
 - Equipment and vehicles operating in CA may be subject to operational restrictions
 - Health and Safety Code 43156: Non-CA certified motor vehicles with less than 7500 miles may not be registered for highway use because they are considered new

EMA Q+A

- Q: Is used (previously certified) equipment that is under an EPA test exemption for testing outside of California required to have an experimental permit if brought into California?
- Q: Does used 49-state (previously EPA-certified but not California-certified) equipment that is under an EPA test exemption need to have an experimental permit if brought into California?

What Engines/Vehicles need Experimental Permits?

- An experimental permit allows for testing of:
 - Experimental motor vehicle pollution control devices installed in:
 - Used motor vehicles (not yet been certified by CARB)
 - Engines
 - Equipment
 - Experimental and prototype:
 - Motor vehicles
 - Engines
 - Equipment
- Permits can be for a single or fleet of vehicle(s), engine(s), or equipment(s)
- Permits are valid for one year, but may be renewed upon request

How to Obtain an Experimental Permit

- Manufacturers need to submit a letter to CARB requesting an experimental permit
- The letter must include:
 - A brief description of the proposed modification, basic theory of operation, and its functional characteristics
 - A defined test program
 - Time period of test program
 - Who is operating the vehicle(s), engine(s), and equipment
 - Affected emission control components
 - Description of each test vehicle, engine, and equipment
 - Statement indicating no vehicle, engine, or experimental technology shall be sold or leased to an ultimate purchaser for operation in California
 - Plan for disposition of the test vehicle(s), engine(s), and equipment at the end of the testing program

Requirements for an Experimental Permit

- The permit must always be carried in the glove box or at the test site of the test vehicle, engine, or equipment during operation anywhere in California
- Fleet type permits must provide a status report before the existing permit can be renewed
- Fleet report is based off the Manufacturers Advisory Correspondence (MAC) 98-03

EMA Q+A

- Q: Clarity is needed regarding CARB's streamlined running change process – specifically relating to justification and information on what is deemed a “running change,” and what is not
- Q: With regard to the November 2020 EPA Tampering Policy, what is the difference between a field fix that requires CARB reporting versus aftermarket parts that do not need reporting?
- A: Running changes and field fixes are changes from what was described in the certification application.
- A: A running change is submitted during production/for production engines and a field fix is submitted after engines are in the field (post production).

EMA Q+A

- A: California Vehicle Code 27156: Anti-tampering
 - (c) No person shall install, sell, ...any ... mechanism ... for use with, ...a required motor vehicle pollution control device or system that alters or modifies the original design or performance...
 - (h) This section shall not apply to ...mechanism found by resolution ...by CARB ...
... Not to reduce the effectiveness of a required motor vehicle pollution control device and... To result in emissions from the ... altered vehicle that are at levels that comply with existing state or federal standards for that model-year ...

EMA Q+A

- Q: Can EPA provide a breakdown of changes from the tech amendment and potential impacts/most noteworthy changes? Additionally, can CARB provide an update on their plan to issue similar “tech amendments” or regulations to match?
- A: Some regulations are proposed to be implemented through the Omnibus regulations. Manufacturers should contact appropriate MSCD staff with any specific questions on deviations, flexibilities, etc. from the tech amendment.

EMA Q+A

- Q: Can a 4X-state (e.g., a 45-state) vehicle be re-certified to a 50-state vehicle if no material changes, or only minor changes (such as changes to the label), are made? If hardware changes are made?
- A: There is no such thing as re-certification. Re-certification is not possible for an engine, vehicle, equipment, etc. since it has been certified, produced, advertised, or entered commerce. A manufacturer may submit a new certification application but must meet all applicable CA requirements (warranty, OBD, etc.)

EMA Q+A

- Q: Please provide an update and clarification on E-Cert implementation timing, especially with regard to the submission of applications for MY2022 certification.
- A: CARB has provided updates through this general session. Additionally, CARB has already been accepting MY2022 applications with previously used FMP format.

EMA Q+A

- Q: DMS training videos use Adobe Flash which is no longer supported in many popular web browsers - will these videos be updated, or is there another way to view them without using Flash?
- A: At this time, we are not recreating updated tutorials. CARB will be using ECMX only until M-Files is operating. CARB will continue to provide monthly DMS training to interested manufacturers that covers the material in the tutorials.

EMA Q+A

- Q: DMS workflow does not show where applications are in the process, can this information be made available to the manufacturer?
- A: Assigned certification staff update the status of each document as the review process continues (e.g. Accepted for filing, reviewed, etc.)
Manufacturers can check the status of the individual documents at any time. When the complete workflow process is approved or rejected, the system moves it to the finished processes tab. Check with certification engineer on status.

EMA Q+A

- Q: DMS workflow is visible only to the originator - can the status of workflow be made available to all the DMS users (or pre-identified alternates) in cases where the originator is indisposed?
- A: Each manufacturer chooses who has DMS access. If manufacturers want their staff to see other staff's submitted processes, they need to check the box All users, and then click on Search. The system will display all manufacturer pending or finished processes.

EMA Q+A

- Q: In DMS, some folders appear to be missing metadata, such that users cannot properly update or tag documents; will users be notified when folders have been modified (and provided information as to why the changes were made)?
- A: Manufacturer users can create engine or test group folders and upload files. Manufacturer users are responsible for providing correct and complete metadata for both.

Contact Information

New Vehicle and Engine Programs Branch

Jackie Lourenco, Branch Chief

(626) 450-6152

Jackie.Lourenco@arb.ca.gov

Compression Ignition and Heavy Duty Certification Section

Babak Pazokifard, Manager

(626) 450-6128

babak.pazokifard@arb.ca.gov

Heavy Duty In-Use Compliance Section

Elena Florea, Manager

(916) 718-5942

Elena.Forea@arb.ca.gov

In-Use Programs Branch

Sharon Lemieux, Branch Chief

(626) 277-9218

Sharon.Lemieux@arb.ca.gov

Off-Road Spark-Ignited Engine Certification Section

Kumar Muthukumar, Manager

(626) 575-7040

kumar.muthukumar@arb.ca.gov

Heavy-Duty Green House Gas Certification Section

Lucky Benedict, Manager

(626) 450-6181

Lucky.Benedict@arb.ca.gov

Questions

