Outline

- Organization
- Certification Statistics
- DMS Update
  - DMS Statistics
  - Reminders
- Certification Streamlining
- E-Cert Update
- General Certification Topics
ECARS
New Vehicle/Engine Programs
Branch
Revised: 5/8/11

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California Environmental Protection Agency
Air Resources Board
Volume of EOs issued in 2013

Issued Executive Orders 2013 Calendar Year

- Off-Road Small SI Engines-Exhaust
- Off-Road Small SI Engines-Evap.
- PC/LDT/MDV/MDE
- Off-Road CI Engines
- On-Road Motorcycles
- Off-Road RV
- On-Road Heavy-Duty
- SI Marine Engines
- Off-Road Large SI Engines
- Red-Sticker OFMC-ATV

California Environmental Protection Agency
Air Resources Board
DMS and E-Cert Update

- DMS Reminders
- Certification Streamlining – Update
- E-Cert Status
Update Excel Contact Sheet & Electronic Signature Page

- Review and update
- Include only active contacts and identify inactive contacts quickly
- Wet signature by manufacturer’s authorized company representative (not third party consultants)
- Mail-out coming soon requesting Electronic Signatures and contact sheet to be updated
Other DMS Reminders

- Company name change
  - Official letter from manufacturer’s authorized representative on company letterhead
  - Specify start date of new name

- DMS web based training for manufacturers’ representatives offered each month
Certification Streamlining - Update

- Increase efficiency
- Provide structure and formality
- Provide feedback to manufacturers in a timely manner
- Use consistent communication protocol with manufacturers across all categories
- Draft to EMA
2013 Calendar Year Average Application Processing Time

<table>
<thead>
<tr>
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<th>Calendar Days</th>
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</thead>
<tbody>
<tr>
<td>Notification Time</td>
<td>20</td>
</tr>
<tr>
<td>EO Process Time from Date of Last Submittal</td>
<td>20</td>
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<tr>
<td>EO Process Time from Date of Initial Submittal</td>
<td>50</td>
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</tbody>
</table>

California Environmental Protection Agency
Air Resources Board
2013 Calendar Year Average Application Processing Time

- CIHD
- On-Road
- Off-Road

Calendar Days

- Notification Time
- Process Time from Date Last Submitted
- Process Time from Date Submitted
Diesel Engine E-Cert Status

• Staff finalizing Data Requirements by adding mode specific data requirements

• Workshop in the Fall
  • Present Data Requirements
  • Present XML schema and MS InfoPath form at workshop
General Certification Topics

- Compliance Reports
- Warranty Language
- Certification Application (FileMaker Pro)
Compliance Reports

On-Road

• End-of-Year ABT (90 days)
• Final ABT (270 days)
• Certification Fee (Mailout)

Off-Road

Engine Mfr.

• End-of-Year Sales Report (Feb. 15)
• End-of-Year ABT (90 days)
• Final ABT (270 days)
• Replacement Engine (conclusion of model year)

Equipment Mfr.

• Flex Sales Report (Mar. 31)
Warranty Statement Updates

- Major review in 2013
- Identify “engine” manufacturer name
- Specify contact phone number
- Provide complete list of emissions related parts
- Identify the applicable warranty period
Warranty Statement Updates

- Emergency repair provisions identified in 13 CCR §2036(d)(4)
  - Seek nearby service
  - Reimbursable
FileMaker Pro: Common Issues

- Family Information Form
  - Manufacturer Name not included (top)
  - Intended Service Class (#16) incorrect
  - Engine Family Name (#4) incorrect / inconsistent
- Test Information Form
  - Emission Values (#16-18) printed with incorrect significant figures
  - Cert Levels (#18) incorrectly calculated
- Engine Model Summary
  - ECS acronyms (#9): Oxidation catalyst (DOC or OC) is different than AMOX catalyst
FileMaker Pro: Significant Figures

1. Official Test Results Date:

<table>
<thead>
<tr>
<th>Test 1</th>
<th>Test 2</th>
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<tbody>
<tr>
<td>HC/OMHCE</td>
<td>0.07</td>
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<tr>
<td>NMHC/OMNMHCE</td>
<td></td>
</tr>
<tr>
<td>HC + NOx</td>
<td></td>
</tr>
<tr>
<td>CARBON MONOXIDE</td>
<td></td>
</tr>
<tr>
<td>OXIDE OF NITROGEN</td>
<td></td>
</tr>
<tr>
<td>PARTICULATE</td>
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</tr>
</tbody>
</table>

2. FileMaker Pro - [TemplateEZ1.2.fp5]

3. Crankcase emissions (CCEs)

   - CCEs
   - ACCELERATION
   - LUGGING (Gen)
   - PEAK (Gen)
   - IDLE CO %
   - CO2
FileMaker Pro: Significant Figures

4. **Number Format for “FA9_nmhcot”**
   - General format
   - Leave data formatted as entered
   - Format as decimal
     - Fixed number of decimal digits: 3
     - Use thousands separator
   - Show zeroes as: No
   - Use notation: Currency (leading)
     - Currency symbol: $
   - Do not display number if zero

5. **FileMaker Pro - [TemplateEZ1.2.fp5]**
   - **Browse Mode**
     - Ctrl + B
     - Find Mode
     - Ctrl + F
   - **Layout Mode**
     - Ctrl + L
     - Text Ruler
     - Separators
       - Decimal separator: .
     - Use color.
     - Use thousands separator.
   - **Preview Mode**
     - Ctrl + U

6. **Official Test Results**
   - Date: 16. Official Test Results Date: FA9
   - Test 1: 0.072
   - Test 2: 0.072
   - HC/OHCE
   - NMHC/OMNMHCE
   - HC + NOx
   - CARBON MONOXIDE
   - OXIDE OF NITROGEN
   - PARTICULATE
Certification

On-Road Topics

- Labels
- OBD
- Alternative Fuel Retrofit Systems
- Service Information Rule
- Greenhouse Gas Regulations
Several issues with engine labels:
- Incorrect or missing list of Emissions Control System (ECS) components
- Incorrect or missing FEL value
- Missing storage tank capacity (Evaporative)
On-Board Diagnostics

• MY2014: All engine families need to be equipped with OBD, except alternative fueled engines (EMD+)
• Hybrid Engine OBD System
• Upload OBD approval letter to DMS
Alternative Fuel Retrofit System

- ARB approved amendments to the existing procedures in September 2013
- Usable now
- Applicable to 2004 and later used vehicles and engines only
  - Manufacturers may request certification based on data from previously certified new vehicles and engines – 2004 and later only
  - New vehicles and engines certification requirements are not changed
Alternative Fuel Retrofit System

- Pre-certification requirements:
  - OBD, durability demonstration, emission testing, labeling, warranty, installation and maintenance procedures, etc.
- Post-certification requirements:
  - Record-keeping, annual sales reporting, BAR inspection, in-use enforcement testing
For more detailed information please refer to the Workshop held on November 12, 2013 at El Monte, CA.

http://www.arb.ca.gov/msprog/onroad/altfuelconv/altfuelconv.htm
Service Information Rule

- 13 CCR §1969
- Manufacturers are required to submit annual reports for Service Information website availability
- Some manufacturers have not provided the information to ARB yet
ARB adopted Phase I HD GHG Standards in December 2013.

Requirement for manufacturers of HD vehicles and engines to meet GHG emission limits

ARB goal is to minimize submissions from manufacturers
ARB Harmonized With EPA Phase I HD GHG

- Key program websites:
  - http://www.arb.ca.gov/msprog/onroad/phaselghg/phase1ghg.htm
OFCl
Certification Topics

• Compliance with FEL limits
• Labels
• Deterioration Factors
• Production Reports
• TPEM Engines
ALT 20% (NOX, PM, NOX + NMHC) FEL Limits

• Submit AB&T plan (beginning and end of model year)

• Provide calculations detailing that engines certified to the ALT 20 % FEL CAP standard do not exceed 20% of U.S. production volume in any single model year in each power category

• Submit to DMS
Engine Labels

• Information required to be on the label:
  • List of Emissions Control System (ECS) components
  • FEL value (if above standard)
  • Applicable Power Category
  • Ultra Low Sulfur Fuel only
  • Correct statement of compliance
Deterioration Factors

• Carryacross of on-road DFs to off-road engines, where applicable

• DF carryacross requires completion of the engine and aftertreatment parameters table

• Two DFs needed for Tier-4 ➔ NRTC and SS
Production Reports

• Final production numbers (flex engines and regularly certified engines) are due within 45 days from the end of model year
• Report 50-State production volume (include California sales if available)
• AB&T numbers must be submitted within 90 days from the end of the model year. Final report is due within 270 days from the end of model year
• Submit reports using ARB specified format to DMS
TPEM Engines

- ARB responding to EMA questions
- TPEM Engine MAC will be released after discussion with EMA
- Additional guidance for equipment manufacturers forthcoming
  - Submittals
  - DO NOT e-mail Annette, new e-mail address: TPEM@arb.ca.gov
  - Reports
  - Hardship requests: ARB & EPA
Upcoming Regulations

- Greenhouse Gas Regulations
- Optional NOx Standards
Questions