

Air Resources Board Certification Update

Certification, DMS, and E-Cert

2014 EMA Certification Workshop

May 13, 2014

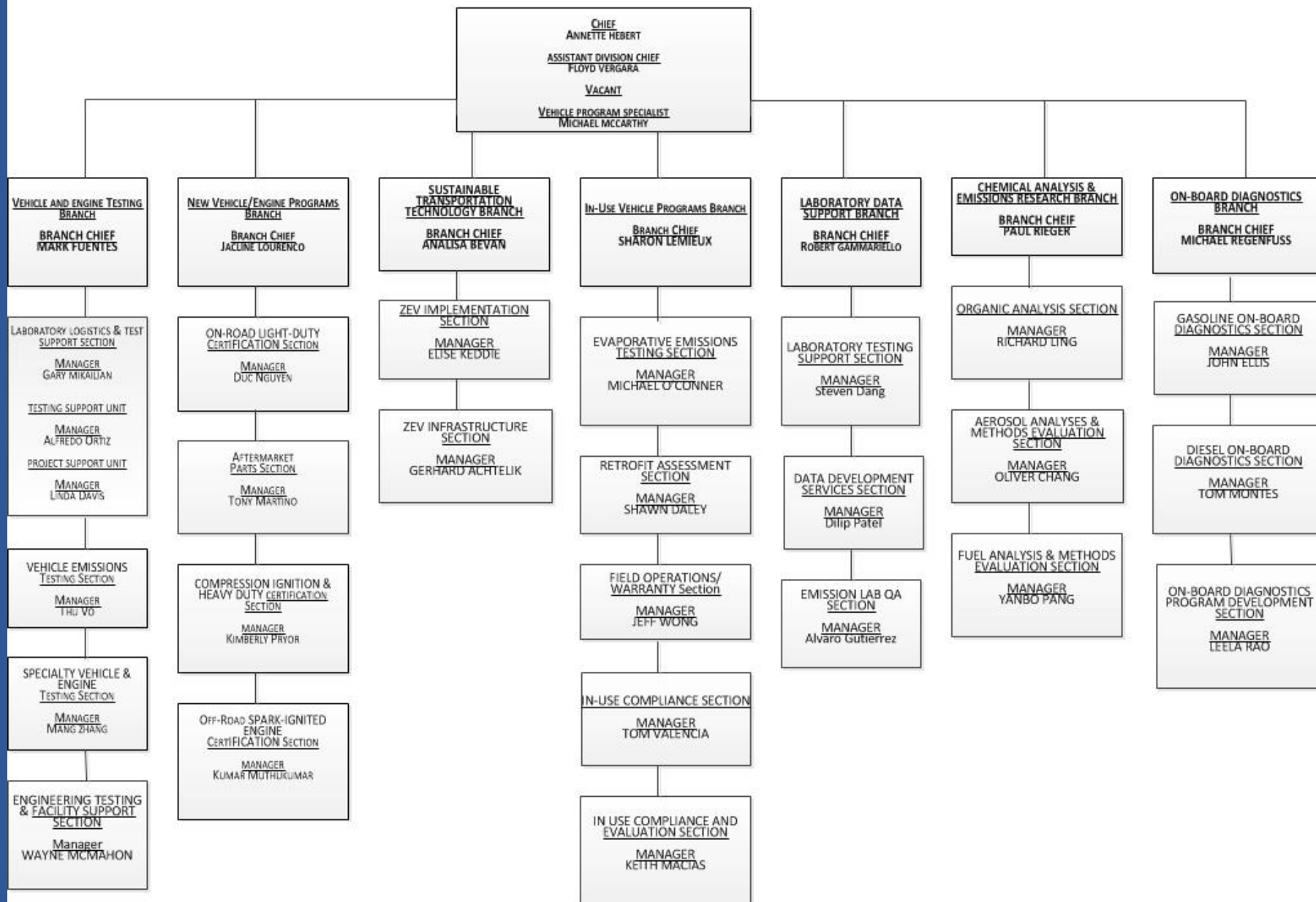
California Environmental Protection Agency

 **Air Resources Board**

Outline

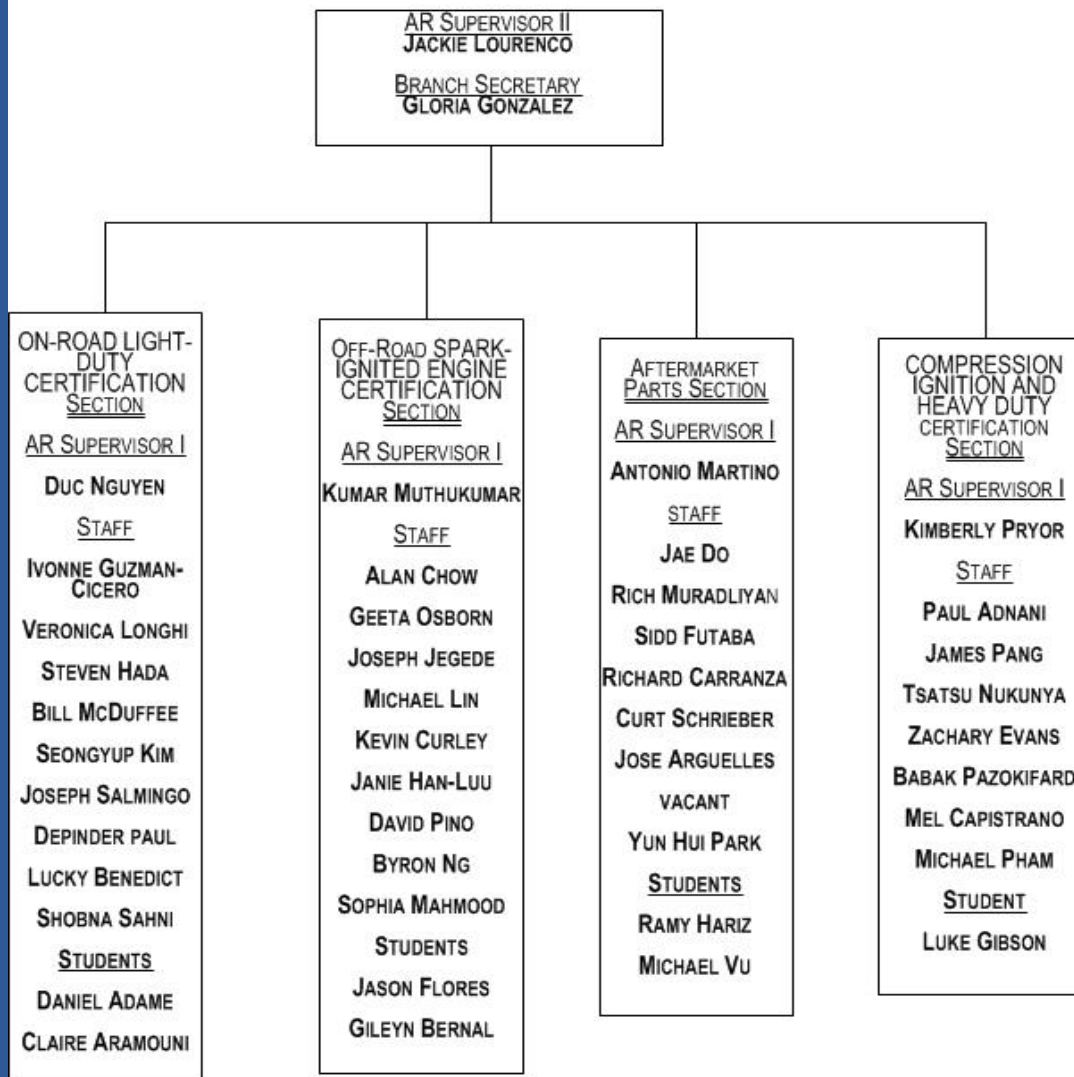
- Organization
- Certification Statistics
- DMS Update
 - DMS Statistics
 - Reminders
- Certification Streamlining
- E-Cert Update
- General Certification Topics

Emissions Compliance, Automotive Regulations and Science Division



ECARS New Vehicle/Engine Programs Branch

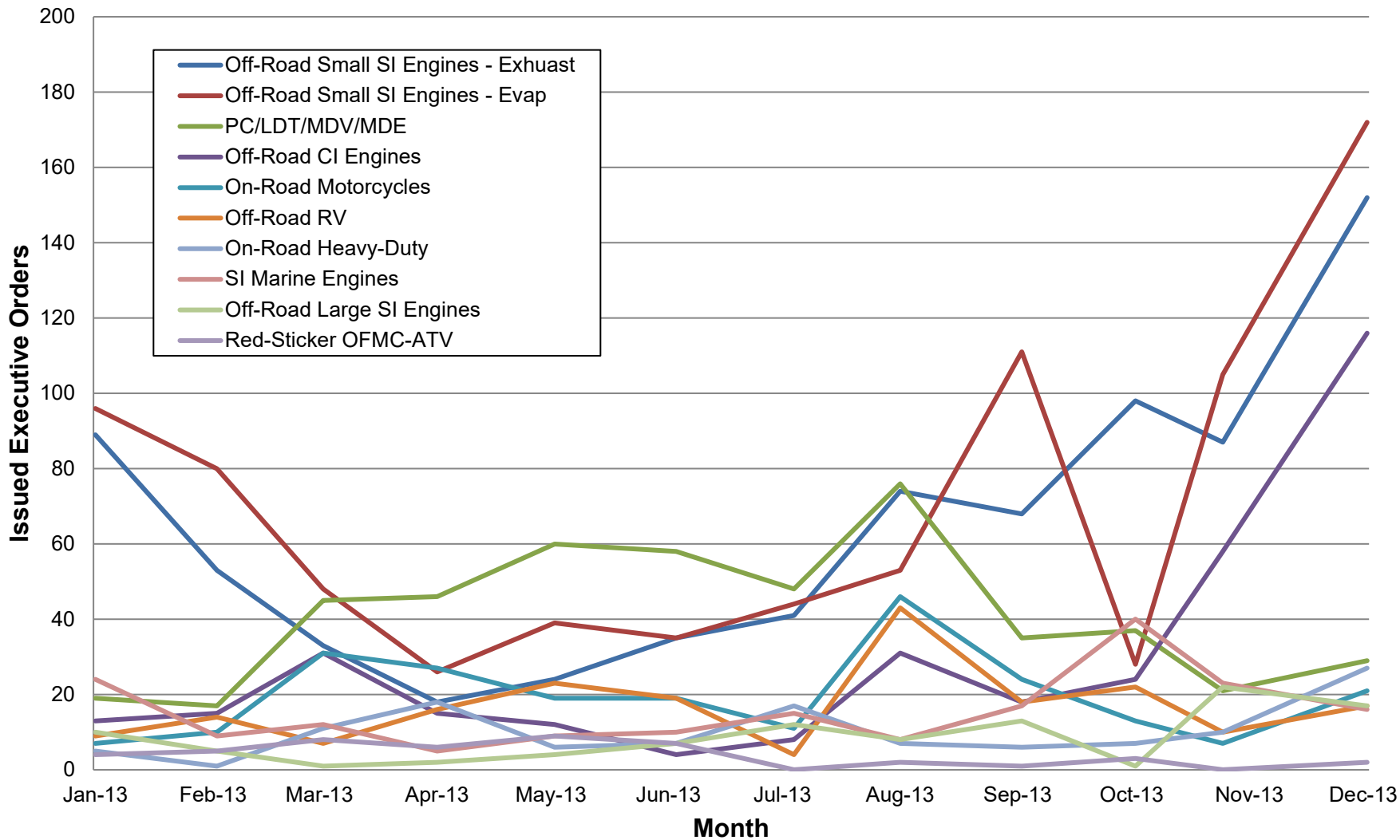
Revised: 5/8/14



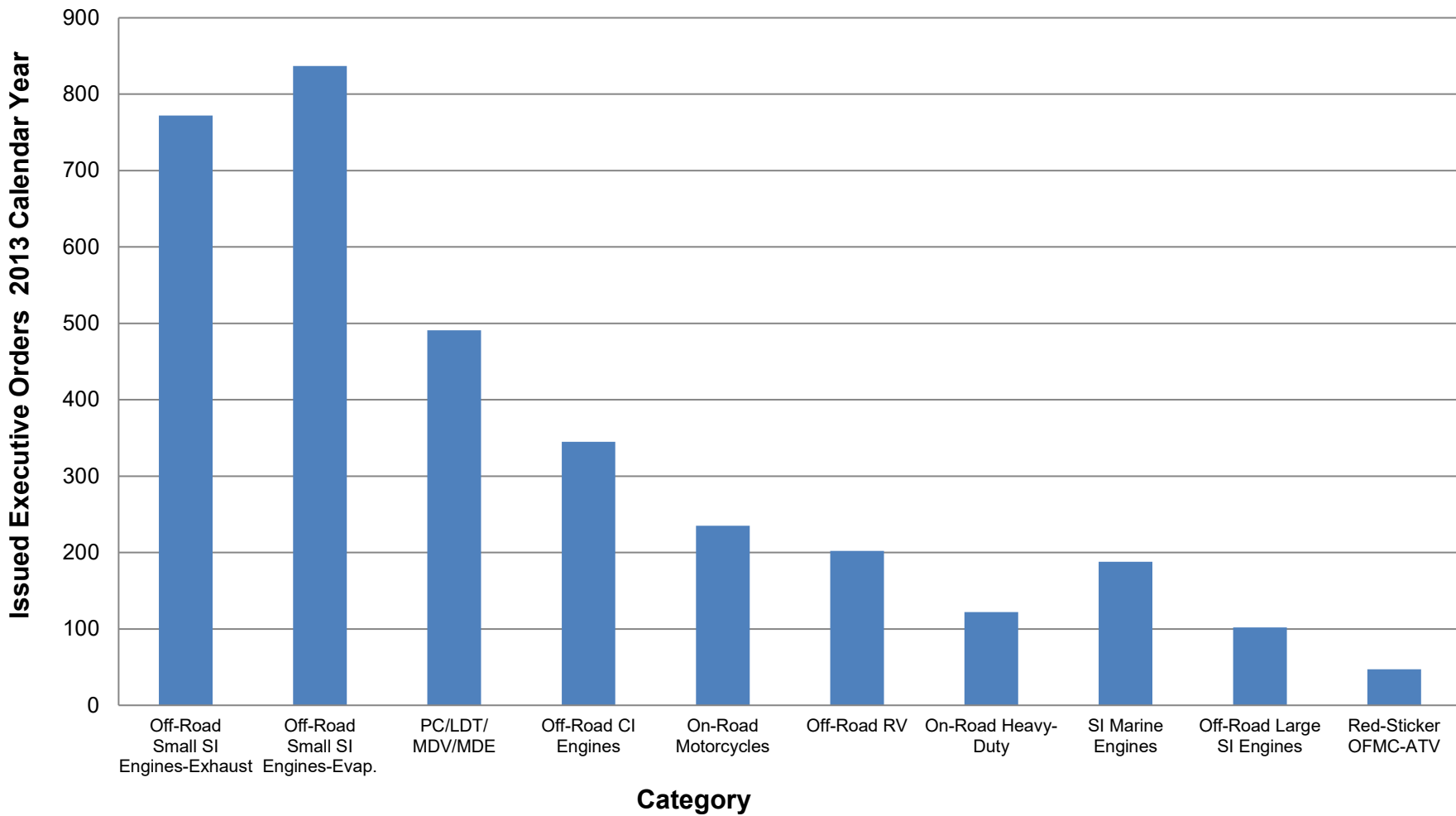
California Environmental Protection Agency

 **Air Resources Board**

Certification Application Statistics 2013

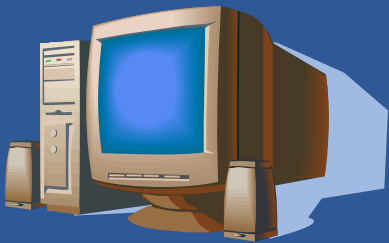


Volume of EOs issued in 2013



DMS and E-Cert Update

- DMS Reminders
- Certification Streamlining – Update
- E-Cert Status



California Environmental Protection Agency

 **Air Resources Board**

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

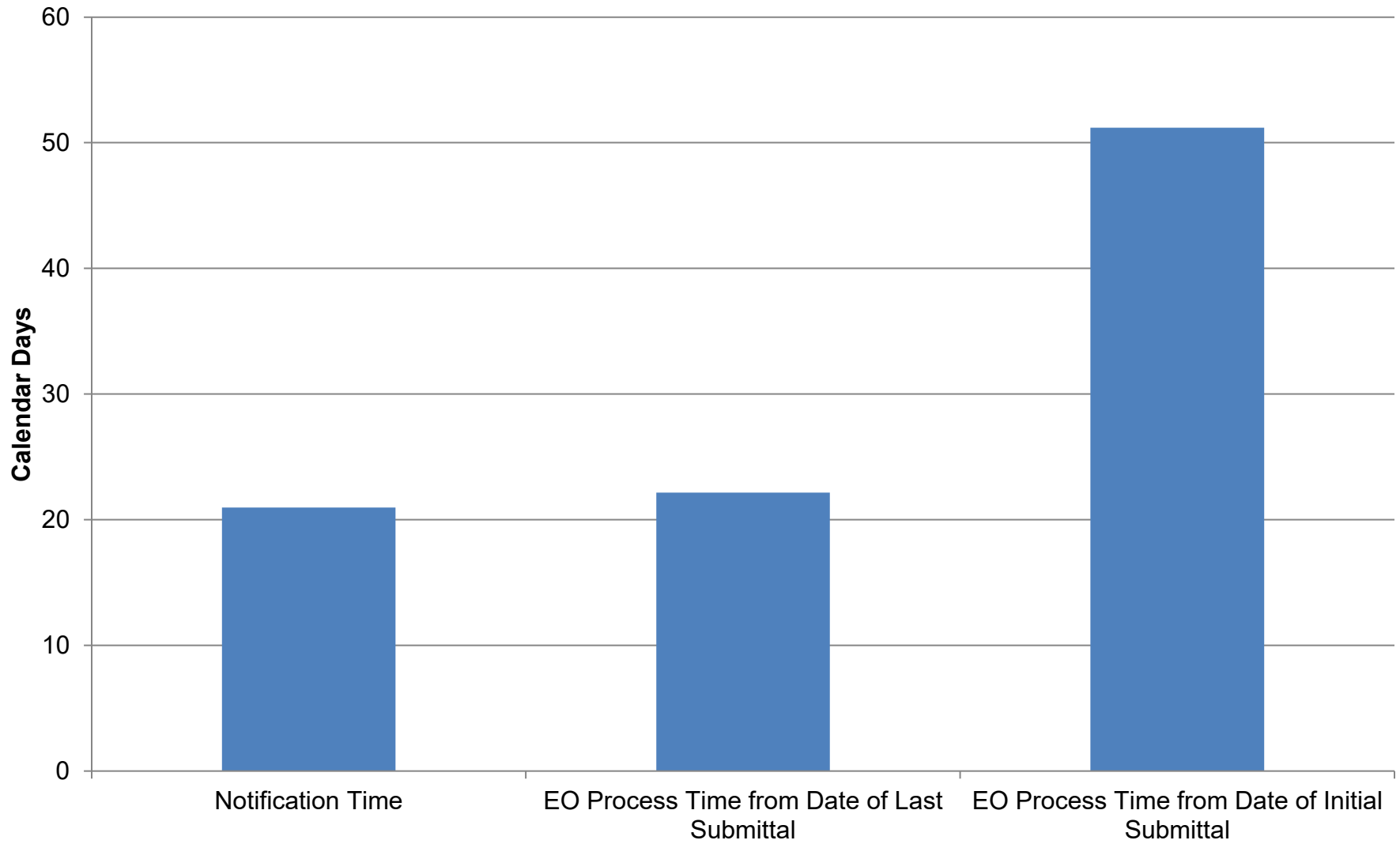
Other DMS Reminders

- 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

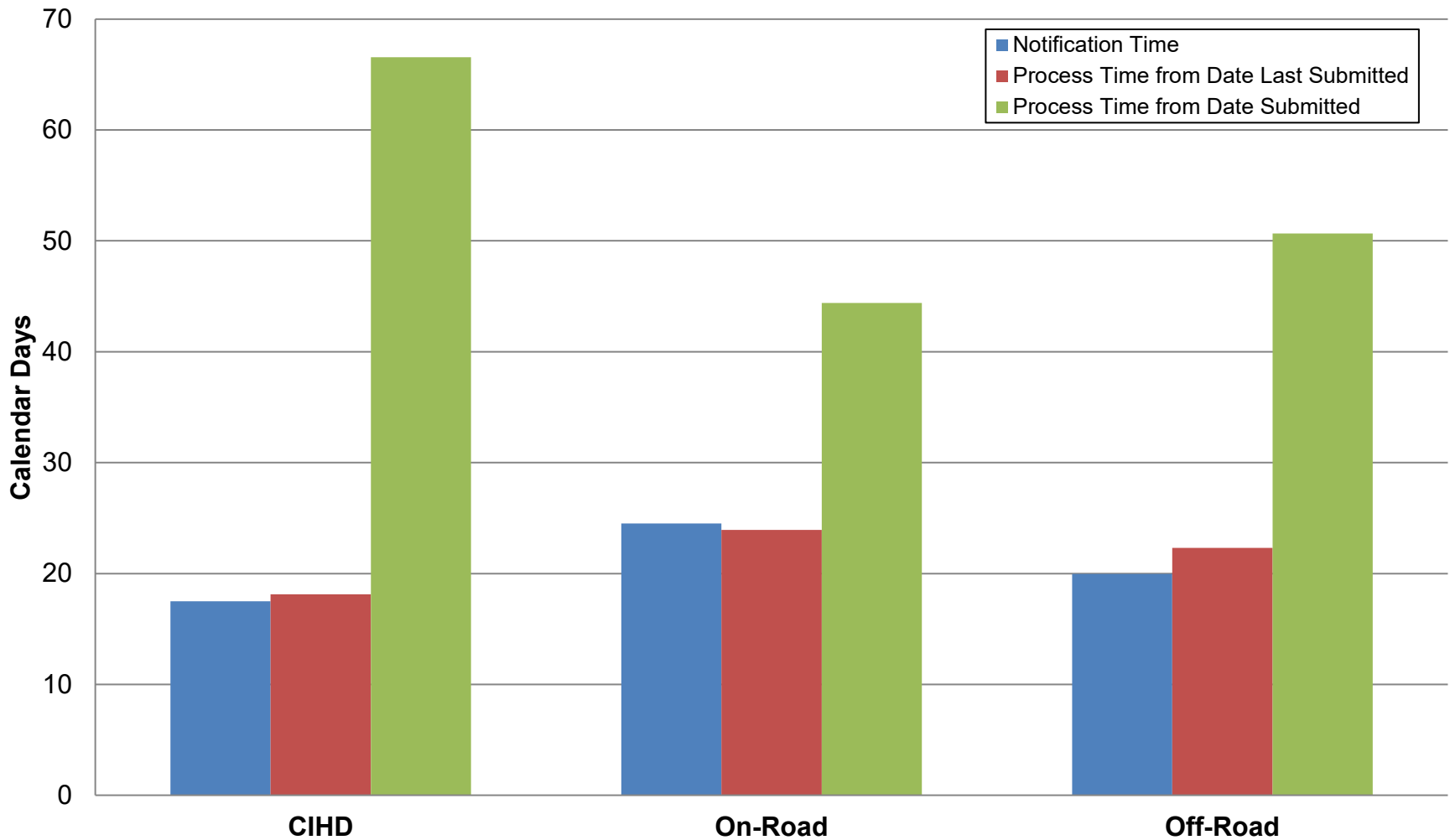
Certification Streamlining - Update

- 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



2013 Calendar Year Average Application Processing Time



California Environmental Protection Agency

 **Air Resources Board**

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)



California Environmental Protection Agency

 **Air Resources Board**

Compliance Reports

On-Road

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

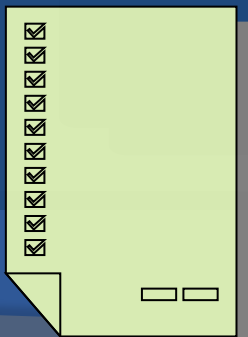
Off-Road

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

California Environmental Protection Agency

FileMaker Pro: Significant Figures

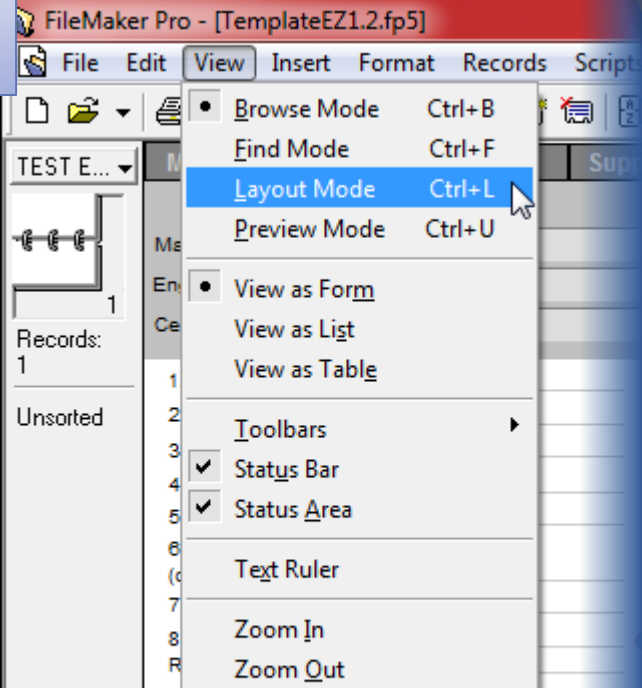
1

16. Official Test Results Date:

HC/OMHCE
NMHC/OMNMHCE
HC + NOx
CARBON MONOXIDE
OXIDE OF NITROGEN
PARTICULATE

	Test 1	Test 2
HC/OMHCE	0.07	
NMHC/OMNMHCE		
HC + NOx		
CARBON MONOXIDE		
OXIDE OF NITROGEN		
PARTICULATE		

2



3

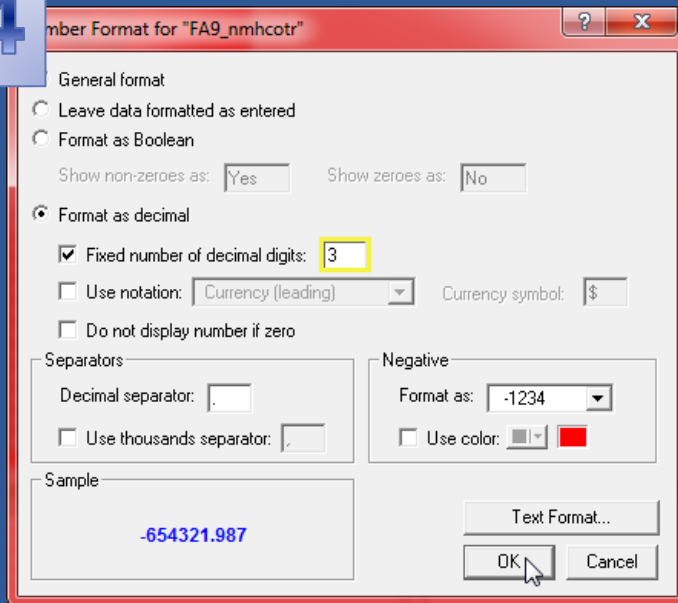
	Test 1	Test 2	Test 3
HC/OMHCE	HC_OMHCE		9_HC_C
NMHC/OMNMHCE	FA9_nmhc		9_nmhc
HC + NOx	9_HCNOx		9_HCNO
CARBON MONOXIDE	FA9_CO		FA9_CO
OXIDE OF NITROGEN	A9_NOx		A9_NOx
PARTICULATE	A9_Part		A9_Part
FORMALDEHYDE	formalde		ormalde
ACCELERATION (%opacity)	A9_accel		A9_acc
LUGGING (Gen) (%opacity)	9_lugging		9_luggin
PEAK (%opacity)	A9_peak		A9_peak
IDLE CO %	9_idle CO		9_idle C
CO2	FA9_co		

California Environmental Protection Agency

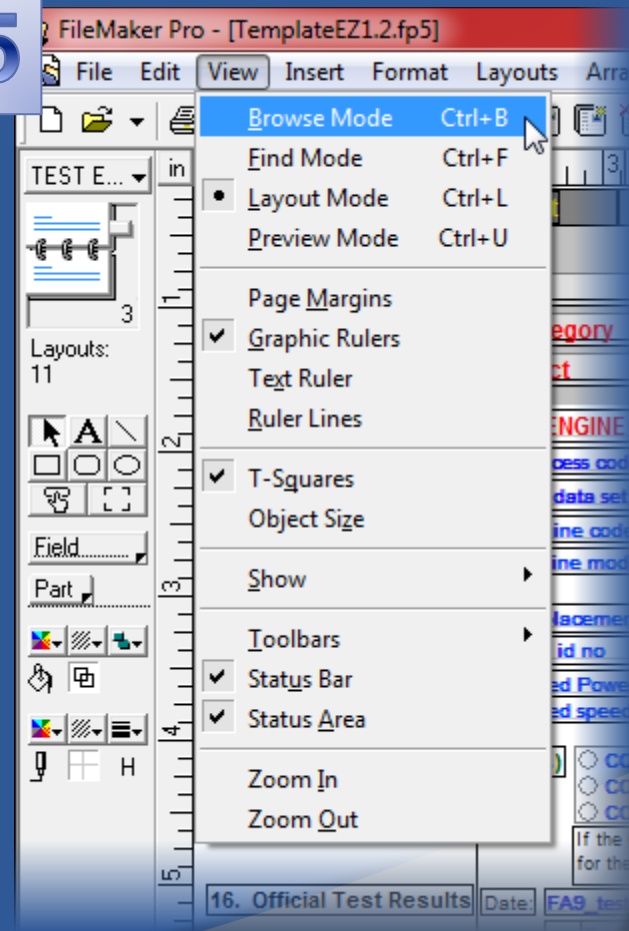
 Air Resources Board

FileMaker Pro: Significant Figures

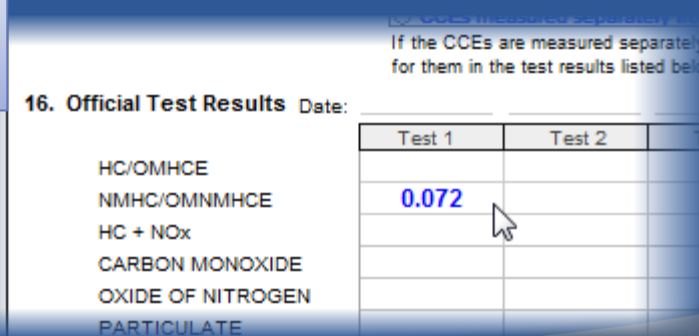
4



5



6



California Environmental Protection Agency

 Air Resources Board

Certification

On-Road Topics

- Labels
- OBD
- Alternative Fuel Retrofit Systems
- Service Information Rule
- Greenhouse Gas Regulations



Engine Labels

- 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

Alternative Fuel Retrofit System

- 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 Harmonized With EPA Phase I HD GHG

- 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/phase1ghg/phase1ghg.htm>
- <http://www.arb.ca.gov/regact/2013/hdghg2013/hdghg2013.htm>

OFCI

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



California Environmental Protection Agency

 **Air Resources Board**