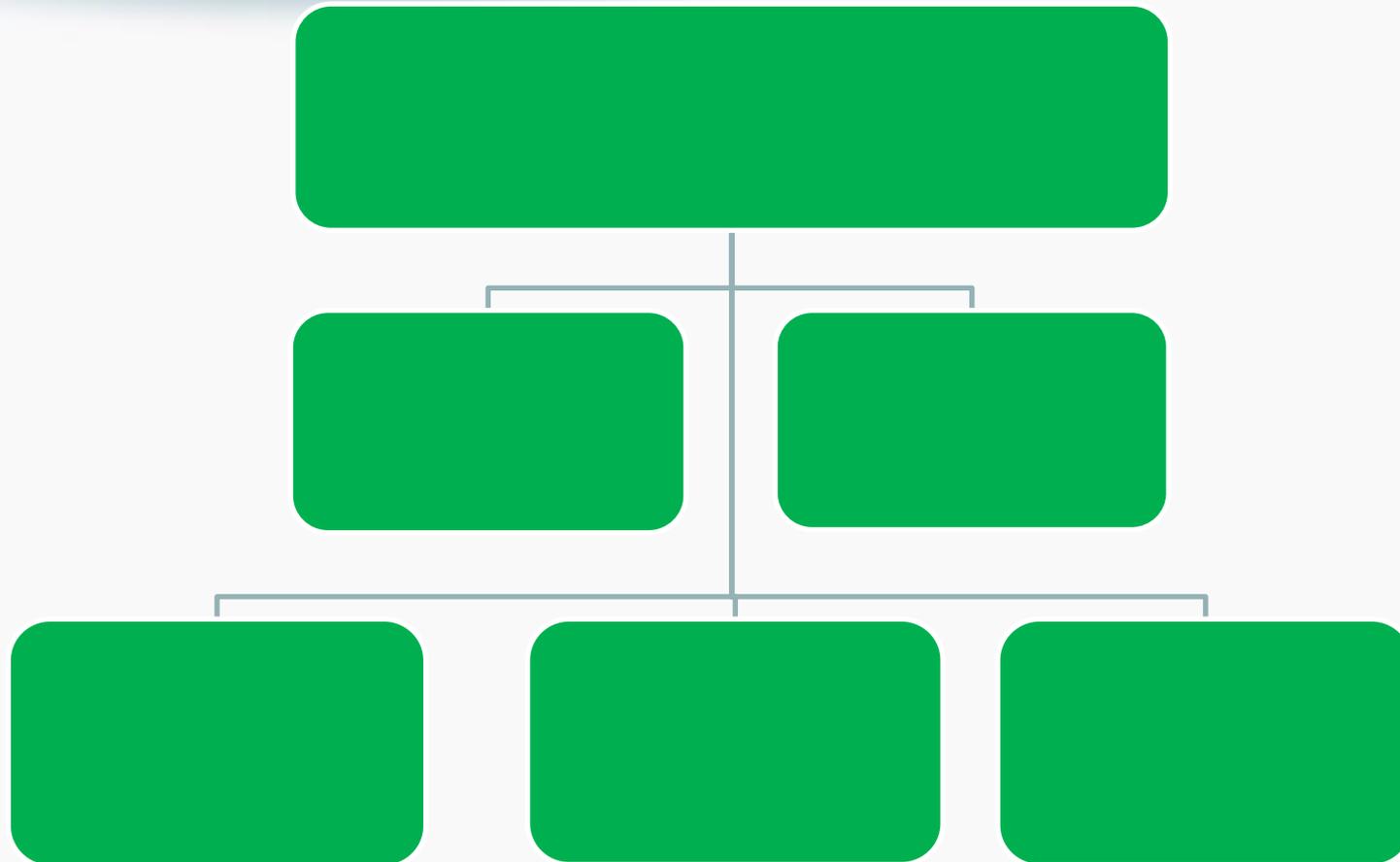
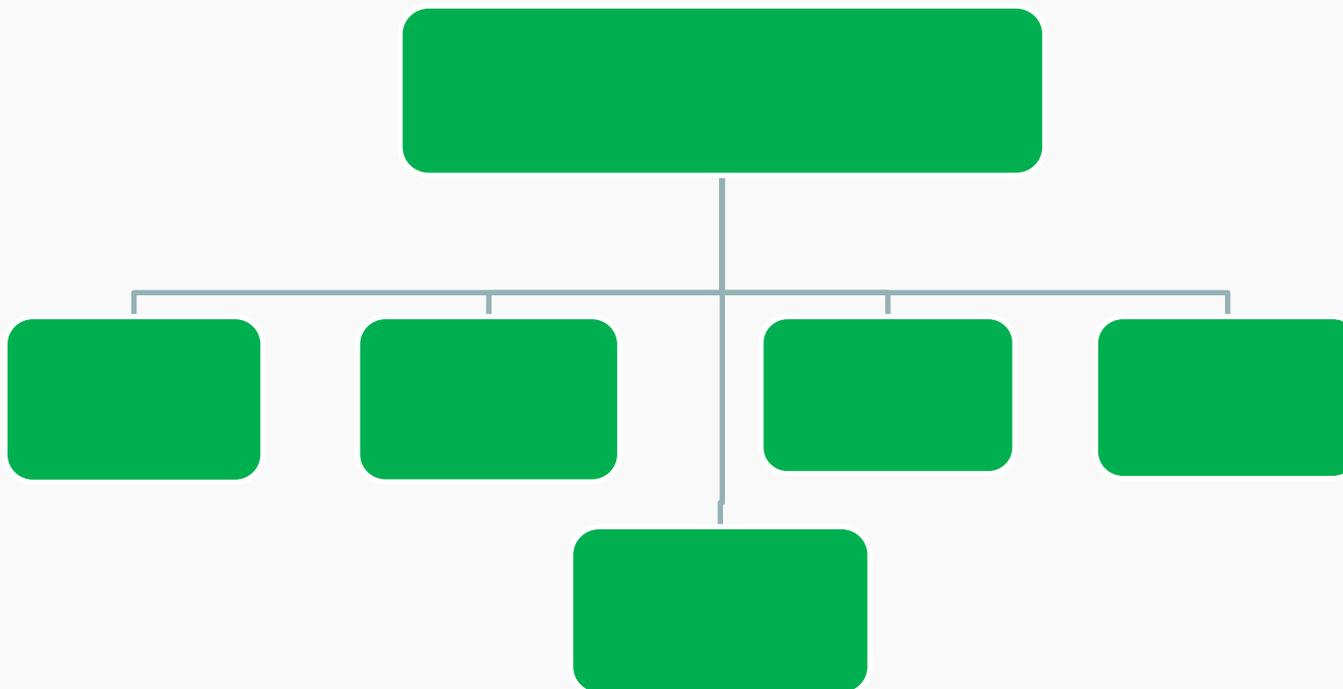


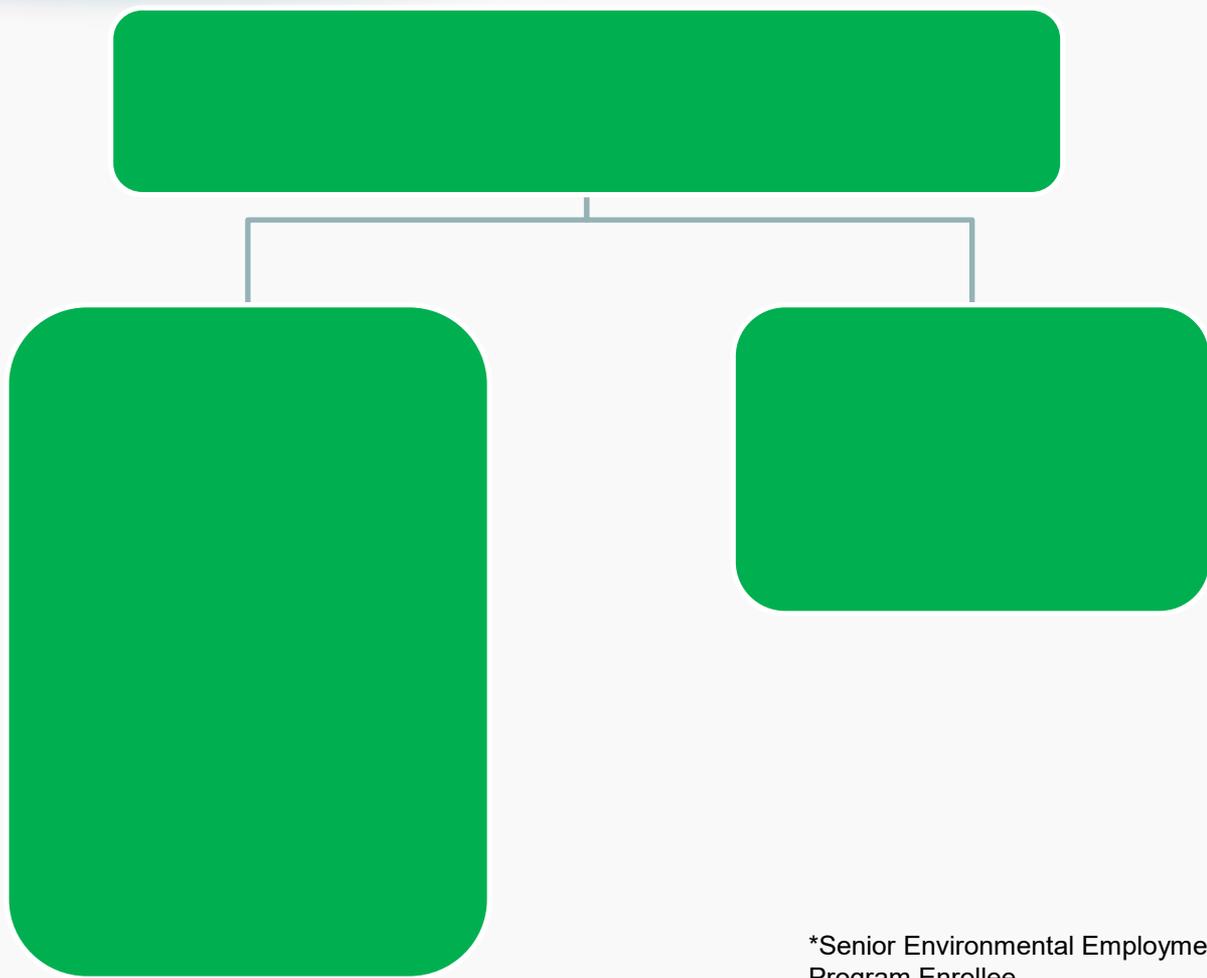
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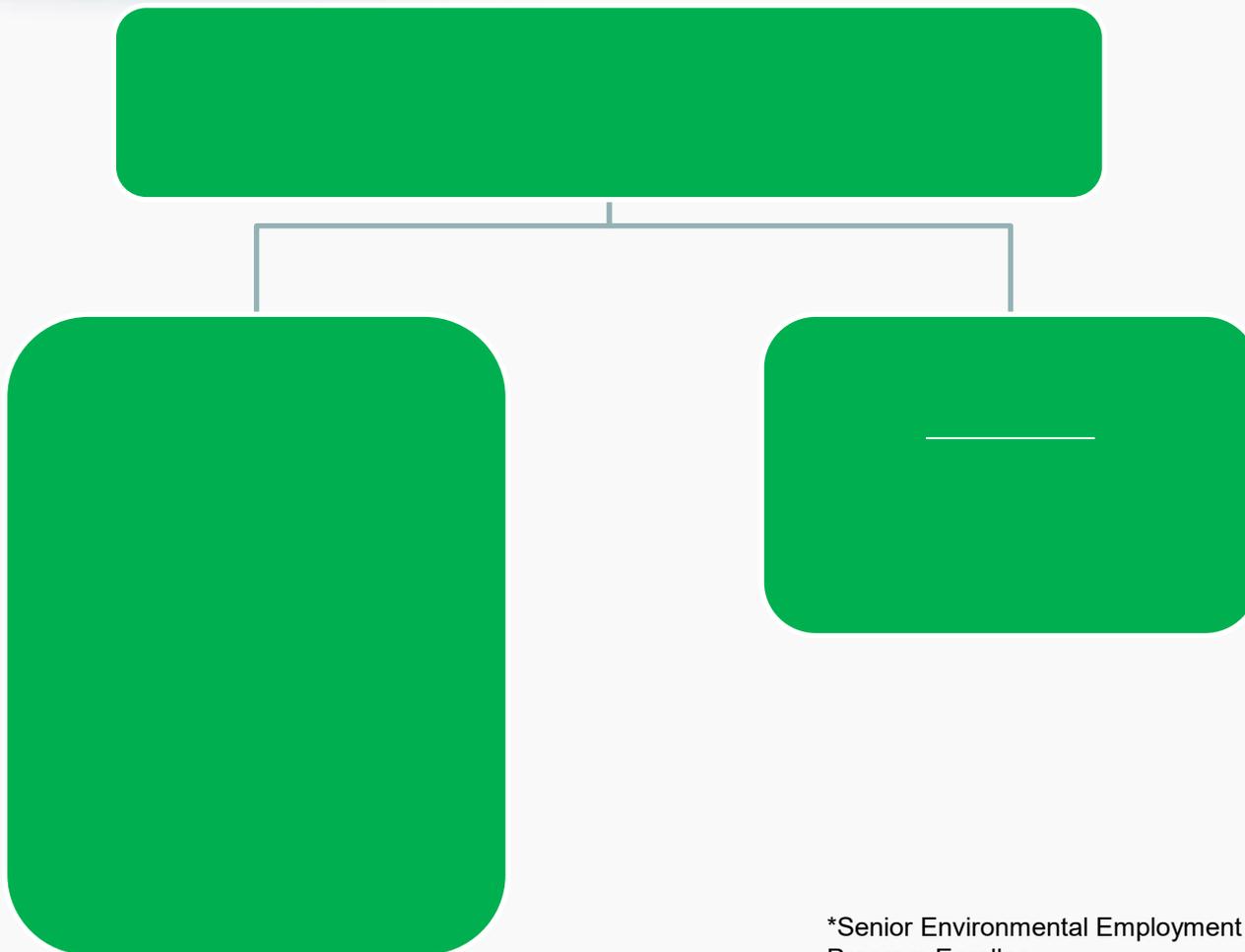
Update







*Senior Environmental Employment Program Enrollee



*Senior Environmental Employment
Program Enrollee



CI Assignments

• Steven DeBord
• Jason Gumbs
• Greg Orehowsky
• Jay Smith

*Includes HD GHG

• Steven Debord
• Jason Gumbs
• Joe Hresko
• Michelle Ibarra
• Greg Orehowsky
• Melvis Strickland
• Carl Wick

• Melvis Strickland
• Carl Wick

*Includes IMO

• Michelle Ibarra
• Larry Oeler

SI Assignments

• Jay Smith

• Phil Carlson
• Dan Cullen
• Julia Giuliano
• Trina Vallion

*Includes Small & Large SI

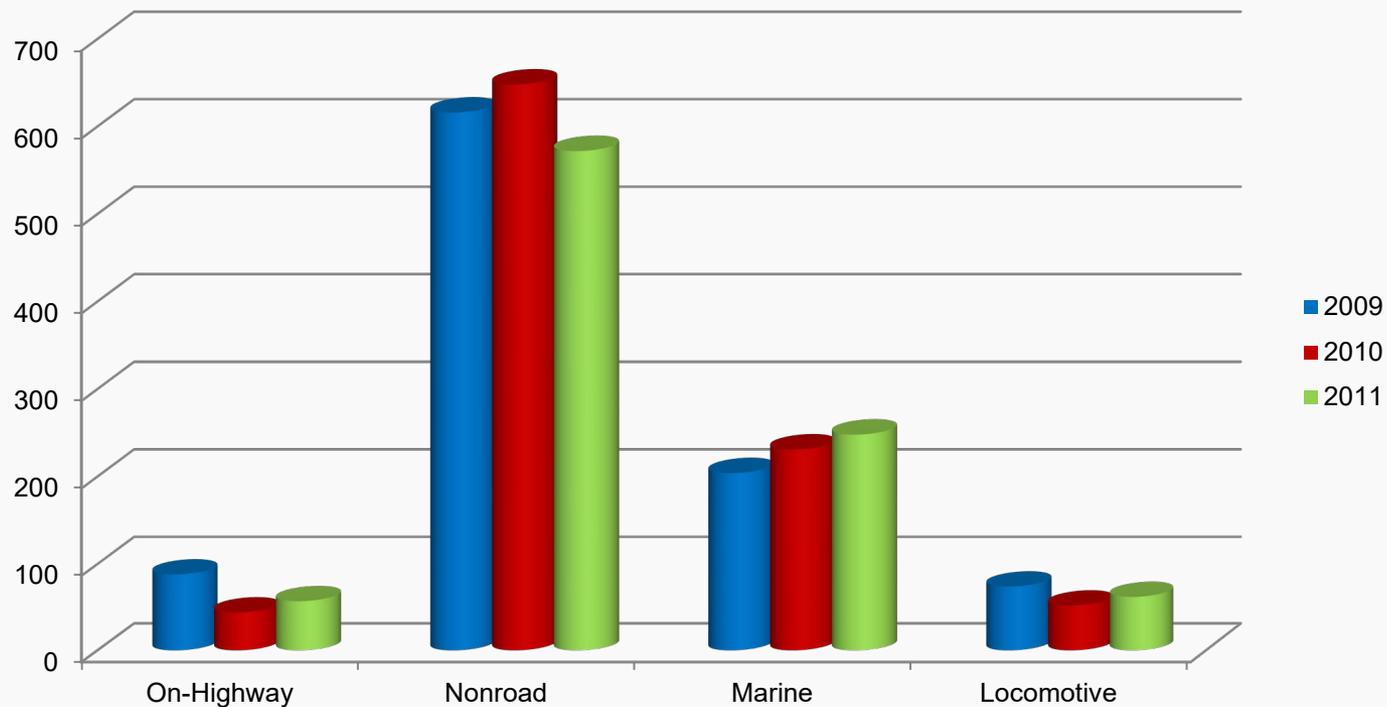
• Dan Cullen

• Emily Chen



Certificate Issuance by MY

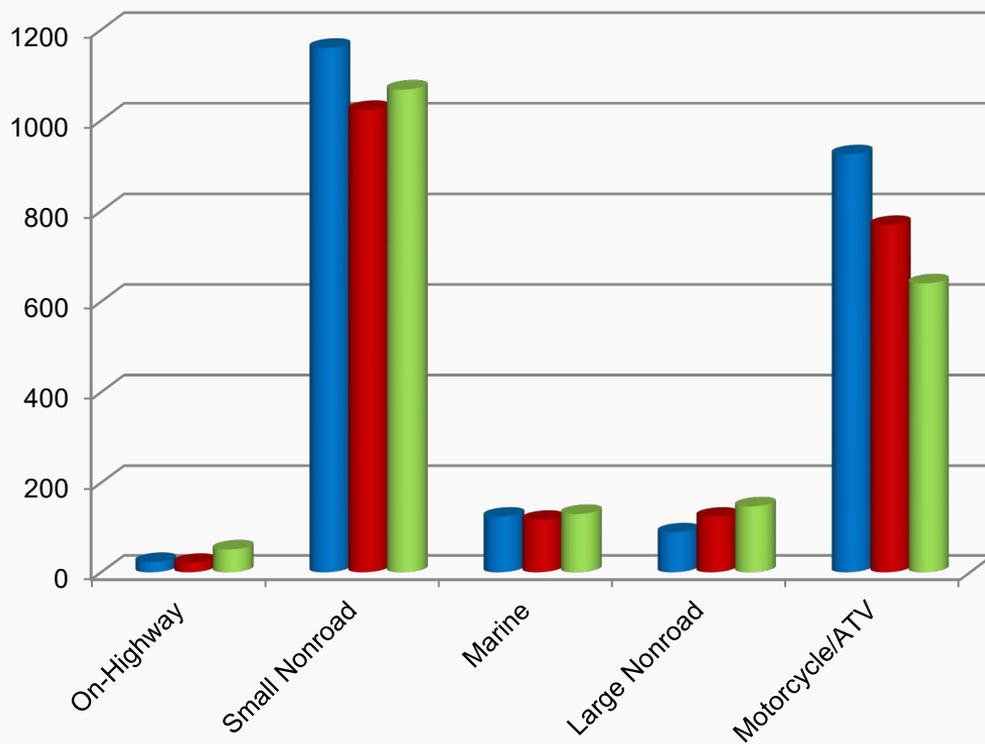
Compression-Ignition



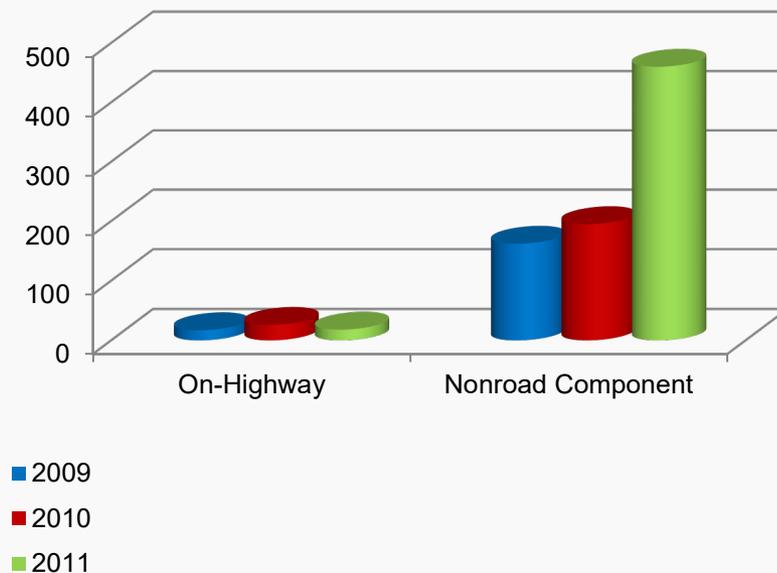


Certificate Issuance by MY

Spark-Ignition



Evaporative





Certification Workload

- Experiencing significant workload reviewing applications for NRCI Tier 4 rollout
 - New technology (EGR, DPFs, early SCR)
 - Deterioration factor development
 - AECD reviews
- Significant focus on implementing new HD GHG regulation
 - Development of certification templates and database
 - Transferring knowledge base (vehicle aerodynamics, tire evaluations)
 - Early model year certification



Certification Process

- In advance of submitting an application
 - Provide notice of certification plans
 - Begin discussions early with certification representative on:
 - any new engine design or emission controls
 - DF development plans
 - AECD descriptions
 - NTE deficiencies or LTRs
 - any alternative/special procedure or exemption



Certification Process

- When submitting an application
 - Ensure application is complete and accurate
 - Specify correct engine family name
 - Include all models and parts
 - Be sure application fee is paid
 - Notify cert rep of application submittal (not needed for Verify applications)
 - Be sure statement of compliance is submitted (not needed for Verify applications)
- Carryover applications
 - Ensure test data has not changed from prior model year
 - Include running changes (make sure they don't change carryover status)



DF Requirements

- Manufacturers should approach certification representatives well in advance of submitting application to discuss DF development plans
 - Selection of DF engines
 - Carry across of DFs to other engine families
 - Amount of planned service accumulation
 - Service accumulation duty cycle
- Presently coordinating with CARB to provide feedback on EMA cooperative DF program



Auxiliary Emission Control Devices

- Manufacturers should approach certification representatives in advance of submitting application to discuss AECDs
- Manufacturers expected to still utilize reporting template outlined in CCD-04-12
 - Provide clear description of need for AECDs, sensed and controlled parameters, and how they function
 - For those active off-cycle, need justification that they are the minimum strategy necessary
 - Verify modules will accommodate slightly revised format for reporting AECDs – expectations on substance, however, remain unchanged



Flow Through Filters (FTFs)

- Receive occasional inquiries about use of FTFs for nonroad applications
- Always discuss technology plans well in advance of submitting certification application
 - EPA has previously voiced concerns
 - Challenges publicly documented
 - Particulate Oxidation Catalysts – A. Majewski - DieselNet



Certification Fees

- Fees change annually
 - Fees are recalculated each year according to a formula in the fees regulation
 - The formula accounts for changes in the number of certificates issued each year and for effects of inflation on cost of labor
 - New fees are announced via guidance letter each February or March for the upcoming calendar year
 - Guidance letters can be found at www.epa.gov/otaq/fees.htm
- Important to remember
 - Manufacturers should pay the fee corresponding to the calendar year in which the application is submitted
 - Be sure to submit a fee filing form
 - Fillable PDF version can be found at www.epa.gov/otaq/fees.htm
 - Applications cannot be processed until the certification fee is paid



Status of Electronic Certification

- Information Management System (IMS)
 - EPA's historical engine certification and compliance system
 - FileMaker Pro database software
 - Mfrs submit applications via e-mail using template files
 - Templates can be found at www.epa.gov/otaq/certdat2.htm
 - IMS still utilized for on-highway CI, marine CI, and on-highway SI (including evaporative) sectors
 - IMS recently updated for processing of HD GHG cert applications



Status of Electronic Certification

- **Verify**
 - EPA's engine and vehicle compliance information system (<http://epa.gov/otaq/verify/>)
 - Web-based system consisting of two elements
 - Public interface – consists of web screens and programs that collect and process manufacturer data
 - EPA-only database – gathers and processes data, issues certificates, and supports compliance functions (access limited to EPA staff)
 - Will aid in streamlining certification processing
- **Engine Module Development**
 - Locomotive
 - Deployed late 2006
 - Does not include non-OEM component certification or AESS systems
 - Nonroad SI
 - Deployed August 2010
 - Covers multiple sectors: small nonroad, large nonroad, marine, and nonroad evaporative component
 - Nonroad CI
 - Deployed August 2010 (mandatory use began February 1, 2011)



Status of Electronic Certification

- NRSI and NRCI Verify Modules
 - Implementation has been successful
 - No major issues reported by manufacturers
 - Improvements being made as time and resources allow
- What's next
 - Updating locomotive module for component and AESS certification
 - Marine CI module planned for deployment during FY13
 - HD on-highway module (criteria and GHG certification) to follow
 - Development schedule contingent upon budget and resource availability



Availability of Certificates / Data

- Posting of certificates on website
 - Historically, have not posted certificates
 - Not frequently requested by public
 - Viewed as having small utility relative to posting non-CBI certification data
- Posting of certification data on website
 - IMS data posted a minimum of every 6 months at www.epa.gov/otaq/certdata.htm
 - Plan for posting of Verify data will be developed later this year after completion of CBI class determination



CBI – Certification and Compliance Data

- Currently trying to harmonize data treated as CBI among various regulated sectors
 - Will accomplish through class determination for information with common characteristics
 - Currently only have class determination for light-duty (issued 1977)
 - Will provide predictability to businesses and reduce burden on EPA of making repetitive CBI determinations
- Undertaking effort so that we can continue to publish same general certification data as in past
- General categories being considered as CBI
 - Small SI bond information
 - Projected sales
 - Production dates
 - Aftertreatment device details
 - AECD names/details
 - Engine technical descriptions
 - Engine family comments
- No current plan to publish compliance data (credit balances, etc.), but will follow up with manufacturers if this changes
- Will share draft with industry once we have completed internal reviews – timing TBD
- Plan to publish FR notice later this year with final determination



Electronic Data Reporting

- Verify also used to collect data from manufacturer-run in-use program
 - System deployed early 2006
 - Covers only on-highway sector
 - Recently revised data reporting requirements to add processing capabilities for PM test results
 - Changes planned for production environment in mid-May
- Supporting information can be found at www.epa.gov/otaq/verify/publications.htm#hd



HD Defects, Voluntary Recalls, and Progress Reports

- New electronic reporting system (EDIR/VERR System) for only HD on-highway
 - Replaces hardcopy reporting process
 - Announced for heavy-duty June 30, 2011
 - Webinar conducted August 2, 2011
 - System officially opened August 30, 2011
 - Some manufacturers began submitting early
 - Same system as utilized for light-duty
 - Increasing use of internal defect database for nonroad review
 - Planning to include nonroad reporting in Verify for the future
 - Guidance documents can be found at www.epa.gov/otaq/verify/publications.htm#edir



Manufacturer Compliance Reports

- EPA has developed MS Excel-based templates for reporting of other manufacturer compliance data and a Compliance Database to manage reports
- Manufacturers may submit reports via e-mail (next slide)
 - Alternately, may submit electronic copy (CD, etc.) via postal service
 - Regardless of submission method, please always provide an electronic copy – hard copies are not effective
 - Submit questions / comments about templates to appropriate e-mail addresses
 - Submit questions about compliance programs and regulations to your EPA certification representative
- EPA is working to develop capability for manufacturers to submit compliance reports through Verify
 - Do not submit reports through Verify yet – they are extremely difficult to retrieve
 - Plan to have capability developed this Fall



Manufacturer Compliance Reports

- Templates can be found at www.epa.gov/otaq/certdat2.htm
 - Annual production volume
 - Available for all industries
 - Submit reports to prod_data@epa.gov
 - Averaging, banking, & trading (AB&T)
 - Available for on-highway CI & SI, nonroad CI (Part 89), small nonroad SI (Part 90 & 1054), marine SI (Part 1045), locomotive (Part 92 & 1033)
 - Submit reports to abt_engine@epa.gov
 - Production-line testing (PLT)
 - Available for small & large nonroad SI (Part 90, 1054, & 1048), marine SI (Part 1045), locomotive (Part 92 & 1033)
 - Submit reports to plt@epa.gov
 - In-Use testing
 - Available for small & large nonroad SI (Part 90 & 1048), marine SI (Part 91)
 - Submit reports to in_use@epa.gov
 - Other templates under construction



Manufacturer Compliance Reports

- Dear Manufacturer Letter (CISD-10-17) sent out September 2010
 - Reminder to manufacturers of reporting obligations by industry sector
 - Noted inconsistent reporting rates
 - Instructed manufacturers to begin using templates for reporting and to submit past due reports
- EPA will integrate the Compliance Database with Verify to link reports to certified engine families and carryover applications
- Failure to report may result in:
 - Referral of violation to OECA
 - Revocation, suspension, or voiding of existing certificates
 - Withholding of new certificates



EPA Compliance Testing

- Compliance testing program continues with goal to:
 - Ensure benefits stated in rulemakings are reflected in real world operation
 - Address level playing field issues for all market participants
 - Address compliance issues for new and in-use engines

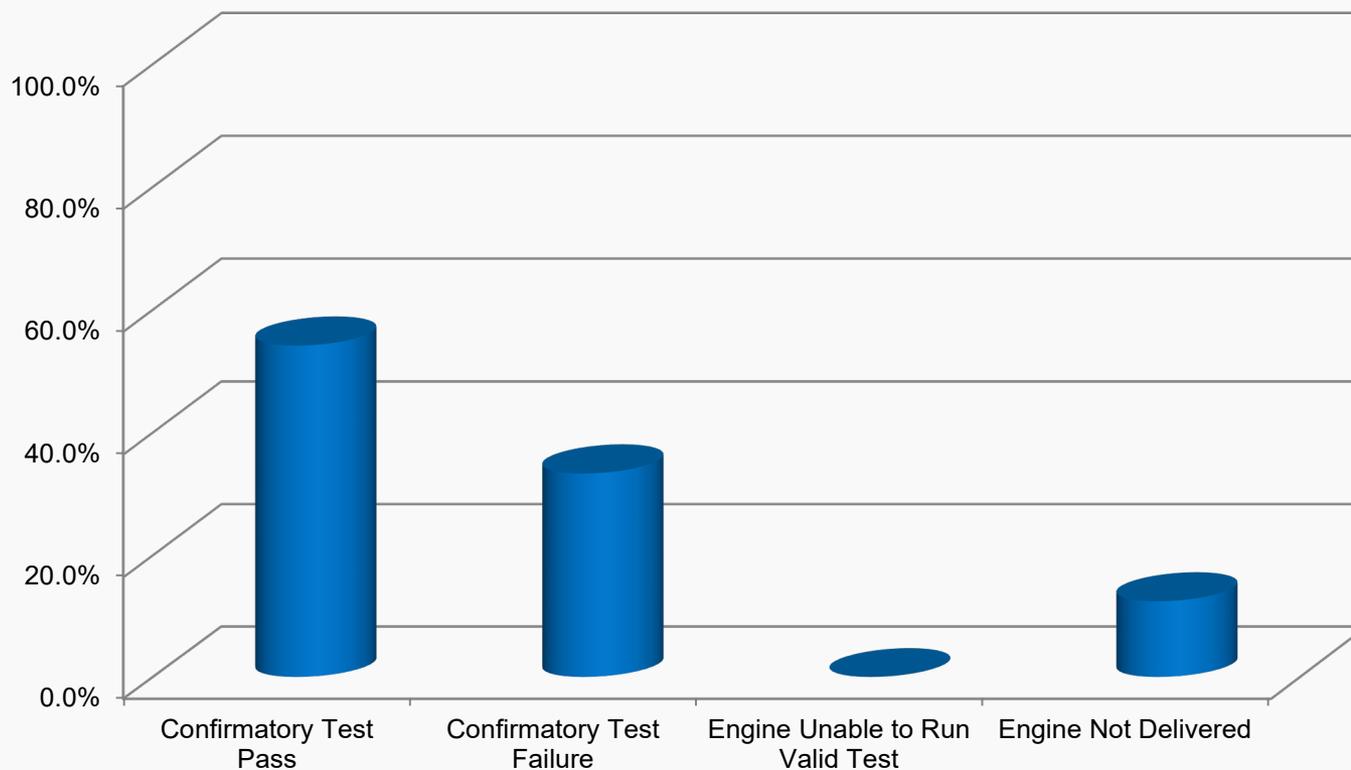


EPA Compliance Testing

- Over past year, have conducted in-house confirmatory testing, contract lab confirmatory testing, on-site SEA, and in-use testing
- Multiple sectors are included in the testing
 - Initial focus on nonroad CI has been expanded to small nonroad SI (handheld and non-handheld) and on-highway CI
 - Expect to continue with compliance testing for nonroad CI and small SI, and expand to marine SI, large SI, and beyond



Confirmatory Testing in 2011





In-Use Testing at NVFEL

- Previous programs focused on 2004 and 2007-level technology
- Current program is evaluating 2010-level engines from multiple manufacturers
- Looking at a variety of metrics
 - NTE emissions performance (using Subpart T procedures)
 - Overall emission levels (impacts of idling, transient operation, etc.)
 - Inducement strategies for SCR (if SCR equipped)
- Plan is to test between 20 and 30 vehicles in 2012



EPA Compliance Testing

- Compliance testing and analysis will utilize all of the available tools, including:
 - Confirmatory tests
 - Selective enforcement audits
 - General laboratory and records audits
 - In-use data evaluation from manufacturer and EPA test programs
 - Informal site visits



Manufacturer In-Use Testing

- 2011 selections for on-highway industry sector
 - Reports due December 30th, 2012
 - Selections for 2012 coming in June
- Prior testing
 - 2008 – 12 engine families, 7 manufacturers
 - 2009 – 18 engine families, 8 manufacturers



Manufacturer In-Use Testing

Preliminary Analysis of Pass Ratios for 2009

Vehicle Result	Number of Vehicles	Range in "Pass Ratio" by Pollutant			
		HC	NOx	HC+NOx	CO
Pass	24	100%	93 – 100%	-	100%
	41	-	-	93 – 100%	100%
Fail	1	-	87%	-	-
	6	-	-	0- 82%	-



HD GHG Rule

- Final rule signed August 9, 2011
- Conducted industry workshop on November 3, 2011
 - Outreach / early questions
 - Workshop presentations and Q&A materials can be found at www.epa.gov/otaq/climate/regulations.htm#1-2
- Certification templates and database have been developed
 - Templates can be found at www.epa.gov/otaq/certdat2.htm
- Issued first certificates to Daimler Trucks North America on February 21, 2012



Transition Program for Equipment Manufacturers (TPEM)

- EPA has developed MS Excel-based templates for nonroad CI and SI
 - Will be posted soon at www.epa.gov/otaq/certdat2.htm
 - Engine manufacturers
 - Annual TPEM production reporting (in addition to other production reporting)
 - Equipment manufacturers
 - Notice of participation
 - TPEM report (one-time under Part 89; annually under Part 1039)
 - Bond waiver calculation / request (may be used to calculate the value of the bond)
- Submit TPEM questions (Part 89 / 1039) and reports to TPEM-CI@epa.gov



Compliance Report

- EPA produced compliance reports in 2007 and 2008
 - Reports present convenient reference for environmental data collected from manufacturers and generated in our test programs
 - Available at www.epa.gov/oms/about/420r08011.pdf and www.epa.gov/oms/about/420r10022.pdf
- Next report to cover 2009 and 2010 activities