# **Major Steps of Certification and Compliance** for

2006 and Later Model Year ATVs and OFMCs

ATV/OFMA Workshop, July 21, 2004 EPA/CARB

### Major Steps of Certification and Compliance

#### **Pre-Certification Requirements**

- 1. Register with EPA (for New MFR)
- 2. Group Products into Engine Families
- 3. Conduct Durability and Emissions Tests
- 4. Prepare Application & Data Summary Sheet
- **5.** Submit Appropriate Certification Fees
- **6.** Submit Application Package

#### **Post - Certification Requirements**

- 7. Build Vehicles to Certified Specifications
- 8. Label Each New Vehicle/Engine
- 9. Conduct Production Line Tests, if required
- 10. Submit Amendments to Application
- 11. Submit Required Reports
- 12. Provide Maintenance Instructions and Warranty Service, Submit DRs and Conduct Recalls

## Step 1. Register with EPA

#### > Send a Manufacturer Registration Letter

- Provide a brief description of your company and your certification plan; include answers to List of Questions in Attachment 1
- Send to EPA and CARB

### ➤ Fill out the Manufacturer Code Entry Form

- Access www.epa.gov/otaq/cfeis.htm, download the form
- Fill out and send it back to EPA via email: omscfeis@epa.gov

## Step 2. Group Products into Engine Families

- ➤ Group vehicles/engines into Engine Families (EFs) based on emission characteristics (40 CFR §1051.230)
  - Combustion cycle
  - Cooling system
  - Fuel system
  - Method of air aspiration

- Catalytic converter
- Fuel
- Approximate bore diameter
- Evaporative emission controls

#### ➤ Name an EF:

Character Position	1	2	3	4	5	6	7	8	9	10	11	12
EF Name Example	6	В	A	C	X	•	1	2	5	D	6	F
Sequence	MY	Three letter MFR code assigned by EPA			Vehicle category	Displacement			MFR specified code			

## Step 3. Conduct Emissions Tests to Demonstrate Compliance 1 of 2 - Exhaust emissions

#### • Demonstrate compliance:

**Certification level = Emission value at vehicle's end-of-useful life** 

= low operating hour emission x DF (with catalyst converter), or

= low operating hour emission + DF (w/o catalyst converter)

#### • Procedure:

- Select one Emission Data Vehicle (EDV) from each EF
- Conduct service accumulation to stabilize emissions
- Test to determine DF for each regulated pollutant
- Test to determine emission value at a low operating hour for each regulated pollutant

## Step 3. Conduct Emissions Tests to Demonstrate Compliance 2 of 2 - Evaporative/Permeation Emissions

- Two methods may be used to show permeation emissions compliance:
  - ➤ Emission Testing 40 CFR §1051.515
  - ➤ Certify-by-Design 40 CFR§1051.245(e)

No crankcase evaporative emissions allowed

#### Step 4. Prepare a Complete Application Package

#### **Application Package (PDF format):**

- **▶ Application** (Text content)
  - Request for Certificate with authorized signature
  - Complete content of application
  - A Fee Payment Form
  - o California E.O., if certifying for "California-only" EF
- **▶** Data Summary Sheet (DSS) (Database printout sheet)
  - Prior to EPA/CARB computer system is ready, use an interim Data Summary Sheet (a data input file in MS Excel format) and the DSS template.

## Step 5. Pay Appropriate Certification Fees

- ➤ Payment is required in advance of any EPA certification service
- ➤ \$ amount may change:
  - \$826 per EF per MY (Effective 7/12/04 to 12/31/05)
  - check <a href="https://www.epa.gov/otaq/fees.htm">www.epa.gov/otaq/fees.htm</a> for updated fee schedule
- ➤ Payment procedure: EPA Guidance CCD-04-14
- ➤ Fee Payment Form and instructions:
  - downloadable from the same website as above

Note: Must also pay full certification fee for "CA-only" certificate

## Step 6. Submit Application Package

#### **➤** Three procedures:

- 50 States: Submit to EPA & CARB concurrently
- 49 States: Submit to EPA only
- CA only: Submit to CARB first; receive CARB EO; finally, submit the application with EO to EPA

#### **▶** Electronic submission is required

• Email or mail (e.g. on a CD-Rom)

#### Step 7. Build Vehicles to Certified Specifications

Manufacturers must assure that the production vehicles or engines are within the scope of an issued certificate, with respect to:

- Materials
- Engine & drivetrain design
- Fuel system

- Emission control system components and strategies
- Exhaust after-treatment devices; or
- Any other device and component that may influence emissions

## Step 8. Label Each New Vehicle/Engine

- ► VIN: Vehicle Identification Number
- ► VECI: Vehicle Emission Control Information label
- ► NER: Normalized Emission Rate

### Step 9. Conduct Production Line Test, if Required

- ➤ Must perform Production Line Test (PLT) for an EF participating in ABT and certified to a Family Emission Limit (FEL)
- ➤ PLT Procedure: 40 CFR Part 1051, Subpart D
- Must submit failure reports & periodic reports by specified deadlines

## Step 10. Submit Amendments to Application

- Must submit amendments to EPA before taking action:
  - Add a new configuration
  - Modify a FEL
  - Make any changes that may affect emissions

#### Note:

CARB does not allow modifying FEL after certification.

## Step 11. Submit Required Reports

#### For example:

- **►** End-of-model year phase-in report
- ➤ End-of-model year ABT report
- ➤ Failure and Periodic reports for PLT

## Step 12. Provide Maintenance Instructions and Warranty Service, Submit DR and Conduct Recalls

- **►** Maintenance Instructions
- **▶** Warranty Requirements
- **▶** Defect Reports and Recalls

## Summary

- ➤ Manufacturer is responsible for pre- and post-certification requirements to assure the vehicles are in compliance for the full useful life
- ➤ EPA will conduct additional tests to verify compliance and provide assistance in your compliance process.