

Proposed California Evaluation Procedures for Aftermarket Critical Emission Control Parts on Highway Motorcycles



Agenda Item 09-1-3

January 22, 2009

Overview

- Background
- Motorcycle emissions testing
- Staff technical proposal
- Enforcement
- Environmental/economic impacts
- Conclusion

Background

- High rate of modification in new motorcycles - exhaust systems (up to 85%)
 - Aesthetics
 - Performance



Exhaust

Paint

Light & Forks

Wheels

3

Background (cont.)

- Increased use of catalysts by OEMs
- More stringent motorcycle emission standards in 2004 and further reductions in 2008 (0.8 g/km HC+NOx)



Background (cont.)

- Only OEM exhaust systems legal now
- No existing aftermarket parts evaluation procedures for catalyst exhaust systems
- Aftermarket motorcycle exhaust system manufacturers requested a new procedure to allow them to sell legal systems

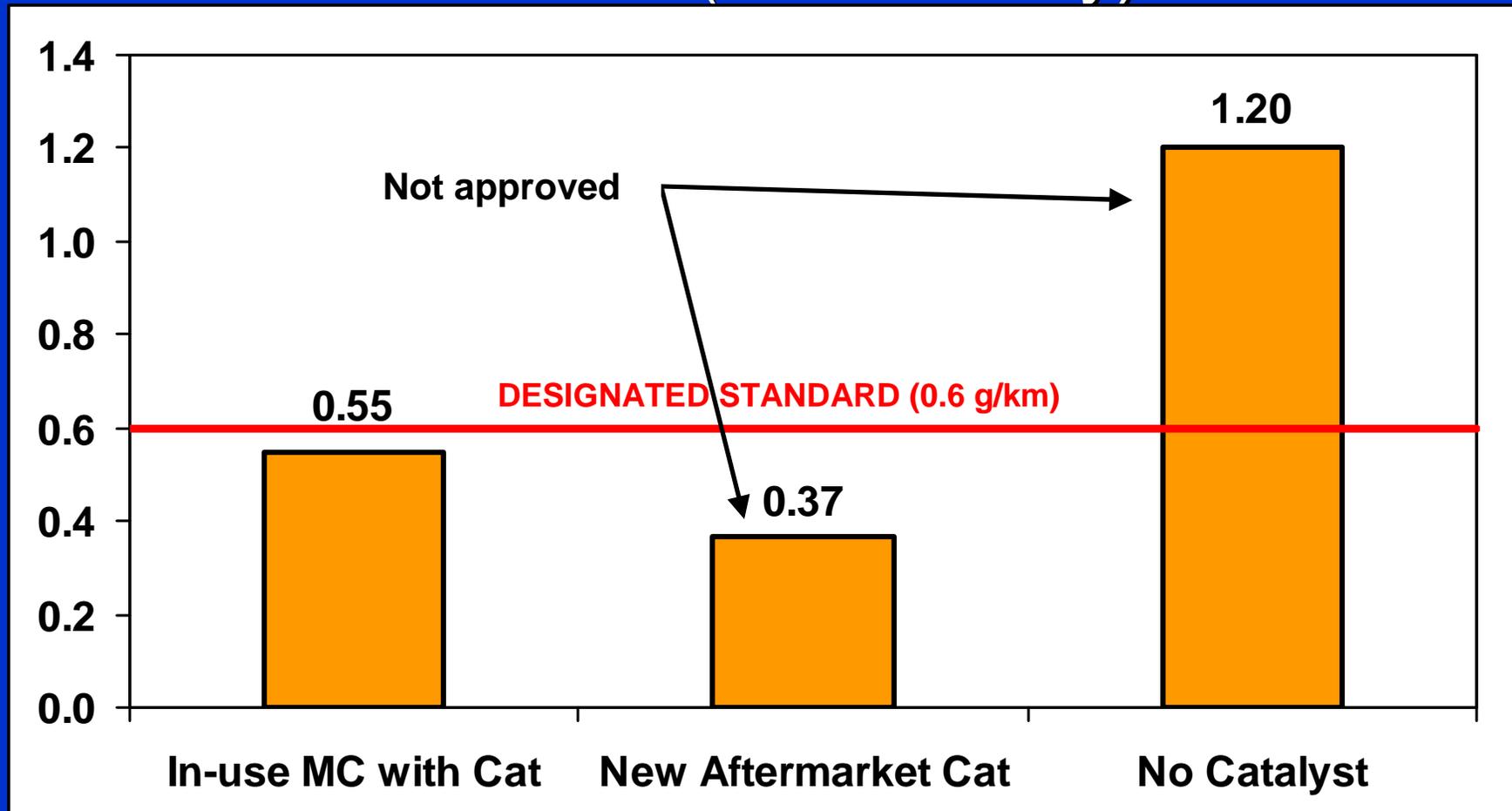
Motorcycle Emissions Testing

- Performed in-house testing to generate emissions data from newer motorcycles and aftermarket parts
 - Popular 2008 Harley-Davidson cruiser
 - Three typical configurations tested
 - Owner-modified bikes



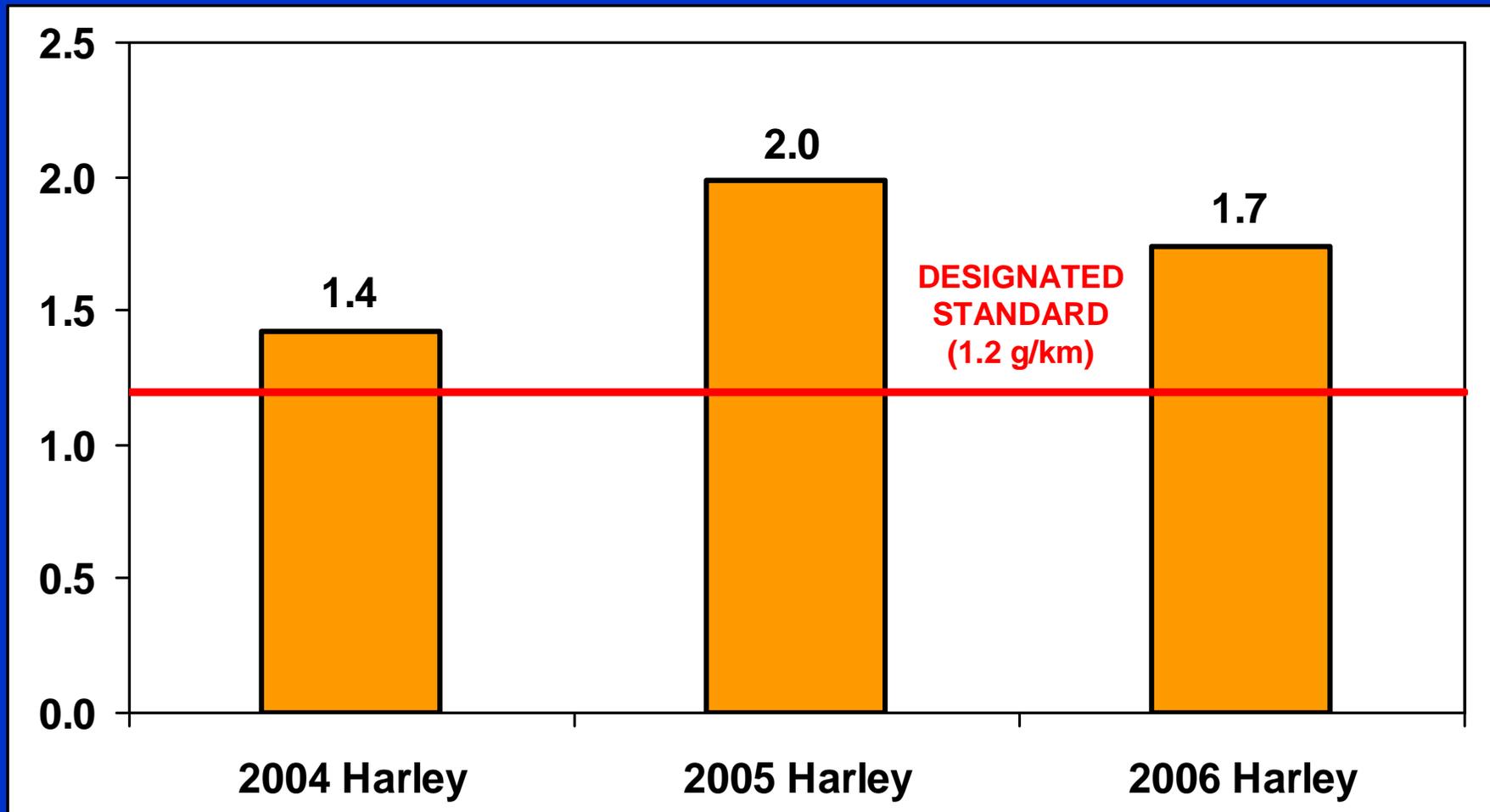
Tampered Exhaust Systems Double Emissions

HC+NOx emissions (2008 Harley)



Owner-Modified Exhausts Exceed Standards

HC+NOx emissions



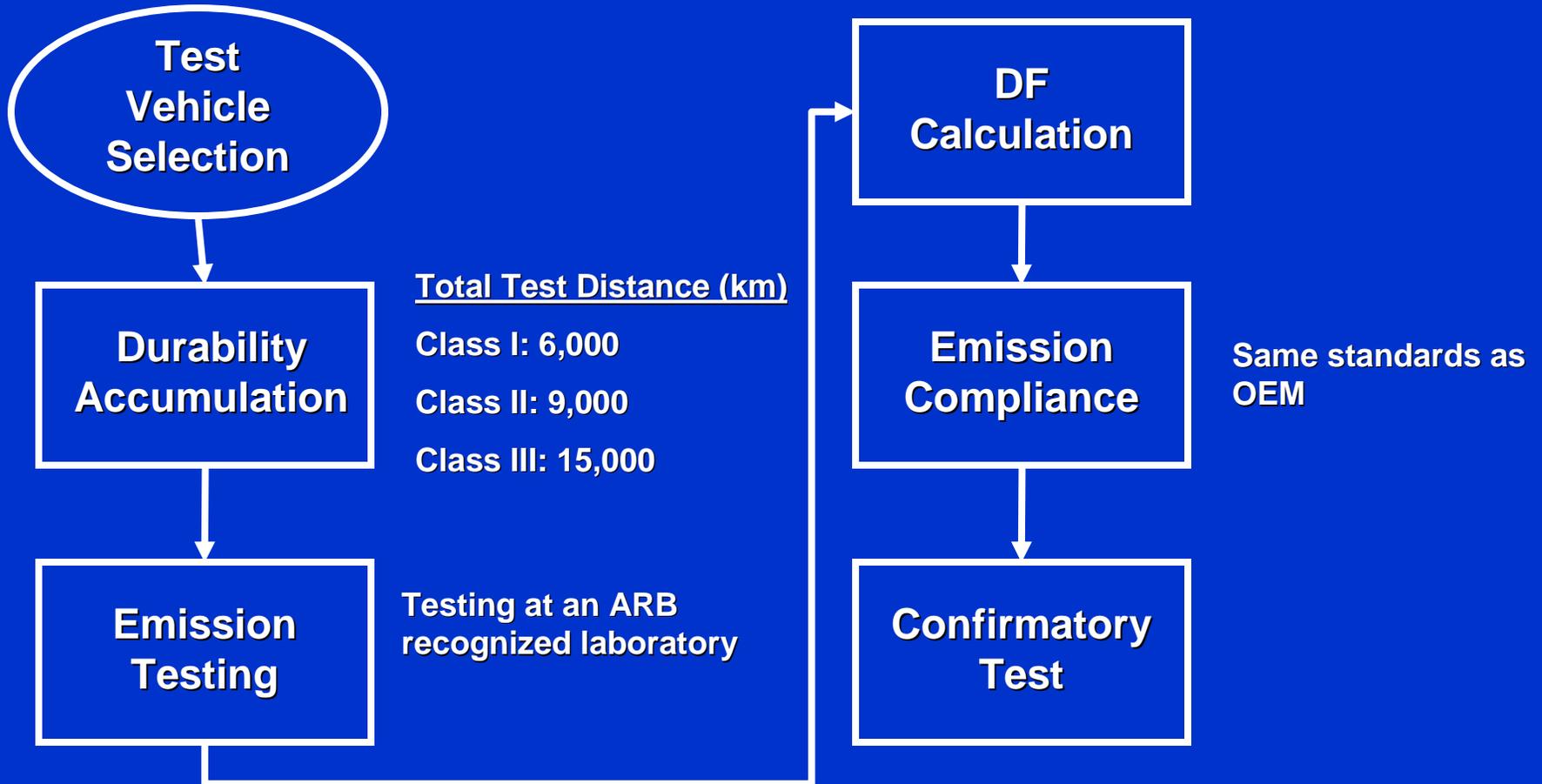
California Environmental Protection Agency

Proposed Regulation

- Applicable to all aftermarket critical parts for use on highway motorcycles
 - Catalysts (in exhaust system)
 - Oxygen sensors
 - Hydrocarbon adsorbers
- Very similar to OEM certification requirements
 - Durability emission testing
 - Warranty and labeling
 - Quality audit/warranty reporting/recall



Emissions Testing



Defects Warranty

- Warranty covers manufacturer defects in design, materials and workmanship
- Warranty periods
 - For motorcycles \leq 4 years old:
 - 5 years/full applicable warranty mileages
 - For motorcycles $>$ 4 years old:
 - 3 years/half applicable warranty mileages

Other Provisions (cont.)

- Warranty Registration Cards
 - 50% return of warranty cards required to ID motorcycles modified
 - Other methods to track may be considered
- Installation warranty
 - Two years/12,000 kilometers
 - Liability to part manufacturer or installer

Recordkeeping for Retailers/Installers

- Information needed
 - Owner
 - Part/motorcycle
 - Vehicle identification number (VIN)
- VIN issue
 - Industry concerned about requirement
 - Similar requirement exists for sale of car catalyysts
 - Only way to track actual motorcycle in event of recall

Labeling/Enforcement

- Labeling similar to current exemption requirements
- Quality Audit testing conducted by ARB
 - Free if vehicle passes emissions
 - Manufacturer pays if vehicle fails
- Manufacturers report to ARB when defect claims become excessive
- Recall or corrective action may be required when claims are verified

Compliance/Enforcement

- Review/approval of parts
- Emission testing/audit
- Review manufacturing advertising
- Respond to complaints
- Focus enforcement actions toward affected industries



Environmental Impacts

- Maintain benefits of motorcycle emission standards (0.8 g/km HC+NOx)
- Reduced tampering
- Legal aftermarket parts

Economic Impacts

- Opens market to aftermarket part manufacturers
- Total cost: \$358,000 over 5-year period
 - Application costs of \$100 each
 - Recordkeeping costs of \$60/year
- Consumer cost: \$100-\$150 per exhaust system

Conclusion

- Proposal provides industry with exemption process to sell legal aftermarket parts
- Reduces tampering by making available emission compliant parts
- Maintains motorcycle emission benefits
- Does not impose unreasonable burdens
- Adoption of proposal recommended