Maryland
Department of
the Environment

Aftermarket Catalytic Converter Regulation

BRTBs Joint ICG/Technical Committee Meeting – Karl Munder, MDE August 4, 2020

Background

- Thirty years ago there was federal guidance on Aftermarket Catalytic Converters (AMCC) to ensure that emissions control systems remained effective
- That guidance lapsed, so now … there are no real prohibitions on the kind of AMCCs that can be purchased and installed
- EPA shifted its focus to anti-tampering
- Several states have moved forward with rules to address this problem. Other states in the queue … update later
- MDE is pushing to attain the ozone standard and therefore believes it is best to move ahead with a MD specific regulation

Need for an Updated AMCC Program

- The catalytic converter is a key component of a vehicle's emissions control equipment

- When converters fail, repair shops have two options for installing a replacement converter
  - Original equipment manufacturer (OEM) … very good
  - Aftermarket catalytic converter (AMCC) … not always so good

- Due to low quality of some AMCC, states and stakeholders have called on EPA to amend its federal AMCC policy
  - AMCC technology is lagging behind today's emissions control technology
  - California Air Resources Board (CARB) has demonstrated the ability of a state program to ensure AMCCs effectively reduce emissions

- A strong federal program is preferable to a patchwork of state rules

Need for an Updated AMCC Program

- MD and other states are getting close to meeting the 2015 ozone standard
  - Because of this, states are working hard to find reductions and have been pushing EPA for an updated AMCC program
  - Ozone Transport Commission (OTC) developed a model rule based on the CARB AMCC program for states to consider adopting
- EPA has shifted focus from AMCCs to broader anti-tampering measures
  - This is good … but
  - It does not address AMCCs adequately
- An effective AMCC program can provide meaningful NOx reductions at a time when MD and other states are getting very close to meeting the 2015 ozone standard

Pros and Cons

- Pros
  - CARB AMCCs offer lower cost options for motorists, compared to OEM converters
  - MD would see a reduction in locally produced NOx and other ozone forming emissions to assist with meeting the federal ozone standard
    - Estimated regional and local daily NOx reductions are 24 and 2 tons, respectively
  - Provides consumers assurance that a vehicle's emissions control system will be functioning properly after a converter replacement
  - The incremental cost of a CARB AMCC (approx. $200) is offset by enhanced warranty coverage
  - Supported by automobile parts manufacturing industry … Manufacturers of Emission Controls Association (MECA) and Autocare
  - Provides momentum for other states to adopt

Pros and Cons

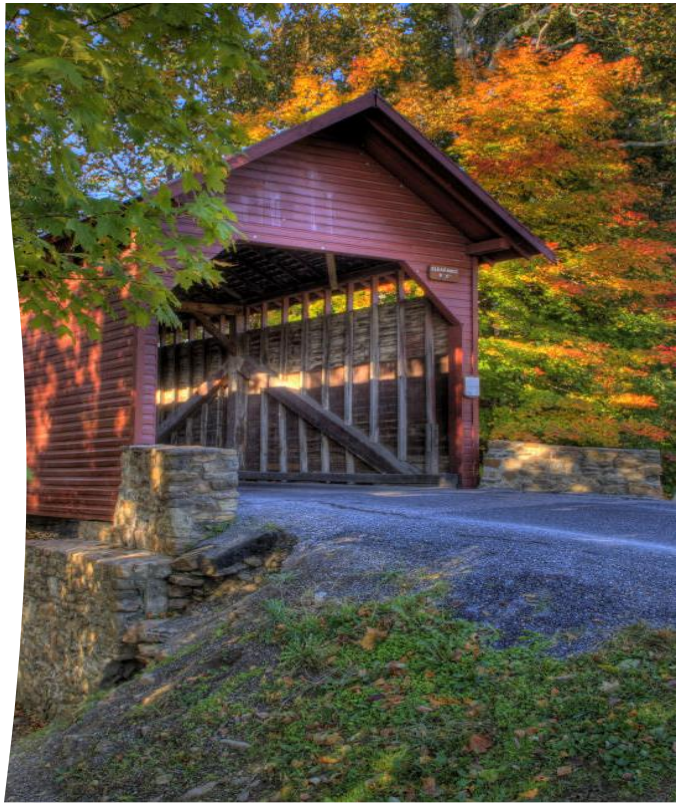
- Cons
  - Right now, some of the converters that don't work well are cheaper than the converters that will be required
  - Is still best implemented nationally by a federal effort
  - Is complicated to enforce

Timeline of Regulation Development

- Started in 2015 - Proposed regulation was based on the OTC model rule
  - MDE delayed regulation adoption since EPA appeared to be moving forward with an update to the federal AMCC program
- 2015-2019 - During the interim, MDE and OTC pushed EPA for federal action
  - EPA started a process with manufacturer support and shared some draft material
  - Despite multiple discussions, ultimately no new federal program was produced
  - Ozone improved in MD, but more NOx reductions are needed to attain
- 2019/2020 - Due to lack of EPA progress, MDE updated the draft regulation and is moving forward with adoption

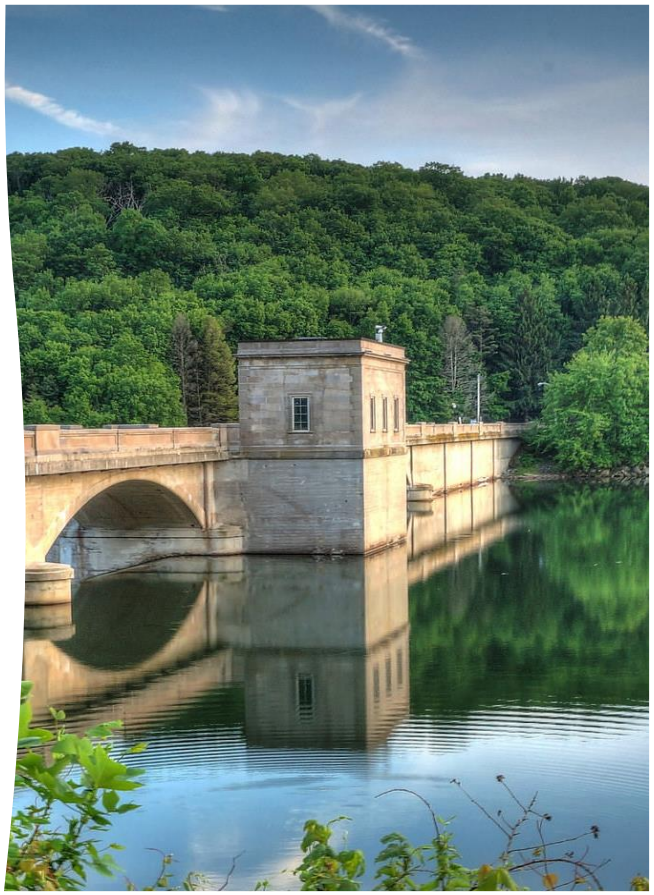
Review of CARB AMCC Program

- Is the basis for MDE's AMCC regulation
- Developed by CARB due to ineffectiveness of federal AMCC program
- Requires converter to allow vehicle to meet its original emissions level
- Ensures OBD II system compatibility … check engine light must stay out
- Does not allow used converters



CARB Overview … continued

- CARB reviews test results from independent labs to certify converters
- CARB audits/tests converters to ensure they meet the standards
- Warranty of 50,000 miles/ 5 years covers converter, parts, and labor

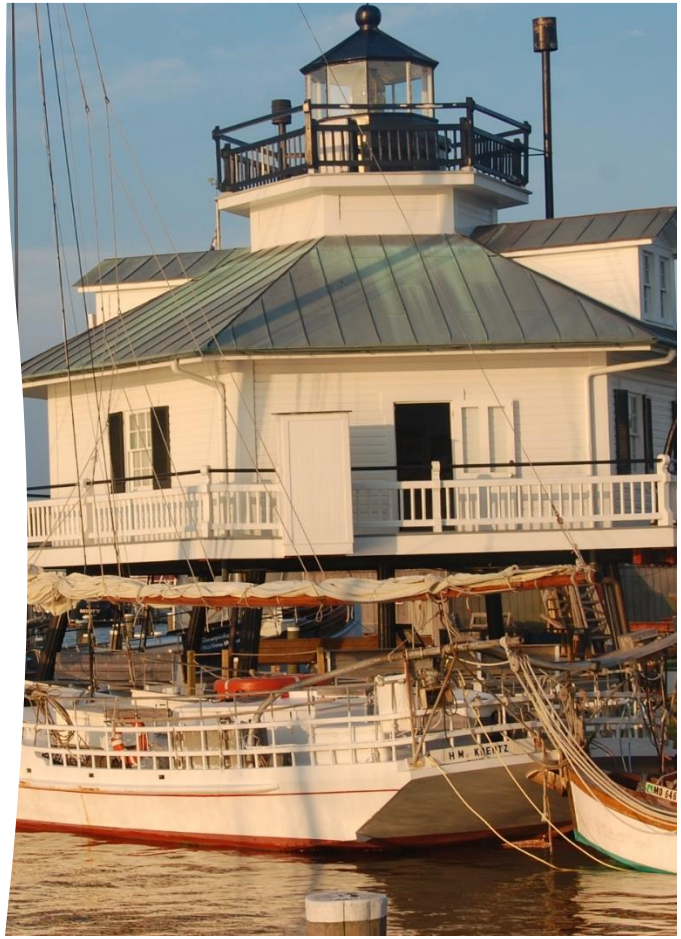


Actions from Other States

- OTC states are moving forward with adopting the program
- Two OTC states (NY, ME) have already adopted the CARB AMCC program
- MD, NJ and CT are now working towards adopting a state AMCC rule. MA is studying issue and considering a regulation in the future
- In the absence of a national AMCC program, these state rules are supported by automobile parts manufacturers like:
  - MECA and Autocare
- CO adopted the CARB AMCC program along with its Clean Cars program, effective January 2021

Overview
COMAR 26.11.20.07

- Requires CARB AMCC in Maryland for all vehicles, whether CARB or federal
- Prohibits used, recycled, or salvaged converters for all vehicles
- Establishes recordkeeping and reporting requirements

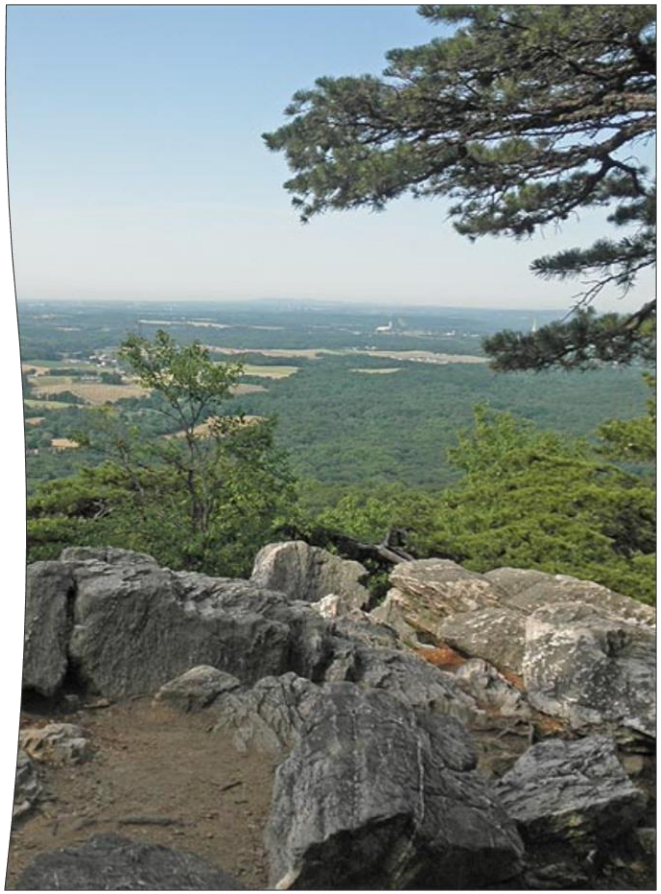


Applicability and Effective Date

- This regulation applies to a person that produces, installs, sells, supplies, advertises, or offers for sale AMCCs on or after the effective date
- Non-CARB parts can still be shipped to an in-state distribution center/warehouse, through the state, or sold out of state
- Effective Date
  - January 1, 2024 (tentative)

Producer Requirements

- A producer shall provide:
  - An aftermarket catalytic converter motor vehicle application guide to installers
  - A means for the installer to contact the producer for technical assistance



Installer Requirements

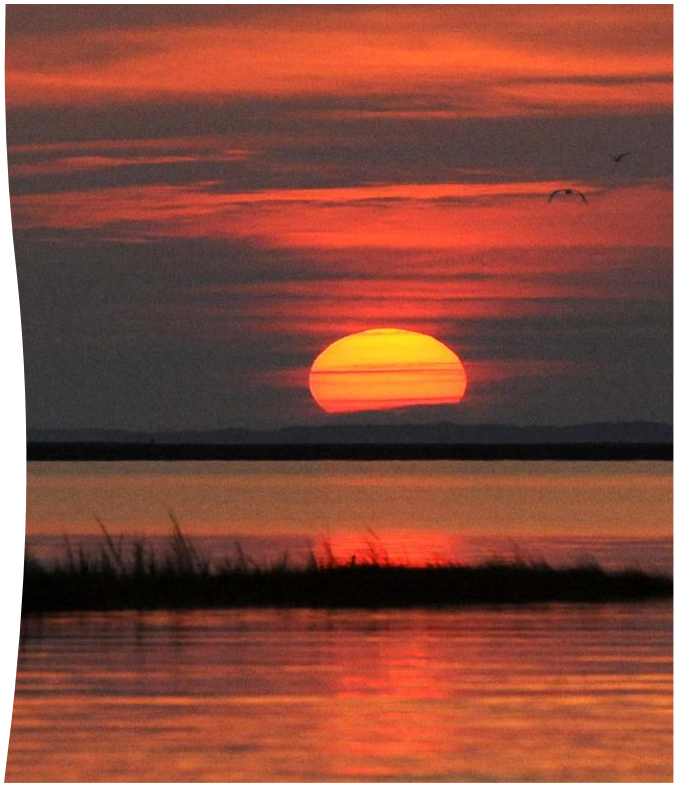
- The installer must verify that the AMCC is specified for the motor vehicle using the producers guide
- The AMCC must be installed in the same location as the original equipment manufacturer catalytic converter

Record Keeping and Reporting

- Record Keeping Requirements
  - An installer shall retain records pertaining to the sale and installation of AMCCs for a minimum of 4 years from the date of installation
- Reporting Requirements
  - A producer shall submit to the Department semi-annual warranty reporting on AMCCs sold in the State

Sunset Provision

- This regulation expires when the United States Environmental Protection Agency adopts a regulation or enforcement policy that provides for the sale, supply, advertisement, or installation of an AMCC that is able to reduce motor vehicle emissions at the same or greater level

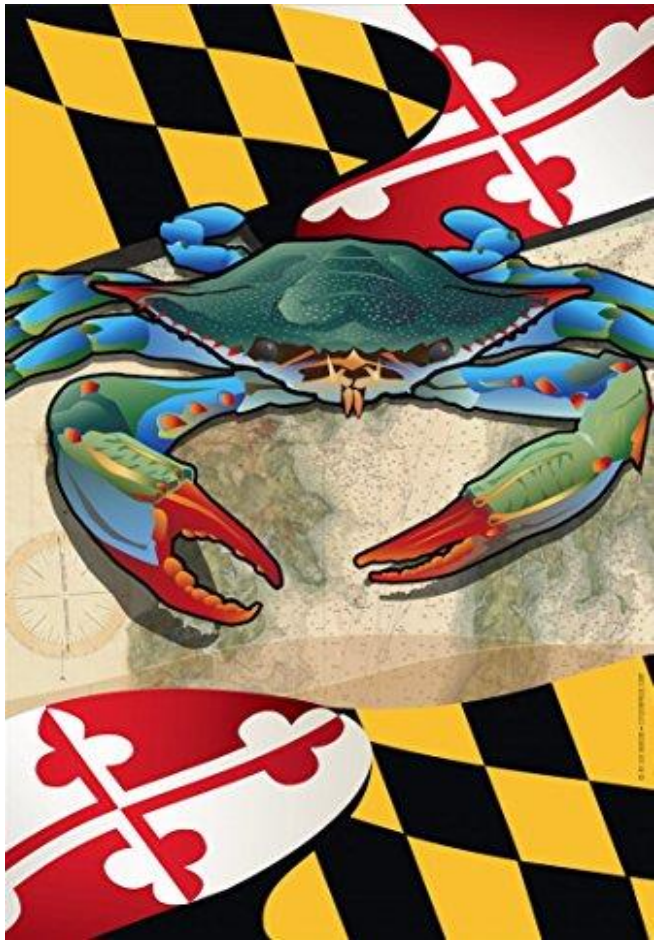


Regulation Adoption Schedule

- June 2020
  - Discussion and approval by MDE's Air Quality Control Advisory Committee (AQCAC)
- Fall 2020
  - Approval from Division of State Documents
- Late 2020/ Early 2021
  - Notice of Proposed Action is released, and hearing is held
- July 2021
  - Regulation adopted, effective date of January 1, 2024

Recap

- A rule was proposed in 2015 based on the OTC model rule
- MDE did not move forward due to a potential for a federal rule update and industry initiatives. This did not happen, so MDE believes it is necessary to move forward with a state regulation
- The new MDE 2020 rule would allow for a more robust product to be installed over a wider range of vehicle model years



Questions