



Maryland
Department of
the Environment

Aftermarket Catalytic Converter Regulation



AQCAC Meeting – Karl Munder, MDE – June 15, 2020



Background

- An earlier version of this regulation was brought to AQCAC in 2015
- There were a lot of questions asked and at the end of the day, AQCAC did not move forward with an approval
- Difficulties with moving the 2015 regulation forward?
 - It would have worked best if implemented through a federal effort
 - No other neighboring states had moved forward with a state AMCC rule
 - There appeared to be an effort by EPA to fix the federal program
- Why are we back with this regulation?
 - We still need more nitrogen oxide (NO_x) reductions to meet the current ozone standard - we are very close
 - This is the largest NO_x reducing initiative we can do in Maryland
 - EPA has not fixed, and does not appear to be planning to fix, the federal program
 - Other states (no neighbors) are also moving ahead



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

- Like MD, the Ozone Transport Commission (OTC) states are getting close to meeting the 2015 ozone standard
 - Because of this, other OTC states are also working hard to find reductions and are pushing EPA for an updated AMCC program
 - 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 NO_x 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 would 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
- VEIP will continue the current procedure of confirming a vehicle has a converter and using the On-Board Diagnostic (OBD) system to verify proper functioning
- Supported by manufacturers ... 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

- 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 NO_x reductions are needed to attain
- 2019/2020 - Due to lack of EPA progress, MDE updated the draft regulation and is bringing it to AQCAC today for approval



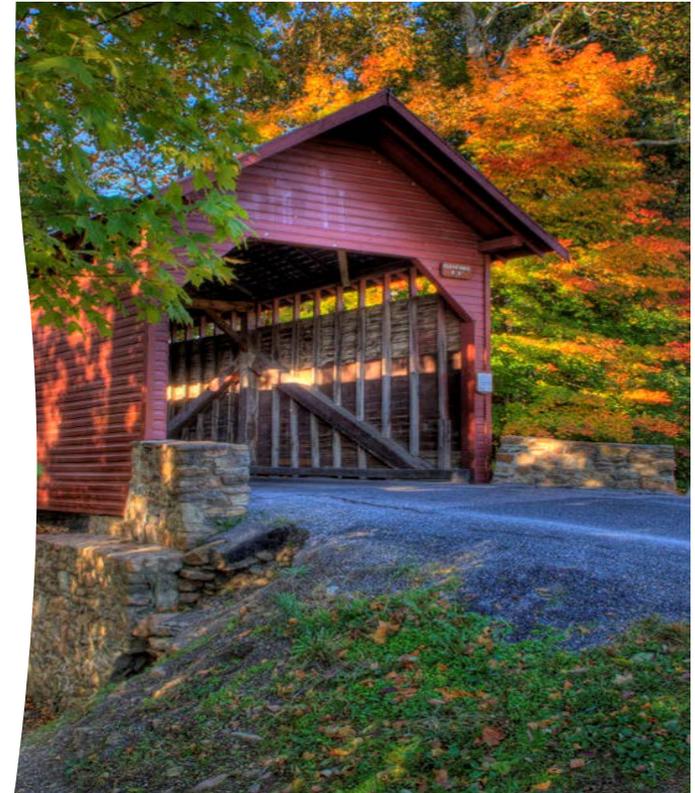
What Happened to the EPA Process?

- Thirty years ago there was federal guidance on AMCCs 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



Review of CARB AMCC Program

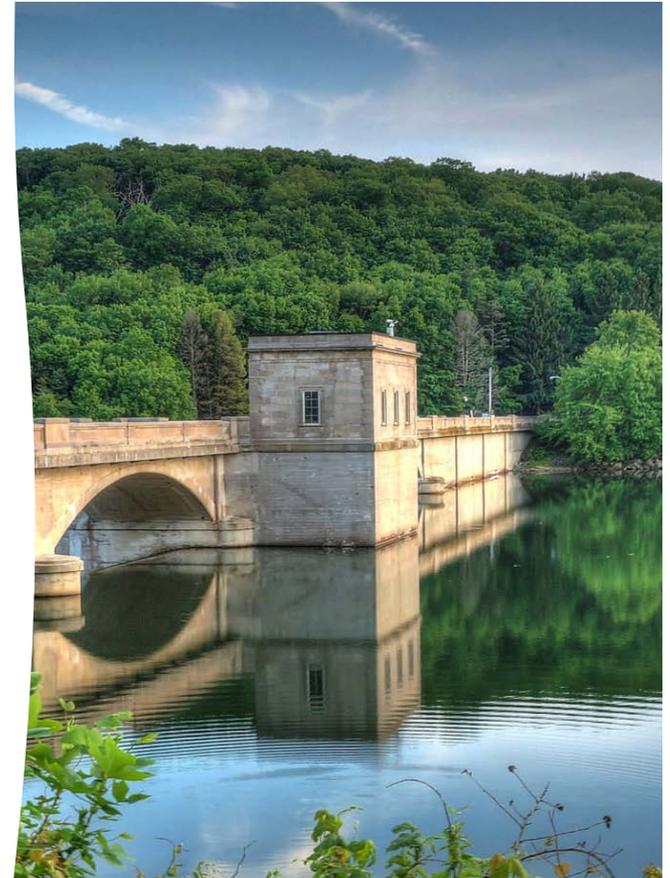
- Is the basis for MDE's AMCC regulation
- Developed by CARB due to ineffectiveness of federal AMCC program
- Requires converter to allow vehicle to meet its original emissions level
- Ensures OBD II system compatibility ... check engine light must stay out
- Does not allow used converters





CARB Overview ... continued

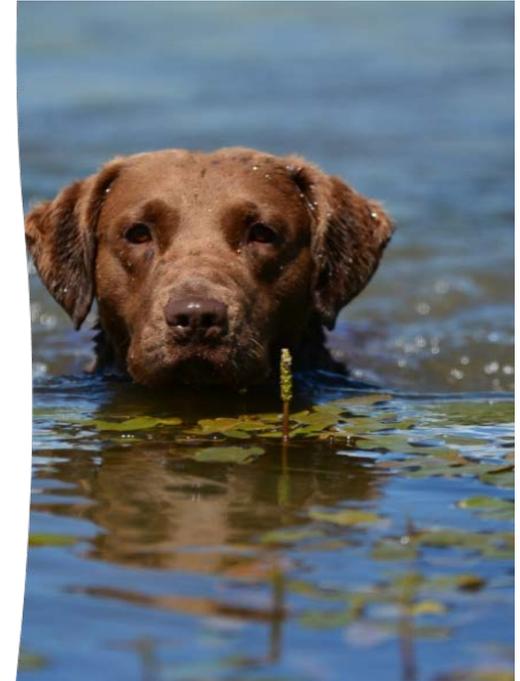
- CARB reviews test results from independent labs to certify converters
- CARB audits/tests converters to ensure they meet the standards
- Warranty of 50,000 miles/ 5 years covers converter, parts, and labor





OTC States

- OTC states are pushing for EPA to update the federal AMCC program
 - OTC has taken many formal actions, written letters in support of an updated federal policy
- 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 Jan 2021





OTC's Comments on EPA's Draft Proposal on AMCC

- The updated EPA tampering policy appeared promising but falls short of requirements for an effective AMCC program
- EPA draft white paper sent to OTC in September 2018
- Weak performance of current AMCCs endangers the investments OTC states have made in Clean Cars programs
- Establishing a national AMCC program has been a goal of OTC, other states, and most of the AMCC industry for over a decade
- NY and ME have had to proactively develop and implement individual state programs based on the CARB program
- Focus on enforcement discretion and tampering ... leaves out the standards, testing procedures, warranty specifications, and record keeping requirements of prior program



Changes to Regulation Since the March 2020 AQCAC Presentation

- Still largely based on the OTC model rule
- Incorporates NY's improved implementation elements
- Incorporates an industry proposal allowing CARB AMCCs on vehicles that only have federal emissions certification





Industry AMCC Proposal for Federal Certified Vehicles

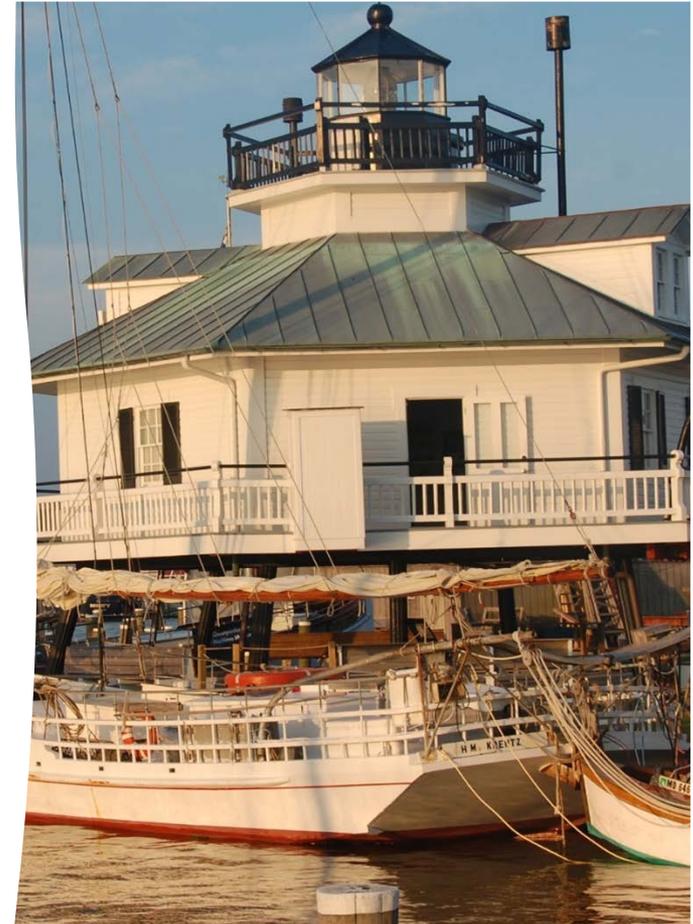
- MECA and Autocare proposed a concept for the use of CARB AMCCs on federal vehicles
 - Responds to the need to address federal vehicles as CARB AMCC program and OTC model rule do not
 - A problem for states outside of CA
- Allows manufacturers to determine an appropriate CARB AMCC based on a vehicle's characteristics (exhaust system configuration, emissions certification, etc.) and provide the information to installers
- Their proposal is based on standard industry practices



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
- Includes other state “trigger” concept and sunset provision





Applicability and Effective Date

- **Applicability** (Section B)
 - This regulation applies to a person that produces, installs, sells, supplies, advertises, or offers for sale aftermarket catalytic converters 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** (Section C)
 - No earlier than January 1, 2024; and
 - Two years after two of the following states have adopted a regulation that provides for the production, sale, supply, advertisement or installation of aftermarket catalytic converters that meet the requirements of § (E) of this regulation:
 - Delaware;
 - New Jersey;
 - Pennsylvania;
 - Virginia; or
 - West Virginia

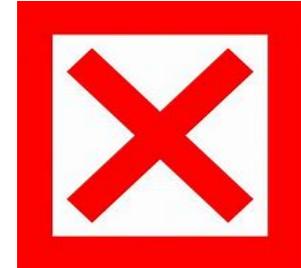


MDE is specifically asking for AQCAC input on this “Other State Trigger” concept



What is Not Allowed

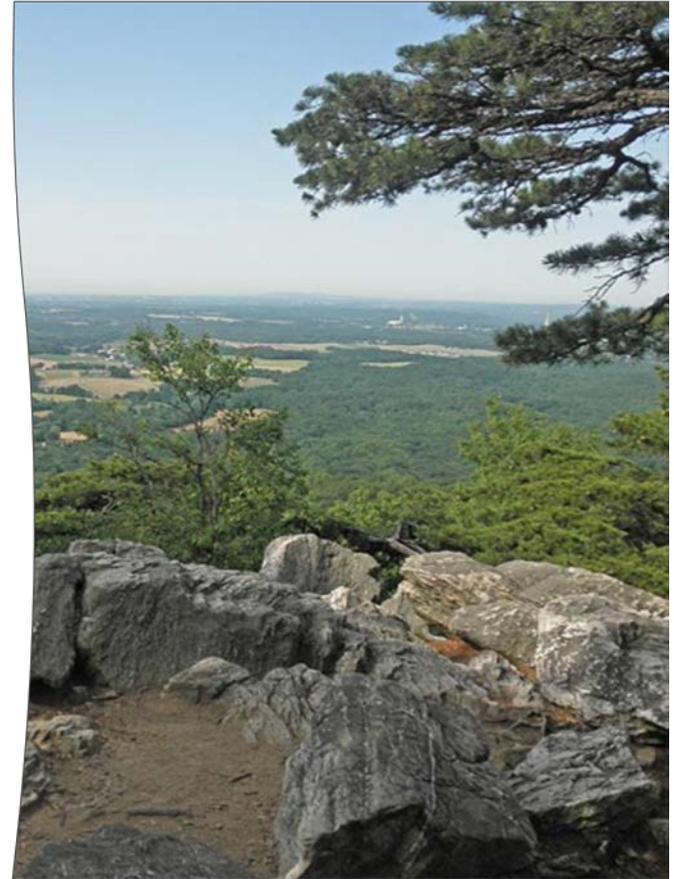
- Prohibitions (Section E)
 - A person may only install, sell, supply, advertise, or offer for sale, for use on a motor vehicle in the State:
 - An AMCC that has been allowed for use by CARB on a 1996 or newer model year motor vehicle
 - A converter that is not used, recycled, reconditioned, or salvaged





Producer Requirements

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





Installer Requirements

- **Installer** (Section F)
 - 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 (Section G)
 - 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 (Section H)
 - A producer shall submit to the Department semi-annual warranty reporting on AMCCs sold in the State





Sunset Provision

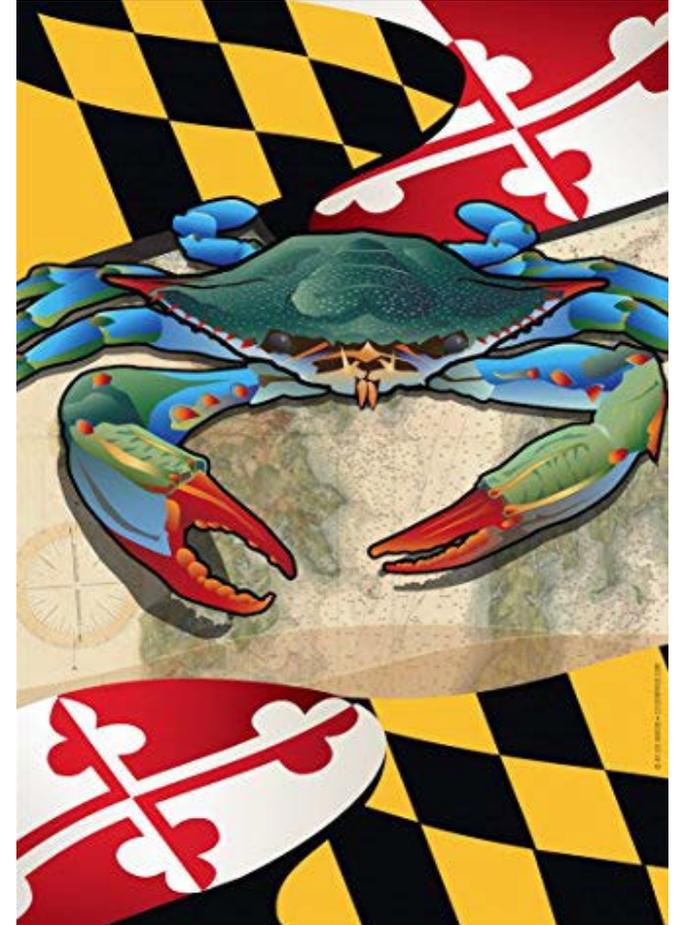
- **Sunset** (Section I)
 - This regulation expires when the United States Environmental Protection Agency adopts a regulation or enforcement policy that provides for the sale, supply, advertisement, or installation of an AMCC that is able to reduce motor vehicle emissions at the same or greater level





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





Regulation Adoption Schedule

- June 2020
 - Seek advice on “trigger” wording in the regulation
 - Discussion and approval by 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



Today's Action Items

- Obtain guidance from AQCAC on the “trigger” wording in the regulation
- A favorable vote, so MDE can move ahead with this regulation with the support of AQCAC





Questions

