



**Maryland**  
Department of  
the Environment

---

# Insuring that Aftermarket Catalytic Converters Work



MWAQC Meeting – Karl Munder, MDE – December 16, 2020

---



# Purpose of Presentation

---

- Maryland briefed MWAQC TAC on its new Aftermarket Catalytic Converter(AMCC) regulation in July 2020
- EPA policies have not been updated and aftermarket converters now being sold result in significant emission increases
  - MD,CO, CT, MA, ME, NY, and NJ are only adopting a regulation because of the EPA failure to update its aftermarket catalyst program
- Maryland was asked to brief MWAQC during the September 23<sup>rd</sup> meeting
- During discussion on the 23<sup>rd</sup>, MWAQC decided to revisit the topic during the December meeting
- This presentation will provide an update on recent activities and provide more details on how a regional AMCC policy will help with achieving the ozone standard



# Two Recent Activities

---

- Over the past month two important things have happened
  - Virginia, Maryland and the District of Columbia have begun discussions on regional adoption of the rule
    - Maryland is in the process of publishing the regulation for comments and adoption
    - DC has indicated an interest in adopting a similar regulation
    - VA is interested but has numerous challenges, including prohibitive legislation affecting its ability to move forward with adopting a similar regulation
  - EPA has begun to take action



# Recent EPA Action

---

- On November 23, 2020 EPA issued a pre-publication copy of a Federal Register notice that discusses a potential for a reinvigorated effort to update the EPA 1986 AMCC program to insure that AMCCs actually work and reduce emissions
- Timeframe uncertain
  - This effort will become much clearer as the EPA transition takes place
- This program is much better if required by EPA
  - Maryland will move slowly in adopting the AMCC rule with the hope that EPA solves the problem
  - The Maryland regulation does include a sunset provision should EPA adopt an effective federal program



## Region has Made Great Strides Towards Meeting the 70ppb Ozone Standard

---

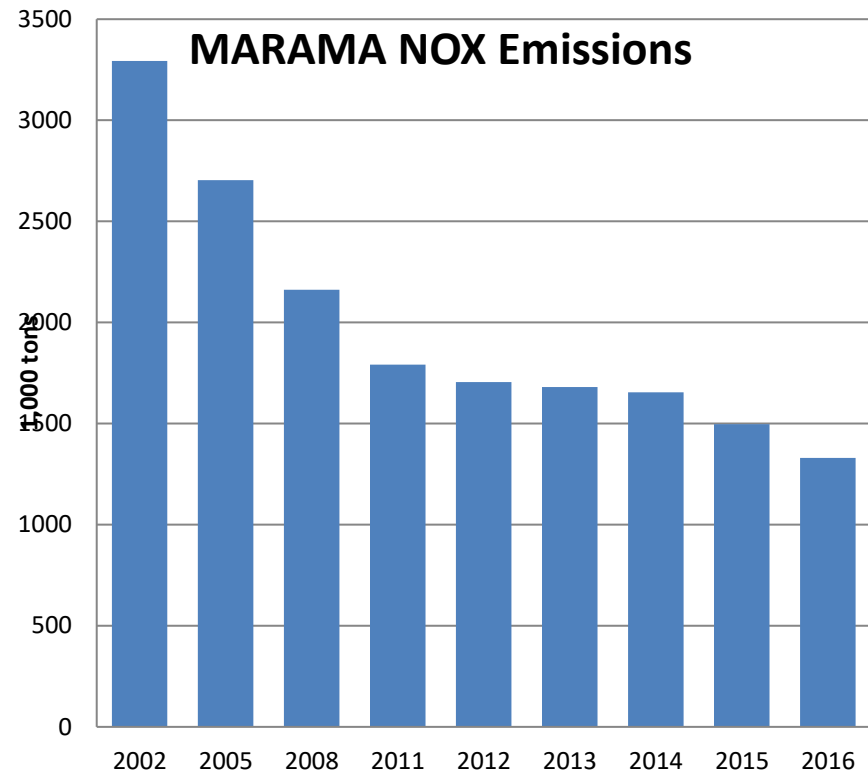
- A significant decrease in the number of bad ozone days for Maryland and the MD-DC-VA area starting in 2010
  - This has happened even as the number of days exceeding 90 Degrees have increased
- The MD-DC-VA region has been flirting with achieving the 70 ppb Ozone Standard for the past 5 - 7 years
  - The level has been hovering between 71ppb - 72ppb
- A regional AMCC policy could be the strategy that allows the area to achieve its goal of attaining the ozone standard



# Changing Chemistry ... Some Good News

- In the Mid-Atlantic,  $\text{NO}_x$  reduction efforts seem to be returning unexpected dividends
- We know that regional  $\text{NO}_x$  reductions will clearly reduce ozone levels
- It appears that in 2017, enough  $\text{NO}_x$  has been taken out of the system that the chemistry has changed
  - We now get more ozone reduction per every ton of  $\text{NO}_x$  we reduce compared to 2000

NO<sub>x</sub> Reductions in Mid-Atlantic States  
Ozone Season Tons





# Benefits of an Updated AMCC Regulation

---

- CARB AMCCs would offer lower cost options for motorists, compared to OEM converters
- Region would see a reduction in locally produced NO<sub>x</sub> and other ozone forming emissions to assist with meeting the federal ozone standard
- Provides consumers assurance that a vehicle's emissions control system will be functioning properly after a converter replacement
- Supported by manufacturers ... Manufacturers of Emission Controls Association (MECA) and Autocare
- Provides momentum for other neighboring states to adopt



# Reductions From Regional CARB AMCC

---

- Potential for large regional emission reductions
- Approximately 3.5 tons per day in the MD-DC-VA region
- Compared to other options ... this is a large NO<sub>x</sub> reduction opportunity

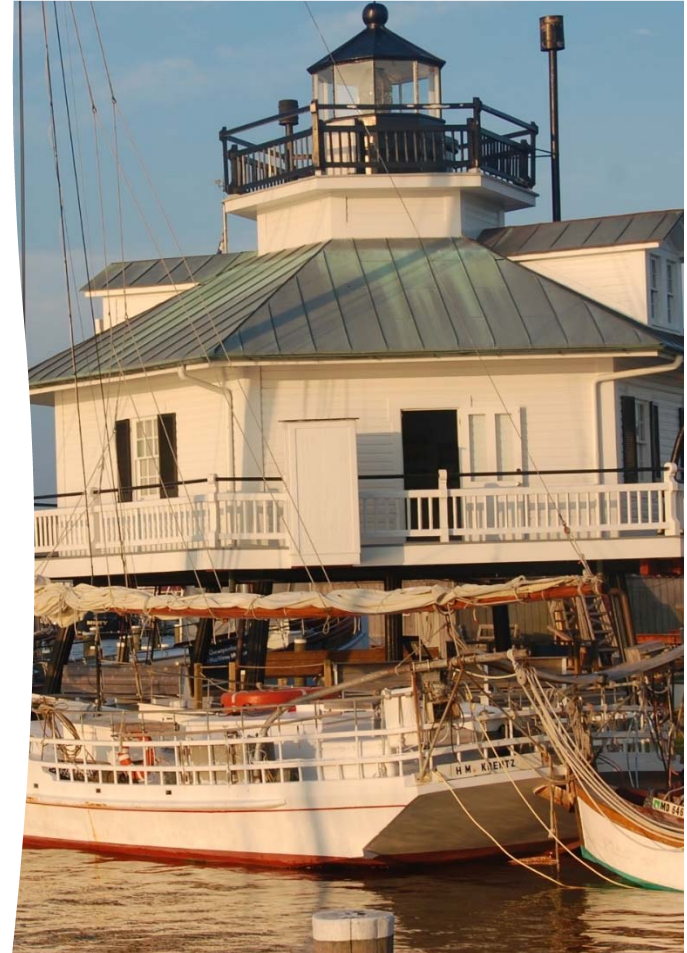






# Overview of Maryland's AMCC Regulation

- Requires a CARB AMCC for all 1996 and newer model year vehicles
- No used, recycled, or salvaged converters allowed
- Installers, parts manufacturers, and distributors as responsible entities
- Non-CARB parts can still be shipped to an in-state distribution center/warehouse, through the state, or sold out of state
- Regulation takes effect on October 1, 2023

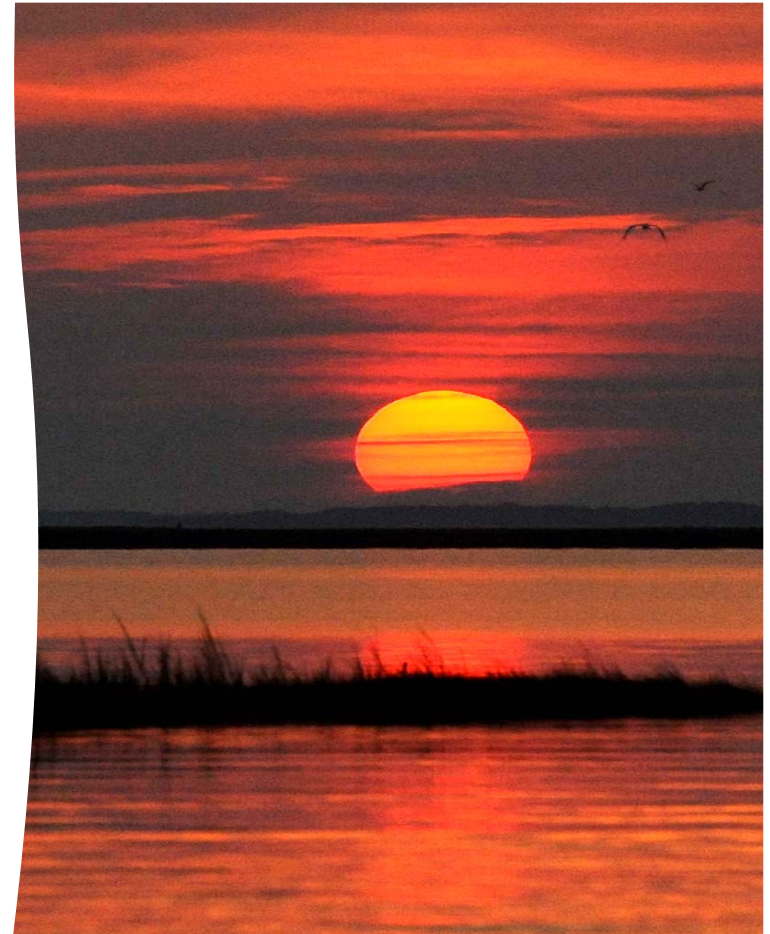




# Sunset Provision

---

- 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





# Recap

- A coordinated regional AMCC program is best in for achieving the highest amount of regional NOx reductions
- The MDE regulation allows for a more robust product to be installed over a wider range of vehicle model years
- Updated program will help jurisdictions to achieve the 2015 Ozone standard
- This is an automotive aftermarket part regulation





# Conclusions ... Action

---

- Maryland would like to see the AMCC program adopted throughout the DC-MD-VA nonattainment area
  - If not by EPA, then through state regulation
  - We hope many MWAQC members will support this
- Has multiple positive drivers
  - DC-MD-VA area is so close to attainment
  - Significant NOx reductions
  - Cost effective emission reduction strategy with added consumer protections
  - Has vocal support from manufacturers
  - Also being considered or adopted in many other OTC states
- We hope that MWAQC will support continued collaboration between MD, VA and DC on this issue
  - To be implemented through a federal program
  - If not through a federal effort - MD, VA and DC should consider to pursue options for local implementation including regulations, enforcement and other policies



# Questions

---

