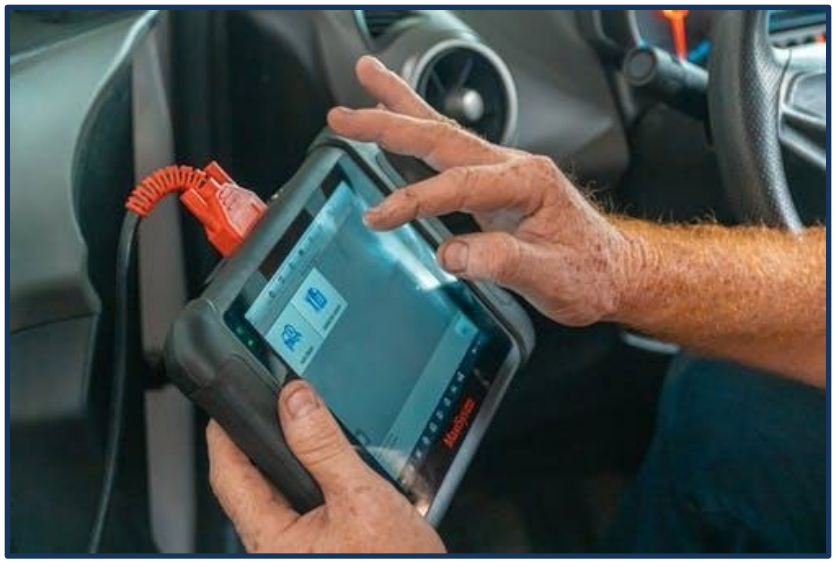
Maryland
Department of the Environment

Vehicle Emission Tampering Amendments



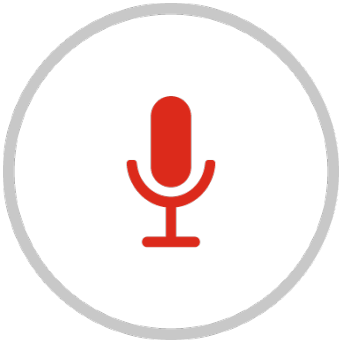
Air Quality Control Advisory Council
June 13, 2022
John Artes & Randy Mosier - MDE

Air Quality Control Advisory Council Meeting Materials

- Welcome to today's meeting!

- This meeting is being Recorded. The webinar recording, presentations and related resources will be made available on the Air Quality Control Advisory Council web page:

https://mde.maryland.gov/programs/workwithmde/Pages/AQCACmeetingminutes.aspx



Outline

- Regulatory Background
- Brief Refresher
- Proposed Amendments
  - Exemptions to Wholesale Auto Auction and Insurance Industry
- Compliance Updates
- Regulation Adoption Schedule

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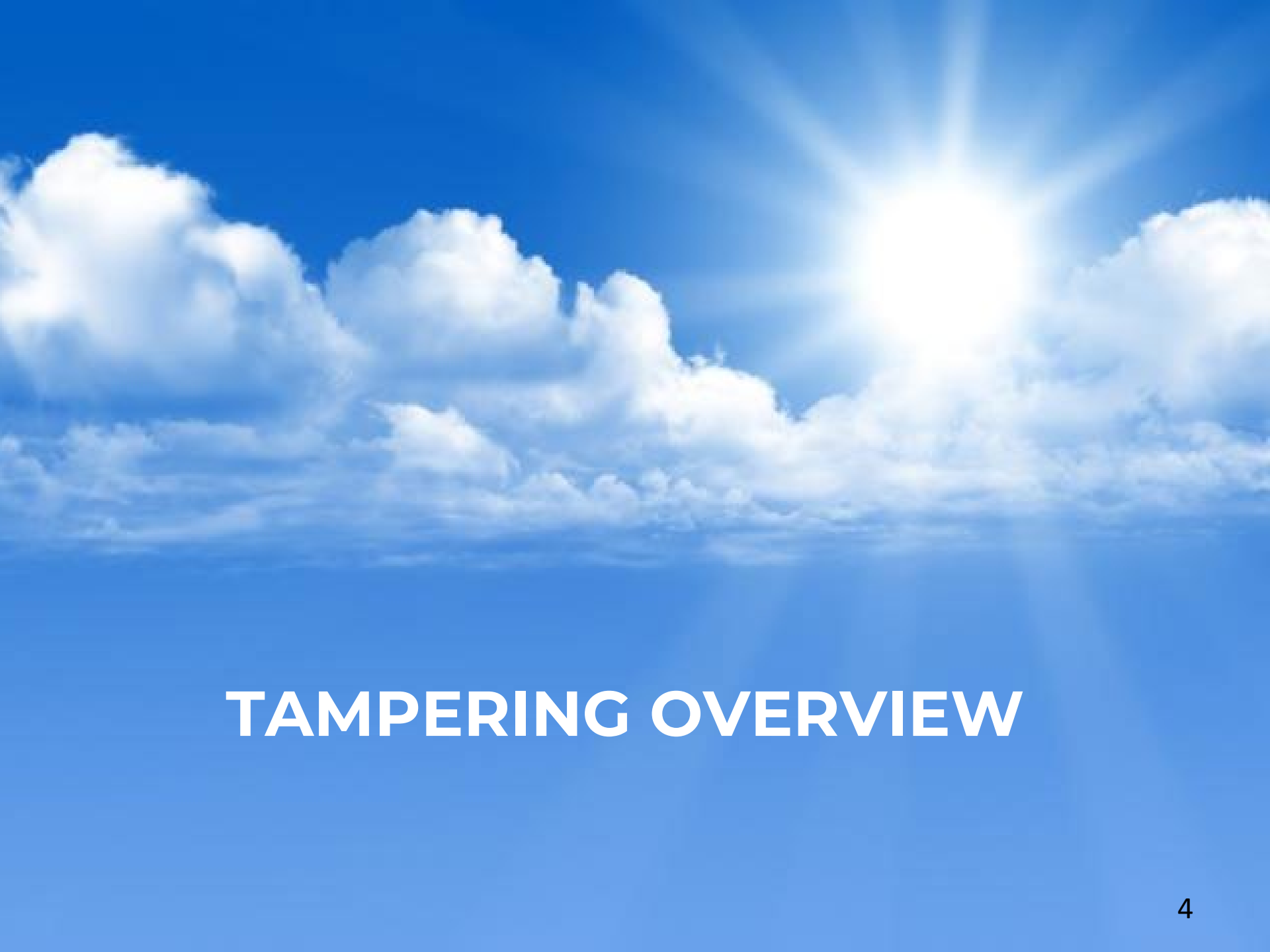

TAMPERING OVERVIEW

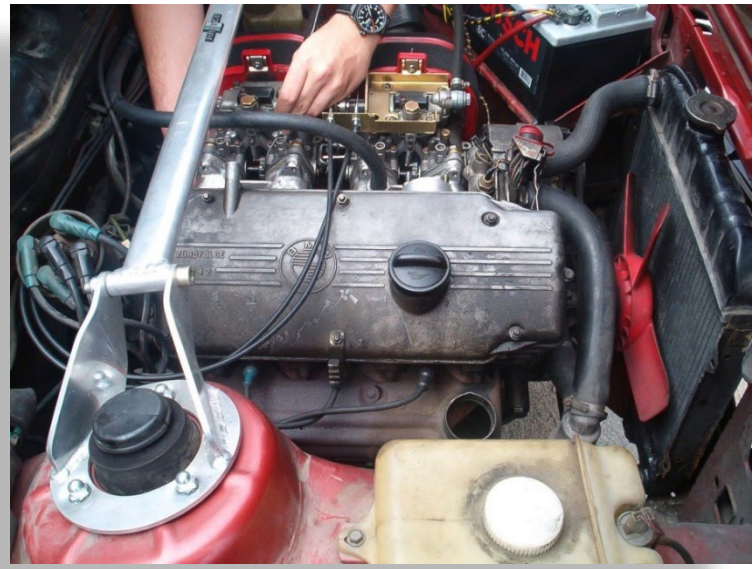
Tampering Basics

- Over the past few years, Maryland, the U.S. Environmental Protection Agency (EPA), and other states have begun to investigate and take action against companies and individuals who tamper with the emission control systems on vehicles
- The Volkswagen case was the first major action taken by EPA to address this issue
- Five years ago, this issue was not understood to be a major emissions problem, but it is now viewed as major problem and can be linked to Maryland's ozone problem
- It is estimated that tampered vehicles are emitting up to 2,900 excess tons of nitrogen oxide (NOx) emissions during the ozone season in the seven states that make up the Mid-Atlantic region*

* Values are for Class 2b and 3 diesel pickups only

What is Tampering?

- Tampering can take two basic forms:
  - Removing hardware, filters and catalysts in the stock emission control system
    - This hardware can be located in the engine (e.g. Exhaust Gas Recirculation (EGR)), or
    - In the exhaust system (eg. Diesel Particulate Filter or Selective Catalytic Reduction)
  - Replacing or altering the software or calibrations that control engine operation, sometimes referred to as "tuning“
    - Tuning may increase engine emissions,
    - Allow a vehicle or engine to operate without emissions controls, or
    - Prevent the onboard diagnostic system from recognizing that the vehicle or engine is functioning differently than originally designed and certified



Local NOx and Particulate Matter Emissions

- EPA estimates that in the next decade close to 100,000 excess tons of NOx and 890 tons of Particulate Matter (PM) could be emitted in the Mid-Atlantic states due to aftermarket tampering of diesel mobile sources

- EPA estimates that roughly 58,000 diesel vehicles in Mid-Atlantic States had their emissions controls completely removed in the preceding decade

- EPA estimates that from 2009-2019, Maryland had 5,900 diesel trucks operating with deleted devices
  - Excess NOx emissions from these vehicles amounted to 6,000 tons during this period (600 tons per year or 1.64 tons per day)
  - Excess PM emissions from these vehicles amounted to 64 tons during this period (6.4 tons per year)

Background

- On June 14, 2021, AQCAC voted to recommend the Maryland Department of the Environment (Department) adopt updated regulations addressing the tampering of motor vehicle emission controls

- This action clarified and expanded Maryland's regulations
  - The adopted regulation prohibits the manufacture, sale, installation, and use of any device that prevents a motor vehicle's air pollution control system from operating as originally designed
  - The adopted Regulation also:
    - Requires a vehicle dealer or business that sells, auctions or transfers a motor vehicle to maintain records confirming all air pollution control systems are in operating conditions at the time of sale; and
    - Codifies the Department's rights to conduct inspections and surveillance of new and used motor vehicles for the purposes of determining compliance

- These regulations became effective February 7, 2022

- Comments were received from the auto insurance and auction associations during the public hearing process

- The Department proposed amendments to AQCAC on March 14, 2022 to address comments received
  - AQCAC recommended the Department further develop clarifying language for the Council's consideration

Schedule

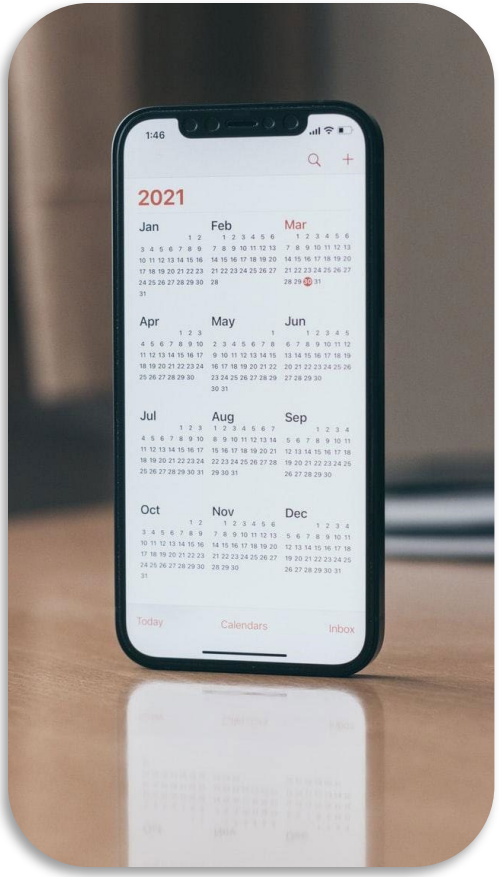
AQCAC – June 13, 2022

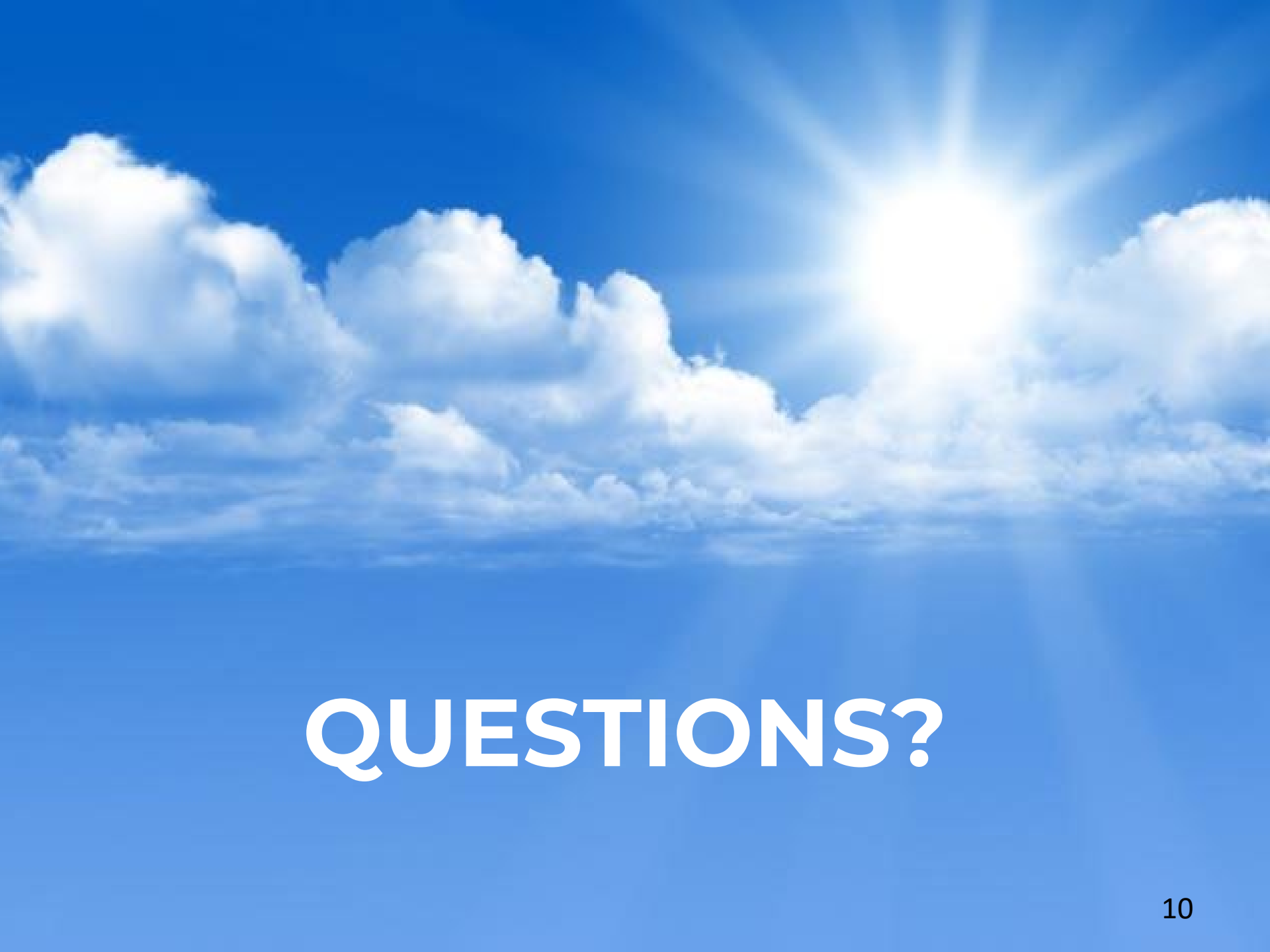
Notice of Proposed Action – September 2022

Public Hearing – October 2022

Notice of Final Action – December 2022

Final Effective Date – December 2022




QUESTIONS?