





Hampton Roads 1997 Ozone NAAQS Second Maintenance Plan

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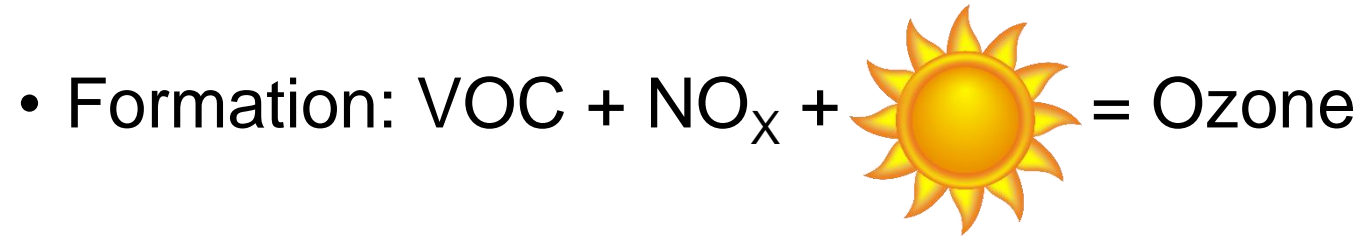
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What is Ozone?

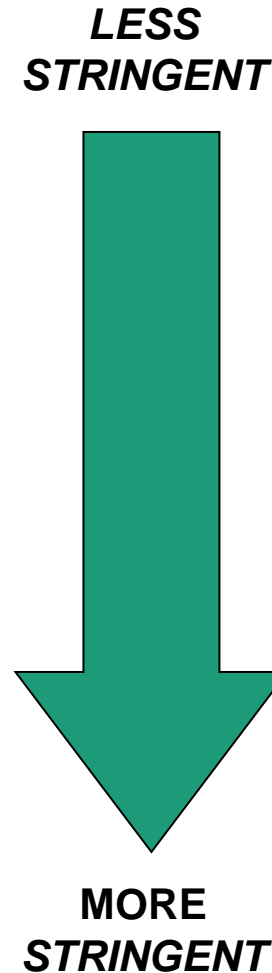


(Volatile organic compounds and nitrogen oxides in the presence of sunlight will form ozone.)

- Primary component of smog
- Mainly a summertime pollutant
- Impacts human lung function and health as well as vegetation
- Heavily regulated by the Clean Air Act (CAA)
- Transportation conformity and general conformity result from CAA requirements in areas with poor ozone air quality

Federal Ozone Air Quality Standards

- **1979 Standard**
 - 0.12 ppm
 - Averaged over one hour
- **1997 Standard**
 - 0.08 ppm
 - Averaged over eight hours
- **2008 Standard**
 - 0.075 ppm
 - Averaged over eight hours
- **2015 Standard***
 - 0.070 ppm
 - Averaged over eight hours



** EPA's draft Policy Assessment for the ozone NAAQS, dated April 29, 2022, indicates that EPA is not considering changing the primary ozone standard.*

Hampton Roads Ozone Monitoring Locations



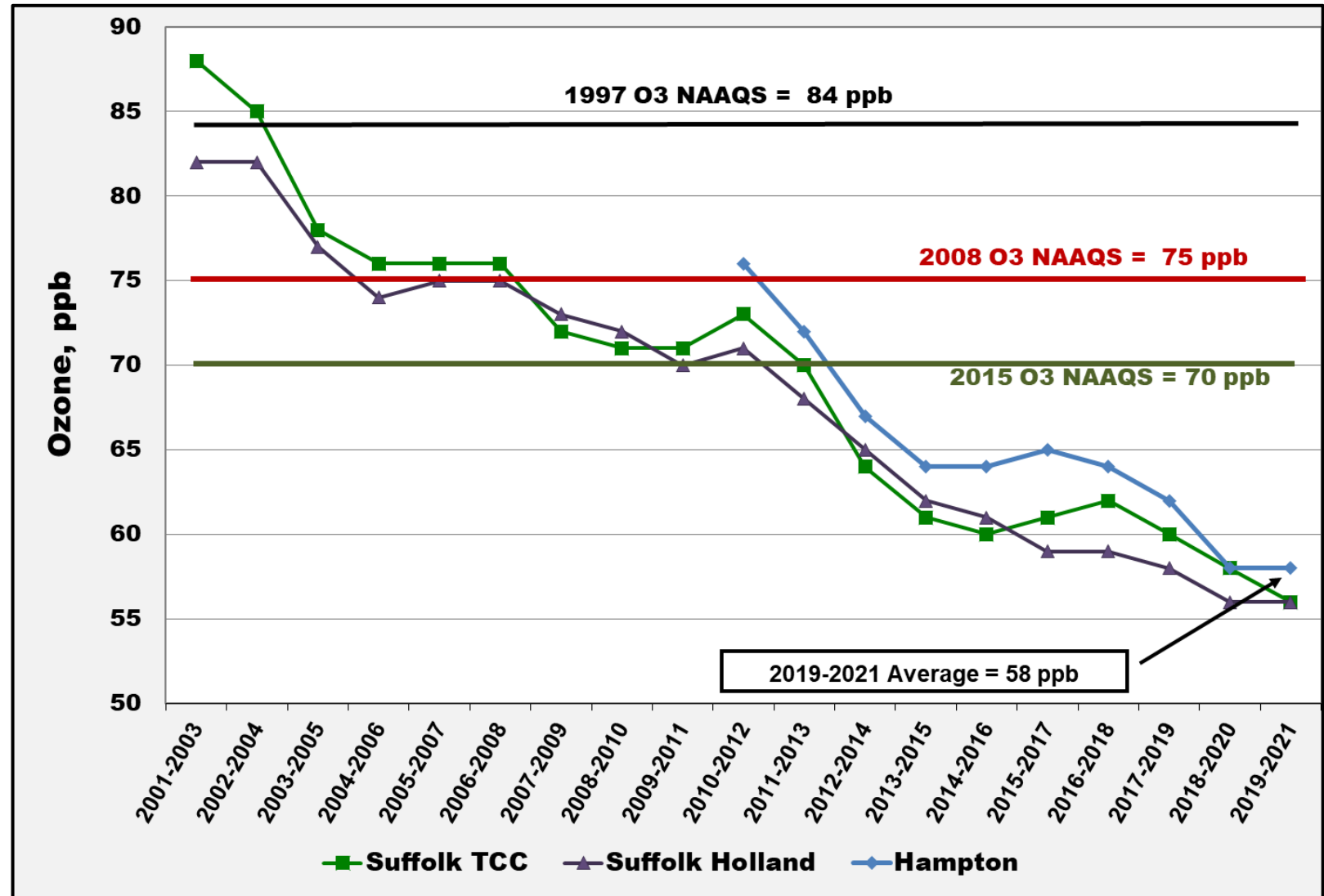
Hampton Roads Air Quality and CAA Designations

1979 Standard
Moderate nonattainment

1997 Standard
Marginal nonattainment

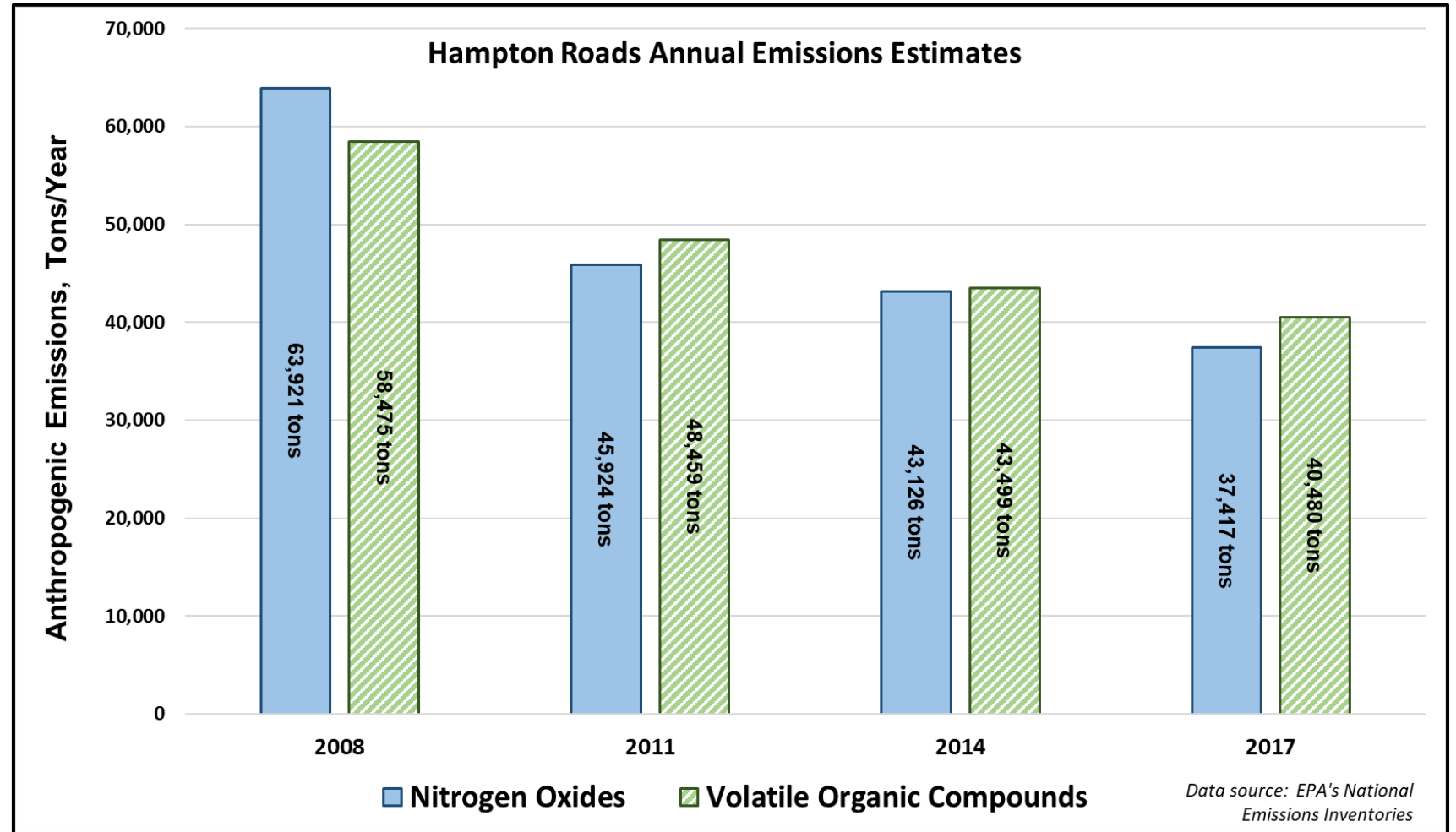
2008 Standard
Attainment

2015 Standard
Attainment



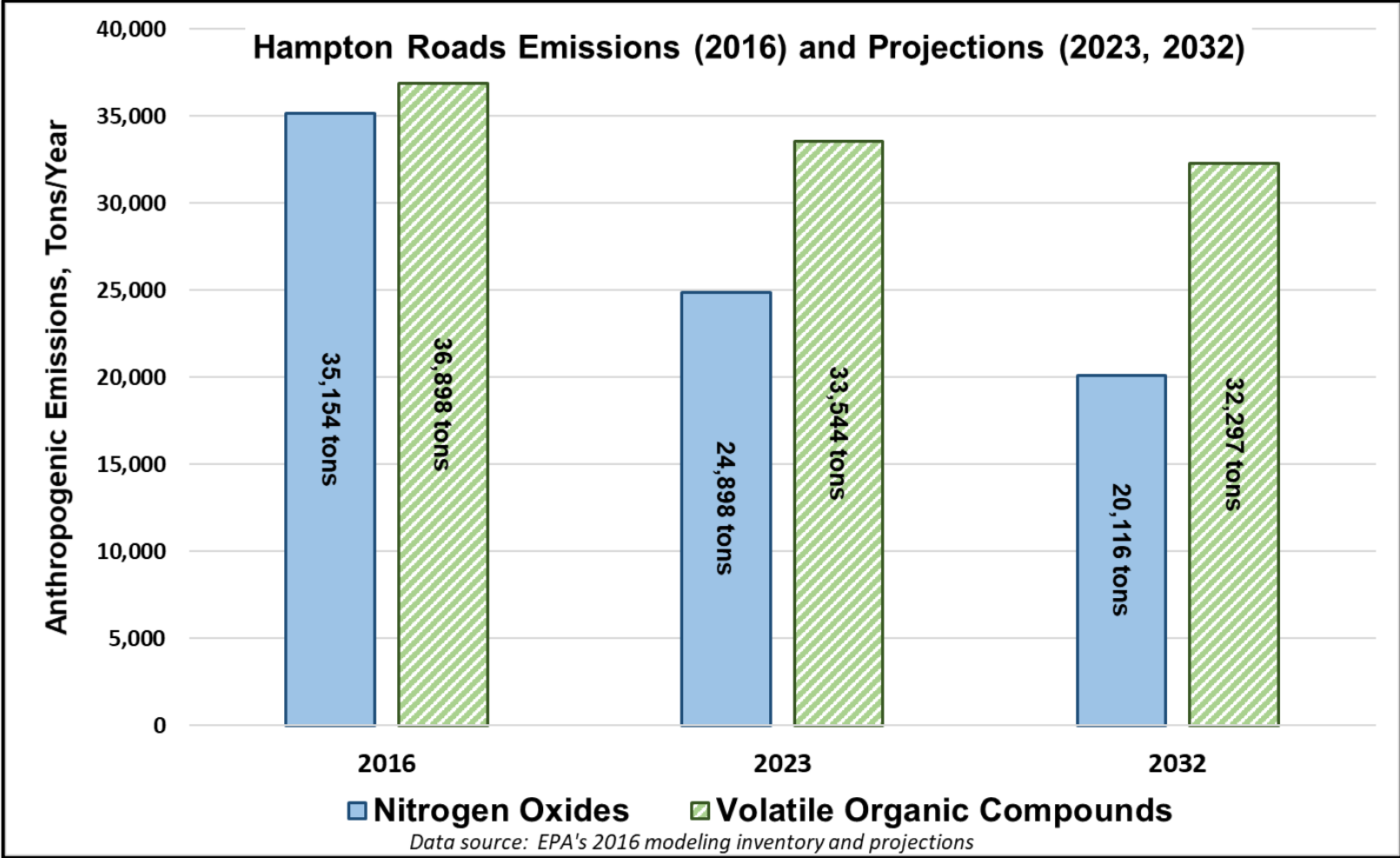
Why Has Air Quality Improved?

- Cleaner engines and fuels
 - Passenger vehicles, trucks, HDDV
 - Off-road engines, including marine engine standards
- Utility emissions controls
- Industrial emission reductions and controls
- Cleaner consumer products (paints, stains, personal care, etc)
- Numerous voluntary programs (VPA, military bases, TRAFFIX, etc)



Air Quality Improvements Expected to Continue

- New vehicle standards are in place
- New HDDV standards are in the works at EPA
- Continued utility emission reductions expected
 - Offshore windfarm developments
 - Renewable/solar installations
- Electric vehicle and electrified equipment initiatives



CAA Planning Requirements for Areas with Poor Ozone Air Quality

Designation (Attainment or Nonattainment)

CAA Sections 107(d), 176(c)

- Based on monitoring data. Severity of air quality problems dictates classification (marginal, moderate, serious, severe).
- Transportation conformity => after 1 year grace period. General conformity => immediately.
- Hampton Roads designated “marginal nonattainment” for the 1997 ozone NAAQS (69 FR 23941, 4/30/04) based on 2001-2003 monitoring data.

Attainment Plan

CAA Section 172(b)

- Not required for marginal nonattainment areas.
- No plan needed for Hampton Roads.
- Shows what controls are necessary for improved air quality.

Redesignation Request & 1st Maintenance Plan

CAA Sections 107(d)(3), 175A

- Monitoring data must show compliance with the standard.
- Area must demonstrate continued compliance for at least 10 years from final date of the plan.
- Hampton Roads submitted a request and plan that was approved by (72 FR 30490, 06/1/07). Plan based on 2003-2005 monitoring data.

2nd Maintenance Plan

CAA Section 175A(b)

- Area must demonstrate maintenance of the standard for at least an additional 10 year period from the end of the first plan.

Hampton Roads is at this stage for the 1997 ozone NAAQS.

Hampton Roads Second Maintenance Plan

- In areas like Hampton Roads with very good ozone air quality, EPA offers two options for second maintenance plans:
 - “Limited” maintenance plan, which alleviates some inventory requirements within the plan.
 - “Full” maintenance plan, which requires interim year (2023) and out year (2032) inventories to be included.
 - “Full” maintenance plans also allow states to include emission estimates in the interim and out year inventories from projects that may trigger general conformity. Such projects could include port expansions, airport expansions, military construction projects, dredging projects, and many others.
- DEQ used the “Full” maintenance plan approach to include emission estimates from three off shore wind-to-energy projects that are expected to happen in the Hampton Roads area:
 - [Commonwealth of Virginia Offshore Wind \(CVOW\) project](#)
 - 2,500-3,000 Megawatts
 - Construction estimated to start in 2023 timeframe.
 - [Avangrid’s Kitty Hawk North Offshore Wind project](#)
 - 800-1,380 Megawatts
 - Construction estimated to start in 2024 timeframe
 - Avangrid’s Kitty Hawk South Offshore Wind project
 - 1,600-2,420 Megawatts
 - Construction estimates to start in 2026 timeframe
 - Inclusion of emission estimates will help these projects show compliance with general conformity requirements.

Hampton Roads Second Maintenance Plan, continued

- The proposed “Full” plan expires in 2032. Both general and transportation conformity requirements sunset 12/31/2032.
 - The one difference between a “Limited” plan and a “Full” plan is that transportation conformity requirements would sunset 12/31/2028 in a “Limited” plan.
 - Otherwise, no changes to how transportation conformity is currently being done.
- Proposal is expected to be noncontroversial.

HR Second Maintenance Plan Approval Timeline

Milestone	Date
Commencement of 30-day comment period	June 20, 2022 (in <i>Virginia Register</i>)
Comment period closes	July 20, 2022
Response to comment development	August 2022
Preparation of final packet for management signature	August 2022
Submission of final document to EPA	End of August/Beginning of September 2022

Proposed documents are available on DEQ's website:

<https://www.deq.virginia.gov/permits-regulations/public-notice/air>

Questions?