

BASE YEAR 2017 EMISSIONS INVENTORY - 2015 OZONE STANDARD (70 PPB)

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MWAQC
February 26, 2020

Agenda Item 4



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Base Year 2017 Emissions Inventory - 2015 Ozone Standard

- Current ozone standard was published in 2015 – 70 parts per billion (ppb)
- Washington region - Nonattainment Area for 2015 ozone standard (70 ppb)
- Levels of nonattainment depend on ozone levels
 - Marginal, Moderate, Serious, Extreme
- Washington region - **Marginal** Ozone Nonattainment Area
- **Attainment deadline – August 3, 2021** (Attainment to be based on 2018-2020 data)
- Requirements for Marginal Ozone NAA - Submission of a comprehensive Base Year emissions inventory to EPA by August 3, 2020
- Base Year selected in coordination with EPA – 2017



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Ground-level Ozone Health & Environmental Effects

- Difficulty breathing, shortness of breath
- Aggravates coughing and/or chest pain
- Can trigger asthma attacks
- Respiratory infection
- Repeated exposure can result in chronic damage to the lungs
- Sensitive populations: children, older adults, people with asthma, and people who are active outdoors, especially outdoor workers
- Environmental Effects
 - Damage to crops, forests, and vegetation
 - Damage to building materials, rubber, and paint

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Ozone Monitor Map

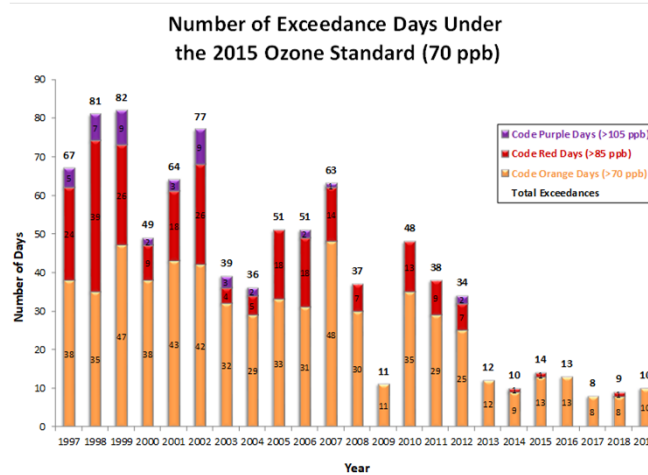
Metropolitan Washington Ozone Monitors
Washington, DC, MD, VA



Note: State air agencies in the District of Columbia, Maryland, and Virginia monitor and provide air pollutant data for the Washington region. EPA also operates a monitor in Beltsville, MD.

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Ozone Exceedance Trend

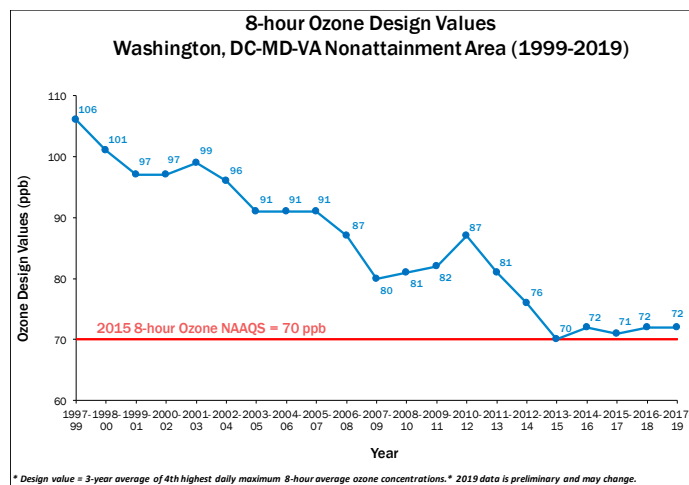


* 2019 data is draft.



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Ozone Design Value Trend



* 2019 data is draft.



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Overview - BY 2017 Emissions Inventory

- **Emission Sources**

- **Point**



- **Area**



- **Nonroad**



- **On-Road**



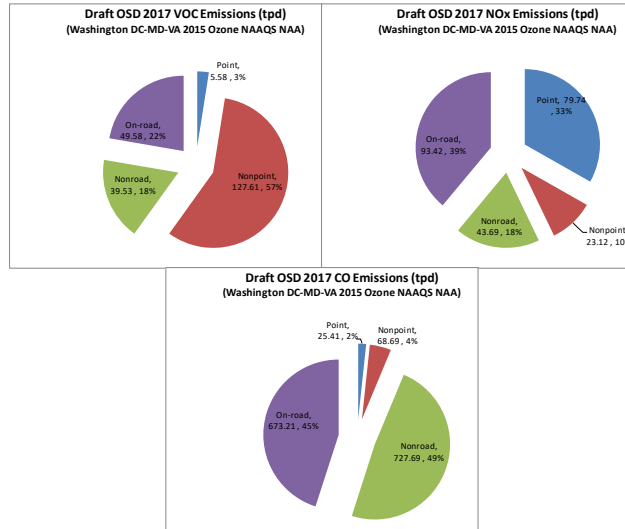
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Emission Period & Pollutants

- **Emission Period: Average ozone season day emission in 2017**
- **Pollutants**
 - **VOC and NO_x (Required)** – These are precursors for ozone
 - **Carbon Monoxide (CO)** – Not required, but added to the inventory document keeping in mind uses in future air quality plans (e.g. ozone redesignation request/maintenance plan)

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Emission by Source



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Timeline – BY2017 Emissions Inventory

- MWAQC-TAC recommended MWAQC to approve inventory for public comment and hearing (PH&C) process: February 11
- Request to EPA for providing comments on inventory before PH&C process by: February 21 (If comments are not received by this date or require significant revisions, then MWAQC authorizes MWAQC-Executive committee to approve inventory on its behalf)
- MWAQC approves for PH&C process: February 26
- Public comment period: March - May
- MWAQC-TAC approves response to comments: May 12
- MWAQC approves final inventory document for EPA submittal: May 27
- State air agencies submit BY2017 inventory to EPA by August 3

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