EPA Proposal to Revise the National Ambient Air Quality Standard for Ozone & Its Implications

Sunil Kumar ACPAC January 12, 2015

EPA Proposal

- November 25, 2014 EPA proposed to revise the current primary and secondary 8-hour ozone standards published in 2008 (75 parts per billion, ppb)
 - Primary standard: Public health; Sec. standard: Public welfare (Plants & trees)
- Proposed revised Pr./Sec. 8-hour ozone standards = A range between 65 ppb - 70 ppb
- EPA also seeking comments on as low as 60 ppb and retaining the current 75 ppb standards
- EPA is also proposing to update the Air Quality Index (AQI) for ozone

Reasons for Revision of Standard

EPA's proposal to revise the 2008 ozone standard is based on following key scientific evidence:

- Evidence from a large number of clinical and epidemiological studies -Current standard (75 ppb) not adequate to protect public health
- Ozone causes adverse respiratory effects in healthy adults
- Children, people with asthma and other respiratory diseases, and older adults likely to experience more serious effects than healthy people
- People with certain health conditions, such as obesity or diabetes, may be at increased risk of ozone-related health effects
- Recent studies consistently report associations between ozone exposures and mortality from respiratory and cardiovascular causes

Air Quality Index (AQI) - Proposed Changes

AQI Category	Index Values	Current Breakpoints (2008 AQI) (ppb, 8-hour average)	Proposed Breakpoints (ppb, 8-hour average) Note: parentheses indicate a range
Good	0 - 50	0-59	0 to (49-54)
Moderate	51 - 100	60-75	(50-55) to (65-70)
Unhealthy for Sensitive Groups	101 – 150	76-95	(66-71) to 85
Unhealthy	151 – 200	96-115	86-105
Very Unhealthy	201 - 300	116-374	106-200
Hazardous	301 –500	375 to the Significant Harm Level*	201 to the Significant Harm Level*

*The Significant Harm Level for ozone is 600 ppb, two-hour average

Proposed Changes – Ozone Monitoring

Extension in ozone monitoring season

- Lower threshold for code orange means ozone needs to be monitored in Spring and early Fall months to alert citizens
- Ozone monitors located at the multi-pollutant NCore monitoring sites would be required to operate year round
- The expanded monitoring season requirements would become effective January 1, 2017
- A new monitoring method is being introduced

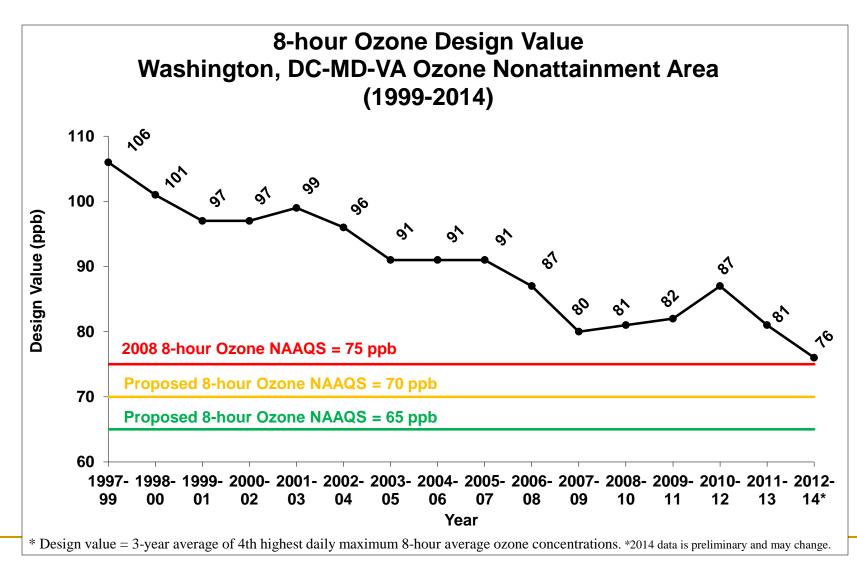
Benefits & Costs

- **Benefits** (Nationwide, excluding California)
 - □ \$6.4 to \$13 billion annually in 2025 70 ppb
 - \$19 to \$38 billion annually in 2025 65 ppb
 - Benefits include the value of avoiding asthma attacks, heart attacks, missed school days and premature deaths, among other health effects
- **Costs** (Nationwide, excluding California)
 - □ \$3.9 billion annually in 2025 70 ppb
 - \$15 billion annually in 2025 65 ppb

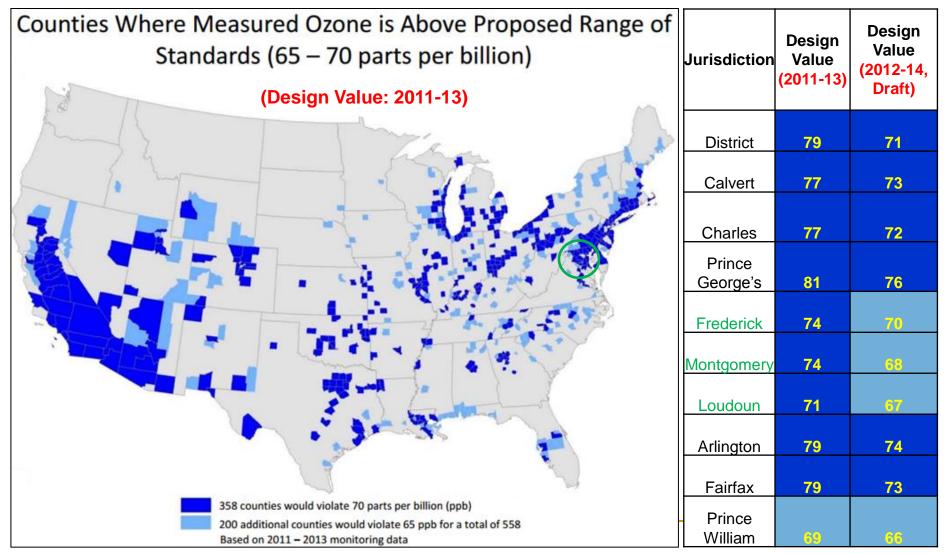
Proposed Implementation Schedule

Milestone	2015 Ozone Standard	
Signature—Final Rule	October 1, 2015	
State Designation Recommendations to EPA	October 1, 2016	
Final Designations	October 1, 2017 (Likely based on 2014-16 data)	
Attainment Demonstration SIPs Due	2020/2021 (for Moderate and above NAA)	
Attainment Dates	2020-2037 (depending on level of nonattainment designation)	

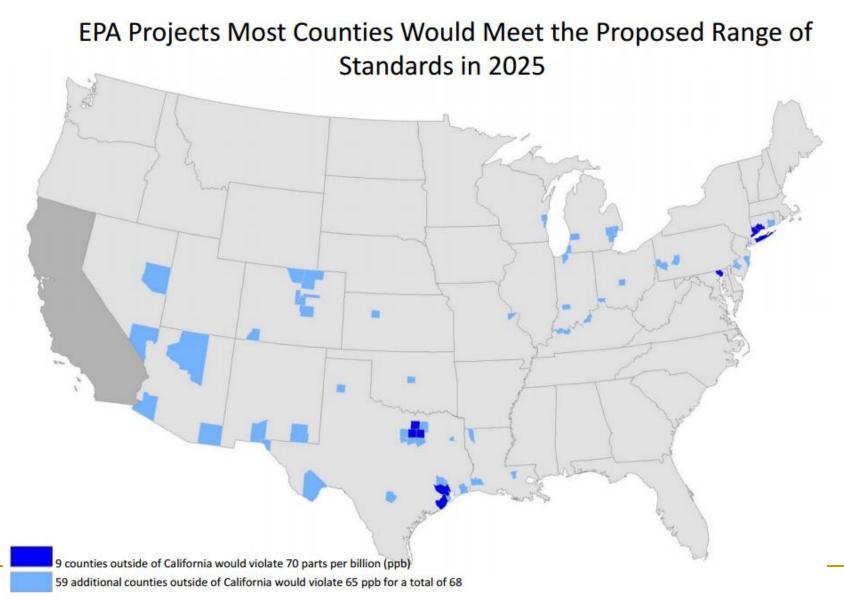
Proposed Standard & Ozone Levels (Washington Region)



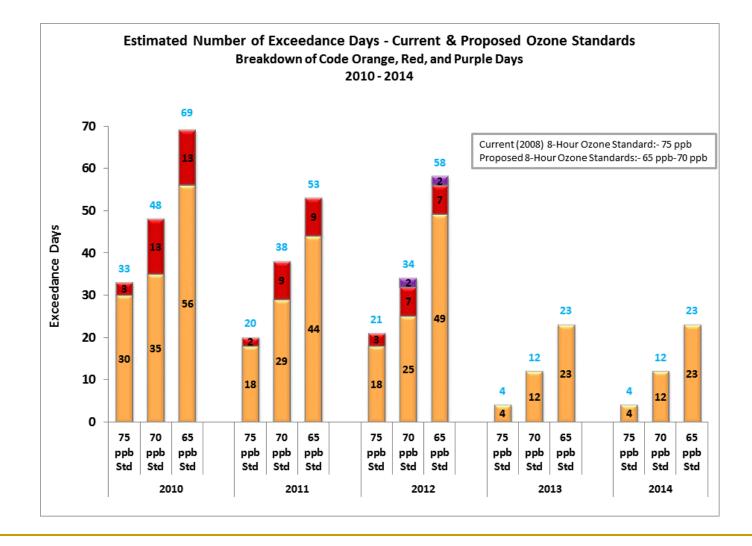
Current Regional Ozone Levels



Ozone Levels - 2025



Implications of Proposed Standard (Washington Region)



Current control measures to help in attaining proposed standard

- Mercury and Air Toxics Standards
- Requirements to reduce the interstate transport of air pollution
- Regional Haze regulations
- Proposed Clean Power Plan
- Tier 3 Vehicle Emissions and Fuels Standards
- Light-Duty Vehicle Tier 2 Rule
- Mobile Source Air Toxics Rule
- Light-Duty & Heavy-Duty Greenhouse Gas/Corporate Average Fuel Efficiency Standards
- Reciprocating Internal Combustion Engines (RICE) Rule
- Industrial/Commercial/Institutional Boilers and Process Heaters Rules

Comments on Proposal

Comment period : March 17, 2015

Comment submission:

- Federal eRulemaking portal: Follow the online instructions for submitting comments
- Email A-and-R-Docket@epa.gov: Include docket ID No. EPA-HQ-OAR-2008-0699 in the subject line of the message
- Fax: Fax your comments to: 202-566-9744.
- Mail: Environmental Protection Agency, EPA Docket Center (EPA/DC), Mailcode 28221T, Attention Docket ID No. OAR–2008-0699, 1200 Pennsylvania Avenue, NW., Washington, DC 20460.
- Hand Delivery or Courier: Deliver your comments to: EPA Docket Center, Room 3334, 1301 Constitution Ave., NW, Washington, DC, 20460.

Public hearing

- □ EPA, WJC East Building, Room 1153, 1201 Constitution Avenue NW
- □ 9 AM 7:30 PM