

AIR QUALITY & EMISSION REDUCTIONS IN METROPOLITAN WASHINGTON

Steve Walz
Director of Environmental Programs

Metropolitan Washington Air Quality Committee
Climate, Energy & Environment Policy Committee
July 26, 2017

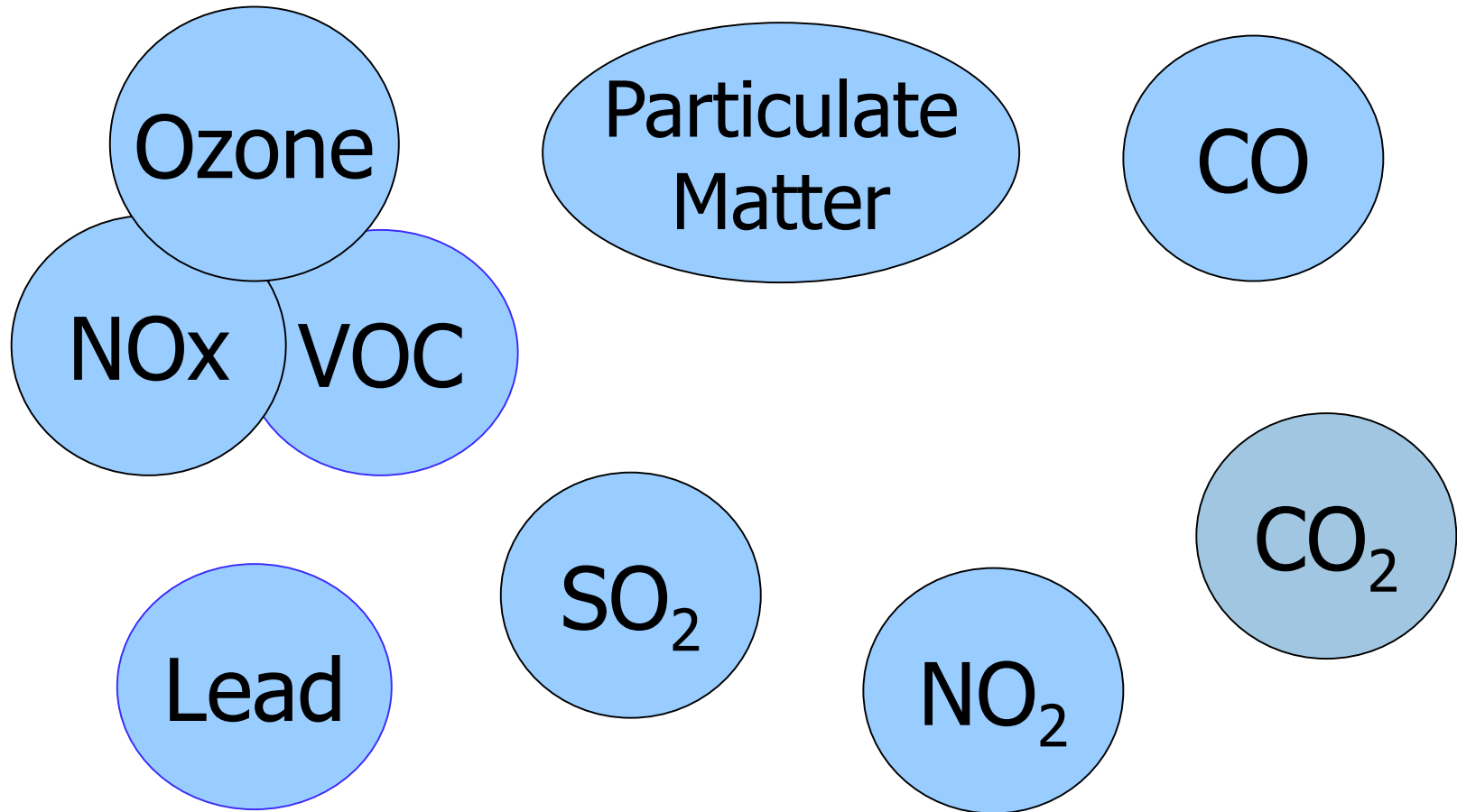
Metropolitan Washington Air Quality

Clean Air Act Amendments of 1990

- Regulates emission of air pollutants from human sources into the atmosphere
- Sets National Ambient Air Quality Standards (NAAQS)
 - Primary (public health); Secondary (public welfare)
- Classifies regions that do not meet NAAQS as nonattainment areas (marginal, moderate, severe)
- Requires reduction in pollution to meet standards



CAA Amendments 1990 Regulated Pollutants



Air Quality Monitors

Air Quality Index (AQI)

Metropolitan Washington Ozone Monitors
Washington, DC, MD, VA



AIR QUALITY ACTION GUIDE

Your "how to" guide for cleaner air

Air Quality Rating	Steps to Protect Your Health and Our Environment
GOOD 0-50	<p>Enjoy the great outdoors.</p> <ul style="list-style-type: none"> - Rather than drive - bike or walk when possible. - Conserve energy. Replace incandescent bulbs with CFLs. - Plant a tree to improve health and air quality.
MODERATE 51-100	<p>Some pollution. Even moderate levels pose risks to highly sensitive groups.</p> <ul style="list-style-type: none"> - Bundle errands. Eliminate unnecessary trips. - Check AirAlerts to see if tomorrow's forecast is unhealthy. - Perform regular maintenance on your car.
UNHEALTHY For Sensitive Groups 101-150	<p>Pollution levels are harmful to children, older adults and anyone with a respiratory or heart condition. Limit physical outdoor activity.</p> <ul style="list-style-type: none"> - Don't drive alone. Carpool, take public transit. - Refuel your car in the evening. - Put off lawn care until air quality improves. - Use a gas or electric grill instead of charcoal.
UNHEALTHY 151-200	<p>Everyone should limit strenuous outdoor activity when the air is unhealthy to breathe.</p> <ul style="list-style-type: none"> - Telework and take public transit. - Turn off lights and electronics when not in use. - Avoid lawn mowing or use an electric mower. - Sign up for health alerts at cleanairpartners.net. - Don't use chemicals on your lawn and garden.
VERY UNHEALTHY 201-300	<p>Pollution levels are very unhealthy for everyone. Avoid any physical outdoor activity.</p> <ul style="list-style-type: none"> - Follow all of the action steps above.

Do Your Share for Cleaner Air.

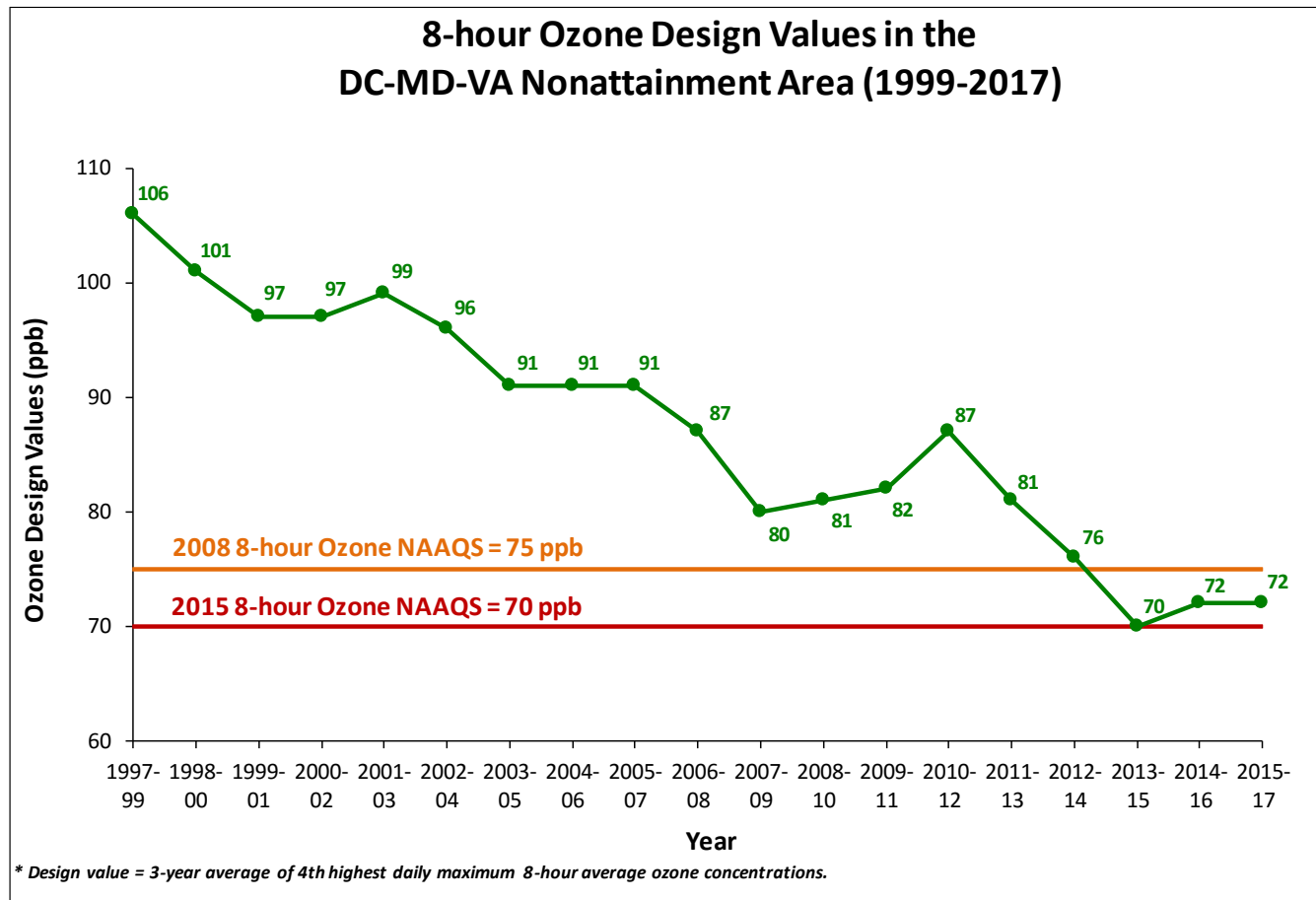
Visit CleanAirPartners.net to get your daily AirAlerts and discover additional steps you can take each day to improve our region's air quality, protect your health, and reduce the risks of climate change.

Visit CleanAirPartners.net

Ozone: O₃

- 1997 Ozone 8-hour NAAQS: 84 ppb
 - State Implementation Plan submitted in 2007
 - EPA Clean Data Determination in 2011 demonstrating attainment
- 2008 Ozone 8-hour NAAQS: 75 ppb
 - Marginal non-attainment – No State Implementation Plan required
 - Data show attainment in 2013-15 period
 - MWAQC Approved Resignation Request and Maintenance Plan for public comment
- 2015 Ozone 8-hour NAAQS: 70 ppb
 - State clean data show design value (2015-17 to date): 72 ppb
 - Marginal non-attainment
 - EPA designation determination delayed to 2018
 - Attainment date: October 2020 (2021 with announced delay)

Ozone Design Value Trend



- * 2016 data is a draft as of July 24th, 2017.
- * 2017 data is incomplete and preliminary as of July 24th, 2017

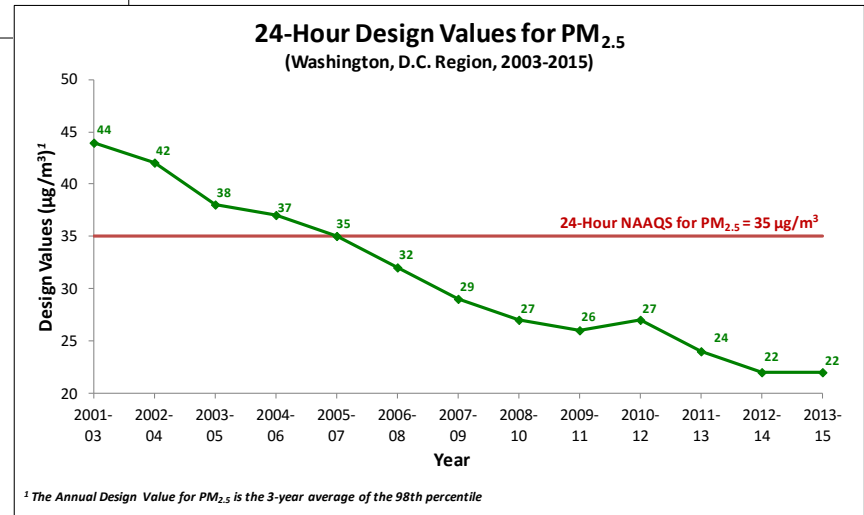
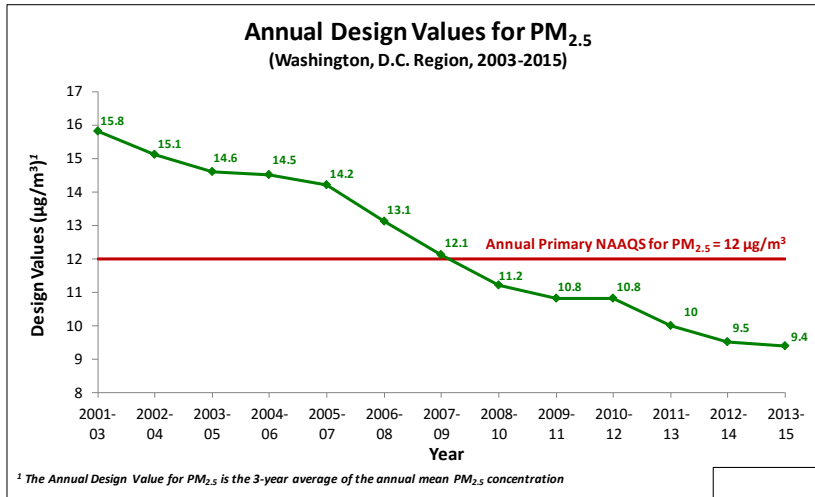


Fine Particulate Matter: PM_{2.5}

- 1997 PM_{2.5} Annual NAAQS: 15 ug/m³
 - State Implementation Plan submitted 2008
 - Clean data showed attainment in 2008
 - EPA revoked standard
- 2006 PM_{2.5} 24-Hour NAAQS: 35 ug/m³
 - Region in attainment
- 2012 PM_{2.5} Annual NAAQS: 12 ug/m³
 - Region in attainment



PM_{2.5} Design Value Trend



CO, SO₂, NO₂, Pb, CO₂

- CO
 - Region in attainment of NAAQS in 1995
 - 2004 Maintenance Plan
 - Region has met 20 year compliance schedule
- SO₂
 - 2010 1-hour standard: 75 ppb
 - States modeling to show attainment
- NO₂
 - 2010: 1-hour standard: 100 ppb
 - 2012 EPA determination no areas in violation
- Lead (Pb)
 - 2008 standard: 15 ug/m³, 3-month average
 - No regional violations
- CO₂
 - Clean Power Plan under review



Transportation Conformity

- Clean Air Act of 1977 required transportation investments to be consistent with (conform to) regional air quality plans
- Transportation activities do not worsen air quality or exceed the Motor Vehicle Emission Budgets established in the SIP
 - Transportation Improvement Program (TIP)
 - Financially-Constrained Long Range Transportation Plan (CLRTP)

Steve Walz

Director of Environmental Programs

(202) 962-3205

swalz@mwkog.org

mwkog.org

777 North Capitol Street NE, Suite 300

Washington, DC 20002



Metropolitan Washington
Council of Governments