

WEST PINAL PM10 NONATTAINMENT AREA – TRANSPORTATION CONSIDERATIONS

PINAL COUNTY TRANSPORTATION ADVISORY COMMITTEE

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Background – Air Regulation

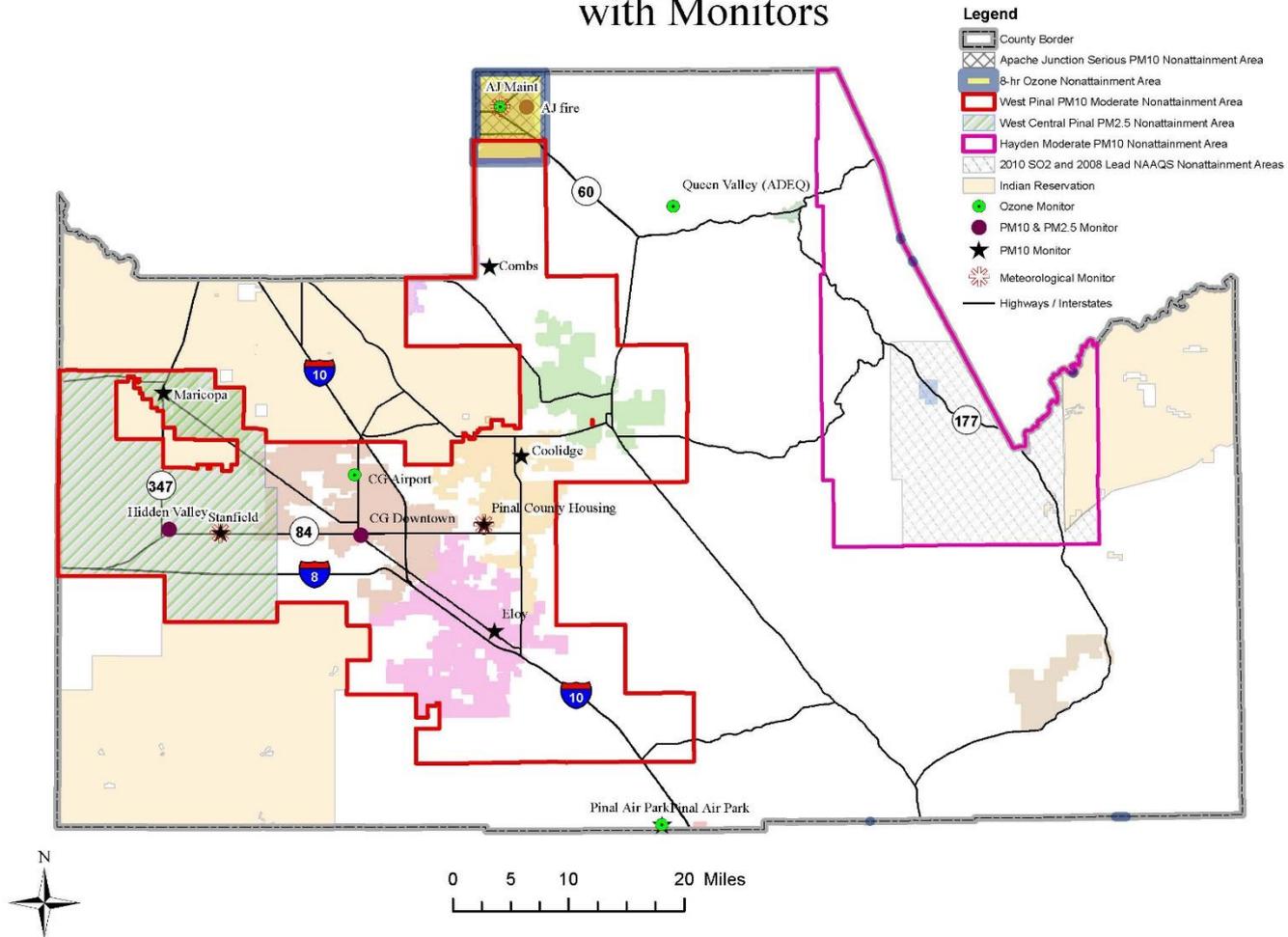
- Clean Air Act (CAA) – Established 1970, last amended 1990.
- CAA established National Ambient Air Quality Standards (NAAQS)
 - Standards for particulate matter (PM10 & PM2.5), ozone, carbon monoxide, lead, nitrogen oxides, sulfur dioxide
 - Set at level to protect public health and the environment
 - Numerical limits (measured by air monitoring programs)
 - CAA Identifies areas that meet the NAAQS (attainment) and those that don't (nonattainment)

Background – Air Regulation

- Areas that do not attain the NAAQS must develop a corrective plan
 - State Implementation Plan or SIP
- The Plan (SIP) must show
 - Emissions and Sources contributing to the problem
 - Corrective actions (rules) to reduce emissions adequate to meet the NAAQS
 - The emission controls can be maintained
- In Arizona Plans are developed by:
 - The state – ADEQ, or
 - Designated Metropolitan Planning Organization (MAG)

Pinal County Nonattainment

Pinal County Nonattainment Areas with Monitors



PM10 Nonattainment Area

- ▣ West Pinal PM-10 Nonattainment Area
 - Nonattainment Designation - July, 2012
 - SIP Complete (1/5/2016 Submittal)
 - ▣ ADEQ was the lead agency for SIP development
 - ▣ Identified “significant” contributing sources
 - Currently under EPA review
- ▣ Nonattainment designation based upon PM10 data collected at several locations in the County.

What is PM10?

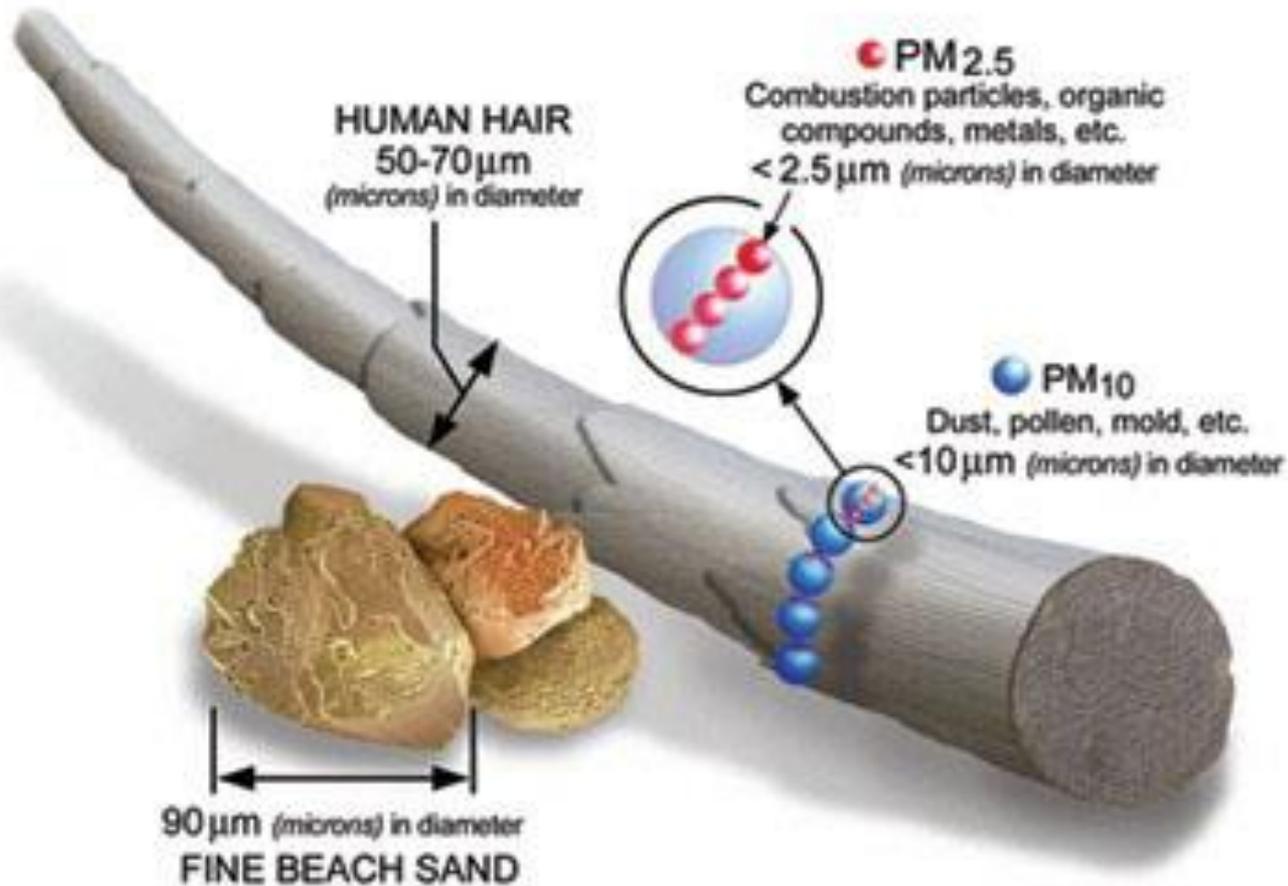


Image courtesy of the U.S. EPA

SIP Identified PM10 Sources

- ▣ Open areas, vacant lots, unpaved parking lots, construction operations, agricultural operations, animal feed operations, unpaved roads, road shoulders
- ▣ Two conditions identified:
 - Stagnation/Low Wind – Activity driven emissions
 - High Wind – Unstable surfaces

SIP Identified Controls

- ▣ Agricultural Operations
 - Open Field Ag, Feed operations, Dairy operations, Irrigation Districts (AgBMP's - ADEQ)
- ▣ Construction Activity
 - Enhanced Local Rule (Pinal County)
 - Effective locally 1/1/2016
- ▣ Fugitive Dust
 - Open areas, vacant lands, roads, etc. (Pinal County)
 - Effective locally 1/1/2016

Fugitive Dust

- ▣ What is Fugitive Dust?
 - Dust particles lifted into the air by man-made and natural activities such as earth moving, vehicles, blasting, equipment, and wind.
- ▣ How can we reduce fugitive dust?
 - Stabilize surfaces that have been disturbed
 - Change or adapt past practices
 - Provide training/outreach

Fugitive Dust Rules

- ▣ Public unpaved roads with greater than 150 average daily trips (ADT)
 - Visible emissions/stabilization requirements
 - ▣ 20% opacity threshold
 - ▣ Silt loading limit
 - Control measures:
 - ▣ Pave; or
 - ▣ Apply and maintain dust suppressants other than water; or
 - ▣ Uniformly apply and maintain gravel
 - Compliance with control measures determined when:
 - ▣ One of the control measures is annually implemented on 15 miles per year of unpaved roads having 150 ADT or more (thru 2018)
 - ▣ This is in addition to planned work (i.e. TIP)
 - After 2018 Alternative method to estimate 15 miles

Fugitive Dust Rules

- ▣ Trackout (dirt/mud onto paved roads)
 - If it extends more than 50 feet
 - Within 24 hours of discovery remove trackout
 - ▣ During removal do in a manner that doesn't cause another source of fugitive dust
 - Time extension possible if
 - ▣ Unsafe travel conditions would result from restricting traffic to clean up
 - ▣ Weekend or holiday
- ▣ Work on unpaved shoulders:
 - Apply dust suppressants prior to, during the work, and after the work is complete.

Where are we now?

- Newly paved road totals for 2016
15.84 to date, 17.94 by November
- Local outreach efforts for Construction activities, and Fugitive dust sources
- Inspection/Education program

Questions?

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