

PM₁₀ in Pinal County

Stakeholder Process Overview

June 22, 2007

Pinal County Today

- Pinal County
 - The Urban Frontier
 - 2000 – 180,000 population
 - 2007 – 300,000 population (?)
 - 500,000 + houses entitled
 - No corner remains untouched
- PM_{10} is a concern.
 - Health
 - Nuisance

Background

- Data consistently exceeds PM_{10} standard
- EPA promised to ignore us
- EPA has revoked that promise
 - Nastri letter of 4/20/07
- We can't ignore the situation
 - “We're living on borrowed time” – Senator Carolyn Allen

Objectives

- Develop a consensus program
 - Comprehensive
 - Effective
 - Achievable
- Protect public health
- Avoid nonattainment

Process

- Analyze monitoring data
 - Concentrations
 - Meteorology
- Define relevant emission inventories
 - Site specific
 - Short term
- Identify mitigation options
- Formulate a plan

Process Mechanics

- Bi-weekly meetings
 - Friday mornings (usually)
 - July 20, August 17 – Friday afternoons
- Materials @ www.co.pinal.az.us/AirQual
 - Agendas
 - Meeting summaries
 - Handouts

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Air Quality Vocabulary #101

June 22, 2007

PM₁₀ – the NAAQS

- National ambient air quality standards - NAAQS
 - Primary NAAQS – health based
 - Secondary NAAQS – “nuisance” based
- 24-hour PM₁₀ standard – 150 µg/m³
 - 3 free bites at the apple in 3 years
 - 4th bite is poison

PM₁₀ as a Pollutant

- Stack emissions
- Fugitive emissions
- Transport – 2 basic phenomenon
 - Flow – Selma Highway ...
 - Diffusion – The Superstitions ...

PM₁₀ Flow



PM₁₀ Diffusion



Regulatory Classification

- Clean Air Act (“CAA”) distinguishes
 - Attainment areas
 - Nonattainment areas
- Natural events exclusions
 - Allows exclusion of data associated with high-wind events
 - Mitigation measures are optional (?!?)
 - Only addresses flow, not diffusion

Regulatory Consequences

- Nonattainment designation requires a curative State Implementation Plan (“SIP”)
 - Locally developed
 - Legally enforceable
- Failure to attain triggers consequences under the CAA
 - Additional statutory burdens
 - A Federal Implementation Plan (“FIP”)
 - Sanctions