

Southern Arizona Environmental Society Pollution Prevention Seminar

September 23, 2010

**The Future of Air Quality Regulation
“There is No Good News”**

What is Now Driving Air Quality Regulation?



Driver # 1

The forces of light v. forces of darkness



- **True believers making decisions**

- **Black hats**

- Utilities, particularly those with coal-fired power plants
- Extractive industries, i.e., mining including rock products, pulp and paper, petroleum
- Agriculture - farming, cattle-raising, dairies, poultry





Driver #2

Cost, practicability is irrelevant

- **Loss of jobs not adequately considered in decisions even though it's primary correlation with public health**
- **NAAQS will always become more stringent**
 - Protected “sensitive” populations ever expanding -- not just health sensitivity but socio-economic, racial, ethnic sensitivity
 - Adverse health effects ever expanding -- any adverse reaction
 - More technology expands ability to measure adverse effect
 - More stringent PM-10 standard -- Agriculture, mining other industries already have BACM -- American Lung Association -- “lack of emissions control technology irrelevant.”
 - OMB reducing cost effectiveness analysis
 - EPA rejects Texas affirmative defense for malfunctions, startups, shutdowns



Driver #3

States are only another stakeholder

- **Cooperative federalism dead**
 - Environmental groups have better access to EPA decision makers than states
 - Little deference to state decisions even in areas like minor source regulation that CAA leaves to state discretion
- **EPA acts unilaterally without consultation with affected states, localities**



Driver #4

No one making decisions at EPA has private sector experience

- **Decisions being made by individuals that are from NGOs or career bureaucrats**
 - Only 8% of Obama appointees have private sector experience;
 - 39% of Clinton's appointees had private sector experience
- **Result -- no sensitivity to the practical impacts of decisions on the regulated community**



II. Specific Issues -- Environmental Justice

- **See Ferland takes “A Hard Look at Environmental Justice” (February 2010)**
 - When will environmental justice considerations trump statutory criteria, e.g., in determining technology-based standards?
 - Are disparate risk conclusions based on actual, empirical evidence or perceived risk differences?
Are differences significant?
 - Why is a TSDF more risky than a service station?



II. Specific Issues -- Environmental Justice

- **EPA to permanently institutionalize consideration of environmental justice at all phases of rulemaking**
 - Early guidance
 - Options selection
 - Implementation and enforcement
- **Will reduction of perceived disparate impacts of rules also deny minority communities access to economic opportunity, jobs?**





III. Specific Issues -- New One-Hour SO₂ NAAQS

- **How is attainment with the new one-hour SO₂ NAAQS to be demonstrated by June 2011**
 - State complained that they lacked resources to upgrade ambient monitoring
 - EPA distrusts monitoring results -- monitors not located where there is peak ground-level concentrations
 - Result: Attainment must be demonstrated by hybrid data – monitoring plus worst case modeling where there is no or incomplete monitoring network
 - 100 TPY. SO₂ sources must be modeled – high probability of nonattainment finding
- **Can Arizona smelters survive non-attainment area designations?**



Specific Issues -- New One-Hour NO₂ NAAQS effective April 12, 2010

- **Problem: No clear guidance as to how to model**
- **Problem: Smaller sources may have greatest impacts because of configurations, i.e., shorter stacks**
- **Problem: Modeling based on three tiers, requires case-by-case approval with no guidance**
- **Problem: Background may exceed standard in many places – but what is background?**

Specific Issues -- New Ozone NAAQS Due By End of October



- **If standard is 0.07 ppm**
 - **Seven Arizona counties, including Pima County, will be in nonattainment**
- **If standard is 0.065 ppm**
 - **Two more Arizona counties in nonattainment (Cochise and Coconino)**
 - **Remaining counties have no monitors -- will they have to be modeled and thereby become nonattainment?**





Specific Issues -- New Ozone NAAQS Due By End of October

- **Problem** -- seven of the nine nonattainment counties are rural -- no controls available
- **Problem** -- the two urban counties already have almost all practicable controls in place
 - Pima County may need to go to reformulated gasoline, lower permitting thresholds
- **Problem** -- western counties impacted by California but California emissions already stringently controlled
- **Problem** – what will Pima County nonattainment area boundaries be?
 - Administrative convenience v. overregulation
- **Many problems** – no known solutions



V. Specific Issues - PM-10 NAAQS - Now and in the Future

- **Status of PM-10 5% Annual Reduction Plan for Maricopa County**
 - **Plan submitted in 2007**
 - **Successfully implemented since 2008-2010 - 5% reductions each year, no violations**
 - **Control measures are the most stringent in the country**
 - **ACLPI sues EPA to force disapproval**
 - **Consent decree establishes September 3, 2010 as proposed action deadline; January 28, 2001 final action**
 - **September 3, 2010 – EPA proposes disapproval of the 5% plan**



V. Specific Issues - PM-10 NAAQS - Now and in the Future

- **Can approvability be achieved by January 28?**
 - Fix emission inventory and 5% reduction to more accurately allocate contributions – deemphasize construction-related dust; emphasize dust from agriculture, paved and unpaved roads
 - Change attainment date to 2012
 - New 5% plan, new rules or legislations (?)
- **Fundamental problem with how EPA and State view naturally-caused dust**
 - 5% reduction in emission per year until three years “clean” data
 - But may not ever be achievable without EPA recognition that:
 - Meteorology (rainfall, drought) is significant factor in attainment
 - High winds cause dust regardless of controls – the exceptional event issue

V. Specific Issues - PM-10 NAAQS - Now and in the Future



- **EPA considering 24-hour PM-10 NAAQS of 65 ppm to 85 ppm**
 - 65 ppm will exceed natural background in rural areas of Arizona
 - No new controls available for mining, farming, construction in desert
 - EPA – lower PM-10 NAAQS also global warming strategy

VI. Specific Issues – Emissions from hard rock mining in Green Valley



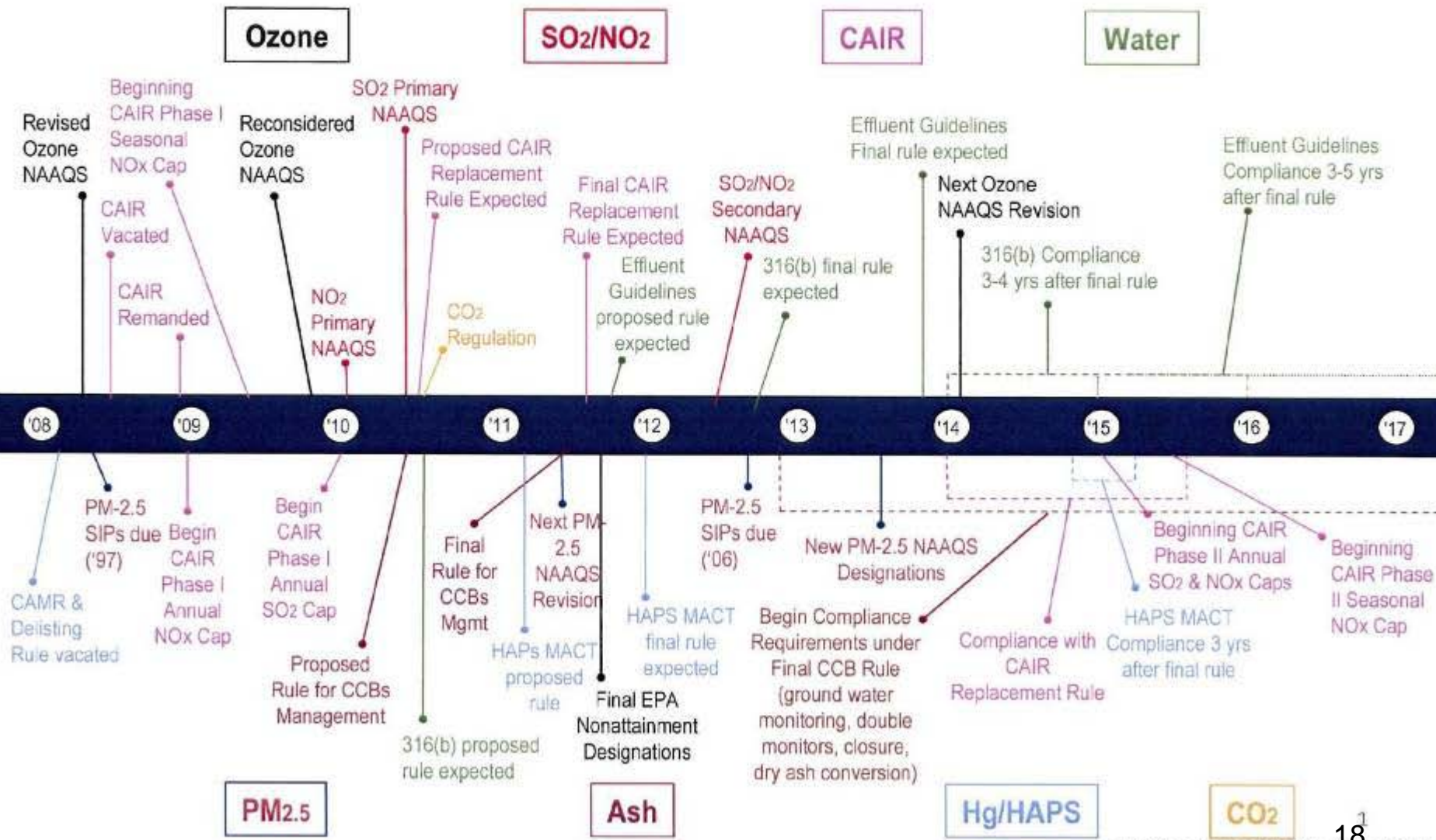
- Classic and chronic problem of locating incompatible uses adjacent to each other
 - Residential use versus mining
 - Same issue in Maricopa County (River bed mining vs. Sun City)
- Pima County believes that more regulation of mining may be necessary
 - What kind of regulation?



Specific Issues -- Utilities



Possible Timeline for Environmental Regulatory Requirements for the Utility Industry





Specific Issues -- Utilities

- **Does not include BART determination for Navajo Generating Station and Four Corners**
- **EPA's Rob Brenner – EPA's goal is to make fossil fuel - fired electricity as expensive as renewables (July 28, 2010)**





Specific Issues -- Utilities

- **Can economy bear the increased cost?**
- **With new costs, hard to justify keeping coal-fired plants open -- particularly for older plants, NGS, Four Corners**
 - **Huge potential grid reliability impacts, particularly because renewables lack dispatchability , long lead time for construction and loss of generation capacity**



VII. Specific Issues -- Regulation of GHGs





PSD/Title V GHG Tailoring Rule

- **Phase 1:**
 - **January 2, 2011 through June 30, 2011**
 - **Only those sources that when newly constructed or modified will emit at least 75,000 tons/year CO₂e and that would trigger PSD or Title V for a non-GHG pollutant would be subject to PSD and Title V**
 - **Intended to cover largest sources (65% of stationary source GHG emissions), including EGUs**



PSD/Title V GHG Tailoring Rule (cont.)

- **Phase 2:**
 - **July 1, 2011 to June 30, 2013**
 - **PSD and Title V apply to *new GHG sources***
 - For new construction, source must emit at least 100,000 tons/yr CO₂e
 - For modifications at existing major emitting facilities, GHG emissions must increase by at least 75,000 tons/yr CO₂e
 - 900 additional PSD permits estimated for new and modified sources
 - **For Title V, sources must emit at least 100,000 tons/yr CO₂e**
 - 550 new sources estimated to need permits
 - Covers stationary sources with 70% of GHG emissions



PSD/Title V GHG Tailoring Rule (cont.)

- **Phase 3:**
 - EPA will issue proposed rulemaking in 2011 to conclude no later than July 1, 2012 (during Phase 2) to explore phasing in small sources, beginning July 1, 2013
 - “an enforceable commitment”
 - Rulemaking “may discuss whether certain smaller sources can be permanently excluded from permitting”



PSD/Title V GHG Tailoring Rule (cont.)

- EPA will look at streamlining options to reduce permitting burden on smaller sources
- Phase 3, “if established,” will not require permitting from sources with GHG emissions below 50,000 tons/yr CO₂e (new or modified) until April 30, 2016 or later



VII. Specific Issues -- Regulation of GHGs

- **Tailoring rule prompts 24 lawsuits including by the Sierra Club, Center for Biodiversity**
 - Everyone wants a seat at the table in settlement discussions
- **Proposed backstop rule**
 - When Tailoring Rule adopted EPA gave states until August 2, 2010 to declare how each state will implement rule by January 2, 2011
 - Texas refuses to implement rule
 - Arizona did not meet August 2 deadline
 - **Sanctions for failure to meet deadline include**
 - Retroactive disapproval of SIP PSD program
 - Promulgation of FIP
 - **New rule will have two parts:**
 - Determining state authority to regulate GHGs
 - How FIP to be implemented

