

Meeting State Implementation Plan Requirements

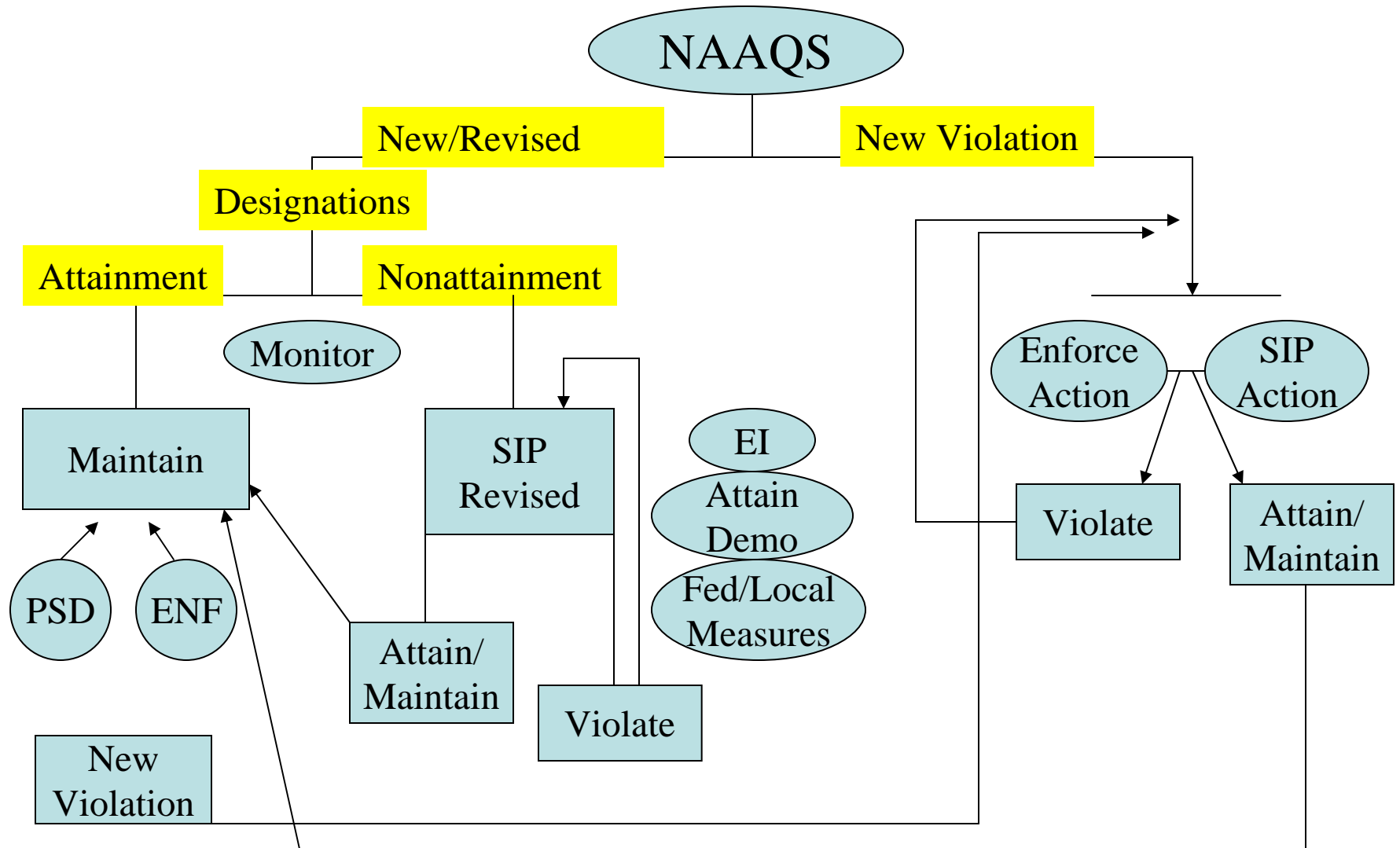
Working Session

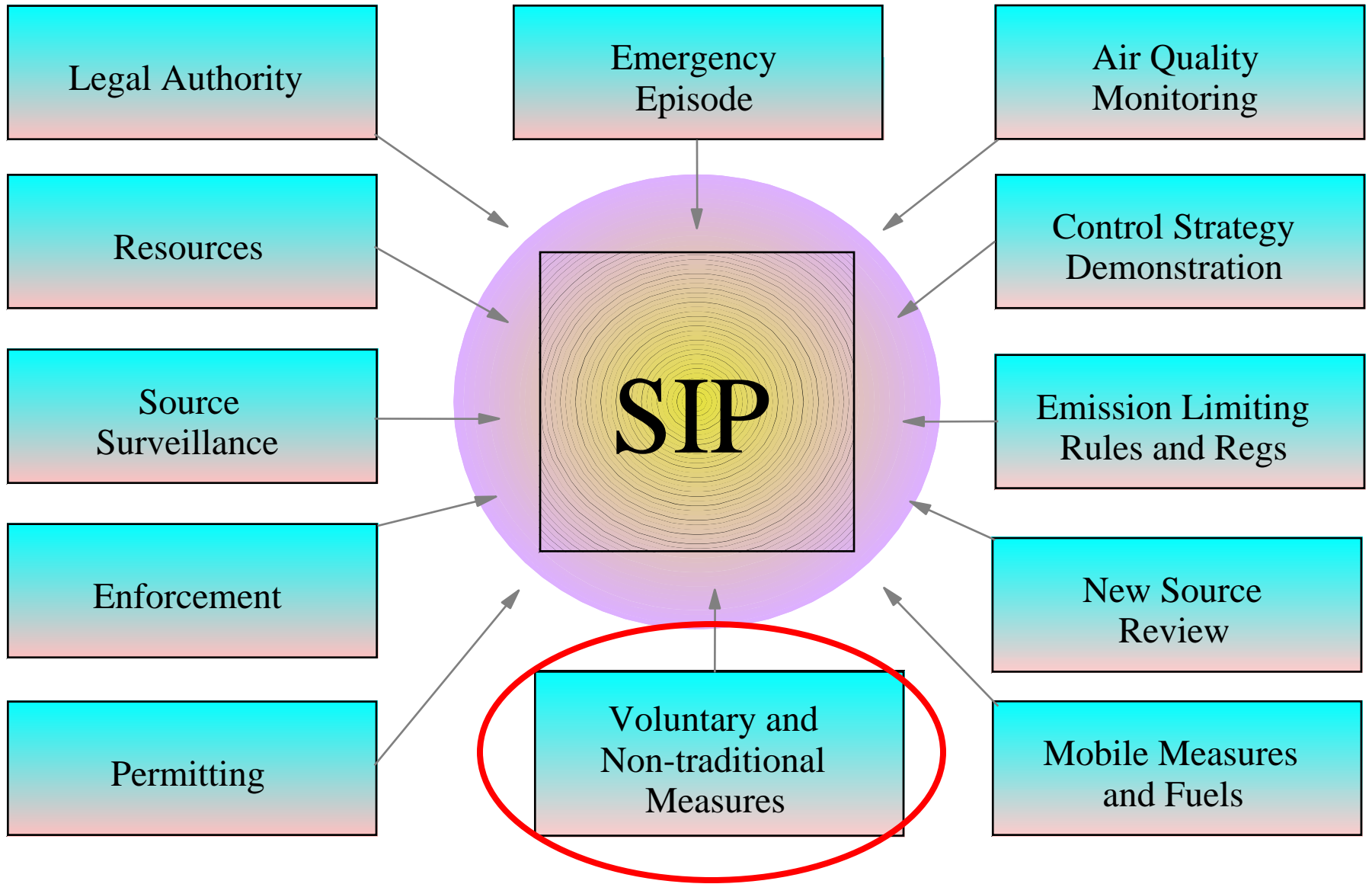
“The Inclusion of Large-Scale Tree Planting in a State Implementation Plan”

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U.S. EPA-Region 6



What is the “air quality management” process ?





What guidance exists for SIP preparation?

- Statutory
- Regulatory
- **Policy and Guidelines**
- Court decisions



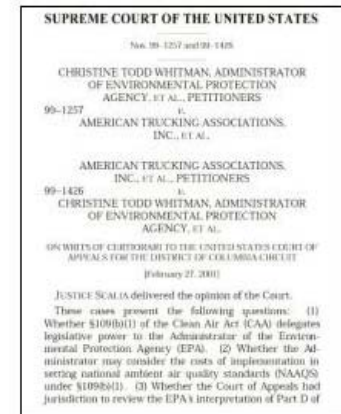
EPA Policy memos



Federal Clean Air Act



40 CFR Parts 50, 51 and 81 Regulations



Court Decisions

Where Can the Guidance Be Found?



Website contains presentations from Conference in Chicago as well as all of the guidance documents.

<http://www.cleanairinfo.com/airinnovations2005/guidance.htm>

Policy Guidance for nontraditional sources to focus on today

- Mobile Source Voluntary Measures Policy (10/27/97)
- Stationary Source Voluntary Measures Final Policy (1/19/01)
- Incorporating Emerging and Voluntary Measures in A State Implementation Plan (9/04)
- Guidance on Incorporating Bundled Measures in a SIP (8/16/05)

Policy for Nontraditional Programs Provides Flexibility

- Normal SIP Requirements
 - Quantifiable
 - Surplus
 - Enforceable
 - Permanent
- Policy provides flexibility for:
 - Quantifiable- deals with more uncertain quantification of new and innovative measures
 - Enforceable – voluntary measures not enforceable against the source

Clean air challenges that we face today

- Many cost-effective control programs have already been implemented, for example:
 - ✓ VOC and NOx reasonably available control technology (RACT)
 - ✓ Cleaner motor vehicles ... Tier II level controls
 - ✓ Reid Vapor pressure limits for gasoline
 - ✓ Heavy duty diesel engine controls and lower sulfur fuel
- The CAIR and Regional Haze rules will help as well. However, the pool of available, cost effective SIP controls will become smaller and smaller
- Innovative and voluntary control programs will play an increasingly important role in providing clean, healthy air

Policy for Nontraditional Programs

(continued)

- Applies Voluntary Measures Process
 - Develop quantification methodology
 - Evaluate to determine if reductions are happening'
 - State makes up shortfall, if any
- Based on Best Available Science
- Limit on SIP Credit
- Assumed Discount factor of 20%
- RACT first
- No backsliding on existing requirements
- Does not apply to mobile sources

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Emerging Measures Policy for Stationary Sources

- Guidance for receiving SIP credit for new, relatively unproven air pollution control or emission reduction measures
- For measures with relatively more uncertain quantification protocols
- Allows use of emission reductions on a provisional basis pending future verification
- May not be used for NSR or trading purposes
- SIP credit is a % of the reductions required for attainment
 - 6% for stationary source voluntary and emerging.
 - Also 3% allowed for mobile source voluntary measures.

Can Large Scale Tree Planting be an Emerging and Voluntary Measure?

- Emerging Guidance Policy identifies examples of types of stationary source voluntary measures
- Planting shade trees is included as an example of a heat island program to encourage activities to reduce center-city temperatures during the summer
- Would need to include support of science that the strategy would be successful
- Might be appropriate to bundle with other innovative measures to reduce “heat island” effect such as Energy Star cool roof products and cool pavement.

Can Large Scale Tree Planting be an Emerging and Voluntary Measure?

(Continued)

- Program Evaluation
 - SIP must include specific program evaluation procedures
 - retrospectively assess the program
 - Within 18 months after the measure is in place.
- Enforceable Commitment if a shortfall
- State responsible for correcting any shortfall within 2 calendar years from discovery.



EPA Guidance for SIP Credits for “Bundled” Control Measures

What types of air pollution control measures/strategies can be bundled?

- **Stationary source voluntary and emerging measures.**
- **Mobile source voluntary emissions reduction measures.**
- **Traditional emissions reduction measures that individually have small amounts of emissions reductions and typically are not included in a SIP.**



9%

EPA Guidance for SIP Credits for “Bundled” Control Measures

(continued)

What limitations apply to bundled measures?

- Majority of measures in a bundle could be voluntary and emerging in nature.
- Amount of emission reductions that can be “bundled” for credit is limited to nine percent, consistent with EPA’s current limits on voluntary and emerging measures.



EPA Guidance for State Implementation Plan (SIP) Credits for “Bundled” Control Measures - (continued)

Can a SIP have more than one bundle of measures?

- **SIP may contain more than one bundle of measures.**
- **But the emissions reductions associated with all bundles for any individual SIP should not exceed nine percent.**



EPA Guidance for State Implementation Plan (SIP) Credits for “Bundled” Control Measures -

What does it mean to “bundle” SIP control measures?



- Emissions reductions for each measure “in the bundle” are quantified and, with an appropriate discount factor for uncertainty applied, the total reduction credits are ***summed together*** in the SIP submission.
- After SIP approval, each individual measure would be implemented according to its schedule in the SIP.
- Performance of the entire bundle (the sum of the emissions reductions from all the measures in the bundle) is considered for SIP evaluation purposes, not the effectiveness of any individual measure.

Challenges of SIP Credit for Trees

- Attainment Date for marginal (2007) and moderate (2010)
 - limited time for implementation and canopy growth
 - May serve to consider as maintenance practice
- Technical work needed to translate decreases in ozone to tree program
- Consider how to protect existing tree canopy – e.g., land use policy for protecting mature urban trees?
 - Maintain or achieve a net positive change
- More benefit as part of urban heat island package?

The End

