Regional Haze SIP Requirements and An Update on MANE-VU SIPs

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Objectives of Presentation

- Goals Regional Haze SIPs
- SIP Requirements
- Status and Next steps





Clean Air Act Goal

"Congress declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution."





Causes of Regional Haze

- The primary contributor to visibility impairment is sulfate, followed by organic carbon
- Emissions outside of as well as within the MANE-VU region
 - Sulfur dioxide
 - Organics
 - Nitrogen oxides



States contributing to sulfate in MANE-VU in 2002

Co-benefits of Improving Visibility

- Reduce Acid Deposition
- Reduce Nitrogen Deposition to Estuaries
- Reduce Particulate Air Pollution



Four Core Requirements of EPA's 1999 Regional Haze Rule

- 1. Calculate baseline & natural visibility conditions
- 2. Set reasonable goals for visibility improvement
- Control grandfathered sources (Best Available Retrofit Technology—BART)
- 4. Adopt additional control measures needed to achieve reasonable progress



Additional SIP Requirements

- Monitoring plan
- Inventory of emissions
- Construction mitigation
- Smoke Management



Reasonable Progress Goals in Class I states' SIPs

- New Jersey: Brigantine
- New Hampshire: Great Gulf, Presidential Range/Dry River
- Vermont: Lye Brook
- Maine: Acadia, Roosevelt/Campobello, Moosehorn





Reasonable Progress Requirement

- Make reasonable progress toward goal:
 - Prevention of future and remedying existing visibility impairment in Class I areas
- Progress will be measured in deciviews
 - That is, actual improvement in visibility
 - The expected change in deciviews is calculated by modeling the impact of control measures considered to be reasonable
- Thus, the decision about which measures are reasonable leads to a conclusion about how much visibility improvement is reasonable

Selecting Reasonable Measures

- Consider 4 factors :
 - Costs of compliance
 - Time necessary for compliance
 - Remaining useful life of any existing source subject to such requirements
 - Energy and non-air quality environmental impacts of compliance

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Setting Reasonable Progress Goals

- Identify key pollutants and source categories affecting visibility at Class I areas
- Determine reductions from control measures which will be in place by 2018
- Identify potential additional strategies
- Consider 4 statutory factors, choose measures
- Assess progress in comparison to uniform rate
- Determine deciview goals



Long Term Strategy

- Enforceable emissions limitations, compliance schedules, and other measures necessary to achieve the 2018 reasonable progress goals set by the Class I States
- State must demonstrate it has included all measures needed to obtain its fair share of emission reductions

Outreach Requirements

- States must consult with other states on
 - Reasonable progress goals
 - Long term strategy
- States must consult with Federal Land Managers 60 days before SIP hearing on
 - Assessment of visibility impairment
 - Recommendations on reasonable progress
 - Control strategies
- States must hold public hearings

Northeast Visibility Union

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Ongoing process through 2064

- Initial SIPs
 - Regional Haze SIPs are due in December 2007
 - PM SIPs are due in April 2008
- Progress reports to EPA every 5 years
- Comprehensive revisions to SIPs are required in 2018 and every 10 years thereafter





Update on Progress

- Regional Haze SIPs and Particulate Matter SIPs are being drafted
 - Final modeling and documentation in preparation
 - BART determinations underway
- States are consulting with each other
- Informal discussions underway with EPA Regional Offices and FLMs
- Stakeholder briefing today
- Public hearings will be scheduled

Mid-Atlantic/Northeast Visibility Union

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Technical Reports Available

- Nature of Fine Particles and Regional Haze
- Baseline and Natural Visibility Conditions
- Contribution Assessment
- BART Resource Guide
- BART Five Factor Analysis
- Reasonable Progress
- CAIR v. CAIR Plus
- Emissions Inventory Documentation
- SIP Template

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Next Steps

- Complete documentation
- Make draft SIPs available for public comment
- 5 year progress report
- 10 year revision



Information Links

- The MANE-VU website
 - www.manevu.org
- The NESCAUM regional haze website - <u>www.nescaum.org/topics/regional-haze</u>
- The MARAMA regional haze website – <u>www.marama.org/visibility/</u>
- The EPA visibility regulatory actions website

- www.epa.gov/oar/visibility/actions.html MANE-VU