EPA United States Environmental Protection Agency

Office of Air Quality Planning and Standards

Air Quality Program Update

October 5, 2010

Current Schedule for Ongoing NAAQS Reviews (Sept 2010)

MILESTONE	POLLUTANT						
	NO_2 Primary	SO_2 Primary	Ozone Reconsideration	CO	PM	NO_2/SO_2 Secondary	Lead
Proposal	Jun 26, 2009	Nov 16, 2009	Jan 6, 2010	Jan 28, 2011	Feb 2011	July 12, 2011	Nov 2013
Final Rule	Jan 22, 2010	Jun 2, 2010	Oct 29, 2010	Aug 12, 2011	Oct 2011	Mar 20, 2012	Sept 2014

NOTE:

Underlined dates indicate court-ordered or settlement agreement deadlines

Next Ozone Review: Proposal in Jun 2013 and Final in Mar 2014

PM_{10} NAAQS Review

- Consideration could be given to retaining or revising the current PM_{10} standard.
  - CASAC concluded the current standard should be revised to increase public health protection.
  - Staff and CASAC concluded that it is appropriate to retain a 24-hour averaging time.
- To the extent it is judged appropriate to revise the current standard:
  - Staff and CASAC concluded it would be appropriate to consider revising the form to the 98th percentile of the annual distribution of 24-hour PM_{10} concentration.
  - A 98th percentile form would be expected to provide increased stability, relative to the current one-expected-exceedance form.
  - Potential Range:
    - Staff: 85 µg/m3 to 65 µg/m3
    - CASAC: 75 µg/m3 to 65 µg/m3

Anticipated NAAQS Implementation Milestones

Pollutant	NAAQS Promulgation	Designations Effective (approximate date)	110(a) SIPs Due (3 yrs after NAAQS promulgation)	Attainment Demonstration Due	Attainment Date
$PM_{2.5}$ (2006)	Sept 2006	Dec 2009	Sept 2009	Dec 2012	Dec 2014/2019
Pb	Oct 2008	Nov 2010/2011 (extra time for new monitors)	Oct 2011	May 2012/2013	Nov 2015/2016
NO_2 (primary)	Jan 2010	Feb 2012	Jan 2013	Aug 2013	Feb 2017
SO_2 (primary)	June 2010	July 2012	June 2013	Jan 2014	July 2017
Ozone (all dates tentative)	Oct 2010	Oct 2011 (proposed)	Oct 2013	Feb 2014 (to be proposed)	Dec 2017 (Moderate)
CO	Aug 2011	Sept 2013	Aug 2014	Mar 2015	Sept 2018
$PM_{2.5}$ (2011)	Oct 2011	Dec 2013	Oct 2014	Dec 2016	Dec 2018/2023
NO_2/SO_2 Secondary	Mar 2012	Apr 2014	Mar 2015	Oct 2015	n/a

SO_2 Designations Milestones

Action	Date
Final NAAQS signed	June 2, 2010
Governors' recommendations due to EPA	June 3, 2011
EPA sends out 120-day letter to all States/Tribes and notifies public via FR	Feb. 4, 2012
Deadline for States/Tribes to respond to EPA's modifications	April 4, 2012
Final designations	June 3, 2012

Designations strategy outlined in final SO_2 NAAQS rule:

- An area that has both monitoring data and appropriate modeling results showing no violations would be designated as “Attainment.”

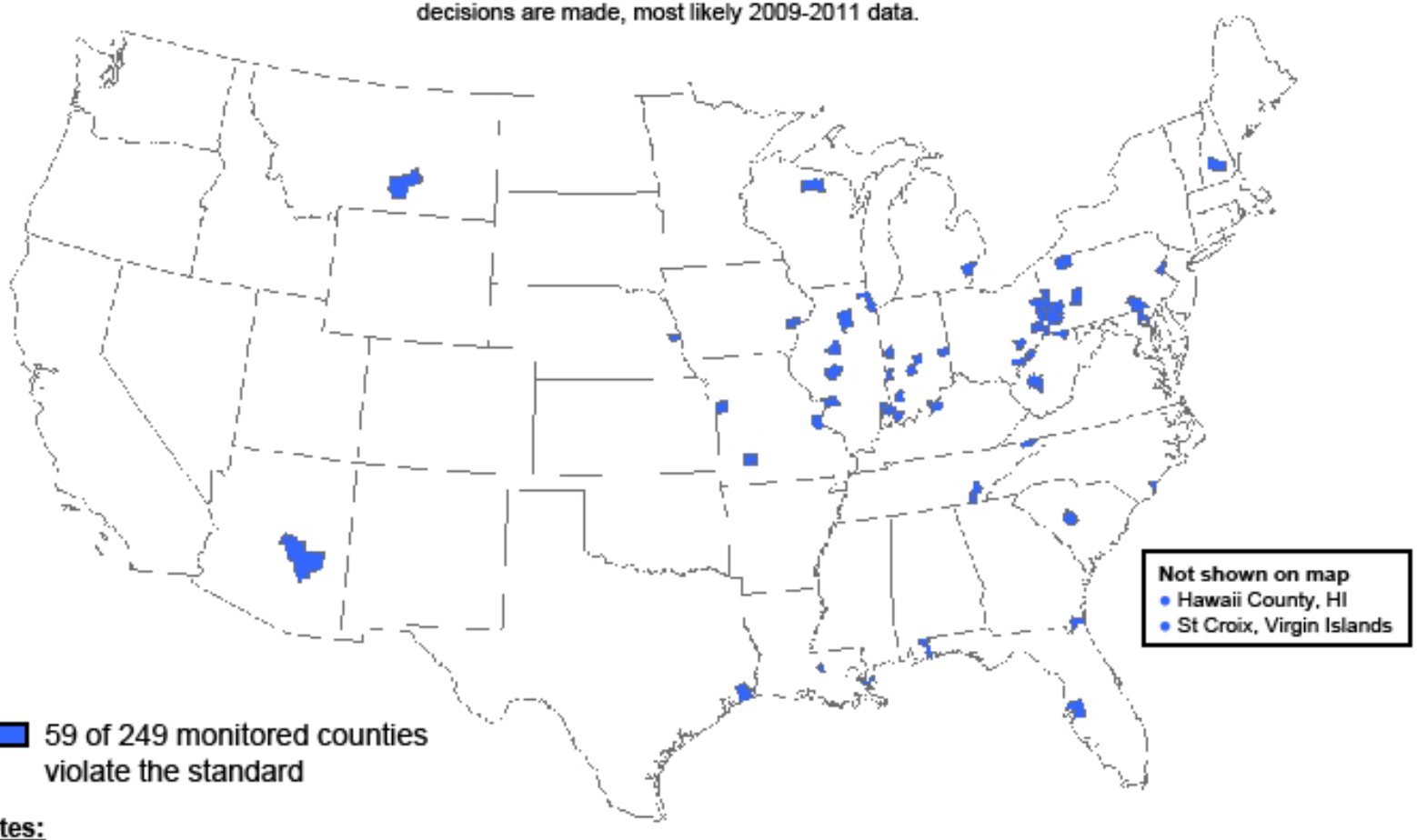
- Those with monitored violations will be designated “Nonattainment” and must develop attainment plan in 18 months (approx. Jan 2014) showing compliance in 5 years (approx. Aug 2017).

- All others will be designated “Unclassifiable” and must ensure attainment/maintenance under sec. 110(a)(1) plan due June 2013. Would include modeling of significant SO_2 sources and necessary emissions controls demonstrating attainment/maintenance by Aug. 2017.

Counties With Monitors Currently Violating the Revised Primary 1-Hour Sulfur Dioxide (SO2) Standard of 75 ppb

(Based on 2007 – 2009 Air Quality Data)

EPA will not designate areas based on these data but will use the currently available air quality data at the time designations decisions are made, most likely 2009-2011 data.



Notes:

1. Data are shown for monitors that met the following criteria: 75% of the day has valid hourly values,75% of the days in a quarter are valid, and all 4 quarters for each of the three years are valid as well as other applicable data handling conventions included in 40CFR50 Appendix T.

Ozone NAAQS Implementation

Proposed Designation Schedules

- EPA proposed designation schedules in the January 2010 ozone NAAQS proposal
- Primary NAAQS: Proposed accelerated schedule
  - Final designations in less than 1 year vs. 2 years
  - States submit recommendations in 129 days vs. 1 year
- Seasonal secondary NAAQS: Took comment on 2 alternative schedules
  - Same accelerated schedule as for primary standard, or
  - Traditional 2-year schedule allowed under CAA; States submit recommendations in 1 year.

Designations Assistance

- Plan to offer early interaction/assistance to facilitate development of states' recommendations.
- Revised designations guidance with description of each factor and information that might be used to assess.
  - 5-factors: air quality data, emissions-related data, meteorology, geography/topography, jurisdictional boundaries.
  - Guidance on qualifying for "rural transport area" classification.
  - Potential for partial counties in certain cases.
- Plan to share information addressing designation factors shortly after NAAQS are final.
  - Including ozone source apportionment modeling results which estimates the combined impact of multiple factors (emissions, meteorology, geography).
  - 5-factor TSD template

Boundary Decision Criteria

- EPA's goal is national consistency in decisions to ensure legally defensible designations.
  - CAA Sec 107(d): NAA boundary must contain any area that violates the NAAQS or that contributes to NAAQS violation in a nearby area.
- Suggest Census-defined CSA/CBSA is starting point for technical analysis; analysis could support smaller or larger area.
- Possible decision guides?:
  - Counties in CSA/CBSA that contribute at least ___ ppb ozone to any violating monitor in the CSA/CBSA are "presumed in"?
  - NAA boundary to include sufficient area (e.g., counties or parts of counties) to account for at least ___% of total ozone contribution from CSA/CBSA counties to violating monitor(s)?
  - "Nearby" includes any area within CSA/CBSA? Beyond that considered to be long-range transport?

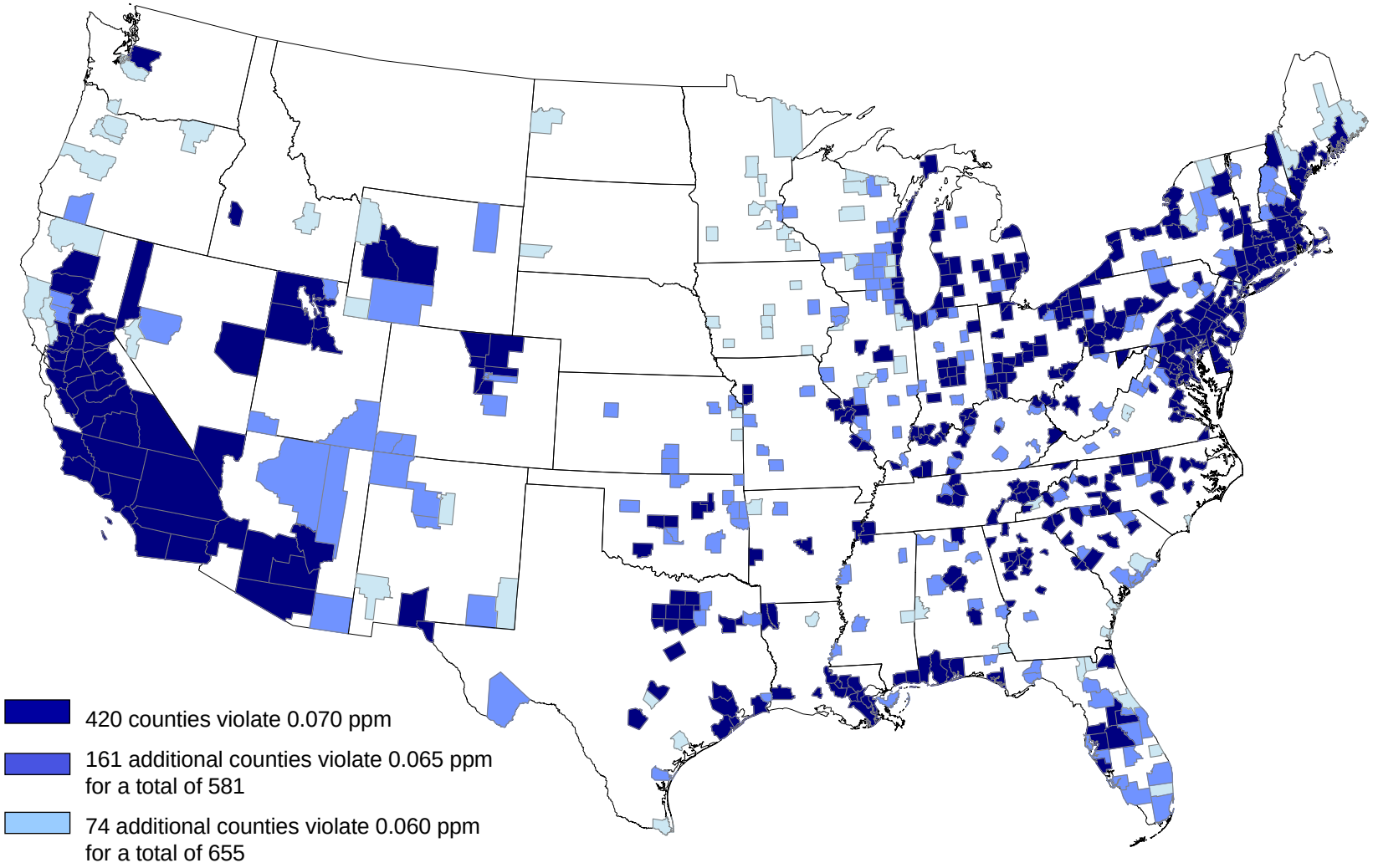
Classifications

- Option 1 is consistent with the approach used for the 1997 standard.
  - Results in largest number of “Marginal” areas (and moderate areas).
  - Fewer mandatory controls; shorter attainment deadlines with higher probability of “bump-up.”
- Option 2 specifies the Extreme threshold as either the actual DV of the area with the highest DV at the time we designate, or a value approximately mid-way betweqen the two highest DVs at the time we finalize the implementation rule.
  - Results in more areas in higher classifications.
  - More mandatory controls, but with more time to attain w/o “bump-up.”
- Also considering proposing that where states submitted voluntary reclassification requests under the 1997 NAAQS we would treat those requests as applying to this standard unless the state says otherwise.
  - Would avoid going through separate reclassification process.

Counties With Monitors Violating Proposed Primary 8-hour Ground-level Ozone Standards
0.060 - 0.070 parts per million

(Based on 2007 – 2009 Air Quality Data)

EPA will not designate areas as nonattainment on these data, but likely on 2008 – 2010 data which are expected to show improved air quality.



Notes:

1. No monitored counties outside the continental U.S. violate.
2. EPA is proposing to determine compliance with a revised primary ozone standard by rounding the 3-year average to three decimal places.

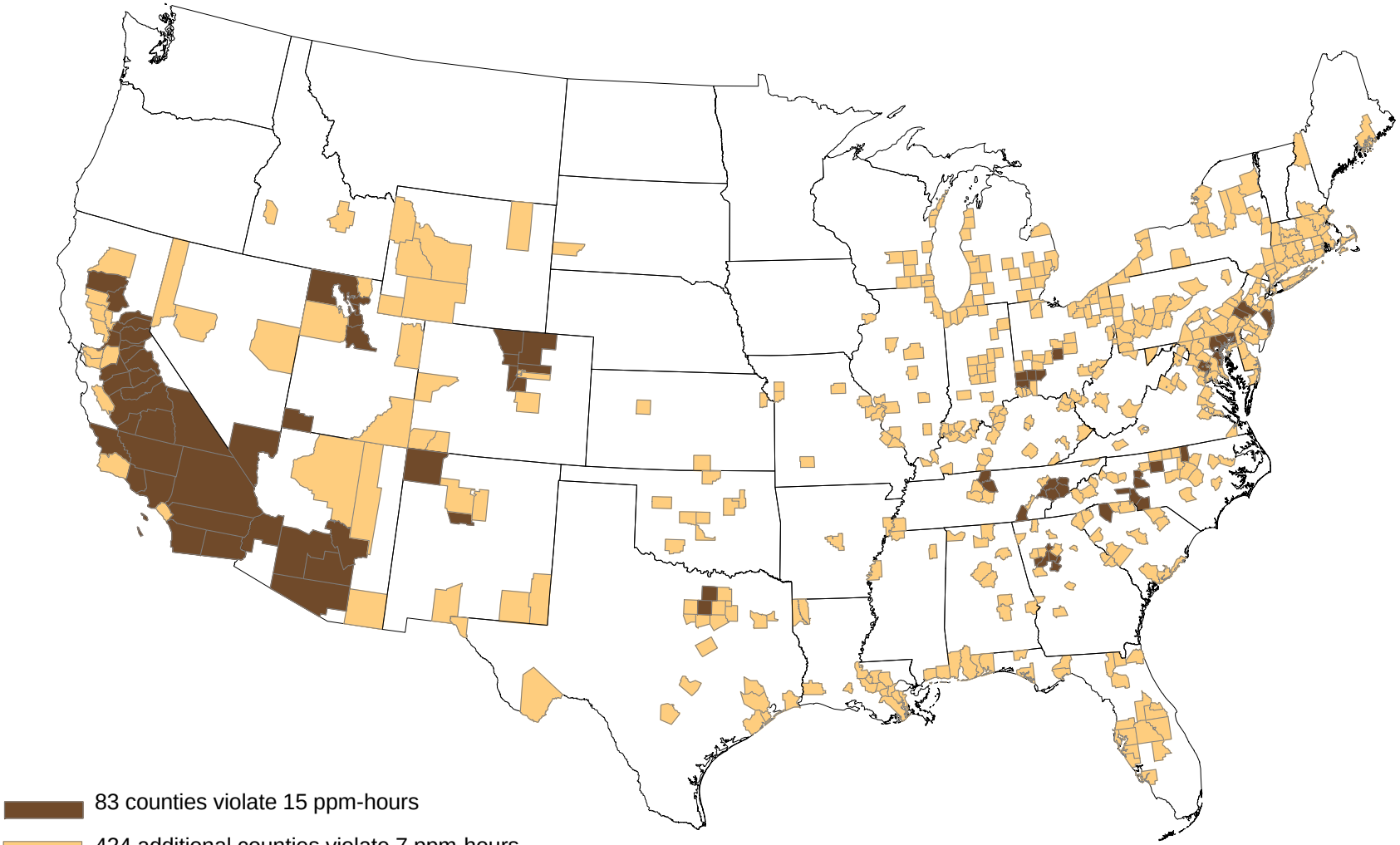
United States Environmental Protection Agency

Counties With Monitors Violating Proposed Secondary Seasonal Ground-Level Ozone Standards

7 – 15 parts per million - hours

(Based on 2007 – 2009 Air Quality Data)

EPA will not designate areas as nonattainment on these data, but likely on 2008 – 2010 data which are expected to show improved air quality.



No monitored counties outside the continental U.S. violate.

Regional Haze

Regional Haze SIP and FIP Deadlines

- SIPs were due December 17, 2007
- EPA made a finding of failure to submit in January 2009 for 37 states, DC, and the Virgin Islands
  - 14 states had submitted by then, so no findings for those
  - 16 states on the findings list have submitted since then – so we have 30 final SIPS now
  - 16 (out of 25) from CAIR States (AL, DE, FL, GA, IA, KY, LA, MS, MO, NC, NJ, NY, SC, TN, TX, WV)
  - 14 (out of 28) from non-CAIR States (AR, CA, CT, KS, MN, ND, NV, NH, OK, OR, RI, UT, VT; NM- Bernalillo County)
- FIPs or final approvals of SIPs for states on the findings list are due January 2011
  - We have not taken approval/disapproval action on any states to date
  - In the CAIR states, we are considering limited approval/deferred limited disapproval until Transport Rule is final
  - EPA-Region 8 is preparing a FIP for Montana
  - Regions are working diligently with states to submit their SIPs by the deadline

Regional Haze SIP and FIP Deadlines (cont.)

- We have a consent decree with WildEarth Guardians for 7 states to approve the SIPs or promulgate FIPs by May 2011
  - Oklahoma, North Dakota, New Mexico, Colorado, Oregon, Idaho, and California

- EPA-Region 9 is also working on BART FIPs for Navajo Generating Station in AZ and Four Corners Power Plant in New Mexico – we expect to propose very soon

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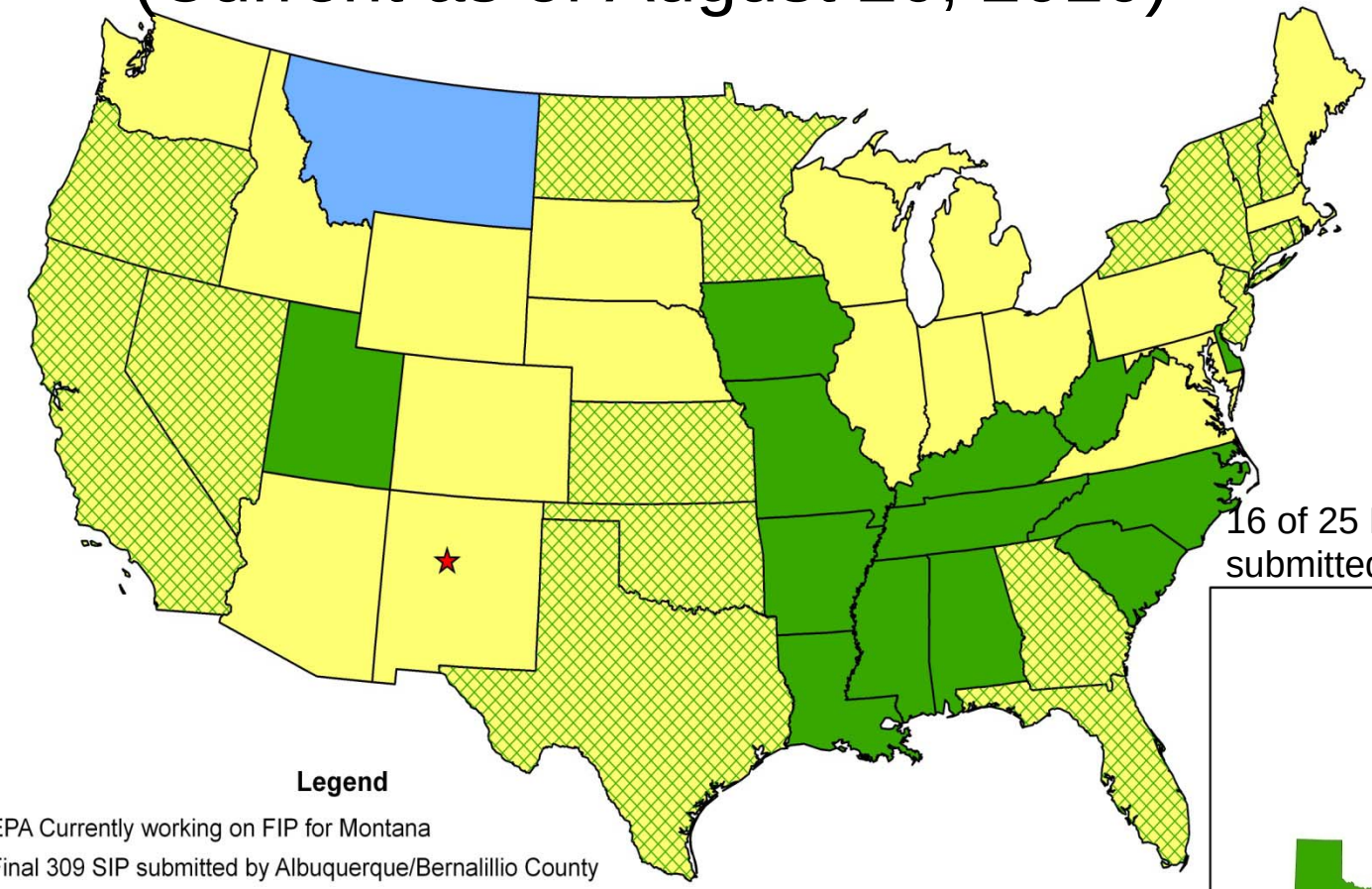
Status of Final Regional Haze SIPS (Current as of August 20, 2010)

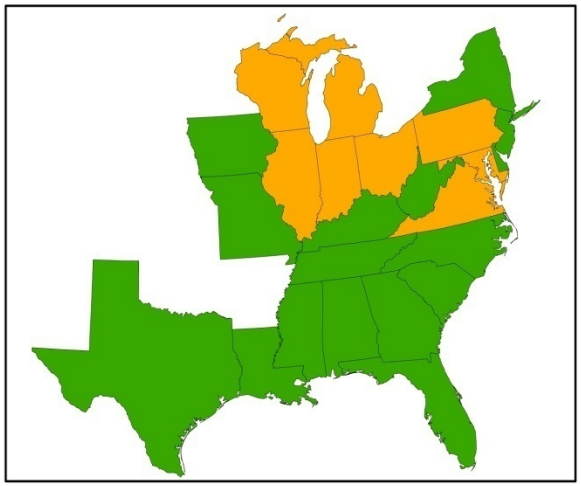


Legend

- EPA Currently working on FIP for Montana
- ★ Final 309 SIP submitted by Albuquerque/Bernalillio County
- States on the Findings List that have submitted Final SIPs (16)
- States that submitted Final SIPs prior to Findings (13)
- States on the Findings of Failure to Submit List (35 including AK, HI & VI)

Note: Alaska, Hawaii, and the Virgin Islands are also on the Findings List
- EPA is preparing a FIP for Hawaii and assisting the Virgin Islands with preparing SIP (possible FIP)

16 of 25 Final SIPs submitted from CAIR States



Proposed Transport Rule

- By 2014, EPA modeling projects that implementation of the Transport Rule, as proposed, combined with other state and EPA actions, would reduce 2005 emissions from electric generating units in the covered states by:
  - 6.3 million tons of SO2 per year
  - 1.4 million tons of NOX per year
    - 300,000 tons of NOX during ozone season (included in NOX estimate above)
- These reductions represent a 71% reduction in SO2 and a 52% reduction in NOX. emissions from power plants from 2005 levels in the covered states.
- In the states and DC covered by the proposed Transport Rule, in 2014, SO2 emissions would be capped at 2.5 million tons per year annually and NO emissions would be capped at 1.4 million tons per year (ozone season NOX emissions will be capped at 600,000 tons per year)

Proposed Transport Rule: States Required to Reduce Emissions