Clean Air Updates

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Outline of Presentation

- NAAQS reviews and implementation
  - Schedule
  - PM and ozone NAAQS
    - Infrastructure SIPs
      - Transport requirements
  - SO2 primary standards
  - NO2 primary standards
  - NOx/SOx secondary standards
  - Pb and CO NAAQS
- Regional Haze SIPs
- Exceptional Events guidance and fire policy
- RPO study
- GHG permitting
- Appendix

Current Schedule for Ongoing NAAQS Reviews (October 2011)

MILESTONE	POLLUTANT						
	PM	NO_2/SO_2 Secondary	Ozone	Lead	NO_2 Primary	SO_2 Primary	CO
NPR	TBD	July 12, 2011	Fall 2013	Winter 2013	Summer 2015	Winter 2015	Spring 2016
NFR	TBD	Mar 20, 2012	Summer 2014	Fall 2014	Spring 2016	Fall 2016	Winter 2016

NOTE:

Underlined dates indicate court-ordered or settlement agreement deadlines.

Anticipated NAAQS Implementation Milestones (October, 2011)

Pollutant	NAAQS Promulgation Date	Designations Effective	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	Dec 2010/2011	Oct 2011	June 2012/2013	Dec 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 (2008)	Mar 2008	2012	Mar 2011	2015	2015-2032
Ozone (current review)	July 2014	2016	July 2017	2019/2020	2019-2036
$PM_{2.5}$ (current review)	TBD	TBD	TBD	TBD	TBD
NO_2/SO_2 Secondary	Mar 2012	TBD	Mar 2015	TBD	TBD

2008 Ozone NAAQS Area Designations

- OMB returned the final rule to reconsider the 2008 ozone standard to EPA on September 7, 2011
- In September 22 memo to RAs, AA Gina McCarthy laid out steps for implementing 2008 standard and intention to fast-track initial area designations and classifications approach rule
- EPA is moving ahead to designate areas based on 2008-2010 air quality data and 2009 state recommendations
  - Preliminary decisions (120-day letters) in Fall 2011
  - Final decisions by mid-2012

2008 Ozone NAAQS Area Designations

- **EPA is <u>not requiring</u> states to submit new recommendations**
  - States had opportunity to voluntarily revise previous recommendations
  - Discussions of new information can occur during the official "120-day" process
  - EPA will update the recommendations submitted in 2009 with the most current, certified air quality data

- **Potential reasons states may voluntarily revise 2009 nonattainment boundary recommendations:**
  - Nonattainment boundary for area with violating monitor was not previously submitted
  - Change in the number/extent of monitors violating in an area
  - Significant change in location of VOC/NOx sources

- **2011 data will be considered if certified early**
  - To be considered, State must certify 2011 data by Feb 29, 2012, which is earlier than the May 1, 2012 deadline
  - Cusp areas with new exceptional event claims for 2009 and 2010 need to finalize submissions in time for EPA to review and make determinations

- **Currently expecting 41 "nonattainment" areas and 1 "unclassifiable"; the rest are "unclassifiable/attainment."**
  - Only 3 "new" areas
  - Emphasis on existing area boundaries
  - Implementing new tribal designations policy

2008 O3 NAAQS Classifications Approach Rule

- **Proposal expected winter 2011 and final rule by mid-2012 (same time as initial area designations go final)**

- **Classification Thresholds – example thresholds based on same "percent-above-the-standard" approach used for 1997 ozone NAAQS:**
  - Marginal 0.076 up to 0.086 ppm
  - Moderate 0.086 up to 0.100 ppm
  - Serious 0.100 up to 0.113 ppm
  - Severe-15 0.113 up to 0.119 ppm
  - Severe-17 0.119 up to 0.175 ppm
  - Extreme 0.175 ppm or more

2008 O3 NAAQS Classifications Approach Rule

- **Option to honor previous voluntary bump-up requests**
  - Unless state indicates otherwise, a previously requested voluntary bump-up would be honored for the purposes of initial classification under the 0.075 ppm standard
  - This could move 5 CA areas and Houston into higher classifications.

- **Attainment deadlines – Two options:**
  - End of calendar year. Provides areas with same number of full ozone seasons to attain as in original CAA Table 1
  - Consecutive calendar years from the effective date of designations. Results in 1 fewer ozone season to attain

2008 Ozone NAAQS Implementation Rules

- **"Simple and straightforward" rule addressing SIP requirements under Subpart 2**

- **Tentatively final in late 2012**

- **Preliminary Content:**
  - Anti-backsliding provisions for revoked 1997 NAAQS
  - Criteria for attainment date extensions
  - Deadlines for emissions inventory, RACT, ROP/RFP, attainment plan/demo, and section 185 fee program SIPs
  - RACT and RACM policies
  - Satisfying 15% ROP and 3% annual RFP requirements
  - Photochemical modeling for attainment demonstrations
  - Transportation and general conformity
  - Contingency measures
  - Nonattainment NSR
  - Emissions inventory and emissions statements
  - Application of the Clean Data Policy

Ozone Implementation Rules (cont.)

- Widespread Use of Onboard Refueling Vapor Recovery and Stage II Waiver
  - Proposed rule issued July 2011 addresses waiver of Serious and above area requirements for Stage II vapor recovery systems at gasoline refueling stations
  - Public comment period closed September 13, 2011
  - Expected final summer 2012
  - EPA intends to issue separate guidance to address technical aspects of removing existing Stage II programs from SIPs, and the Ozone Transport Region "comparable measures" requirement (also expect to be issued in summer 2012 at time of final rule)

Ozone Implementation Rules (cont.)

- Revisions to implementation rules for 1997 8-hr ozone NAAQS
  - **RFP credit final rule** for emissions reductions outside nonattainment areas – proposed December 2010 to limit credit only to reductions "in the area"
  - **Classification of former subpart 1 areas under subpart 2 final rule** – proposed September 2009 to reclassify under subpart 2 using 2003 DVs and retroactively effectuating attainment date extensions and bump ups. Would not affect areas that have been redesignated to attainment before final rule
  - **RACT policies proposal** – proposal to reconsider presumptions that NOx SIP Call and CAIR satisfy nonattainment area RACT requirements for covered sources, and economic feasibility criteria for determining what is "reasonable."
  - **Anti-backsliding rules for legacy 1-hr nonattainment NSR** major source definitions and offset requirements – proposed August 2010 to retain nonattainment NSR requirements specific to the 1-hr NAAQS under certain circumstances when implementing the 1997 8-hr NAAQS

Litigation on Ozone NAAQS/Implementation

- Petition for review filed by Earthjustice and others on **failure to finish the reconsideration action on the 2008 ozone NAAQS** (October 11, 2011)

- NOIs filed by several parties on **failure to designate for 2008 ozone NAAQS**, including:
  - On behalf of NY, CA, CT, DE, MA, and OR (Oct. 11, 2011)
  - On behalf of Midwest Environmental Defense Center (Sept. 28, 2011)
  - On behalf of Citizens United for Responsible Energy Development for WY Upper Green River Basin (Sept. 29, 2011)

- NOI by WildEarth Guardians for **failure to make findings of failure to submit ozone infrastructure SIPs for 2008 NAAQS** (September 13, 2011)

Litigation on Ozone Implementation (cont.)

- NOI to sue by two parties for **failure to write PSD regulations (e.g., PSD increments) for ozone under Section 166 of the Act**
  - On behalf of Sierra Club (October 3, 2011)
  - On behalf of WildEarth Guardians (September 8, 2011)

- Sierra Club suit to **compel EPA to respond to their prior petition to designate through regulation model(s) to use to determine if PSD major sources will cause or contribute to a violation of the ozone NAAQS and $PM_{2.5}$ NAAQS and increments, and to compel EPA to specify with reasonable particularity such models** (August 31, 2011)

- Deadline suit filed by WildEarth Guardians in US District Court (AZ) **for failure to promulgate area designations for the 2008 ozone NAAQS** (August 24, 2011)

- Other ongoing infrastructure SIP litigation

Litigation on Ozone Implementation (cont'd)

- **EarthJustice and Sierra Club petitions for EPA to make findings that Severe/Extreme 1-hour ozone nonattainment areas did not attain by attainment deadline**
  - EPA has proposed determinations for San Joaquin Valley, South Coast, and Southeastern Desert (CA)
  - Proposed settlement agreement with Sierra Club for 6 other areas out for public comment
- **Decision on EPA's Section 185 Fee Program Guidance (July 1, 2011 NRDC case)**
  - Court acknowledged that alternative programs in general under CAA section 172(e) are not precluded by either statute or prior case law
  - Guidance was vacated and remanded
    - Court considered the guidance final action that should have gone through notice-and-comment rulemaking
    - Court concluded that an alternative program featuring attainment of only the 8-hour standard would violate the plain language of the CAA
  - Section 185 "Termination Determinations" have been proposed for Sacramento and finalized for Baton Rouge. New York has also submitted request

Other Ozone-related Actions

- Revision to Monitoring Rules
  - Proposed July 2009 to modify minimum monitoring requirements in urban areas, add new minimum monitoring requirements in non-urban areas, and extend the length of the required ozone monitoring season in some states
  - Focus has shifted to revising ozone season requirements vs. expanding network size
  - If finalized, potentially effective in 2013
- VOC Exemption: HFO (including HFO-1234yf)
  - The proposed VOC exemption for HFO-1234yf will eliminate the need for automobile assembly plants to track and report small leakages of this compound
    - This will help to speed the transition of automobile air conditioning systems away from HFC-134a. HFC-134a was originally adopted in the mid-1990s to protect the ozone layer but has high global warming effects
  - The new compound is good for both the ozone layer and global warming
  - Proposed rule published Oct 17, 2011. Final rule expected summer 2012

Next Ozone NAAQS Review

Stage of review	Major milestones	Schedule
Integrated Science Assessment (ISA)	1st Draft ISA	Mar 2011
	CASAC and public review 1st Draft ISA	May 19-20, 2011
	2nd Draft ISA	Sept 2011
	CASAC and public review of 2nd Draft ISA	Jan 9-10, 2012
	Final ISA	Feb/Mar 2012
Risk/Exposure Assessments (REAs)	Scope and Methods Plans	Apr 2011
	CASAC consultation and public review of Scope and Methods Plans	May 19-20, 2011
	1st Draft REAs	Feb/Mar 2012
	CASAC and public review 1st Draft REAs	May 2012
	2nd Draft REAs	Nov 2012
	CASAC and public review 2nd Draft REAs	Jan/Feb 2013
	Final REAs	Apr 2013
Policy Assessment (PA) and Rulemaking	1st Draft PA	Apr 2012
	CASAC and public review 1st Draft PA	May 2012
	2nd Draft PA	Dec 2012
	CASAC and public review 2nd Draft PA	Jan/Feb 2013
	Final PA	May 2013
	Proposed Rule	**Oct 2013**
	Final Rule	**July 2014**

Ozone Flex Program

- In certain areas of the country that are not currently nonattainment for ozone, EPA's "ozone flex" program helps areas proactively reduce ozone pollution before a new ozone NAAQS review takes place (2014).
  - The main advantages are reducing pollution, protecting public health, and avoiding nonattainment.
- The following areas in Region 6 successfully worked with EPA's ozone flex program:
  - Corpus Christi, TX (1-hr and 8-hr)
  - Tulsa, OK (1-hr and 8-hr)
  - Shreveport-Bossier City, LA (1-hr)
  - Austin-San Marcos, TX (1-hr and 8-hr)
  - Little Rock, AR (1-hr)
  - Oklahoma City (8-hr)
- What did they achieve?
  - All areas stayed in attainment (1997 standard)
  - 8 hour areas are still active today
  - Implemented a variety of measures such as commuting programs, ozone action day programs, low VOC roadway materials, alternative fuels for non-aircraft vehicles, diesel idling and retrofit programs
- We are working to revise program to
  - Work with areas designated attainment
  - Create an opportunity to make progress and reduce emissions for areas to remain in attainment in the future
  - Re-issue Existing Ozone Flex Guidance with streamlined program elements
    - No annual reporting
    - Expanded participation
    - Release revised memo in December

PM NAAQS – Current Review

- Policy Assessment Document (April 2011)
  - $PM_{2.5}$ health standards:
    - Revising the level of the annual health standard within a range of 11 to 13 µg/m^3
      - Staff concludes evidence most strongly supports range from 11-12 µg/m^3
    - Retaining the daily standard at 35 µg/m^3 would be appropriate if the annual standard were set at 11 to 12 µg/m^3; if annual set at 13 µg/m^3, consider revising to 30 µg/m^3
  - $PM_{2.5}$ welfare standards:
    - Staff concludes it is appropriate to consider setting a distinct secondary $PM_{2.5}$ standard to address visibility impairment primarily in urban areas
  - PM_{10} standards:
    - Staff concludes scientific evidence and associated uncertainties could provide support for either retaining or revising the current primary 24-hour PM_{10} standard
      - To the extent consideration is given to revising the standard, staff concludes it would be appropriate to consider a 98th percentile form in conjunction with a level within a range of 85 to 65 µg/m3
    - CASAC recommends revising form to a 98th percentile form in conjunction with a level within a range of 75 to 65 µg/m^3
- If current review results in new/revised standards, revisions to implementation guidance/rule likely to be proposed around time of the final NAAQS
  - Administrator Jackson recently announced that she is prepared to propose to keep the current standard for PM10 when it is sent to OMB for interagency review.

$PM_{2.5}$ NAAQS Implementation

- SIP timeline for 2006 standards
  - Designations effective in December 2009
  - Attainment demonstration SIPs due December 2012
  - Ongoing infrastructure SIP litigation (to be discussed more later)
- Drafting Guidance for 2006 Standards to clarify several issues
  - Framework of existing implementation rule 40 CFR 51 Subpart Z (§51.1000) is appropriate for attainment planning for 2006 $PM_{2.5}$ standards
  - Clarifications: RFP milestone years, seasonal emission inventory issues, policy for contingency measures
- Permitting
  - PSD Program SIP revisions were due May 16, 2011. 1997 PM_{10} Surrogate Policy can no longer be used to satisfy PSD requirements for $PM_{2.5}$
  - Recent revision to 2008 Interpollutant Offset Substitution policy confirms ability to allow substitution but rescinds preferred ratios, which were never in the rule
  - EPA granting reconsideration of 2010 $PM_{2.5}$ Increments, SILs, and SMC Rule to re-propose three provisions to ensure notice and public comment opportunity. Rule is not stayed
  - Sierra Club suit filed August 31, 2011 to compel EPA to respond to their request to specify an official model to determine if major sources of $PM_{2.5}$ precursors violate the NAAQS

Infrastructure SIP Obligations

NAAQS	Due date under CAA	Notes
1997 Ozone	July 2000	June 2011: EPA actions taken for 21 states (per July 2010 Consent Decree) Fall 2011: Settlement Agreement (nearly final) will include i-SIP obligations for 16 states; deadlines all in 2012
1997 $PM_{2.5}$	July 2000	NOI received, but no further actions taken by litigants
2006 $PM_{2.5}$	Sept 2009	September 2011: Made findings of failure to submit for 8 states, starting FIP clock Oct 2011: Entered Consent Decree for 20 states; EPA final action due in 2012 (AR, NM in 2013)
2008 Ozone	March 2011	Per litigation, expect schedule for findings in 2012
2008 Lead	October 2011	Infrastructure SIP guidance issued in October 2011
2010 NO_2	January 2013	Draft infrastructure SIP guidance anticipated spring 2012
2010 SO_2	June 2013	Infrastructure SIP guidance proposed in September 2011; public comment period extended until December 2, 2011

Infrastructure SIP Issues

- Latest EPA guidance for infrastructure SIP submissions is tending toward more specificity than in the past, in light of ongoing litigation.
  - See e.g., lead infrastructure SIP guidance October 14, 2011.
- EPA approval must not be misinterpreted as approval/re-approval of provisions involving:
  - Excess emissions of a facility at times of startup, shutdown, or malfunction ("SSM")
  - Director's discretion
  - Minor source NSR program
  - NSR Reform amendments
- Other issues
  - NOx as a precursor
  - NSR revisions for PM2.5 due in May 2011
  - Section 128 of CAA – State Board Requirements
- Sierra Club SSM petition (June 2011)
  - Identifies 39 states across all 10 Regions
  - HQ will begin rulemaking (OAQPS, OGC, OECA, Regional Counsel)
  - Action to grant or deny due by August 2012 (may involve SIP calls)

Transport Requirements

- Section 110(a)(2)(D)(i) of the CAA requires Transport SIPs as part of infrastructure submittal
- Prohibits emissions that contribute significantly to nonattainment with (or interfere with maintenance of) a NAAQS by any other state
  - Section 110(a)(2)(D)(i) also contains provisions prohibiting downwind interference with PSD and visibility elements of Part C
- Transport Rule (and FIP) defined significant contribution with respect to 1997 Ozone and PM and 2006 PM NAAQS for eastern US, but Transport requirements apply for all NAAQS in all States
- For 1997 ozone and $PM_{2.5}$ NAAQS, interstate transport SIPs are generally done, though a handful of issues remain with visibility prong (linkage to RH SIPs)

24-hr $PM_{2.5}$ and Ozone Interstate Transport SIP Guidance

- For the 2006 $PM_{2.5}$ NAAQS:
  - SIP due date was September 2009
  - EPA issued guidance on September 25, 2009
  - FIP deadline for several states approaching in July 2012 because of "June 2010 findings" and WildEarth CD deadlines
  - For states included in Transport Rule modeling domain:
    - If state is included in Transport Rule FIP, no additional SIP actions are necessary
    - If state is found not to "significantly contribute" or "interfere," please use Transport Rule's technical analysis to supplement SIP approval actions
  - For states not included in CSAPR modeling domain (West):
    - OAQPS is discussing the type of information that could be used to support these SIP actions

- For the 2008 ozone NAAQS:
  - Transport SIPs for 2008 ozone NAAQS were technically due March 2011
  - EPA received a notice of intent on September 13, 2011; litigants have expressed intentions to file on November 21
  - OAQPS is considering guidance options for states to submit these SIPs

- For other pollutants, see appropriate infrastructure SIP guidance

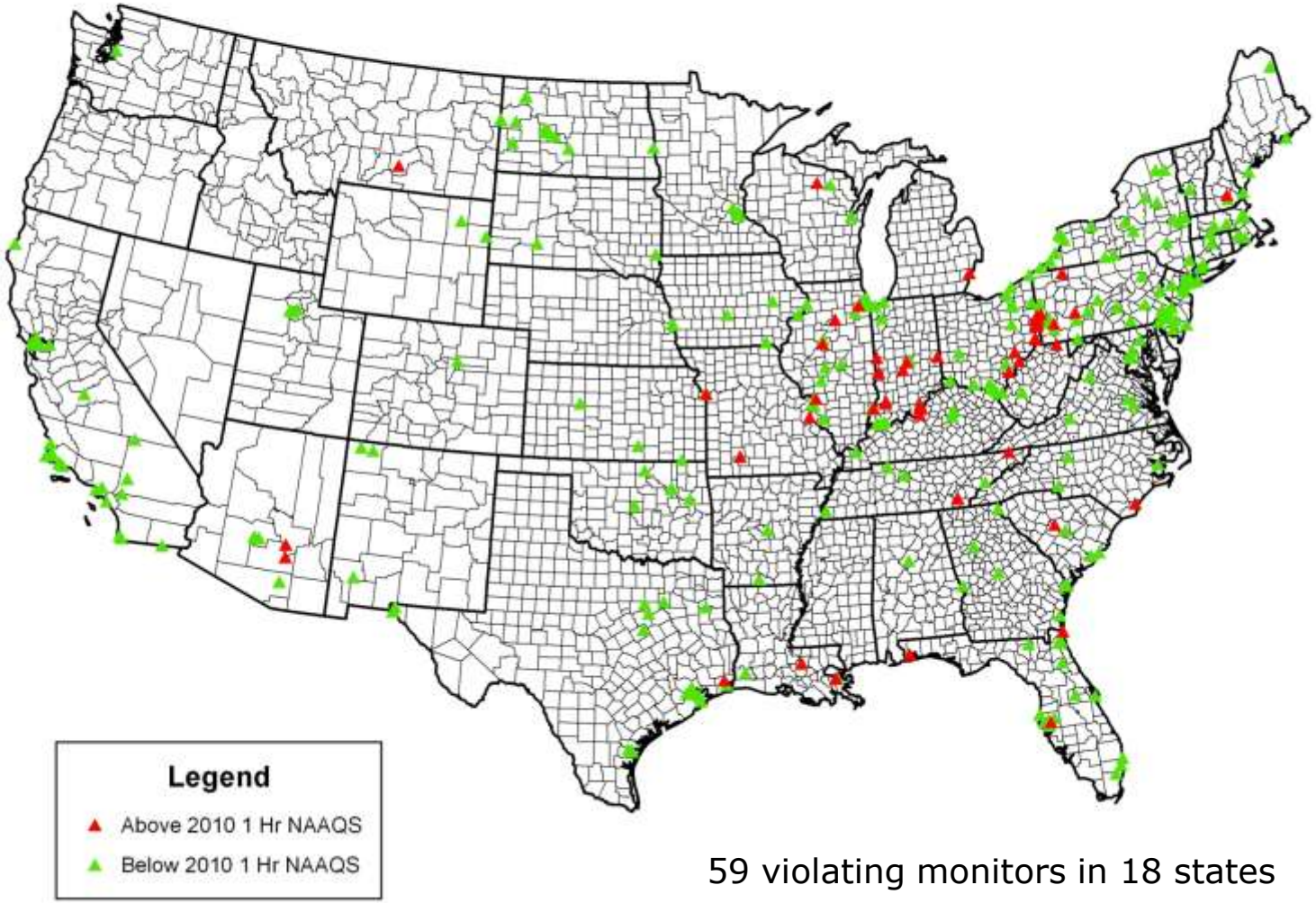
Progress on Ozone and $PM_{2.5}$ Attainment

	1997 8-hr Ozone 2003 designations	1997 $PM_{2.5}$ 2004 designations	2006 $PM_{2.5}$ 2009 designations
Initial Nonattainment Areas	113	39	32
Current Nonattainment Areas	44	37	32
Redesignations Approved	69	2	0
Clean Data Determinations	18	22	1
Pending Redesignation Requests	7	4	1

SO_2 NAAQS Implementation

- New 1-hr 75 ppb SO_2 NAAQS promulgated June 3, 2010
- SO_2 designations guidance was issued March 24, 2011. State designation recommendations were submitted June 2011.
  - 59 violating monitors in 18 states, 1 territory, 48 counties (2008-2010 data)
  - Anticipate sending "120-day letters" in February 2012; final designations June 2012
- States submit attainment demonstration SIPs to EPA within 18 months of the effective date of nonattainment designation (early 2014)
- Attainment date is 5 years after effective date of designation
  - Probably 2017 based on 2014-2016 monitor data

SO_2 Monitor Design Values 2008-2010



59 violating monitors in 18 states and 1 territory, (48 counties)

SO_2 Implementation Guidance

- 110(a)(1) and (2) SIP revisions addressing infrastructure and state-wide "maintenance" due by June 2013
  - SIP must be consistent with providing for "implementation, maintenance, and enforcement" of the NAAQS
  - EPA expects these SIP revisions to demonstrate, through refined modeling, that sources contributing to monitored and modeled violations will be sufficiently controlled to ensure timely attainment and maintenance of the new SO_2 NAAQS
- Draft guidance for SIP development and modeling released for public review on September 23, 2011.
  - Public comment period extended until December 2
  - Final guidance to be issued as soon as possible after public comment period
- Planning a rulemaking to establish:
  - Hybrid modeling/monitoring approach for determining attainment
  - Modeling protocol for attainment/maintenance demonstrations
  - Attainment/maintenance deadline for "maintenance track" areas
  - Tentative completion date: Summer 2012

NO_2 NAAQS Implementation

- 1-hr 100 ppb standard promulgated January 2010
- EPA intends to designate all areas of the country unclassifiable/attainment based on lack of violations anywhere in the existing community-wide monitoring network
  - Plan to designate Fall 2011 on expedited schedule
- New monitoring network: 52 near-road sites in cities with population > 1 million in 2013/2104
- Infrastructure SIPs due January 2013; guidance planned.
- Guidance on NO_2 PSD permit modeling issued June 29, 2010 http://www.epa.gov/NSR/guidance.html includes:
  - Recommended interim significant impact level
  - Estimating ambient NO_2 concentrations and determining compliance with the new 1-hour NO_2 standard
  - Modeling emergency equipment
  - Additional clarifications issued March 21, 2011 (intermittent emissions, more detail on NO to NO2 conversion, background concentrations, etc.)

NO_2/SO_2 Secondary Standards

- In July 2011, EPA proposed to revise the secondary NO_2 and SO_2 standards by establishing an additional set of secondary standards identical to the new health-based primary standards set in 2010
  - Because of remaining complexities and uncertainties, EPA cannot judge whether a new, multi-pollutant standard would provide the appropriate degree of protection
  - Final decision on revised NAAQS due March 2012
- Exploring ways to align any new implementation requirements (including infrastructure SIPs and area designations) with primary standards
- Longer term
  - Planning a 5-year field pilot program to collect and analyze data to inform next NAAQS review
  - 3-5 locations in acid-sensitive ecoregions (starting 2013)

Pb NAAQS Implementation

- 0.15 µg/m^3 NAAQS (rolling 3-month average) promulgated October 2008
- Initial Area Designations
  - Round 1 nonattainment designations for 16 areas (11 states) effective December 2010. SIP deadline June 2012. Attainment deadline December 2015.
  - Round 2 nonattainment/attainment/unclassifiable designations to be completed very soon, to include 5 new violating areas, plus expansion of Lower Beaver Valley NAA. SIP deadline would be June 2013. Attainment deadline would be December 2016.
  - http://www.epa.gov/leaddesignations/2008standards/
- Infrastructure SIPs were due October 15, 2011
  - Guidance for state submittals of infrastructure SIPs for the 2008 lead NAAQS was released October 14.
- Implementation Assistance
  - Updating RACT/RACM guidance (expected Fall 2011) - updating basic information and modeling guidance
  - Draft technical note on modeling (February 5, 2009) available at http://www.epa.gov/ttnamti1/files/ambient/pb/ModelingQA.pdf
  - Implementation Q & A covering general implementation issues, monitoring and modeling (July 8, 2011) available at http://www.epa.gov/airquality/lead/implement.html
  - Intend to update the 1993 Lead Guidelines Document – timing is resource dependent

CO NAAQS Implementation

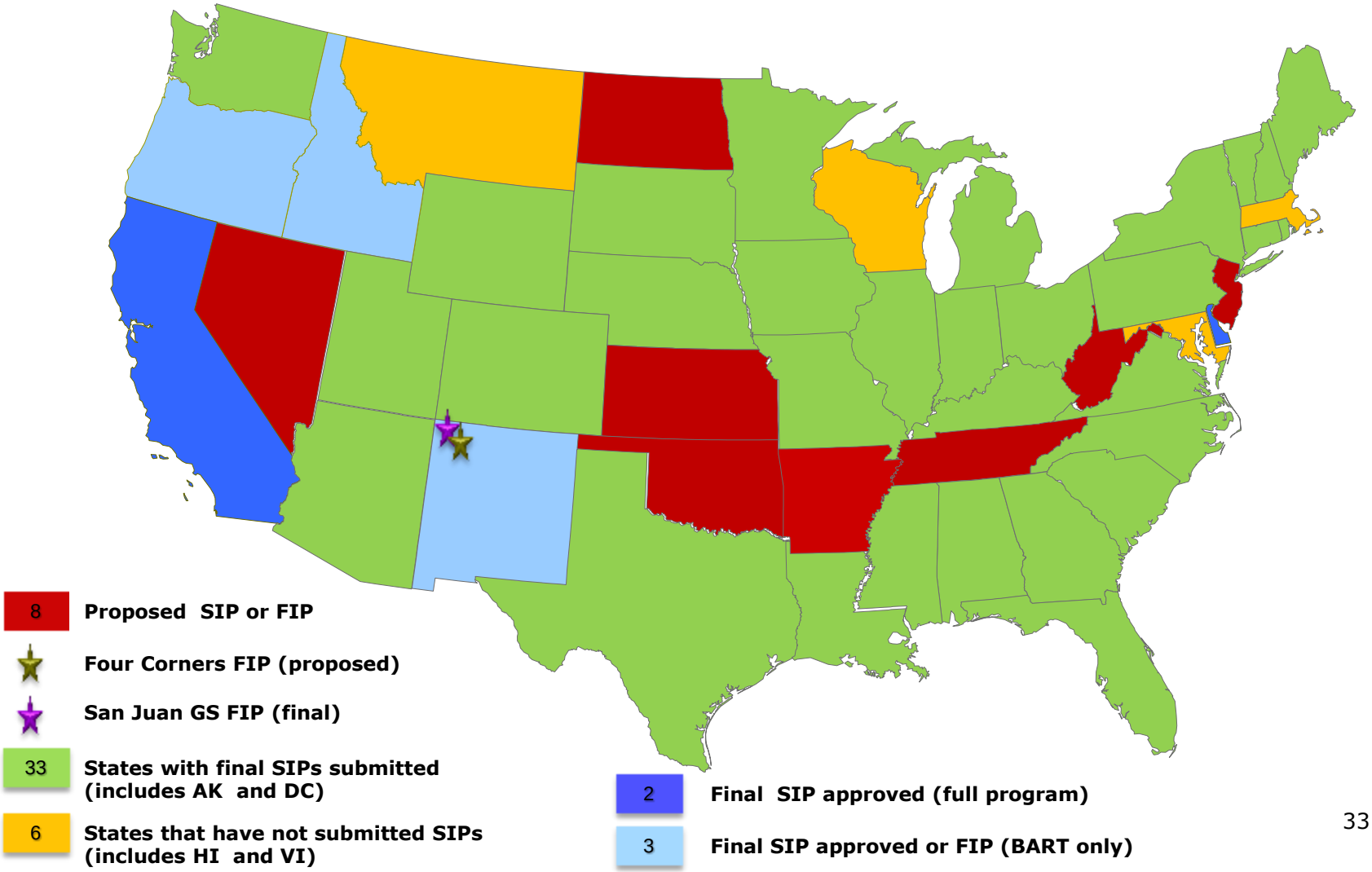
- Final decision to retain existing standards (9 ppm 8-hr, 35 ppm 1-hr) issued on August 12, 2011
- Current implementation approach will continue
- Final ambient air monitoring requirements include co-locating one CO monitor with a "near-road" NO_2 monitor in urban areas having populations of 1 million or more
  - Approximately 52 CO monitors within 52 urban areas, as part of the overall CO monitoring network
  - States may request that an alternative near-road location be used to house a required near-road CO monitor, to be approved by the EPA Regional Administrator on a case-by-case basis

Policy for Separately Designated Areas of Indian Country

- On a case-by-case basis, and after consultation with tribes, EPA may designate an area of Indian country (IC) separately from adjacent areas
- IC to be acknowledged explicitly in 40 CFR Part 81 Area Designations tables
- Comments on draft policy were due last Friday (October 14)
  - We plan to incorporate as many comments as possible and to move as quickly as practicable to finalize policy.
  - We intend to carry out policy for the 2008 ozone standard.
- Important considerations for states:
  - We encourage states and tribes to coordinate on recommendations
  - Where IC is designated separately from an adjacent state area, redesignation will be independently evaluated
  - The multi-factor analysis will not be considered any differently for tribes than for states, with the exception of the jurisdictional boundaries factor

Regional Haze SIP/FIP Status

(November 2011)



Other EPA Actions on Regional Haze SIPs

- CA and DE have fully-approved RH SIPs
- Multiple environmental groups (NPCA) filed a complaint for EPA's:
  - Failure to take action on submitted SIPs for states that did not receive a 'finding of failure to submit' notice in January 2009, and
  - Failure to promulgate FIPs for states that did receive a 'findings' notice.
- Consent Decrees
  - Action schedules for 10 states are already governed by separate Consent Decrees (e.g., Wild Earth Guardians)
  - A settlement with NPCA is close to being finalized. In combination with other consent decrees already in place, the NPCA agreement would establish a schedule covering all 50 states plus DC and the Virgin Islands
- FIPs:
  - Several mentioned on previous slide
  - Also proposed BART FIP for SO_2 for 6 EGUs (3 facilities) for Oklahoma
- Transport Rule Better-Than-BART determination
  - Expect proposal in November/December 2011 and final in May 2012

Regional Haze SIPs – Periodic Review and 2018 Revision

- Periodic report describing progress toward reasonable progress goals [§51.308(g)]
  - Report is due 5 years from submittal of the initial SIP
  - Must be in the form of a SIP
  - Evaluate adequacy of existing plan and act accordingly [§51.308(h)]
  - Regional offices are working with the states to clarify expectations

- 2018 SIP revision must fully satisfy RH rule requirements [§51.308(f)]
  - Comprehensive SIP revision due July 31, 2018, with revised reasonable progress goals, if necessary
  - EPA intends to hold future meeting with RPOs to discuss the requirements and develop a strategy to meet the requirements
  - Now is the time to undertake revisions to the rules/policies if necessary

Exceptional Events Implementation Guidance

- EPA is developing guidance and other tools to improve implementation of the Exceptional Events Rule
- Elements currently drafted include:
  - High Winds Guidance document
  - Extensive Q/A
  - Resources, examples on EPA website
- Schedule
  - Received comments from state/local/tribal agencies and FLMs in June
  - Develop response to comments document by fall 2011
  - Release revised draft guidance document for broader public review in fall 2011
  - Finalize guidance documents by early 2012
  - Determine next steps regarding potential rule changes
- Also developing a guidance document to address demonstration elements for wildfire / ozone exceptional events

Policy to Address Air Quality Impacts from Wildfires and Prescribed Burns

- Draft policy to address managing air quality impacts from wildfires and prescribed burns was submitted for OMB review in February 2010
- Because of concerns identified by other federal agencies, we withdrew it to address their issues
- An intent of the policy is to address agriculture burning
- Have had several meetings with federal agencies to understand their specific concerns
  - Working with NACAA to schedule meeting with interested states for their input when EPA and federal agencies have reached tentative agreement on draft policy
- EPA will draft revised policy for comment, likely in Spring 2012

RPO Study – Program Evaluation Findings

- RPO met a clear need for regional technical support and collaborative forums for cost-effective air quality planning
- Existing RPO-MJO structure can inform future design
  - Use a combination of permanent staff, in-kind contributions, and targeted contracting that best meets regional needs
  - Focus on technical analyses and support rather than policy or research
  - Inclusion of tribes
  - RPO scope should expand beyond regional to haze to address multiple air pollutants (e.g. CSAPR, NAAQS)
- There is a need for national-scale coordination of regional technical work and alignment with EPA policies to leverage resources and prevent duplication of efforts
- RPO's developed tools than can continue to facilitate regional air quality work in the future

RPO Study – Next Steps

- EPA will present RPO Program Evaluation at CAAAC meeting Nov 17-18
- Recognizing the increased burden on states and tribes, EPA has requested an $82 million increase in STAG funding for FY2012, but has been unsuccessful so far in securing additional funding
- EPA want to engage states and tribes in a conversation at a regional level on how to move forward on regional planning (tentatively January)
  - Whether their RPO and MJO are likely to merge
  - Upcoming regional planning needs and shortfalls of technical support in states and tribes, and what technical support EPA can provide
  - Ways to support for tribal involvement in regional air planning, including possible EPA funding for tribal involvement
  - Ways to achieve efficiencies through joint EPA/RPO development of tools and data, and aligns with EPA policy (i.e. SIP's):
    - EPA coordinates regional air planning activities and provides technical training at periodic meetings
    - Targeted support of regional tools used by multiple RPO-MJO

GHG Permitting: Steps under the Tailoring Rule

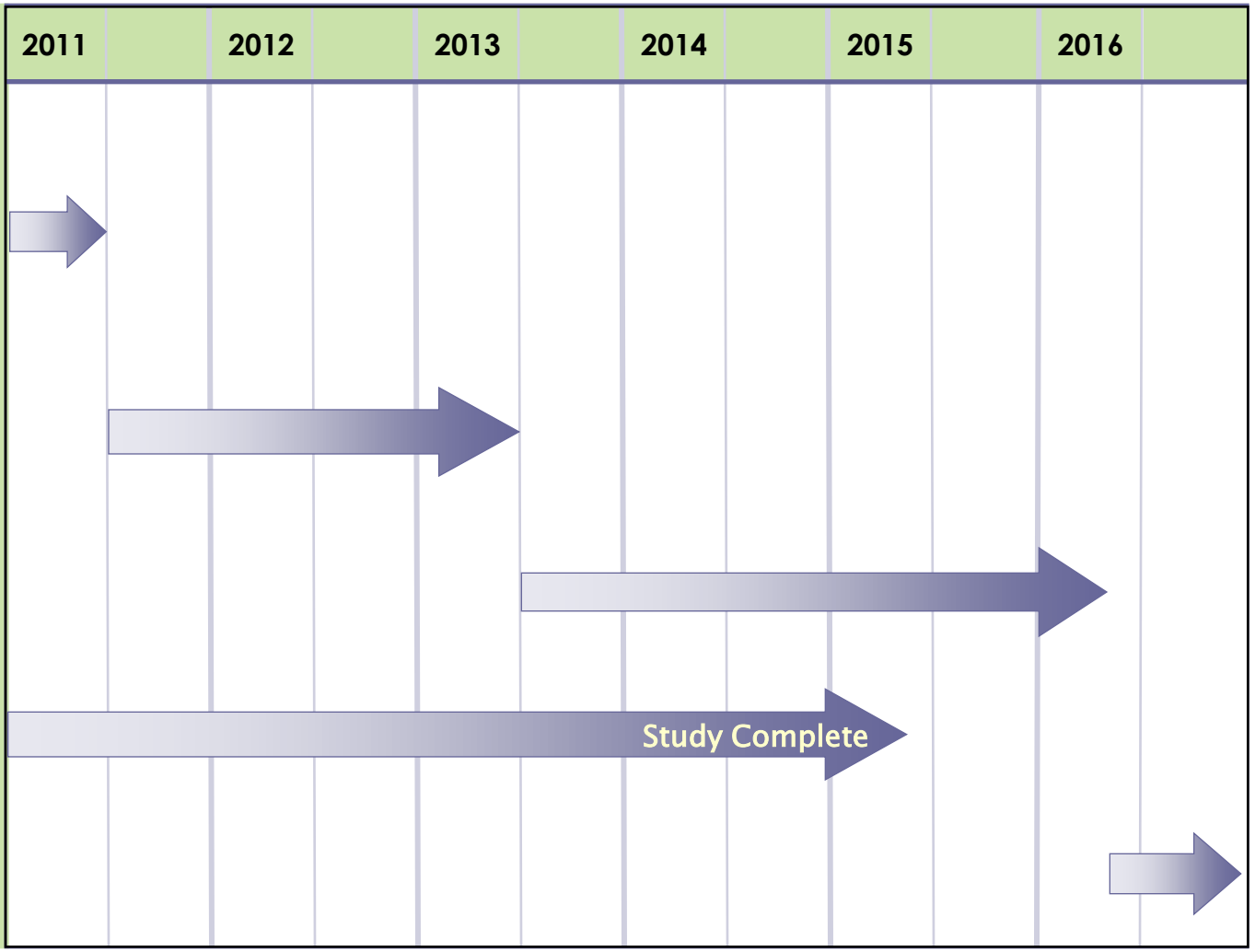
- **Step 1**: Sources already subject to PSD "anyway" and GHG emissions = or > than (tpy CO_2e):
  New source: NA
  PSD Modification: 75,000

- **Step 2**: Step 1 plus sources with GHG emissions = or > than (tpy CO2e) :
  New source: 100,000
  PSD Modification: 75,000

- **Step 3**: Implementation of potential additional phase-in and streamlining options

- **5-year study**: To examine GHG permitting for smaller sources

- Implementation of rule based on 5-year study



Status of State GHG Programs

- In 2010, EPA took a series of actions to ensure that permitting would continue without disruption after the date when GHG emissions became subject to PSD regulations - January 2, 2011.
- "SIP Call," requiring 13 states to revise their PSD programs to cover GHG emissions.
  - Arizona (Pinal Co., Rest of AZ), Arkansas, California (Sacramento), Connecticut, Florida, Idaho, Kansas, Kentucky (Rest of KY, Jefferson Co.), Nebraska, Nevada (Clark Co.), Oregon, Texas, Wyoming
- FIPs to cover those programs that did not address how the program will apply to pollutants newly subject to regulation or that did not submit revised SIPs by their selected deadline.
  - Arizona (Pinal Co. and Rest of AZ), Arkansas, Florida, Idaho, Kansas, Kentucky (Jefferson Co.), Oregon, Texas, Wyoming
- As of October 2011, 5 of the 13 "SIP Called" states have received approval of their plans to regulate GHGs and 5 of these states are awaiting approval of their plans to receive that authority
  - **Approved**
    - Connecticut, Kansas, Kentucky (Rest of KY), Nebraska, California (Sacramento)
  - **Awaiting Approval (States with * are Delegations)**
    - Arizona (Pinal Co.*, Rest of AZ)*, Kentucky (Jefferson Co.), Nevada (Clark Co.), Oregon, Idaho
- Once EPA approves the plan for Nevada (Clark Co.), EPA or the states will have authority to permit GHG sources for all the states

GHG Permit Status

- As of November 2011, about 100 permit applications that likely include a GHG component have been submitted and include source categories such as:
  - Biofuel Production
  - Cement Plants
  - Electric Generating Units
  - Lime Production Facilities
  - Outer Continental Shelf Exploration
  - Pulp and Paper Mills
  - Refineries
- 15 companies/plants have been issued GHG permits
  - EPA issued 2 of these permits (Palmdale Hybrid Energy Center in Antelope Valley, CA and Eni Holy Cross Drilling Project in OCS Eastern GOM)
  - SIP-approved state/local permitting authorities issued the other 13
- EPA has provided comments on 15 draft GHG permits to be issued by state agencies
- EPA is currently reviewing approximately 15 GHG permit applications for which EPA will issue the permits

EPA Comments on GHG Permits

- Include adequate support and explanation for form of GHG BACT emissions limit
  - Numerical emissions limit, or design standard or some other requirement if numerical limit deemed infeasible.
  - Must specify averaging time for limits.
  - Consider setting output based limits for GHG (lb/MWh).
  - Limits can be on CO2e basis or individual gas basis.

- Ensure practical enforceability, adequate compliance monitoring to measure emissions or efficiency over time.
  - Consideration of a source's non-CO_2 constituents– e.g., CH_4 and N_2O at combustion sources.
  - CEMS or other CO_2 measurement- preferably direct measurement for EGUs and other large sources.

EPA Comments on GHG Permits (Cont.)

- Provide adequate explanation for rejecting control options (e.g., CCS) based on feasibility or cost.
  - BACT analysis should explain if most efficient turbine or boiler was not selected.
  - Permit record should clearly show where CCS was eliminated as a potential BACT control technology.

- Affirm that the CO2e emissions during start-up and shut-down are included in the compliance calculation for the CO2e BACT limits.

- **Bottom line: documentation of GHG control considerations and BACT limits is important for a robust permit record**

Biomass and GHG Permitting

- Biomass Deferral
  - In Jan 2011, EPA announced an expedited rulemaking to defer completely the application of pre-construction permitting requirements to biomass-fired CO_2 *and other biogenic* CO_2 emissions for a **period of three years**.
    - Final Rule, Fact Sheet, and Response to Comments at: http://www.epa.gov/nsr/actions.html;
    - Deferral applies to CO_2 emissions only.
- EPA recently sent the Biomass study to SAB for review
- Spring 2012: SAB Biomass scientific study released
- Late 2012:If necessary, proposed rule addressing biomass study

Future GHG Permitting Activities

- Ongoing GHG permitting implementation
  - Tailoring Rule Steps 1 & 2
  - Q&A website
- Winter 2012 – Proposed Tailoring Step 3 Rule
- July 2012 – Scheduled Final Tailoring Step 3 Rule (one year for states to adopt)
- July 2013 – Tailoring Rule Step 3 goes into effect
- 2016 - 5-year GHG NSR study and Step 4 final rule

APPENDIX

Promulgated Mobile Source Clean Air Rules

A new vehicle today is up to 95% percent cleaner than a new vehicle in 1970. Still, by 2020, mobile sources are projected to account for up to 50% of the NOx emissions, and substantial hydrocarbon and PM emissions.

- **Clean Cars and Passenger Trucks – Tier 2**
  - Stringent emissions standards for new gasoline and diesel light trucks and cars beginning in 2004
  - National emissions reductions in 2030 of 3 million tons per year (tpy) of NOx and 800,000 tpy of VOCs
  - *Tier 3 standards being considered for post-2017 fleet*
- **Clean Heavy-Duty Trucks and Buses**
  - Stringent emissions standards for new buses and trucks beginning in 2007
  - Up to a 90% reduction in NOx and PM emissions
- **Mobile Source Air Toxics Rule**
  - Fuel benzene standards beginning in 2011;
  - Cold temperature hydrocarbon standards for vehicles phased in between 2010 and 2015; and
  - Portable fuel container requirements beginning in 2009
  - National emissions reductions in 2030 of 1 million tpy of VOCs and 19,000 tpy of PM

Promulgated Mobile Source Clean Air Rules (cont.)

- **Clean Non-road Diesel Engines and Equipment**
  - Standards for many types of non-road equipment phase-in between 2008 and 2015 depending on engine size
  - NOx and PM emissions reductions of more than 90 percent
- **Locomotive and Marine Diesel Standards**
  - New engine standards for existing locomotives and new large marine desiel engines phase-in beginning in 2009
  - Reduces PM by 90 percent and NOx by 80 percent for newly-built locomotives and marine diesel engines
- **Ocean-going Vessels**
  - In March 2010, the International Maritime Organization designated US coastlines as Emission Control Areas resulting in:
    - New engines being required to achieve NOx reductions of: 20% in 2011, and 80% in 2016
    - Existing engines: 15-20% NOx reductions starting in 2010
    - Fuel Quality Standards: 30% fuel sulfur reduction by 2012 and 97% fuel sulfur reduction by 2015
  - EPA finalized regulations in December 2009 to implement these standards on US-vessels
- **Small Gasoline and Recreational Marine Standards**
  - New exhaust emission standards for lawn and garden, utility vehicles, generator, a variety of other equipment, personal watercraft and outboard engines take effect in 2010-2012 depending on engine type/size
  - First time ever evaporative emission standards for these sources
  - National emissions reductions in 2030 of 600,000 tpy of VOCs, 130,000 tpy of NOx, 5,500 tpy of PM, and 1.5 million tpy of CO.