



Agriculture Air Quality Task Force Meeting

Presented by Robin Dunkins
August 1, 2012

Discussion Topics

- ▶ National Air Emissions Monitoring Study
- ▶ Reciprocating Internal Combustion Engine NESHAP
- ▶ Agricultural Air Quality Conservation Measures: Reference Guide
- ▶ Exceptional Events
- ▶ Grain Elevators New Source Performance Standard
- ▶ National Ambient Air Quality Standards
 - ▶ Particulate Matter
 - ▶ Ozone
- ▶ Other Topics of Interest
 - ▶ USDA/EPA Statement of Principles
 - ▶ Mercury and Air Toxics Standard
 - ▶ Fire Policy

National Air Emissions Monitoring Study

- ▶ Emission Estimating Methodology (EEM) development
 - ▶ EPA published a *Federal Register* Notice March 13, 2012 announcing the availability of two draft documents for public review and comment
 - ▶ “Development of Emissions Estimating Methodologies for Broiler Animal Feeding Operations” and “Development of Emissions Estimating Methodologies for Lagoons and Basins at Swine and Dairy Animal Feeding Operations”
 - ▶ The public comment period closed June 11, 2012
 - ▶ EPA is reviewing comments submitted during the public review process
- ▶ Update on Science Advisory Board (SAB) process
 - ▶ SAB conducted a public meeting March 14-16, 2012 to discuss the two documents
 - ▶ EPA provided written responses (July 2, 2012) to questions raised by SAB panel members
 - ▶ <http://yosemite.epa.gov/sab/SABPRODUCT.NSF/MeetingCal/5F2A619E899C86CF85257A320040EC55?OpenDocument>
 - ▶ SAB scheduled public teleconferences for August 13, 2012 and October 24, 2012
 - ▶ <http://www.gpo.gov/fdsys/pkg/FR-2012-07-12/pdf/2012-17027.pdf>

Proposed Reciprocating Internal Combustion Engine (RICE) NESHAP Reconsideration

- ▶ Federal Register publication June 7, 2012 (77 FR 33812)
 - ▶ <http://www.gpo.gov/fdsys/pkg/FR-2012-06-07/pdf/2012-13193.pdf>
- ▶ Notice of public hearing/extension of comment period published June 21, 2012 (77 FR 37361)
- ▶ Submit comments by August 9, 2012 to Docket No. EPA-HQ-OAR-2008-0708
 - ▶ Federal Register notice outlines options for submitting comments
 - ▶ Suggest also emailing a copy of submitted comments to: king.melanie@epa.gov
- ▶ **Several revisions proposed**
 - ▶ Tier 1/Tier 2/Tier 3 CI
 - ▶ Allowance for Emergency Demand Response & Peak Shaving
 - ▶ Area Source SI Engine requirements
 - ▶ Total Hydrocarbon Compliance option
 - ▶ Expansion of “remote” Alaska definition

Tier 1/Tier 2 Compression Ignition (CI) RICE Scheduled for Replacement

- ▶ Issue: CI (diesel) RICE certified to Tier 1 or 2 emission standards that must be replaced in next few years due to state/local rules
 - ▶ Example: San Joaquin Valley District rule requires replacement of Tier 1 and 2 engines with Tier 3 or Tier 4 engines by January 1, 2015, or 12 years after installation date, but no later than June 1, 2018
- ▶ Current RICE NESHAP requirements
 - ▶ If >300 HP and non-emergency, subject to CO emission limit
 - ▶ Compliance would likely require catalyst retrofit
- ▶ Proposed revision
 - ▶ For Tier 1 and 2 CI engines at area sources of HAP that will be replaced due to state/local rules, allow compliance with RICE NESHAP using management practices until January 1, 2015, or 12 years after the installation date of the engine, but not later than June 1, 2018

Tier 3 CI RICE

- ▶ Issue: Tier 3* (model year 2006) CI RICE constructed (installed) from January 1 - June 12, 2006
- ▶ Current regulation
 - ▶ If >300 HP and non-emergency, subject to CO emission limit
 - ▶ Compliance would likely require catalyst retrofit
 - ▶ Identical Tier 3* engine installed after June 12, 2006, does not require retrofit to comply with applicable EPA rule for that engine (NSPS)
- ▶ Proposed revision
 - ▶ For engines at area sources of HAP, specify that certified Tier 3* CI RICE installed before June 12, 2006, is in compliance with RICE NESHAP

*Tier 2 for engines ≥ 560 kW

Agricultural Air Quality Conservation Measures: Reference Guide

- ▶ Collaborative Document with USDA
 - ▶ Targeted for state and local agencies, public and ag communities
 - ▶ Designed to highlight the major categories of conservation measures
 - ▶ Will be updated to include specific measures to address each of the major categories and identify appropriate USDA-NRCS Practice Standards
 - ▶ Only measures approved by USDA-NRCS will be included
 - ▶ Does not provide any regulatory guidance and is solely for informational purposes
 - ▶ Recognizes that measures should be chosen on a case-by-case basis and not all measures may be appropriate for all conditions
 - ▶ Encourages state and local agencies to work with all stakeholders when developing a plan to mitigate air emissions from ag sources

Exceptional Events Implementation Guidance

- ▶ On July 6, 2012, EPA published a Notice of Availability announcing the availability of and a 60-day comment period for the revised draft guidance documents and other tools to improve implementation of the Exceptional Events Rule
- ▶ Available draft guidance includes an overview guidance document and three attachments:
 - ▶ Frequently asked questions
 - ▶ High winds document
 - ▶ Request for comments (same as in *Federal Register* notice)
- ▶ EPA also made available a Response to Comments document summarizing EPA responses to issues raised by state/local/tribal and other stakeholders during “informal” comment in 2011

Exceptional Events Implementation Guidance

- ▶ Additionally, EPA revised the Exceptional Events website (<http://www.epa.gov/ttn/analysis/exeevents.htm>) to provide additional example demonstration submittals, links to best practice components, and links to publically available tools to assist air agencies in developing demonstrations
- ▶ Draft guidance documents are available for download from:
 - ▶ Exceptional Events website (<http://www.epa.gov/ttn/analysis/exeevents.htm>)
- ▶ Schedule
 - ▶ July 31, 2012 – National conference call to provide stakeholders with an overview of the draft guidance
 - ▶ September 4, 2012 – End of 60-day public comment period
 - ▶ Fall 2012 - Determine next steps regarding potential rule changes
 - ▶ End 2012 – Release guidance documents as final product or as interim step prior to rule revisions
- ▶ EPA intends to develop a draft guidance document to address demonstration elements for wildfire / ozone exceptional events

Grain Elevators New Source Performance Standard (NSPS)

- ▶ EPA is reviewing the existing NSPS for grain elevators as part of the periodic NSPS review required by the CAA
- ▶ If changes to the NSPS are necessary, we will propose a rule in late 2012
- ▶ This standard applies to grain terminal elevators with permanent storage capacity of more than 2.5 million bushels
- ▶ Historically, temporary grain storage was typically done by piling grain on cement or asphalt pads and covering the grain with a tarp
- ▶ Temporary storage technology has improved such that the grain may be stored on large cement pads, with rigid sidewalls, aeration towers, conveyor systems from the storage silos, and elaborate tarp systems
- ▶ Several states requested EPA determine whether advanced technology temporary grain storage structures met the definition of permanent storage capacity under the NSPS for Grain Elevators
- ▶ In November 2007, EPA's Office of Enforcement and Compliance Assistance determined that advanced technology temporary grain storage structures should be counted in a facility's permanent storage capacity for NSPS applicability determinations

Current Schedule for Ongoing NAAQS Reviews

(Updated July 2012)

MILESTONE	POLLUTANT						
	NO ₂ /SO ₂ Secondary	PM	Ozone	Lead	NO ₂ Primary	SO ₂ Primary	CO
NPR	<u>Jul 12, 2011</u>	<u>Jun 14, 2012</u>	2013	Feb 2014	Aug 2015	Feb 2016	Jul 2016
NFR	<u>Mar 20, 2012</u>	<u>Dec 14, 2012</u>	2014	Nov 2014	May 2016	Nov 2016	Apr 2017

Note:

Underlined dates indicate court-ordered or settlement agreement deadlines

Anticipated NAAQS Implementation Milestones (as of January 2012)

Pollutant	Final NAAQS Date (or Projection)	Infrastructure SIP Due	Designations Effective	Attainment Demonstration Due	Attainment Date
PM_{2.5} (2006)	Oct 2006	Oct 2009	Dec 2009	Dec 2012	Dec 2014/2019
Pb	Oct 2008	Oct 2011	Dec 2010/2011	June 2012/2013	Dec 2015/2016
NO₂ (primary)	Jan 2010	Jan 2013	Feb 2012	none	none
SO₂ (primary)	June 2010	June 2013	Aug 2012	Feb 2014	Aug 2017
Ozone (2008)	Mar 2008	Mar 2011	mid-2012	2015	2015-2032
NO₂/SO₂ Secondary	Mar 2012	TBD	TBD	TBD	TBD
PM (current review)	Dec 2012	Dec 2015	2015	2018	2020/2025
Ozone (current review)	July 2014	July 2017	2016	2019	2019-2036

Particulate Matter (PM) NAAQS – Update on Current Review

- ▶ June 14, 2012: EPA proposed to strengthen primary and secondary National Ambient Air Quality Standards (NAAQS) for fine particles, or PM_{2.5}
- ▶ Specifically, EPA is proposing to:
 - ▶ Lower the level of the annual primary PM_{2.5} standard from 15.0 micrograms per cubic meter (µg/m³) to within a range of 12.0 to 13.0 µg/m³
 - ▶ EPA also is seeking comment on alternative annual standard levels, down to 11.0 µg/m³
 - ▶ Retain the existing primary 24-hour PM_{2.5} standard level at 35 µg/m³
 - ▶ Retain the primary 24-hour PM₁₀ (coarse particle) standard at 150 µg/m³
 - ▶ Set a distinct secondary standard for PM_{2.5} to address visibility effects associated with particles, primarily in urban areas
 - ▶ Also proposing to retain secondary standards to address non-visibility welfare effects
 - ▶ Update the Air Quality Index (AQI) for PM_{2.5}, consistent with the proposed primary PM_{2.5} standards
 - ▶ Update monitoring, data handling and permitting requirements for fine particles

Opportunities to Comment on EPA's PM NAAQS Proposal

- ▶ Before issuing final standards, EPA will consider comments submitted on the proposed rule
 - ▶ Public comments due by August 31, 2012
 - ▶ Comments should be labeled with Docket ID number EPA-HQ-OAR-2007-0492
- ▶ EPA will issue final standards by the court-ordered deadline of December 14, 2012
- ▶ For more information on the rule and how to comment, go to <http://www.epa.gov/pm>

Ozone NAAQS – Update on Current Review

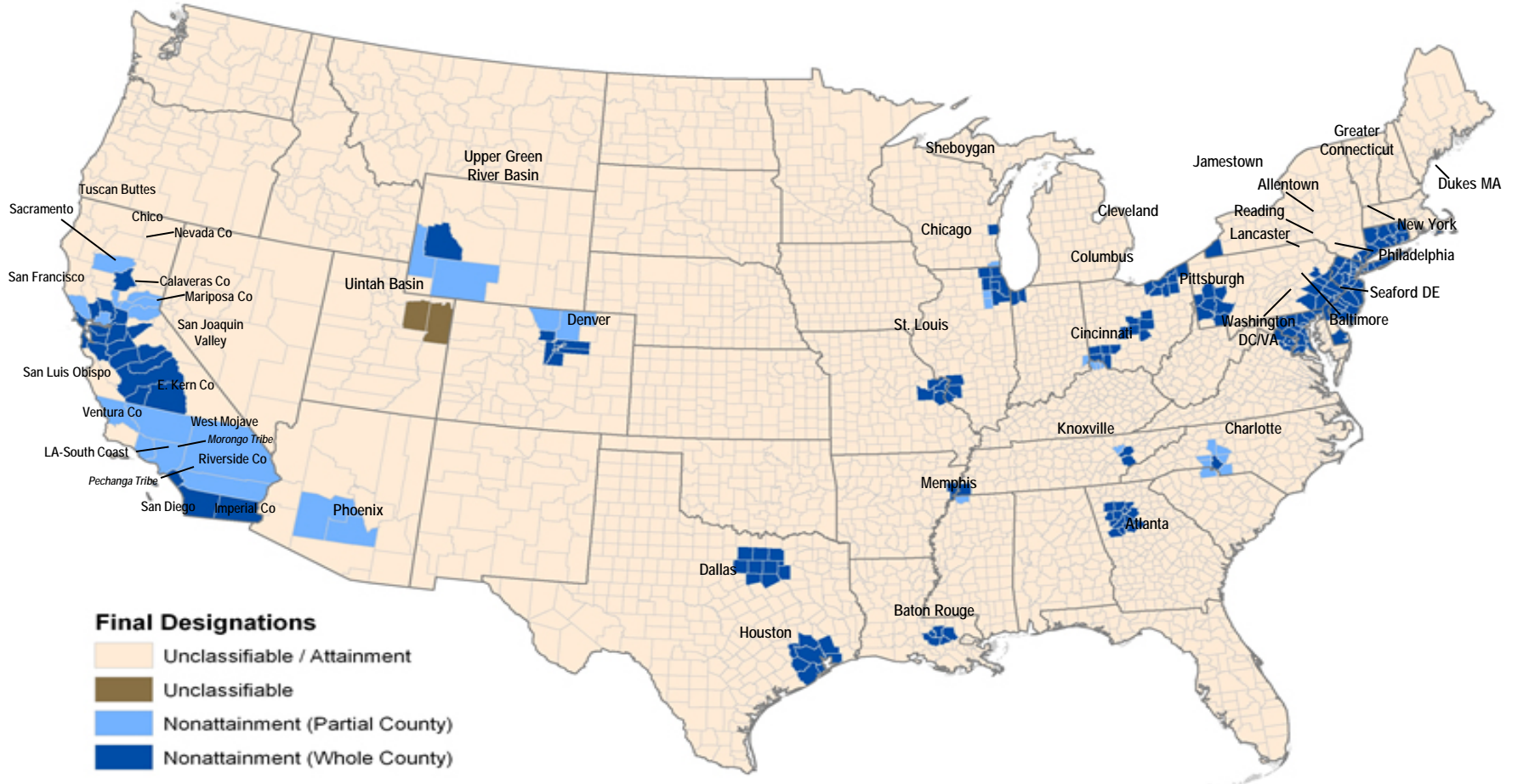
- ▶ Second draft Integrated Science Assessment (ISA) reviewed by Clean Air Scientific Advisory Committee (CASAC) – January 2012
 - ▶ CASAC requested a 3rd draft ISA for its review; emphasized need for better integration of scientific evidence and how it informs understanding of exposure to ozone and potential impacts on at-risk populations
- ▶ Availability of assessment documents for CASAC and public review:
 - ▶ 3rd draft ISA – June 2012
 - ▶ 1st draft Risk and Exposure Assessments (REAs) – July 2012
 - ▶ 1st draft Policy Assessment (PA) - August 2012
- ▶ CASAC review of these draft documents - September 11-13, 2012
- ▶ Current rulemaking schedule
 - ▶ Proposed rule - 2013
 - ▶ Final rule - 2014

2008 Ozone NAAQS Designations and Implementation

- ▶ EPA designated 46 areas as nonattainment for the 2008 standards
- ▶ Two of these are tribal areas designated separately from the surrounding state areas (for the first time)
- ▶ Two rules address implementation of 2008 Ozone NAAQS
- ▶ 2008 Ozone NAAQS Classifications Rule, signed April 2012
 - ▶ Addresses classification thresholds (percent of threshold approach)
 - ▶ Establishes December 31 of each relevant calendar year as the attainment date for each classification
 - ▶ Grants voluntary reclassifications under the 2008 ozone classification NAAQS to the six California nonattainment areas that requested voluntary bump-ups to higher classification
 - ▶ Revokes the 1997 ozone NAAQS for purposes of transportation conformity
- ▶ 2008 Ozone NAAQS State Implementation Plan Requirements Rule
 - ▶ Anticipate proposal in late summer
 - ▶ Anticipate signature in April, 2013

Nonattainment Areas for 2008 Ozone NAAQS

(Effective July 20, 2012)

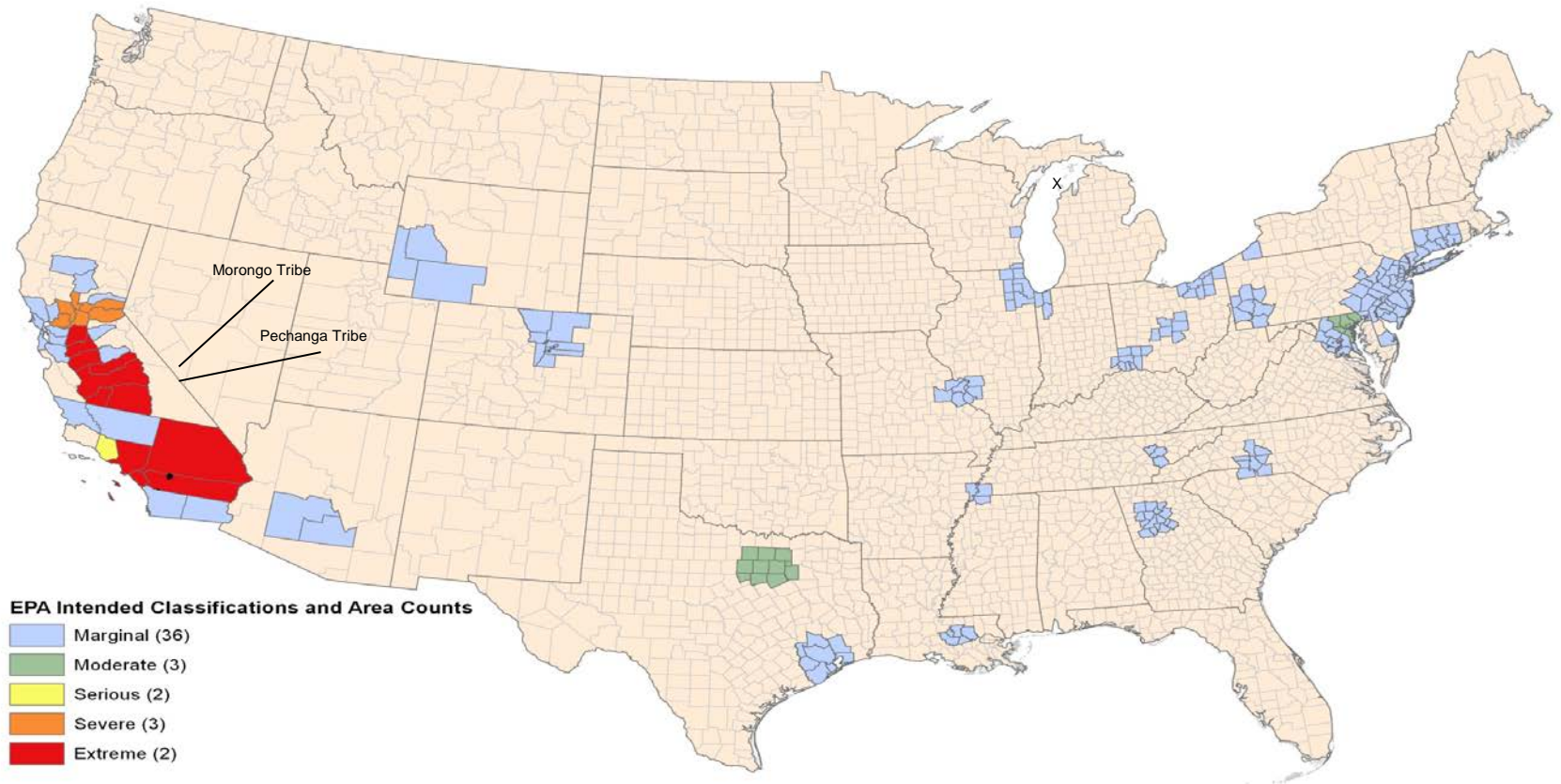


Notes:

EPA has not designated as nonattainment any areas outside the Continental US.

Nonattainment Areas for 2008 Ozone NAAQS by Classification

(Effective July 20, 2012)



Notes:

- EPA does not intend to designate as nonattainment any areas outside the Continental US.
- Map reflects classifications following requests for voluntary bump-up.

Other Topics of Interest

USDA/EPA Statement of Principles

- ▶ The Agricultural Equipment Statement of Principles was developed at the request of agriculture industry stakeholders seeking additional support for farmers to use USDA Farm Bill provisions and programs available for agricultural equipment
- ▶ Both USDA and EPA believe that the existing memorandum of understanding (MOU) provides the flexibility to address this request, and that this Statement of Principles will complement the MOU
- ▶ This document is designed to be comprehensive, addressing criteria and air toxic concerns and clarifying that it includes the replacement of mobile and stationary agriculture equipment
- ▶ As a national initiative, we would also want to provide the states with flexibility to use the agricultural equipment replacement program to meet regulatory requirements as well as voluntary programs
- ▶ US EPA OAR Assistant Administrator Gina McCarthy and USDA NRCS Chief White are signators

Mercury and Air Toxics Standards (MATS)

- ▶ Final rule published February 16, 2012 - *the first national standards to reduce emissions of mercury and other toxic air pollutants from new and existing coal- and oil-fired power plants*
- ▶ Agency has received petitions for reconsideration on:
 - ▶ The manner in which EPA used the available data to assess variability for the new source MACT analyses
 - ▶ The allegation that the final new source MACT limits were, particularly for mercury, below the level that could be reliably measured by CEMS
- ▶ For general information on Mercury and Air Toxics Standards:
<http://www.epa.gov/mats> or <http://www.epa.gov/mats/powerplants.html>
- ▶ MATS Fact sheets and a copy of the rule available at:
<http://www.epa.gov/mats/actions.html>
- ▶ EPA is providing a clear pathway for reliability-critical units to obtain a schedule with up to an additional year to achieve compliance. This pathway is described in a separate enforcement policy document at
<http://cfpub.epa.gov/compliance/resources/policies/civil/erp/>

Fire Policy

- ▶ Still working on discussions within the Agency
 - ▶ No decisions have been made
 - ▶ Will not close on any approach until we engage the state and local agencies in the discussion
- ▶ Expecting to have a path forward October timeframe.