



Air Quality Program Update

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Environmental Update – May 3, 2011

Presentation Overview

- Latest on National Ambient Air Quality Standards (NAAQS) Revisions
 - Implications
- Compliance Reminders
- Permitting Reminders
- Opportunities to Connect



Latest on the NAAQS

- Sections 108 & 109 Clean Air Act
- EPA established “criteria pollutants”
 - Lead (Pb)
 - Nitrogen Oxides(NO_2)
 - Carbon Monoxide (CO)
 - Sulfur Dioxide (SO_2)
 - Particulate Matter (PM)
 - Ozone (O_3)
- Primary standards to protect health
- Secondary to protect welfare & environment

Latest on the NAAQS

Lead

- Revised October 2008
 - Primary & Secondary Stds same
 - $0.15 \mu\text{g}/\text{m}^3$ rolling 3-month average
- December 2010, ambient monitoring rules expanded
 - States required to evaluate facilities with emissions of 0.5 tpy (previously 1.0 tpy)
 - Monitor in large urban areas

Latest on the NAAQS

Lead (cont.)



- Implications for Nebraska
 - Monitoring in Fremont & Auburn
 - Evaluating need for monitoring in Norfolk
 - Monitoring in Omaha at multi-pollutant site (Jan 2011)
- Data so far has shown attainment
- EPA will review/propose revisions to standard by November 2013

Latest on the NAAQS

NO₂

- Primary Revised January 2010
 - 100 ppb 1-hr (3yr ave of 98th percentile values of daily maximums)
 - 53 ppb annual average
- Secondary still under review
 - EPA plans to propose NO₂/SO₂ secondary standards in July 2011
 - Final Policy Assessment released in Feb 2011

Latest on the NAAQS

NO₂ (cont.)

- Nebraska Implications
 - Begin 'near-roadway' monitoring in Omaha area by Jan 2013
 - New projects w/ NO₂ emissions may be required to model
 - Intermittent emission units may be excluded
 - More to come.....



Latest on the NAAQS

CO

- **Current Primary Standards**
 - 9 ppm 8-hr (npe more than once/yr)
 - 35 ppm 1-hr (npe more than once/yr)
- **Jan 2011 - Proposed NO CHANGE**
 - EPA must issue final rule by Aug 12, 2011
- **EPA proposed revisions to monitoring requirements**
 - Co-locate with NO₂ near roadways

Latest on the NAAQS

SO₂

- Current Primary Standard
 - 75 ppb 1-hr ave (3yr ave of 99th percentile of daily maximums)
 - New standard effective Aug 23, 2010
- “Hybrid” approach for implementation
 - Nonattainment = monitored OR modeled violations
 - Attainment = modeled AND modeled evidence of no violations
 - Unclassifiable = all other areas, INITIALLY only

Latest on the NAAQS

SO₂ (cont.)

- Nebraska Implications
 - 2007-2009 monitoring data indicated concern with new 1-hr, 75 ppb standard
 - 2008-2010 monitoring data shows “clean”
 - Initially “unclassifiable” for entire state



Latest on the NAAQS

SO₂ (cont.)

- Nebraska Implications
 - By June 2013
 - Submit a plan to EPA Region 7
 - Modeling of sources of SO₂
 - Done using potential emissions
 - Resolution of any 'non-attainment' with enforceable measures & contingency plan
 - Modeling & monitoring data must be "clean"

Latest on the NAAQS

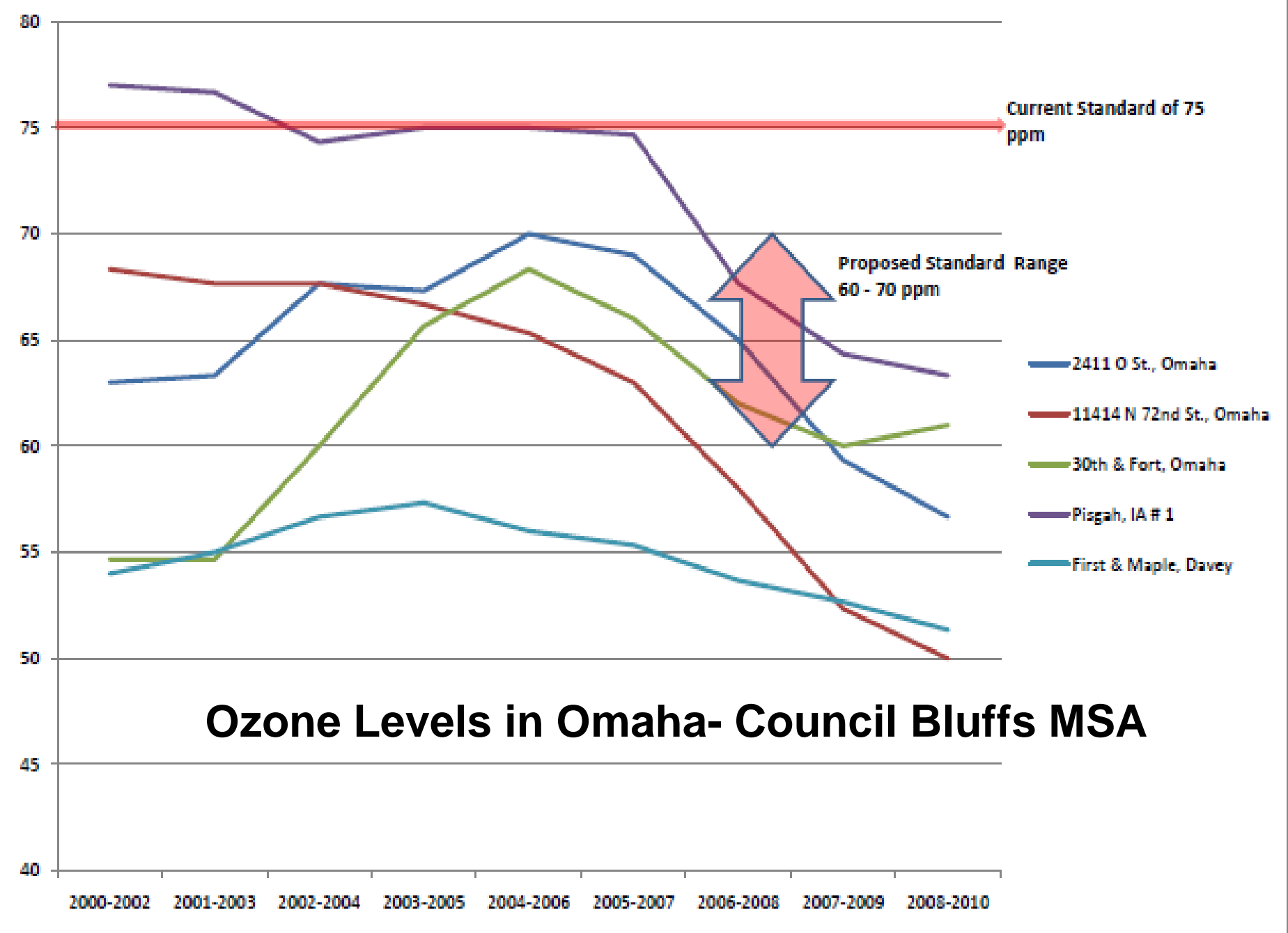
SO₂ (cont.)

- Current Secondary Standard
 - 0.5 ppm 3-hr ave (nre more than once per yr)
 - Under review with NO₂ standard
 - Proposal expected in July 2011

Latest on the NAAQS

Ozone

- EPA proposed revisions in Jan 2010
 - Current stds = 0.075 ppm 8hr ave
 - Proposed primary w/i 0.060 -0.070 ppm 8hr ave
 - Secondary std w/i 7-15 ppm-hrs
- Postponed final action three times
 - Now planned for July 2011
 - Implementation & Monitoring Rules expected as well



Latest on the NAAQS

Ozone (cont.)

- National Park Service monitoring
 - Agate Fossil Beds near Scottsbluff
 - 2007 – 2009, 4th highest values 62 ppb – 67 ppb
 - 3yr ave, 65 ppb
- NDEQ working with Iowa, EPA, MAPA, and local Omaha-Council Bluffs area interested parties
 - Community Based Planning approach
 - Public Outreach Campaign underway
 - <http://littlestepsbigimpact.com/>

Little Steps. Big Impact.

HOME

WHAT CAN I DO TO REDUCE MY IMPACT?

**Buy your
greens locally.**



What can I do to
**reduce
my impact?**

Find Out Now »

WHAT IS OZONE? »

READ MORE ABOUT
**COMMUNITY
BASED PLANNING »**



Ground-level ozone is a pollutant that has harmful impacts to people of all ages, but especially to vulnerable populations such as the elderly, children, and those with respiratory illnesses. The Metropolitan Area Planning Agency (MAPA) is working with several state, local, and federal agencies to reduce ozone in the Omaha-Council Bluffs metropolitan area. **If everyone takes little steps, we can all have a big impact in reducing ozone in our community.**

<http://Littlestepsbigimpact.com>

Who Is MAPA?

Latest on the NAAQS

Particulate Matter

- Current standards
 - PM₁₀ = 150 ug/m³ 24-hr ave (n^ote more than once/year averaged over 3 years)
 - PM_{2.5} = 15.0 ug/m³ annual ave (3-yr ave)
 - PM_{2.5} = 35 ug/m³ 24-hr ave (3yr ave of 98th percentile values of 24-hr values)



Latest on the NAAQS

Particulate Matter (cont.)

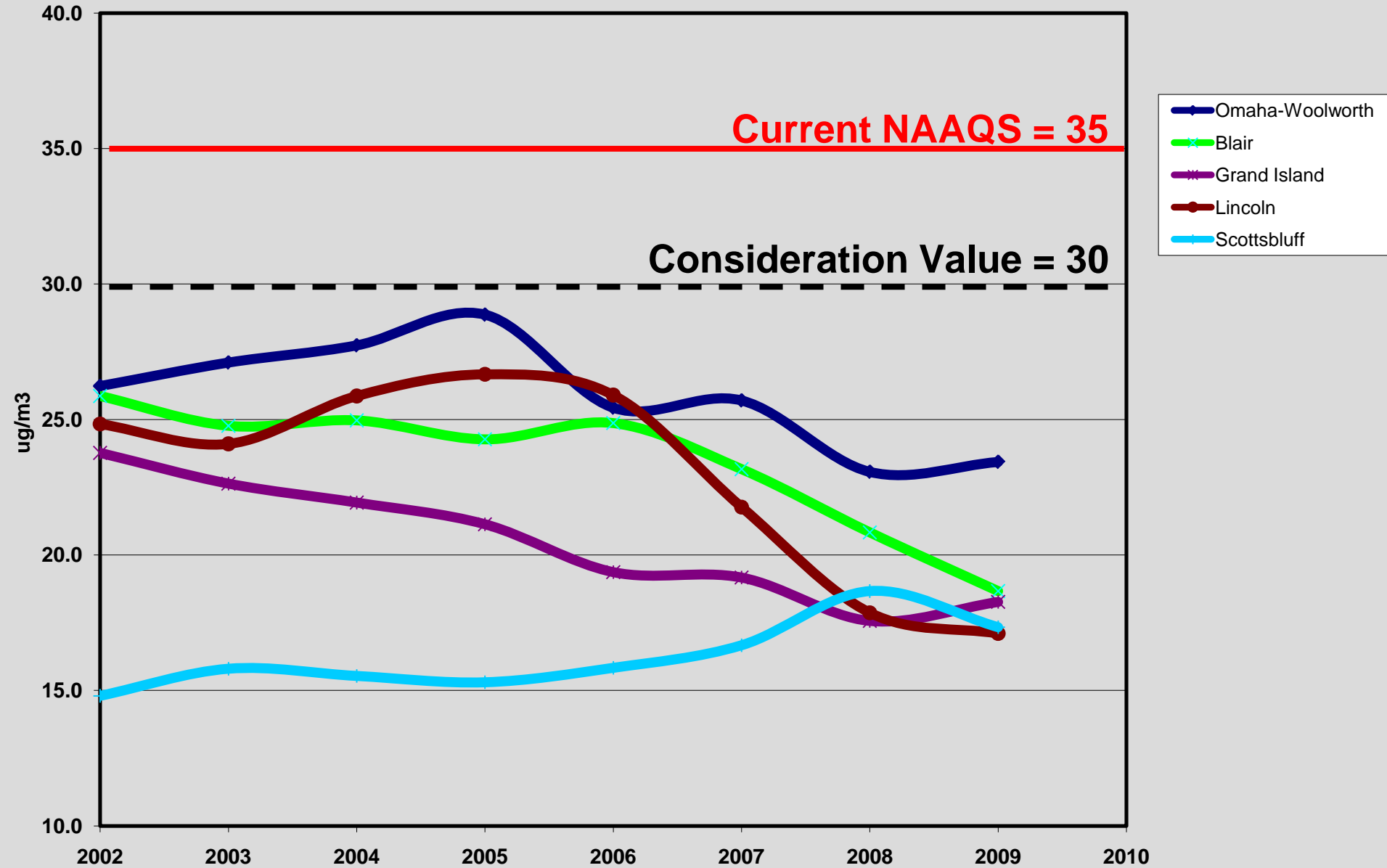
- EPA expected to propose revisions Summer 2011
- Final Policy Assessment released April 2011
 - Call into question adequacy of PM_{2.5} stds
 - Consider lowering annual std from 15 ug/m³ to 11-13 ug/m³
 - Depending upon where annual std is set, consider a 24-hr std 30-35 ug/m³
 - EPA staff concluded lower part of annual range (11-12) and retaining current 24-hr std, supported strongest

Latest on the NAAQS

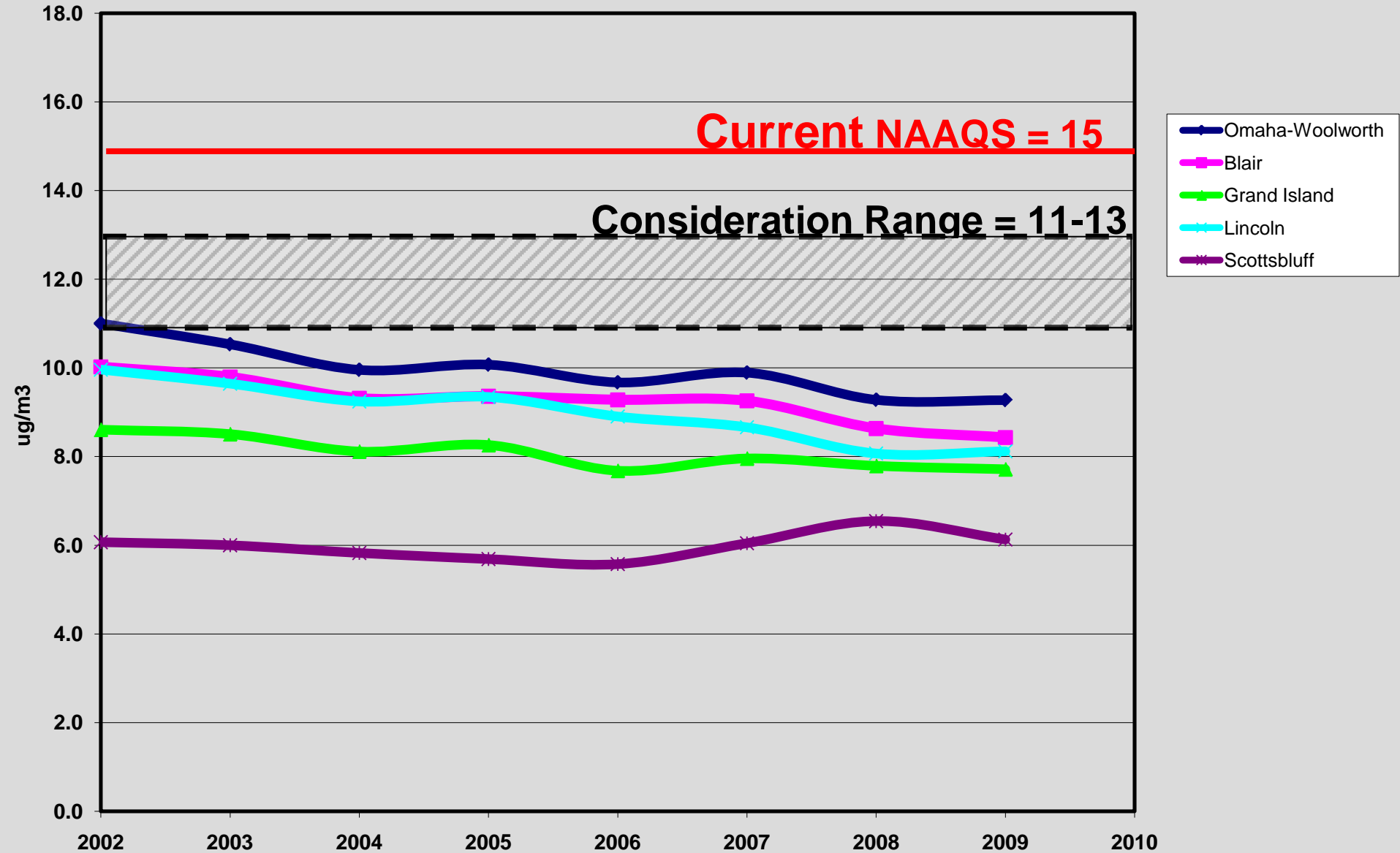
Particulate Matter (cont.)

- Recognizes PM₁₀ std meant to protect against PM_{10-2.5} exposure
 - Consider changing the form & lowering the level
 - (current 150 ug/m³ 24-hr, nte more than once per year average over 3 years)
 - Consider
 - 65-85 ug/m³ 24-hr std, 98th percentile form
 - EPA staff concluded upper range supported strongest

PM2.5 24-hr Design Values



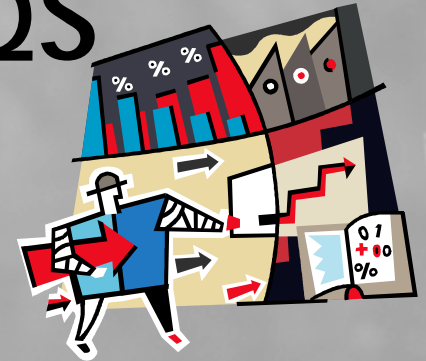
PM2.5 Annual Design Values



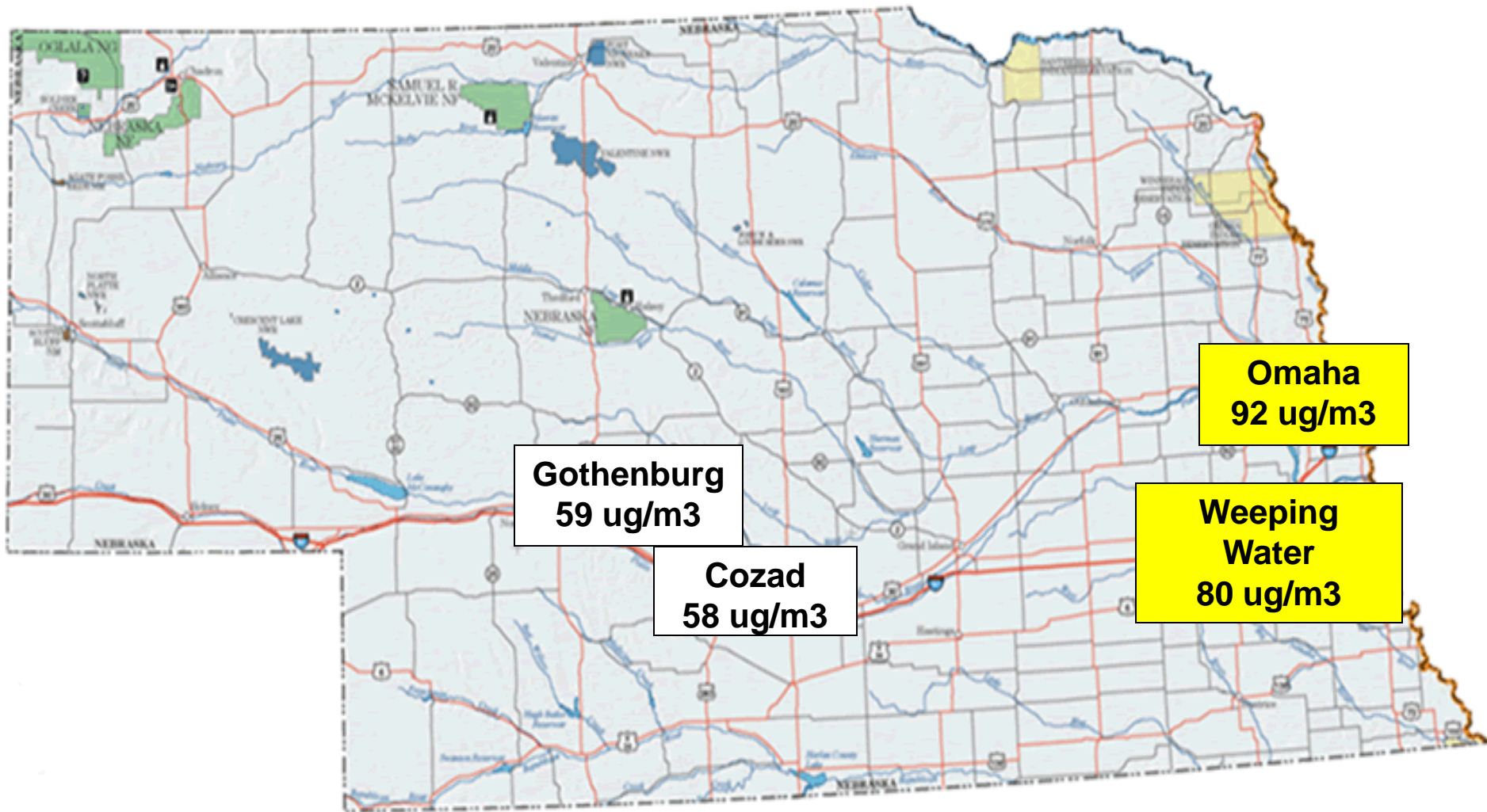
Latest on the NAAQS

Particulate Matter (cont.)

- Nebraska Implications
 - 2010 preliminary data indicates potential issues with current PM10 standard
 - Cass County
 - Still reviewing QA
 - If data shows violation of standard, Nebraska may be subject to a federal “SIP call”
 - Would need to show attainment with old standard, even if standard is changed



2007 thru 2009 PM10 Monitor Values – 24-hr period – ug/m3 (98th Percentile Values Ave over 3yr)



NAAQS Take Home Message

- Nebraska has benefited from long history of attainment (minor exceptions)
- Health science is causing EPA to review adequacy of standards carefully
- As NAAQS go down, Nebraska's ability to maintain attainment becomes more difficult
- Need to pay close attention

What is Non-Attainment?

- “Non-attainment” means non-compliance with ambient standard
 - Different than violating a permit
 - State develops a plan to ‘attain’
- Pollution controls – lowest achievable
 - Reasonably achievable controls
 - Offsets for new/expanding facilities
 - Contingency measures
- Economic development
- Conformity - ozone



Who is Affected by Non-Attainment?

- Citizens, businesses, government and industry in nonattainment area
- Emitters of pollutants of concern
- Goal – Remain in attainment, with clean, healthy air to breathe!



Compliance Reminders

Title 129, Chapter 34:

- Stack (performance) testing notifications
 - “The owner or operator of a source shall provide the Department 30 days notice prior to testing to afford the Department an opportunity to have an observer present”



Compliance Reminders

- Notifications
 - Date of testing – no “during the week of”
 - Which unit on which day
 - Normal business hours unless otherwise notified
 - No notices less than 30 days
 - Will accept one additional day for contingencies
- Doesn't affect federally available exceptions
- Certified copy of test results submitted w/i 45 days

Permitting Reminders

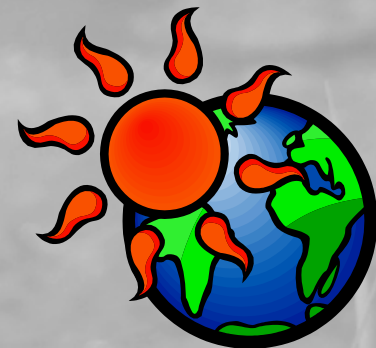
- Greenhouse Gas Emissions

- Jan 2011 - GHG Tailoring Rule adopted into T129

- In Jan 2011, EPA proposed 3 year deferral for permitting GHG emissions from biogenic sources

- All permits are addressing GHGs where appropriate

- Applications updated



Permitting Reminders

- GHG Phase 1 – until July 1, 2011
 - “anyway sources”
 - PSD and Title V issued after Jan 2nd
 - PSD Applicability
 - PSD for non-GHGs
 - Modifications with increases of 75,000 tpy CO_{2equiv} or more, apply BACT
 - Title V Applicability
 - GHGs themselves do not trigger
 - “applicable requirements” for GHGs included in Title V permit



Permitting Reminders

- GHG Phase 2 – After July 1, 2011
 - PSD Applicability
 - GHGs trigger
 - New construction – 100,000 tpy CO_{2equiv} potential emissions
 - Modifications with increases of 75,000 tpy CO_{2equiv} potential emissions
 - Title V Applicability
 - GHGs trigger
 - 100,000 tpy CO_{2equiv} potential emissions

Opportunity to Connect

- Air Waves E-Newsletter & List Serv
 - Topics? Not on List? Contact Tracy Thompson
 - 402-471-4272 or tracy.thompson@nebraska.gov
- Air Program Updates
 - Early to Mid-August 2011
 - 3 locations
 - North Platte or Ogallala
 - Kearney or Grand Island
 - Lincoln
 - Input on Agenda? Contact Tim Kalb Soon!
 - 402-471-3139 or tim.kalb@nebraska.gov



Questions?

