

pB

NO<sub>2</sub>

SO<sub>2</sub>

# NAAQS GONE WILD!

O<sub>3</sub>

PM<sub>2.5</sub>

CO

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# What's Up With That?

## □ **Recently final (2008- 2010)**

- 11/12/08 effective date for the revised primary and secondary lead NAAQS
- 1/22/10 EPA promulgation date for the revised 1-hour NO<sub>2</sub> short-term primary NAAQS
- 06/02/10 promulgation date for the revised SO<sub>2</sub> 1-hr primary NAAQS

## □ **To become final this year (2010)**

- 10/10 expected revised Ozone (O<sub>3</sub>) primary and secondary NAAQS

## □ **To be proposed this year, final 2011**

- 10/10 proposed revision of CO primary NAAQS, final 5/11
- 11/10 proposed revision of PM<sub>2.5</sub> primary NAAQS, final 7/11

## □ **To be proposed next year, final 2012**

- 5/11 proposed revision of SO<sub>2</sub>/NO<sub>x</sub> secondary NAAQS, final 3/12

# Revisions to Lead NAAQS

- EPA lowered the level of the primary standard from 1.5  $\mu\text{g}/\text{m}^3$  to 0.15  $\mu\text{g}/\text{m}^3$ 
  - ▣ calculation method for the averaging time to use to 'rolling' 3 month period with a maximum (not-to-be-exceeded) form, evaluated over a 3-yr period to replace the past approach of using calendar quarters
  - ▣ To be measured as total suspended particles (TSP)
- EPA revised the secondary standard to be identical in all respects to the primary standard
- EPA is requiring monitors to be placed in:
  - ▣ areas with sources that emit  $\geq 1$  TPY and
  - ▣ in urban areas with more than 500,000 people

# Monitoring for Lead

- Sources of  $\geq 1$  tpy required to have ambient monitor sited by January 1, 2010
  - ▣ Under reconsideration, to lower threshold to 0.50 tpy
- Core Based Statistical Area Population  $\geq 500,000$  required to have ambient monitor
  - ▣ Reconsideration – substitute NCore Network sites (80 sites, 60 urban and 20 rural)

# Nitrogen Dioxide Primary NAAQS

- Primary Standards effective 02/09/2010
  - ▣ 53 ppb annual avg in a calendar year
  - ▣ 100 ppb 1-hour - met when the 3-yr avg of the annual 98th % of the daily maximum 1-hr avg concentration is  $\leq 0.100$  ppm, as determined in accordance with Appendix S
  
- All areas of Louisiana are currently attainment or unclassifiable
  - ▣ Attainment = With ambient monitored data
  - ▣ Unclassifiable = Without ambient monitored data

# New NOx Monitors Are Required

- Additional ambient monitors will be required and may result in nonattainment for some parishes in the future
  - New monitors are required within 50 meters of major roadways
  - New monitors are to be sited to measure the area-wide NO<sub>2</sub> concentrations
  - **State must submit plan for additional monitors to EPA by July 1, 2012**
  - The network of NO<sub>2</sub> monitors must be physically established no later than **January 1, 2013**, and at that time, must be operating under all of the requirements of 40 CFR Part 58
- Louisiana currently has 12 NO<sub>x</sub> existing monitors in the state (Baton Rouge MSA 9, Orleans MSA 2, and Lake Charles 1)
- It is anticipated that EPA expects that at least 2 roadway monitors (one in BR and one in NO) and potentially 1 additional area monitor

# Some Problems With Implementation

- Issues With Modeling Compliance
  - ▣ NAAQS is for NO<sub>2</sub>, not NO<sub>x</sub> and Sec. 5.2.4 of EPA's Guideline on Air Quality Models requires case-by-case agency approval to use different options
  - ▣ AERMOD not capable of processing results in the form of the new standard (3-yr avg of 98th % of the yr. distribution of daily max. 1-hr avg.)
- Small sources with short stacks may have impact on compliance (e.g., diesel-driven engines located near fenceline)

# SO<sub>2</sub> Primary NAAQS

- Current primary standard
  - ▣ 30 ppb annual
  - ▣ 14 ppb 24- hr
  
- New Standard effective 08/23/2010
  - ▣ Will Phase Out the 24-hr standard and the annual standard
  - ▣ New 1-hr standard at a level of 75 ppb, applied as the 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour average concentrations.
  
- Secondary standard being reviewed separately along with NO<sub>x</sub>



# Status of Louisiana Parishes Under Proposed SO<sub>2</sub> 1-hr NAAQS

- Current design values based on 2007-2008 data suggest the following parishes will be nonattainment:
  - ▣ **West Baton Rouge** monitored design value is ~31
  - ▣ **St. Bernard** has design value > 300 ppb
- Calcasieu, Caddo, East Baton Rouge have monitored attainment
- EPA final rule indicates that parishes will be “unclassifiable” unless there is both:
  - ▣ Monitored attainment
  - ▣ Each “large source” has modeled attainment at fenceline

# Impact of Revised SO<sub>2</sub> Primary NAAQS

## □ **For Nonattainment Areas**

- **New Source Review requirements will apply to any proposed major modification**
  - **Major modification = change in actual emissions of greater than 40 tpy**
  - **Will have to offset any increased SO<sub>2</sub> emissions greater than 1 to 1**
  - **Will have to employ Lowest Achievable Emission Rate technology to any units physically modified as part of the modification**
- **LDEQ will be required to control large sources of SO<sub>2</sub> within the parish with more stringent requirements to include in the State Implementation Plan. Rules to be adopted by June 2013 and would require reductions before June 2017.**
- **The fact that the area is nonattainment theoretically is an enhancement factor for civil penalties for any SO<sub>2</sub> releases**

# Impact of Revised SO<sub>2</sub> Primary NAAQS

- For Attainment and Unclassifiable Areas
  - ▣ PSD Requirements Apply
    - EPA will be required to develop SILs and SMCs
    - Modeling protocols and guidance under way
  - ▣ EPA or LDEQ may require modeling of any “large sources” to determine attainment status of parish
    - EPA suggested 250 tpy is the minimum size for a “large source” and may go lower
- Additional Monitors Are Required Around the State
  - ▣ Likely to be at least 2-3
  - ▣ EPA Region 6 has discretion to require more

# NO<sub>x</sub> and SO<sub>2</sub> 1-Hour Modeling

- EPA Guidance -6/29/10, “Guidance Concerning the Implementation of the 1-hour NO<sub>2</sub> NAAQS for the PSD Program” and 8/23/10 “Guidance Concerning the Implementation of the 1-hour SO<sub>2</sub> NAAQS for the PSD Program”
  - an ambient impact analysis is not necessary in all instances, regardless of the magnitude of the source’s emissions.
  - The PSD regulations define SER for various NSR pollutants. When a proposed new source’s potential to emit a pollutant, or a modified source’s net emissions increase of a pollutant, would be less than the SER, the source is **not required** to undergo the requisite PSD analysis (BACT and air quality) for that particular emissions increase. ... Each of the significant emissions rates defined in those regulations is specific to an individual pollutant with no differentiation by averaging time with regard to NAAQS. ...

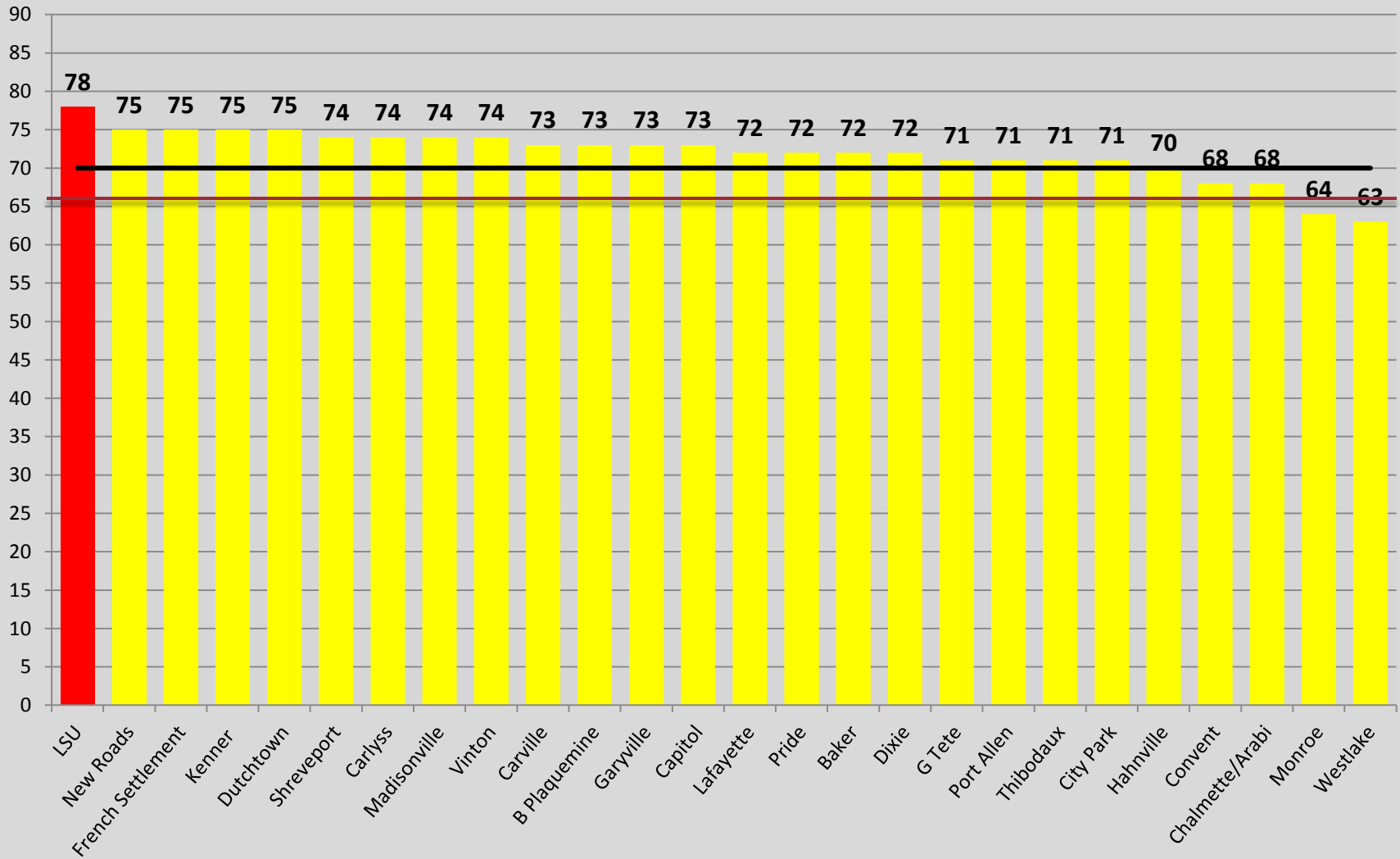
# NO<sub>x</sub> and SO<sub>2</sub> 1-Hour Modeling (continued)

- An ambient air quality impact analysis is required for “each pollutant that [a source] would have the potential to emit in significant amounts.” ... For modifications, these regulations require this analysis for “each pollutant for which [the modification] would result in a significant net emissions increase.” ... EPA construes this regulation to mean that an ambient impact analysis is not necessary for pollutants with emissions rates below the significant emissions rates ...
- LDEQ Guidance
  - Will follow EPA recommendations
  - Reserves the right to require case-by-case modeling to ensure NAAQS compliance
- On June 28, 2010, EPA issued guidance recommending an interim SIL of 4 ppb, or approximately 7.5 ug/m<sup>3</sup> for NO<sub>2</sub>

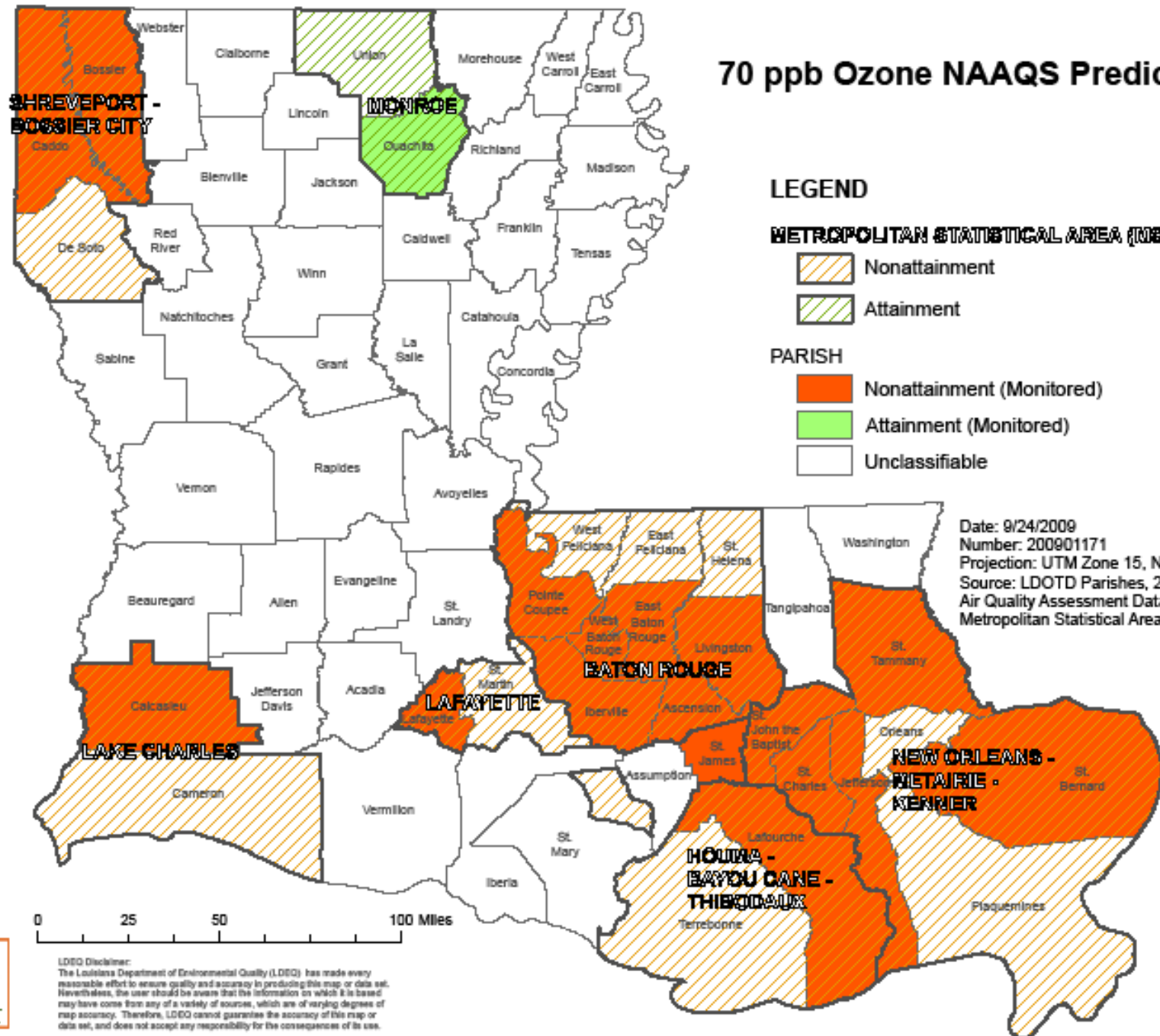
# EPA Reconsideration and Proposal for Primary Ozone Standard

- EPA established a lower primary NAAQS for ozone at a level of 75 ppb (8 hour average) in 2008 but suspended its implementation
- New EPA administration decided to reconsider and is now proposing to lower to a level somewhere between 60 and 70 ppb.
  - 75 Fed. Reg. 2939, January 19, 2010
  - EPA originally projected August final date, but now projects by end of October 2010
  - Likely final value 65 to 68 ppb – 8 hour average
  - Report to OMB indicates a \$1 trillion price tag
- Impact to Louisiana is **extensive** – impacts entire state, well beyond projected nonattainment areas

## 8-hr Design Value as of October 18, 2010



# 70 ppb Ozone NAAQS Predictions



**LDEQ Disclaimer:**  
 The Louisiana Department of Environmental Quality (LDEQ) has made every reasonable effort to ensure quality and accuracy in producing this map or data set. Nevertheless, the user should be aware that the information on which it is based may have come from any of a variety of sources, which are of varying degrees of map accuracy. Therefore, LDEQ cannot guarantee the accuracy of this map or data set, and does not accept any responsibility for the consequences of its use.





# EPA Projected Impacts to Louisiana from Supplement to Regulatory Impact Analysis

- To allow the Baton Rouge Area to meet the primary standard reductions will be required in areas outside of the Baton Rouge Area
  - ▣ To meet 70 ppb – **250,000** TPY NO<sub>x</sub> reduction primarily within a 40 parish area, plus some VOC reductions within smaller area at a cost of between **\$3.1 and \$3.6 Billion**
  - ▣ To meet 65 ppb – **337,000** TPY NO<sub>x</sub> reductions within the same 40 parish area at a cost of between **\$5.1 - \$7.4 Billion**
  - ▣ To meet 60 ppb – **427,000** TPY NO<sub>x</sub> reductions from a 45 parish area and additional NO<sub>x</sub> reductions from 4 other parishes at a cost of between **\$6.4 and \$10.2 Billion.**
- Entire 2009 state emissions inventory is only **415,000** TPY for all 64 parishes, point sources, area sources, nonroad mobile and on-road mobile sources

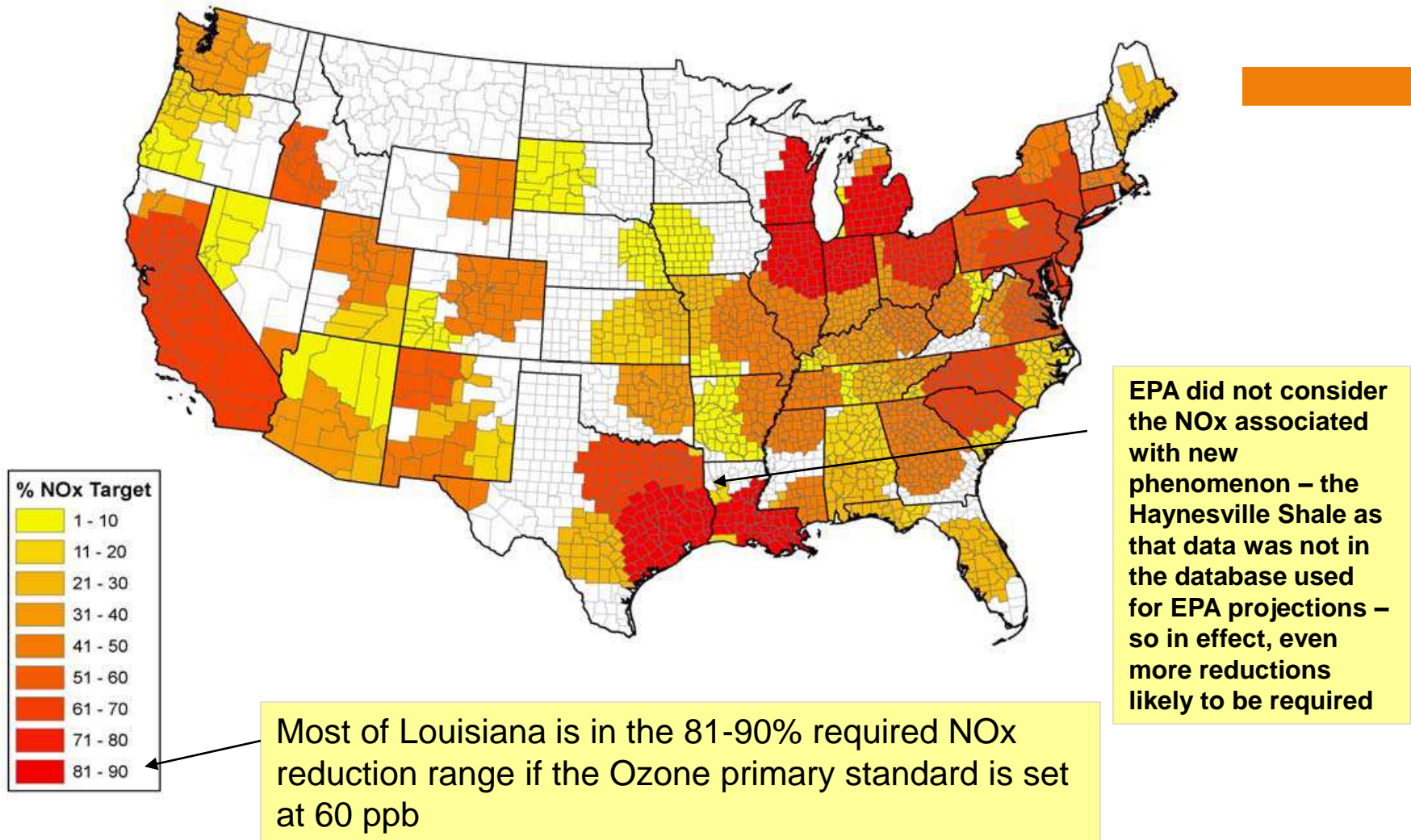
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VOC Reductions  
Also Would be  
Required in 100 km  
Area extending from  
Baton  
Rouge/Iberville –  
including St.  
Bernard Parish

EPA “Buffer Zone” for Projecting Reductions Required for Baton Rouge under 70 and 65 ppb standard

## Extrapolated Cost Counties for 060 Standard



Source: EPA Supplement to the Regulatory Impact Analysis, Figure S2.2

# Required Reductions to Meet Primary Standard

- Prior figures are based on what EPA projects – through modeling – to be required
- States are free to substitute their own control measures in other areas – but will have to demonstrate the impact of what they propose
  - ▣ For example, LDEQ could require greater NO<sub>x</sub> reductions in Caddo, Bossier, DeSoto parishes rather than parishes in the 200 km zone, if LDEQ modeling shows these would be more effective
- Timeline for implementing reductions would depend upon severity of ozone...

▣ Marginal – 3 yrs	Moderate -6 yrs
▣ Serious – 9 yrs	Severe 15 – 15 yrs
▣ Severe 17 – 17 yrs	Extreme -20 yrs

# Classification Thresholds for each Option at 0.070 ppm Example NAAQS

	% above Standard Method	Ratio of Thresholds Method	Modified Ratio of Thresholds Method
Marginal	0.071 to <0.081	0.071 to <0.076	0.071 to <0.075
Moderate	0.081 to <0.093	0.076 to <0.083	0.075 to <0.080
Serious	0.093 to <0.105	0.083 to <0.089	0.080 to <0.084
Severe 15	0.105 to <0.111	0.089 to <0.092	0.084 to <0.086
Severe 17	0.111 to <0.163	0.092 to <0.119	0.086 to <0.106
Extreme	0.163 and greater	0.119 and greater	0.106 and greater

**EPA “Pre-decisional material do not quote or cite”**

# Classification Thresholds for each Option at 0.065 ppm Example NAAQS

Classification	Option 1 % Above Standard Method (in ppb)	Option 2A Ratio of Thresholds Method (in ppb)
Marginal	66 to < 75	66 to < 72
Moderate	75 to < 87	72 to < 79
Serious	87 to < 98	79 to < 86
Severe 15	98 to < 103	86 to < 89
Severe 17	103 to < 152	89 to < 119
Extreme	$\geq 152$	$\geq 119$

**“Pre-decisional material do not quote or cite” from EPA  
March 10, 2010 presentation to NACAA**

# Status of Louisiana Parishes Under EPA Hypothetical Options (2007-2009 design value) @ 65 ppb standard

Area	Option 1 % Above Standards Method	Option 2A Ratio of Thresholds Method	Option 2B Modified Ratio of Thresholds Method
<b>Baton Rouge CMSA 80 dv</b> EBR/WBR/Ascension/Iberville/Livingston/P tCoupee/EFelician/WFelician/ St.Helena	Moderate	Serious	Serious
<b>New Orleans CMSA 76 dv</b> Orleans/Jefferson/StBernard/St.Tamma ny/Plaquemines/StJohnBaptist/ StCharles	Moderate	Moderate	Serious
<b>Lake Charles CMSA 74 dv</b> Calcasieu/Cameron	Marginal	Moderate	Moderate
<b>Lafayette CMSA 73 dv</b> Lafayette/St. Martin	Marginal	Moderate	Moderate
<b>Houma CMSA 72 dv</b> Terrebonne/Lafourche	Marginal	Moderate	Moderate
<b>Shreveport CMSA 71 dv</b> Caddo/Bossier/DeSoto	Marginal	Marginal	Moderate
<b>St. James Parish 71 dv</b>	Marginal	Marginal	Moderate

Analysis based on EPA Pre-decisional material do not quote or cite



# Hypothetical Approach – Only Monitored Nonattainment (2007-2009 design value) @ 65 ppb standard– No CMSA

Parish and design value	Option 1	Option 2A	Option 2B
East Baton Rouge 80	Moderate	Serious	Serious
Ascension 78	Moderate	Moderate	Serious
Iberville 78	Moderate	Moderate	Serious
Pointe Coupee 77	Moderate	Moderate	Serious
Jefferson 76	Moderate	Moderate	Serious
St. John the Bapt. 76	Moderate	Moderate	Serious
St. Tammany 75	Moderate	Moderate	Moderate
Calcasieu 74	Marginal	Moderate	Moderate
Lafayette 73	Marginal	Moderate	Moderate
West Baton Rouge 73	Marginal	Moderate	Moderate
Lafourche 72	Marginal	Moderate	Moderate
Caddo 72	Marginal	Moderate	Moderate
St. Charles 71	Marginal	Marginal	Moderate
St. James 71	Marginal	Marginal	Moderate
St. Bernard 70	Marginal	Marginal	Moderate

Analysis based on EPA Pre-decisional material do not quote or cite



# Major Source Definitions and Offset Requirements for Nonattainment Areas

□ Marginal:	100 tpy	offsets 1.1 to 1
□ Moderate:	100 tpy	offsets 1.15 to 1
□ Serious:	50 tpy	offsets 1.2 to 1
□ Severe:	25 tpy	offsets 1.3 to 1
□ Extreme:	10 tpy	offsets 1.5 to 1

# Attainment Deadlines (from date of designation, anticipated October 2011)

□ Marginal	3 yrs
□ Moderate	6 yrs
□ Serious	9 yrs
□ Severe 15	15 yrs
□ Severe 17	17 yrs
□ Extreme	20 yrs

# Schedule for Adoption and Implementation

- **By January 2011:** States make recommendations for areas to be designated attainment, nonattainment or unclassifiable for primary standard and possibly for secondary standard (unless EPA decides on 2-yr schedule for secondary standard nonattainment designations)
- **By July 2011:** EPA makes final area designations
- **August 2011** Designations become effective for primary standard, and for secondary standard (unless EPA allows this to be deadline for state recommendations for secondary standard)
- **August 2012** – Final Designations to become effective for secondary standard if EPA chooses 2 year implementation option)
- **December 2013:** State Implementation Plans are due to EPA

# What States Must Do Before January 2011

- Determine what counties have monitored nonattainment – must be included
  - States can use either 2007-2009 data or 2008-2010
  - Use of 2010 data will require state's to review and certify data from 2010 ozone season very rapidly
  - Exceptional Events (natural events, fires, transport from foreign country) data may be excluded, but must be flagged and a full demonstration (may include modeling) submitted to EPA to prove exclusion
  
- Determine what other counties must be included within nonattainment area
  - Default is the entire consolidated metropolitan statistical area (C/MSA) must be included due to Clean Air Act requirement that any counties significantly contributing to nonattainment must be included
  - State may propose an area larger or smaller than the C/MSA
  - To propose an area smaller than default C/MSA requires a complete submission per EPA guidance – requires review of numerous factors <http://earth1.epa.gov/ttn/naaqs/ozone/ozonetech/des00328.htm>
  - Burden of proof is on the state to overcome the default
  - Some C/MSA's cover more than 1 state and will require both states to closely coordinate

# EPA Guidance for Boundaries of Nonattainment Areas

- **A State or Tribe wishing to propose larger or smaller nonattainment area boundaries (including partial counties or portions of areas on tribal lands) than ...the C/MSA or boundary of the tribal land should address how each of the following factors affect the drawing of nonattainment area boundaries:**
- Emissions and air quality in adjacent areas (including adjacent C/MSAs)
- Population density and degree of urbanization including commercial development (significant difference from surrounding areas)
- Monitoring data representing ozone concentrations in local areas and larger areas
- Location of emission sources (emission sources and nearby receptors should generally be included in the same nonattainment area)
- Traffic and commuting patterns
- Expected growth (including extent, pattern and rate of growth)
- Meteorology (weather/transport patterns)
- Geography/topography (mountain ranges or other air basin boundaries)
- Jurisdictional boundaries;
- Level of control of emission sources
- Regional emission reductions (e.g., NO<sub>x</sub> SIP call or other enforceable regional strategies)

**All of this must be developed and put together by the mid-2011 submittal deadline**

# New Source Review

## □ New Major Sources and Major Modifications

- Must obtain permit before commencing construction or modification
- Must use Lowest Achievable Emissions Rate (LAER) Technology
- Must Offset new emissions

## □ Major Sources Definitions and Offset Requirements for Nonattainment Areas

	new	modification	offset requirement
Marginal:	100 tpy	40 tpy	1.1 to 1
Moderate:	100 tpy	40 tpy	1.15 to 1
Serious:	50 tpy	25 tpy	1.2 to 1
Severe:	25 tpy	10 tpy	1.3 to 1
Extreme:	10 tpy	5 tpy	1.5 to 1

# EPA Proposal for New Secondary Ozone National Ambient Air Quality Standard

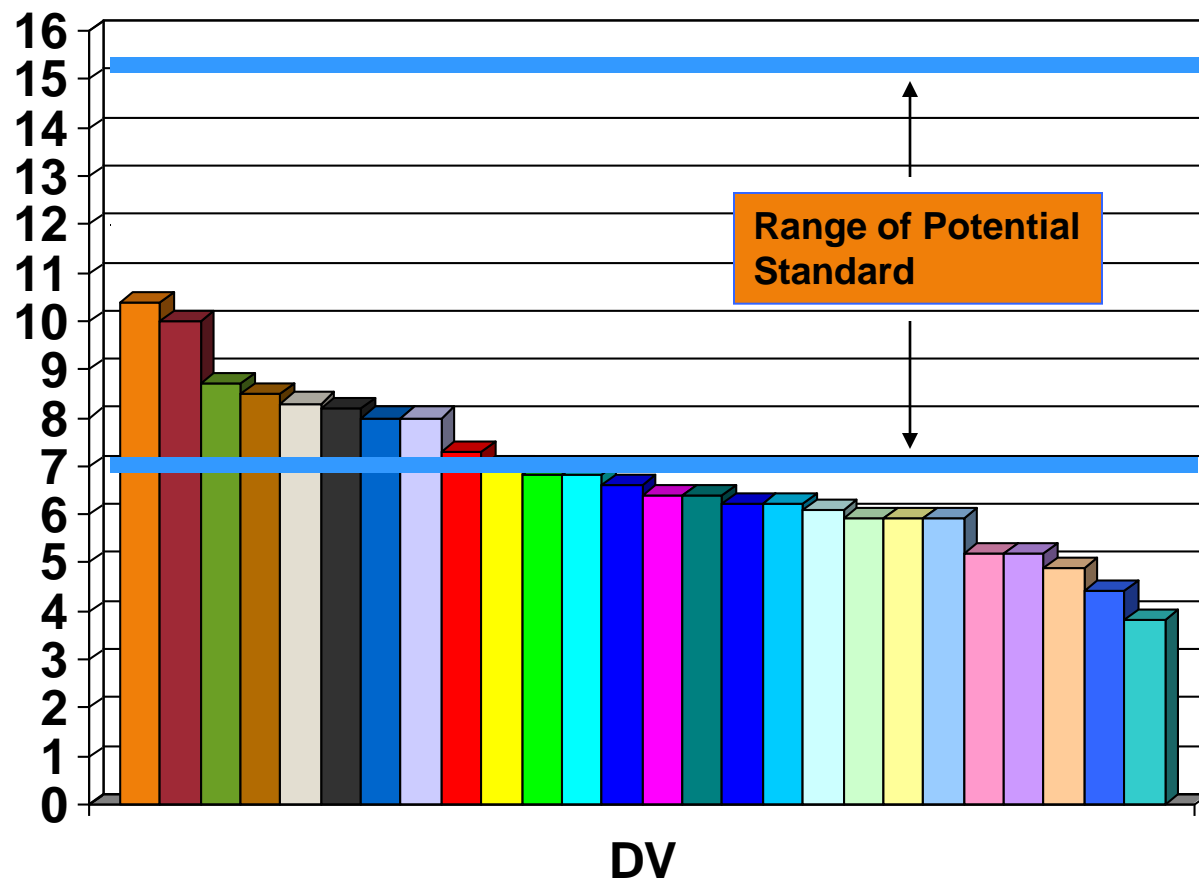
- Change the existing 84 ppb 8-hour average to a cumulative peak-weighted index [called W126] designed to protect sensitive vegetation and ecosystems, including forests, parks, wildlife refuges and wilderness areas
- EPA is proposing to set the level of the secondary standard within the range of 7-15 ppm-hours, with compliance would be demonstrated by:
  - “Weighting” each hourly ozone measurement occurring during the 12 daylight hours (8:00 am to 8:00 pm) each day, with more weight given to higher concentrations. This “peak weighting” emphasizes higher concentrations more than lower concentrations, because higher concentrations are disproportionately more damaging to sensitive trees and plants;
  - Adding these 12 weighted hourly ozone measurements for each day, to get a cumulative daily value;
  - Summing the daily values for each month, to get a cumulative monthly value;
  - Identifying the 3 consecutive months during the ozone season with the highest index value, to get the cumulative seasonal index value; and
  - Averaging these maximum seasonal index values over 3 years.

# EPA Proposed Revision to Ozone NAAQS Secondary Standard

- EPA proposes to set a separate “**secondary**” ozone standard to protect “public welfare” which is considered to include agriculture and the environment, especially plants and trees
- In 2008, EPA set secondary standard same as the primary standard but decided to reconsider that standard as it did not agree with CASAC recommendation to adopt a cumulative index value
- EPA in January 2010 proposed a revision to the secondary standard. The proposed design value is:
  - The **3-year average** of the **annual maximum consecutive 3-month sum of adjusted monthly W126 index values** expressed in **ppm-hours**
  - The monthly W126 index is the sum of the daily index values over one calendar month
- Current EPA proposal - the secondary standard is met at an ambient air quality monitoring site when:
  - the annual maximum consecutive index value is **less than or equal to 7 to 15 ppm-hours**
  - **EPA is taking comment on where the level should be set within this range**

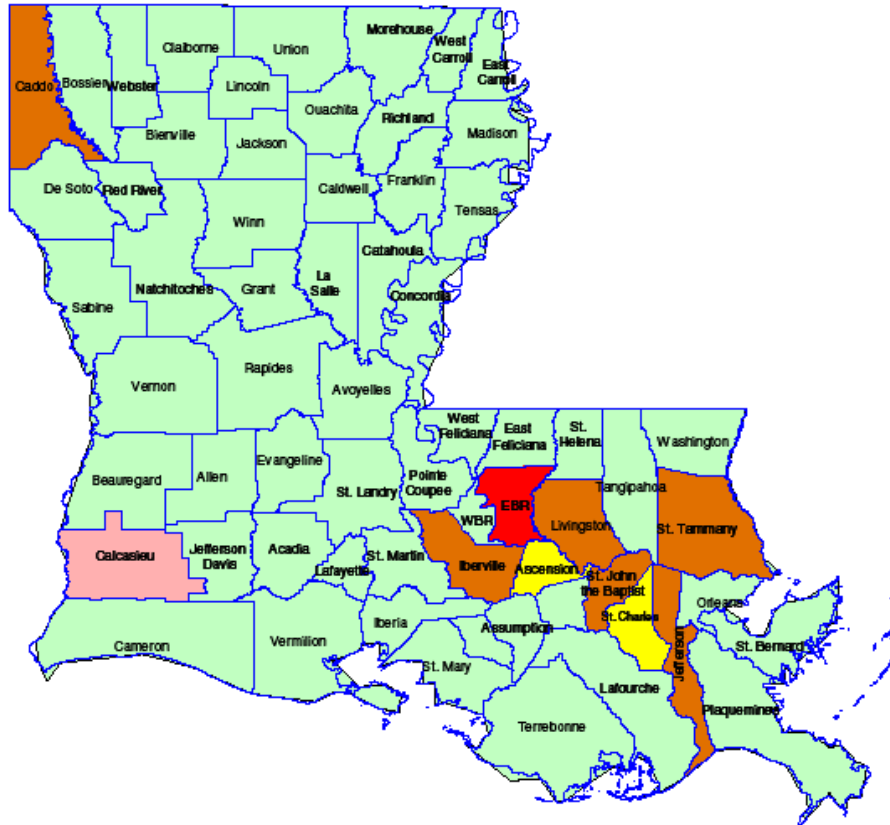


# 2008 – 1-Yr Only Values at Louisiana Monitors Compared to Proposed Secondary Standard



- LSU
- Pride
- Kenner
- Madisonville
- Fr. Settlement
- Carville
- Garyville
- Dixie
- Hahnville
- Dutchtown
- Vinton
- Westlake
- Carlyss

## Impact of Proposed Secondary Ozone NAAQS



# PM2.5 NAAQS Status

- Current Primary standard
  - ▣ 15  $\mu\text{g}/\text{m}^3$  annual
  - ▣ 35  $\mu\text{g}/\text{m}^3$  24 hr
- Hot off the press – October 20, 2010 Federal Register  
EPA actually implements some of the current standard – PSD increments, SILs, and SMCs
  - ▣ added maximum allowable increases in ambient pollutant concentrations ("increments")
  - ▣ Adopted Significant Impact Levels (SILs)
  - ▣ Adopted Significant Monitoring Concentration (SMC) for PM2.5.

# 5-Yr Review Process for PM

- EPA First External Review Draft Policy Analysis-March 2010
- EPA Second External Review Draft Policy Analysis- June 2010
  - **Lower the annual to 11-13 ug/m<sup>3</sup>**
  - **Lower the 24-hr to 30 – 35 ug/m<sup>3</sup>**
  - **Change the PM<sub>10-2.5</sub> standard retaining the PM<sub>10</sub> indicator and the 24-hour averaging time and revising the form and level, with consideration of levels from 85 ug/m<sup>3</sup> down to about 65 ug/m<sup>3</sup> in conjunction with a 98th percentile form.**
- Clean Air Science Advisory Committee (CASAC) – August 10, 2010 – letter supporting EPA conclusions in External Review Draft Policy Analysis
- Federal Register proposal scheduled for 11/10
- Final rules scheduled 7/11

# PM2.5 NAAQS Secondary Standard

- Current Standard -identical to the primary PM2.5 standards (annual and 24-hr)
  
- Second Draft Policy Analysis
  - For protection of visibility -establish a new indicator based on using speciated PM2.5 mass and relative humidity to calculate PM2.5 light extinction ( a 1-hour averaging time, considering only daylight hours with relative humidity no higher than 90 %, and a level, defined in terms of PM2.5 light extinction, in the range of 191 to 64 Mm<sup>-1</sup>)
  - For protection of other welfare effects, including impact on climate change – current information insufficient to make a change

# Status of Louisiana Parishes With Projected Revision to PM 2.5 Standards (Based on 2008 Data Only – Actual Designations will be 2008-2010 or 2009-2011)

- Annual standard potential nonattainment areas
  - ▣ **At 12** – **Caddo** DV 12.6 (MSA Bossier, DeSoto); **EBR** (DV 12.4) and **WBR** (DV 12.9), **Ascension** (DV 12.2 (**MSA** Iberville, Livingston, Pointe Coupee, E and W Feliciana, St. Helena)
  - ▣ **At 11** – same as 12 plus **Jefferson** DV 11.5 (MSA Orleans, St. Bernard, St. Charles, St. John the Baptist, St. Tammany) and **Tangipahoa** DV 11.3
  - ▣ **At 10** – same as 11 plus **Lafayette** DV 10.1 (MSA St. Martin), **Ouachita** DV 10.9 (MSA Union), **Rapides** DV 10.1
- 24-hr Standard potential nonattainment areas @ level of 25
  - ▣ **Caddo** (MSA Bossier, DeSoto)
  - ▣ **E and W Baton Rouge, Ascension** (MSA Iberville, Livingston, Pointe Coupee, E. and W Feliciana, St. Helena)
  - ▣ **Ouachita** (MSA Union)

# Schedules for Implementation - Primary NAAQS

	<b>NO2</b> 100 ppb 1-hr	<b>SO2</b> 75 ppb 1-hr	<b>O3 Between</b> 60-70 ppb 8-hr	<b>PM2.5</b> 11-13 ug/m3 annual 25 -30 ug/m3 24- hr
<b>Final promulgation or expected final promulgation date</b>	<b>1/22/10</b>	<b>6/2/10</b>	<b>10/10</b>	<b>4/11</b>
<b>LDEQ/Governor's Recommendation of Nonattainment Areas to EPA</b>	<b>1/22/11</b>	<b>6/2/11</b>	<b>4/11 ? to 10/11</b>	<b>? 4/12</b>
<b>EPA Designations of nonattainment areas</b>	<b>1/22/12</b>	<b>6/12</b>	<b>Late 2011 to early 2012 ?</b>	<b>4/13?</b>
<b>Infrastructure SIPs due</b>	<b>2/13</b>	<b>6/13</b>	<b>10/13</b>	<b>4/14</b>
<b>Non-Attainment NSR SIPs due (18 mos after designation)</b>	<b>7/22/13</b>	<b>2/14</b>	<b>18 mos. After EPA Designation</b>	<b>18 mos. After EPA Designation</b>
<b>Expected Attainment Dates</b>	<b>1/22/17</b>	<b>8/17</b>	<b>8/2014 - 8/2031</b>	<b>2018</b>



Questions?