

Reconsideration of the 2008 8-Hour Ozone Standards

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1997 8-Hour Ozone Standards

- 0.08 parts per million (ppm) or 84 ppb
 - Design value
 - 3-year average of the annual 4th highest value
- Primary and Secondary NAAQS set at same value
- Designations and Classifications in 2004



2008 8-Hour Ozone Standards

- March 2008: Standards revised to 75 ppb
 - Measurement of DV unchanged
 - Primary and Secondary standards set as the same
- May 2008: Petitions
 - States, and environmental and industry groups
 - Filed with the DC Circuit Court of Appeals for review of the 2008 ozone standards
- March 2009: Suspend litigation
 - EPA request; court granted 180 days
 - Review standards and determine whether they should be reconsidered.



Reconsideration of the 2008 Standards

- September 2009: EPA announced reconsideration
- January 2010: EPA proposed different standards for 8-hour ozone
- Suspended designations for 2008 standard
- EPA & States implement the 1997 NAAQS



January 19, 2010 Proposal

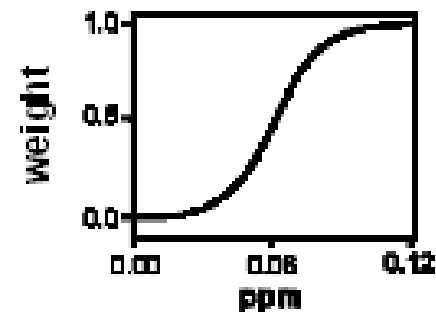
- Primary: Range between 60 and 70 ppb
- Secondary: Cumulative Biological Index Range between 7 and 15 ppm-hrs
- Comment period closes March 22, 2010.



Understanding the W126 Form (from Erika Sasser)

Steps in calculating W126 value for a particular site:

1. Measure hourly O_3 value
2. Weight hourly O_3 value based on concentration: lower concentrations receive less weight than higher concentrations
3. Add the weighted hourly O_3 values for each hour of a 12-hour daylight period (8 am – 8 pm) to calculate daily value for each day
4. Sum daily values over consecutive 3-month period with highest ozone levels
5. W126 = Sum of all weighted daily O_3 values over highest consecutive 3-month period, in ppm-hrs



Example of weighting over 5-hour period:

Hourly O_3 (ppm)	Weight	W126 (ppm-hrs)
0.03	0.01	0.00
0.05	0.11	0.01
0.06	0.30	0.02
0.08	0.84	0.07
0.10	1.0	0.10

SUM: 0.20

Daily value = sum of values over 12 daylight hours



Target Dates for Reconsidered Ozone Standards

Action	Target Date
Final Standards	August 31, 2010
State/Tribal Recommendations	January 7, 2011
EPA Response to States/Tribes	March 11, 2011
Designations/Classifications	July 11, 2011
State Implementation Plans Due	December 2013

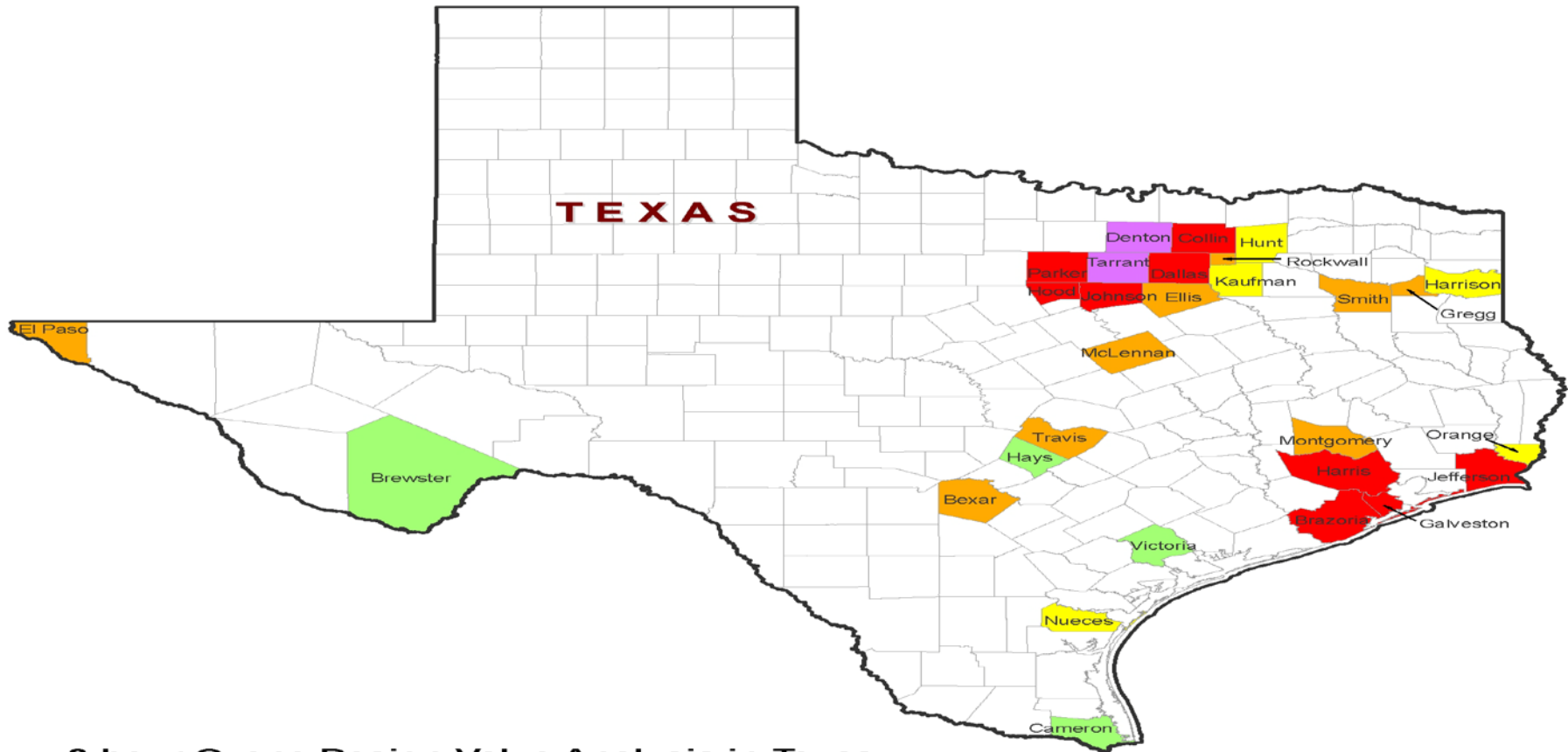


Alternative Dates for Secondary Standard

Action	Target Date
Final Secondary Standard	August 2010
State/Tribal Recommendations	August 31, 2011
EPA Response to States/Tribes	May 3, 2012
Designations/Classifications	August 31, 2012
State Implementation Plans Due	No later than 3 years after designation



Texas Ground Level Ozone Concentrations



8-hour Ozone Design Value Analysis in Texas based on preliminary data (2007-2009) as of 11/13/09

- Counties > 84 ppb
- Additional Counties exceeding the 2008 standard
- Additional Counties if NAAQS revised to 70 ppb
- Additional Counties if NAAQS revised to 65 ppb
- Additional Counties if NAAQS revised to 60 ppb

Sources:
US EPA AQS Database, State Agency Monitors.



	EPA Region 6 GIS Support Team Nov. 18, 2009 20091118ML01
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What are Air Quality Designations?

- Nonattainment – area does not meet the standard or contributes to a nearby area not meeting the standard
- Attainment – area meets the standard and does not contribute to nearby nonattainment area
- Unclassifiable – area cannot be classified based on available data



EPA Guidance on Designations

- Use most recent 3 years of certified data
- Nonattainment for any county with an ozone monitor showing a violation
- Presume the Metropolitan or Micropolitan Statistical Area (Core Based Statistical Area) as the designation boundary
- States/Tribes can recommend smaller areas but should justify



Factors for Area Specific Analysis

- Air quality data
- Emissions data (location of sources & contribution to ozone concentrations)
- Population density and degree of urbanization
- Traffic and commuting patterns
- Growth rates and patterns
- Meteorology (weather/transport)
- Geography/topography
- Jurisdictional boundaries
- Level of control of emissions



What Could a Nonattainment Designation Mean for an Area?

- **Revised State Implementation Plan (SIP)**
- **Controls for major sources of NO_x and VOC**
- **Emission offsets for new major sources or major source modification**
- **Conformity Process (General and Transportation)**



Ozone Classification Timelines

Classification	Years to Attain (from Designation)
Marginal	3
Moderate	6
Serious	9
Severe	15 – 17
Extreme	20



SIP Requirements for 8-Hour Ozone Nonattainment Areas

Classification/Years to Attain	Requirements
Extreme (20 years)	Clean Fuels and Controls for Boilers
Severe (15 – 17 years)	Offset VMT Growth Major Source Fee if Area Fails to Attain
Serious (9 years)	Stage II Gasoline Vapor Recovery Enhanced Monitoring and Enhanced Vehicle I/M Demonstration of Required Emission Reductions
Moderate (6 years)	Basic Vehicle Inspection and Maintenance Reasonably Available Control Technology & Measures Reasonable Further Progress Emissions Reductions Attainment Demonstration, Contingency Measures
Marginal (3 years)	Emissions Inventory & Emissions Statements New Source Review/Emission Offsets (NSR)



For More Information

- www.epa.gov/groundlevelozone
 - Implementation; Resources for SIPs
- <http://www.epa.gov/ttn/naaqs/ozone/eac/>
 - Summary of local measures
- Carrie Paige: paige.carrie@epa.gov
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