



Ozone Standard Revisions and HGB Ozone Update

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Technical Committee
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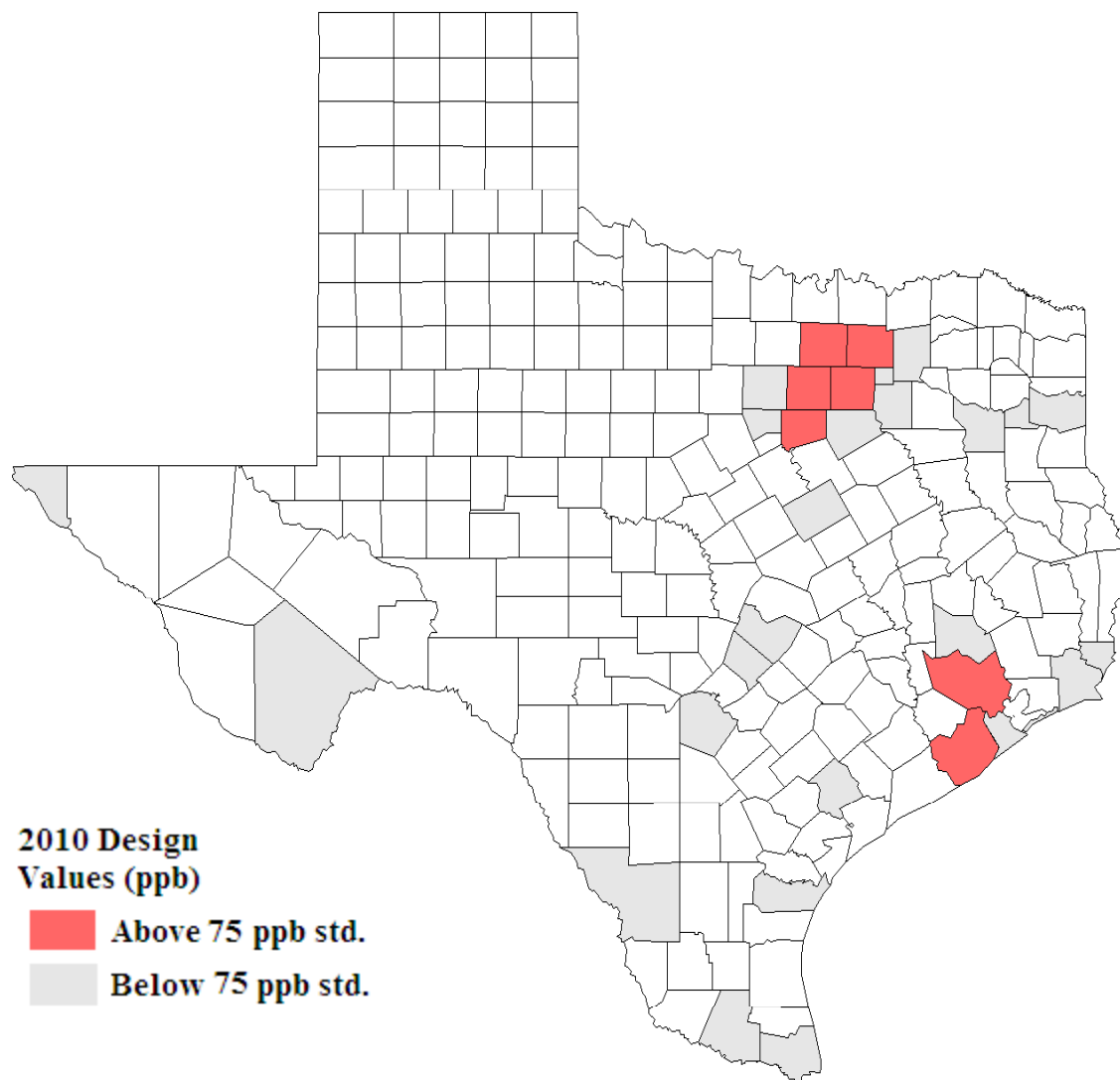
Reconsideration of the 2008 Ozone NAAQS

- EPA proposed a reconsideration of the 2008 Primary Eight-Hour Ozone NAAQS
 - 2008 Eight-Hour Ozone NAAQS: 0.075 ppm
 - Reconsidered NAAQS: Range between 0.070 ppm and 0.060 ppm
 - EPA is proposing to drop truncation in the last step of design value calculations and use rounding instead .
- EPA is also reconsidering the 2008 secondary ozone NAAQS.
 - 2008 Secondary Eight-Hour Ozone NAAQS: 0.075 ppm (identical to the primary)
 - Reconsidered secondary NAAQS: A cumulative standard called W126 in the range of 7 to 15 ppm-hours



2010 Primary Ozone Standard 75 ppb Texas Counties Violating Standard

Region	County	2010 8hr Ozone DV (ppb)
DFW	Tarrant	86
HGB	Brazoria	84
HGB	Harris	83
DFW	Denton	80
DFW	Johnson	80
DFW	Dallas	78
DFW	Collin	77
DFW	Parker	75
DFW	Hood	75
HGB	Galveston	75
SAN	Bexar	75
ARR	Travis	74
BPA	Jefferson	74
DFW	Rockwall	74
NETX	Gregg	74
NETX	Smith	73
DFW	Ellis	72
BPA	Orange	71
CC	Nueces	71
HGB	Montgomery	71
ELP	El Paso	71
WACO	McLennan	70
NETX	Harrison	70
ARR	Hays	67
DFW	Kaufman	67
VIC	Victoria	66
LRGV	Cameron	65
BIG BEND	Brewster	64*
DFW	Hunt	64
MEM	Hidalgo	61
LAR	Webb	57

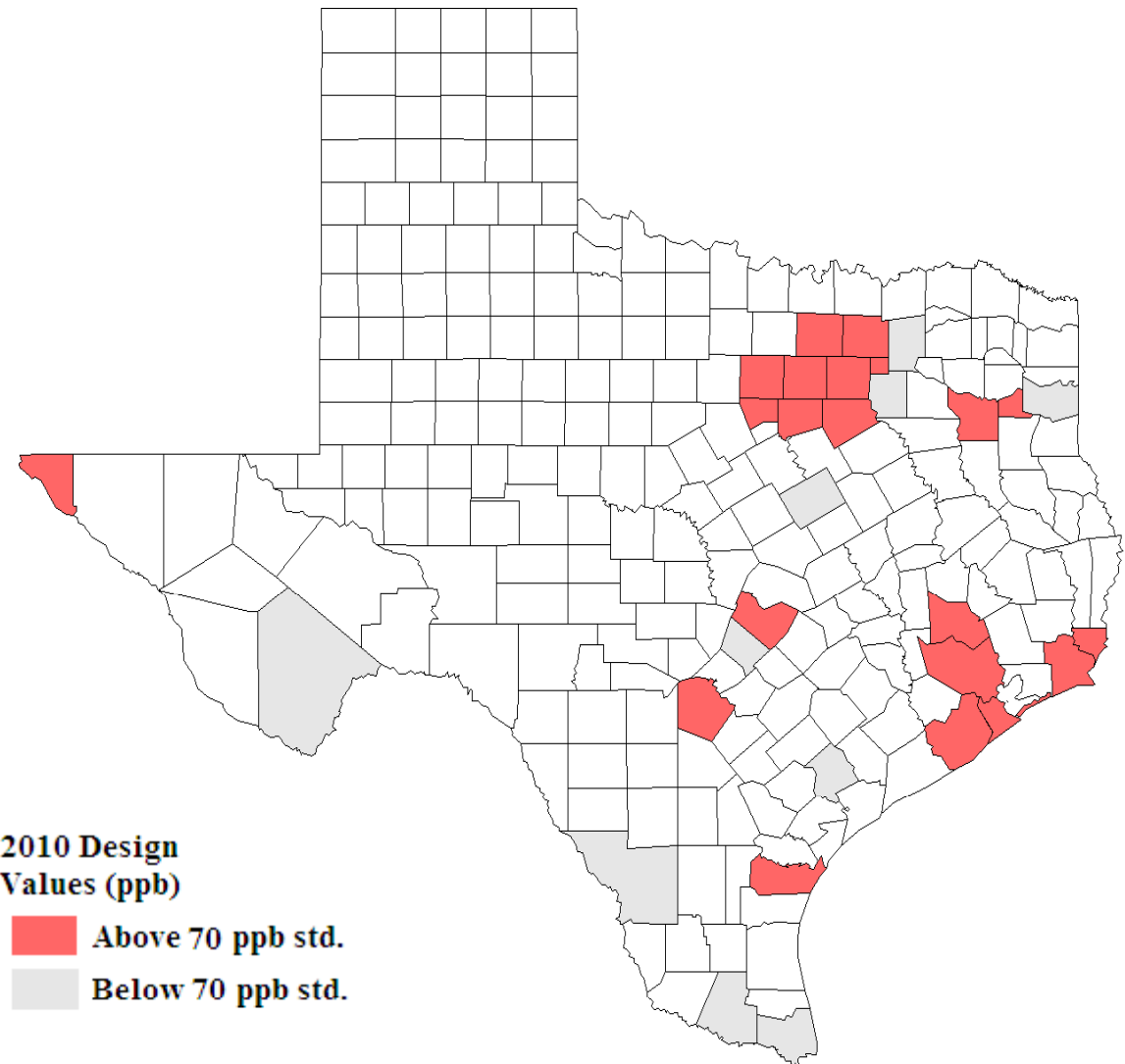


*The Brewster County monitor is maintained by the national park service and reported in EPA AQS.



2010 Primary Ozone Standard 70 ppb Texas Counties Violating Standard

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DFW	Parker	75
DFW	Hood	75
HGB	Galveston	75
SAN	Bexar	75
ARR	Travis	74
BPA	Jefferson	74
DFW	Rockwall	74
NETX	Gregg	74
NETX	Smith	73
DFW	Ellis	72
BPA	Orange	71
CC	Nueces	71
HGB	Montgomery	71
ELP	El Paso	71
WACO	McLennan	70
NETX	Harrison	70
ARR	Hays	67
DFW	Kaufman	67
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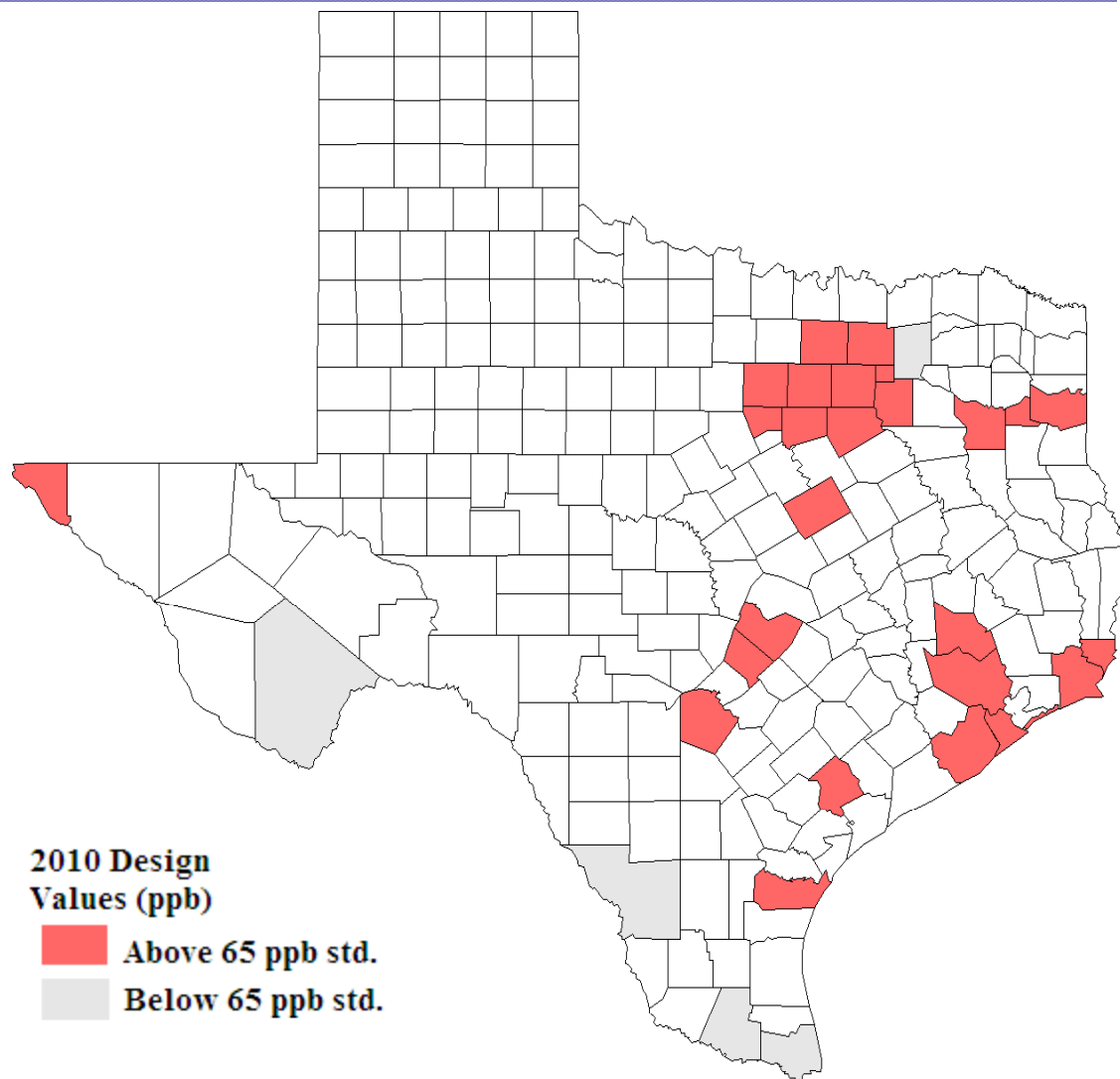


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2010 Primary Ozone Standard 65 ppb Texas Counties Violating Standard

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DFW	Tarrant	86
HGB	Brazoria	84
HGB	Harris	83
DFW	Denton	80
DFW	Johnson	80
DFW	Dallas	78
DFW	Collin	77
DFW	Parker	75
DFW	Hood	75
HGB	Galveston	75
SAN	Bexar	75
ARR	Travis	74
BPA	Jefferson	74
DFW	Rockwall	74
NETX	Gregg	74
NETX	Smith	73
DFW	Ellis	72
BPA	Orange	71
CC	Nueces	71
HGB	Montgomery	71
ELP	El Paso	71
WACO	McLennan	70
NETX	Harrison	70
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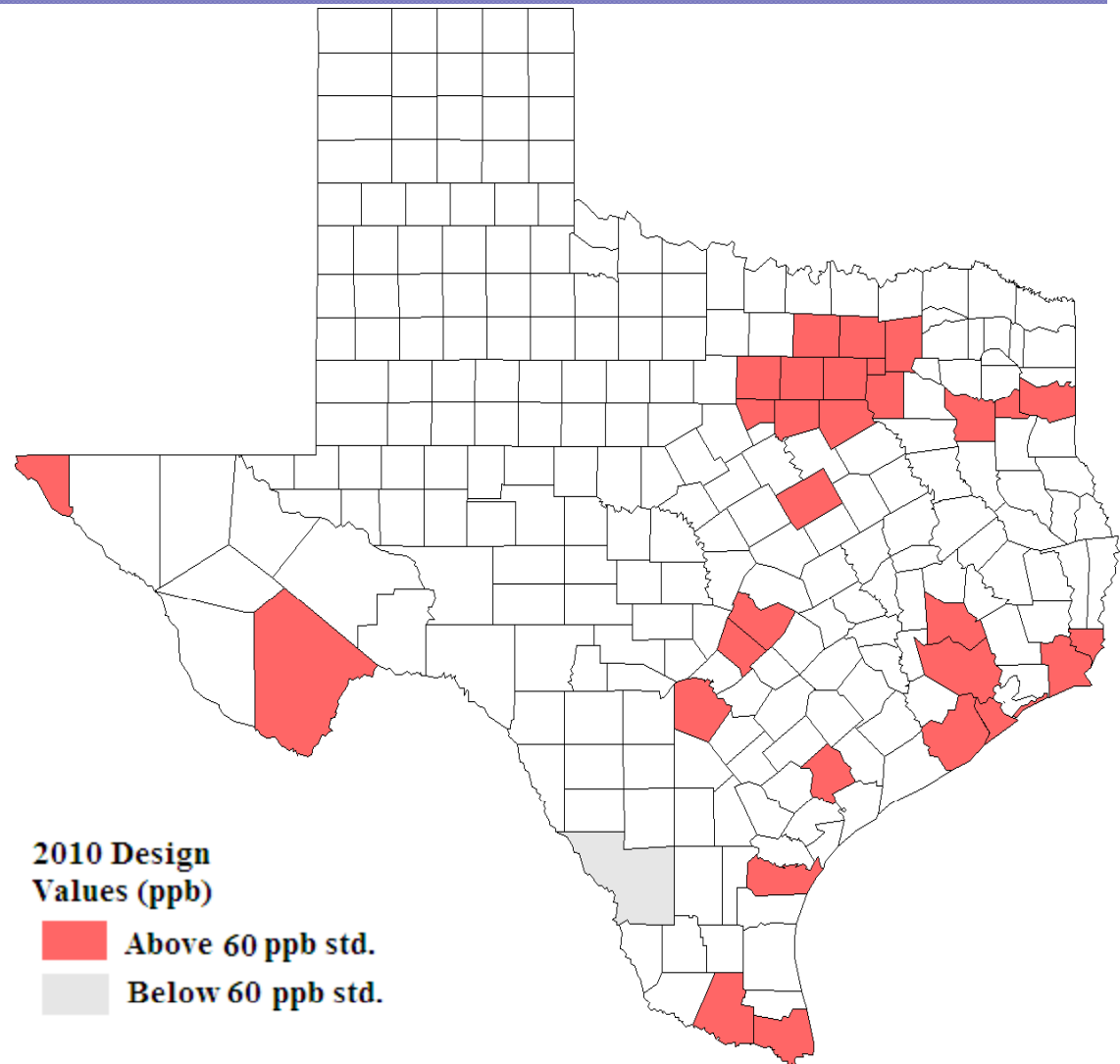


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2010 Primary Ozone Standard 60 ppb Texas Counties Violating Standard

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HGB	Brazoria	84
HGB	Harris	83
DFW	Denton	80
DFW	Johnson	80
DFW	Dallas	78
DFW	Collin	77
DFW	Parker	75
DFW	Hood	75
HGB	Galveston	75
SAN	Bexar	75
ARR	Travis	74
BPA	Jefferson	74
DFW	Rockwall	74
NETX	Gregg	74
NETX	Smith	73
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BPA	Orange	71
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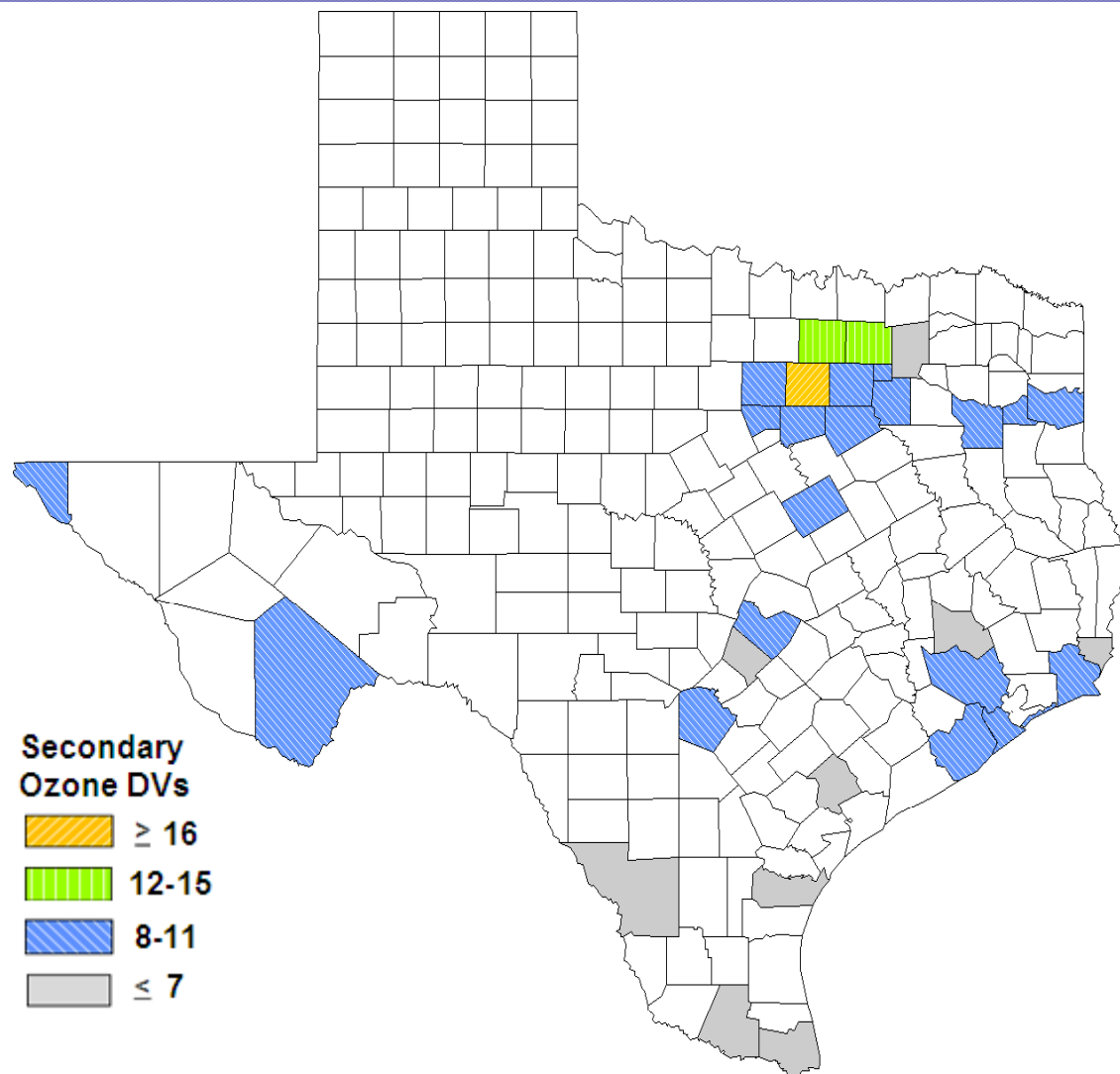


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2010 Preliminary Secondary Ozone W126 Design Values by County

Region	County	W126 DV (ppm-hrs)
DFW	Tarrant	16
DFW	Denton	14
DFW	Colin	13
DFW	Dallas	11
ELP	El Paso	11
DFW	Parker	11
DFW	Johnson	10
DFW	Rockwall	10
HGB	Harris	10
HGB	Brazoria	10
SAN	Bexar	10
BIG BEND	Brewster	9*
ARR	Travis	9
NETX	Smith	9
NETX	Gregg	9
BPA	Jefferson	9
DFW	Kaufman	8
DFW	Hood	8
DFW	Ellis	8
WACO	McLennan	8
NETX	Harrison	8
HGB	Galveston	8
CC	Nueces	7
HGB	Montgomery	7
BPA	Orange	7
ARR	Hays	6
DFW	Hunt	6
VIC	Victoria	5
LRGV	Cameron	4
MEM	Hidalgo	3
LAR	Webb	2



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Calculating the W126 Index

- Take hourly ozone concentrations from 8am to 8pm (12 hours)
- Weight each hour based on concentration, with higher concentrations receiving more weight:

$$O_3 * \left(\frac{1}{1 + 4403e^{-126*O_3}} \right)$$

- Sum the weight from each hour to get a daily W126 value
- For each month in the ozone season, sum the daily W126 values to get a monthly value adjusted for data completeness
- The three year average of the consecutive three-month period with the highest W126 value is the secondary design value for the site.



Current Ozone in HGB

- Current 2011* Design Value = 86 ppb
- Currently Manvel Croix Park C84 monitor is the only monitor in the HGB area above 84 ppb.
- The HGB area has 5 days above 84 ppb.
- The design value setting monitor, Manvel Croix Park C84, has had 2 days above 84 ppb.
- Analysis of the 5 days above 84 ppb shows meteorological conditions and local emissions likely contributed to the ozone exceedances.

*2011 design value are as of August 17, 2011 and are subject to change.



Ozone Standard Revision Summary - 2010 Design Values

- Primary Ozone
 - At 70 ppb
 - 21 counties with ozone monitors are exceeding
 - 8 MSAs are exceeding
 - At 65 ppb
 - 26 counties with ozone monitors are exceeding
 - 10 MSAs are exceeding
 - At 60 ppb
 - 30 counties with ozone monitors are exceeding
 - 12 MSAs are exceeding
- Secondary Ozone
 - At 15 ppm-hours
 - 1 county with ozone monitors are exceeding
 - At 11 ppm-hours
 - 3 counties with ozone monitors are exceeding
 - At 7 ppm-hours
 - 22 counties with ozone monitors are exceeding