

# Proposed Standards and the 2015 Ozone Season

## Air Quality Council

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**June 10, 2015**



# EPA proposed new ozone standards on November 25, 2014

- \* CAA requires periodic review of standards every 5 years
- \* EPA relies on Clean Air Science Advisory Council (CASAC)
- \* Two Step Process
  - \* Setting the Standard – scientific review; protect public health
  - \* Implementing the Standard – consider cost, technical feasibility & time needed to put measures in place
- \* Two types of outdoor standards – primary and secondary

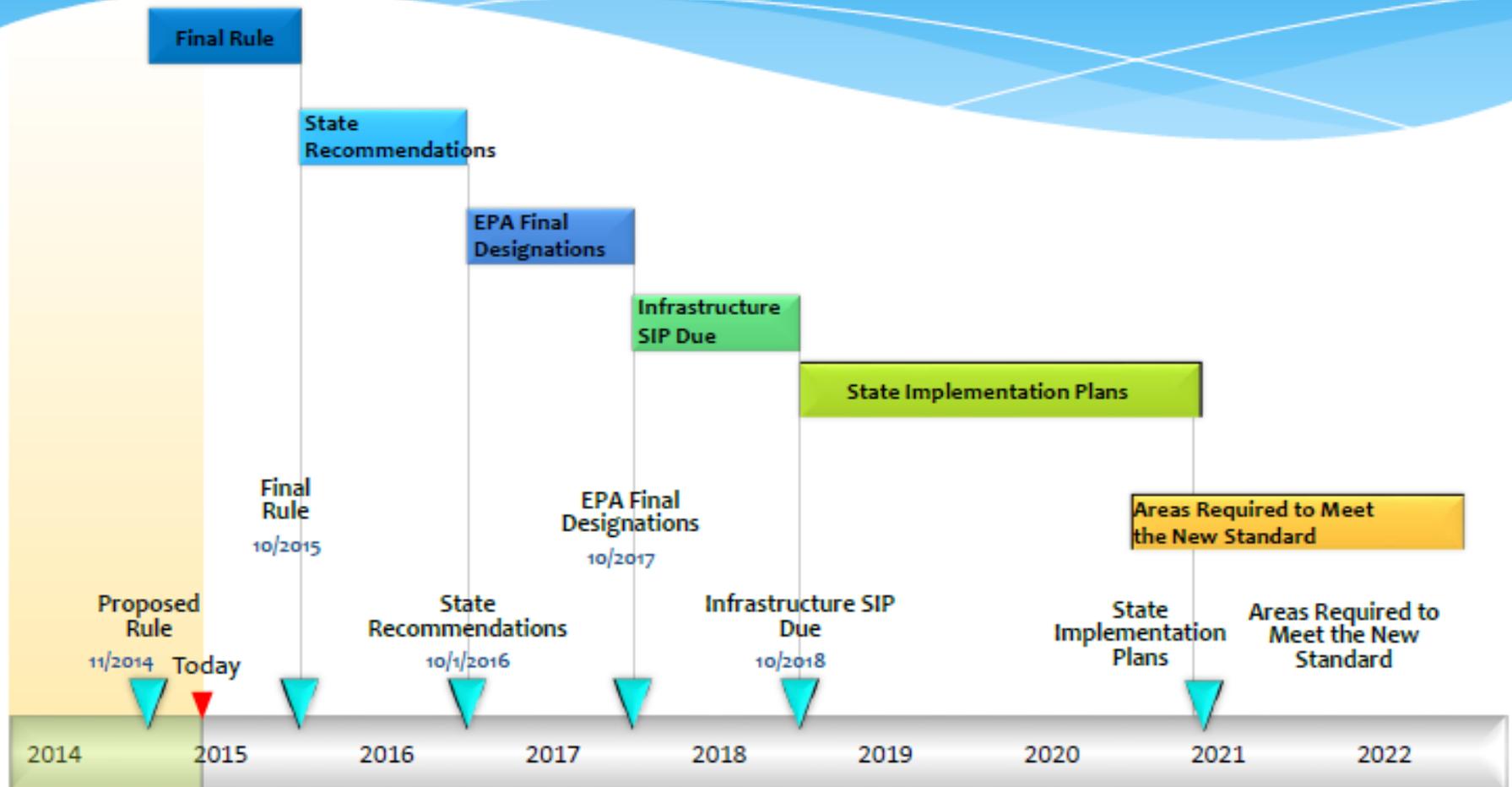
# Proposed Ozone Standards

- \* Proposed Primary & Secondary standards within range of 65 to 70 parts per billion (ppb)
- \* Primary Standard
  - \* Protect public health with “an adequate margin of safety”
  - \* Protect health of at-risk groups – children, elderly, & people of all ages with lung disease like asthma
- \* Secondary Standard
  - \* Protect public welfare – soil, water, crops and other vegetation
  - \* EPA states 65 to 70 ppb equivalent to W126 index of 13 to 17 ppm-hours

# Other Changes Proposed

- \* AQI changes to match new standard
- \* Ozone monitoring season – (Oklahoma not affected)
- \* Photochemical Assessment Monitoring Site (PAMS)
- \* Add new Federal Reference Method (FRM) – (Oklahoma not affected)
- \* Permitting changes for transition

# Schedule for Designation & Implementation



# Required for Marginal Areas

- \* Conformity – Transportation & General
- \* Current Inventory of Emissions
- \* Update of any existing Reasonably Available Control Technology (RACT)-Based rules
- \* Permitting changes for new and modified sources
- \* Periodic emissions inventories (every 3 years)
- \* Annual emissions statements for NO<sub>x</sub> & VOC sources
- \* Emissions offset requirements (at least 1.1 to 1)

Federal measures and transportation conformity are expected to enable marginal areas to attain the new standard (based on EPA projections).

- \* Mercury and Air Toxics Standards
- \* Tier 3 Vehicle and Fuel Standards
- \* Cross-State Air Pollution Rule
- \* Regional Haze Program
- \* Clean Air Non-road Diesel Rules
- \* Tier 2 Vehicle and Gasoline Sulfur Program
- \* Transportation Conformity
- \* Clean Power Plan (future)
- \* Methane & VOC standards for Oil & Gas (future)

# Oklahoma Ozone Status

- \* Current standard is 75 ppb
- \* EPA designated all counties in Oklahoma **attainment/unclassifiable**
- \* Numerous exceedances in 2011 & 2012
- \* Based on 2012-2014, all monitors met 75 ppb standard
- \* Extremely difficult to meet 65-70 ppb standard

# DEQ Monitoring Sites

Monitoring Site	2012-2014 Design Value	65 ppb Standard	70 ppb Standard
Tulsa Central (1127)	0.074	Not Attain	Not Attain
Tulsa East (178)	0.071	Not Attain	Not Attain
Tulsa West (144)	0.072	Not Attain	Not Attain
Tulsa North (137)	0.073	Not Attain	Not Attain
Tulsa South (174)	0.071	Not Attain	Not Attain

# DEQ Monitoring Sites

Monitoring Site	2012-2014 Design Value*	65 ppb Standard	70 ppb Standard
OKC North (1037)	0.074	Not Attain	Not Attain
OKC Central (033)	0.073	Not Attain	Not Attain
OKC Moore (049)	0.072	Not Attain	Not Attain
OKC Goldsby (1073)	0.070	Not Attain	Attain
OKC Choctaw (096)	0.071	Not Attain	Not Attain
OKC Yukon (101)	0.071	Not Attain	Not Attain

\* DEQ is responsible for the quality assurance and certification of the data it collects. Preliminary, uncertified 2014 monitoring data was included in the design value calculations.

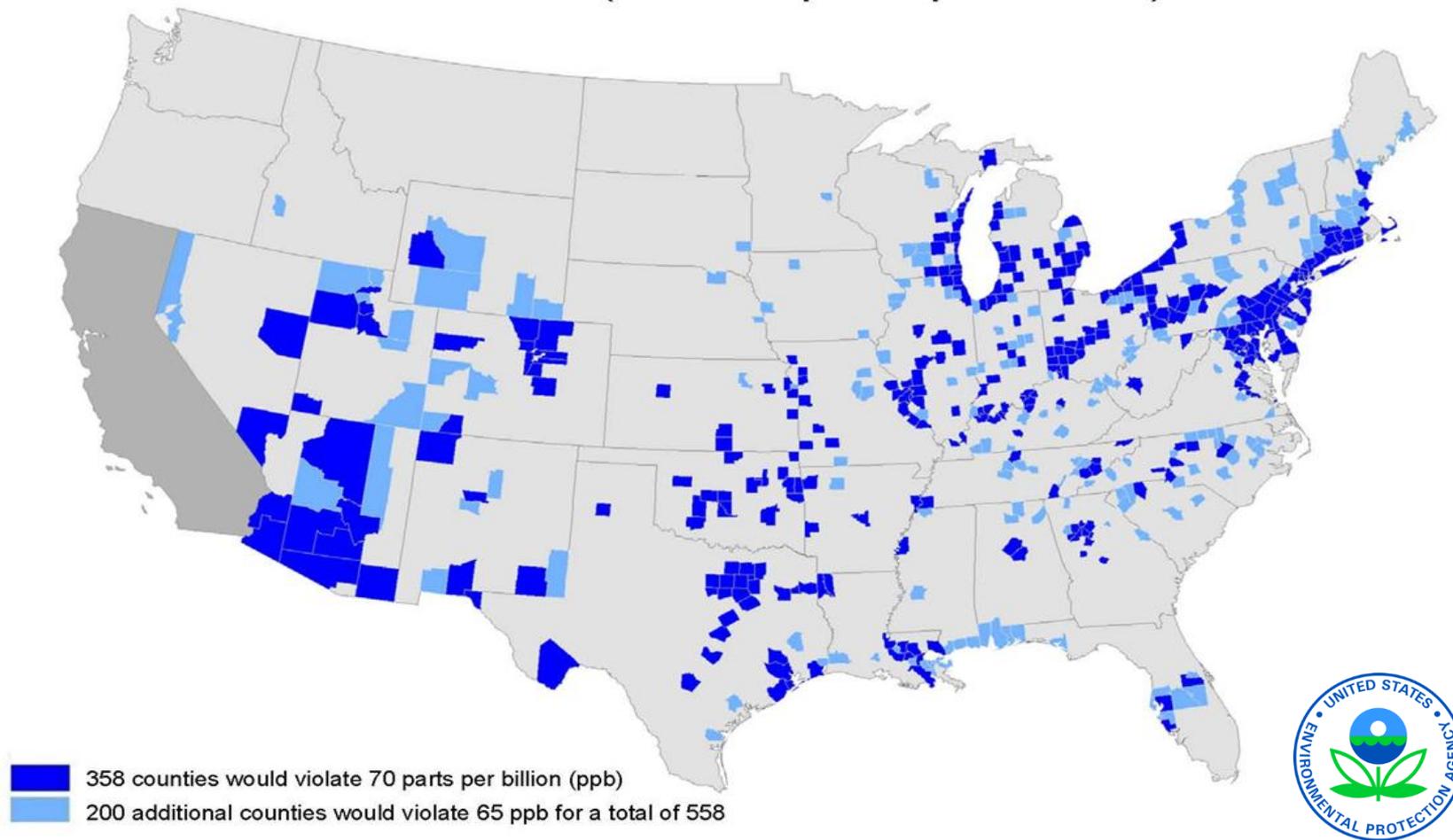
# Highest 8 Hour Averages (ppm) through June 8, 2015

Site			1st	2nd	3rd	4th	12-14 Avg	13-15 Avg	2015 (0.075)
2012 4th	2013 4th	2014 4th	(date)	(date)	(date)	(date)	4th Highs	4th Highs	Critical value
<b>Tulsa West</b> (144)			0.068	0.060	0.059	0.059	0.072	0.064	0.094
0.083	0.068	0.066	6-Jun	12-May	11-Mar	31-Mar			
<b>Tulsa East</b> (178)			0.064	0.063	0.062	0.061	0.071	0.064	0.097
0.082	0.068	0.063	30-Apr	6-Jun	1-May	3-May			
<b>Tulsa Central</b> (1127)			0.070	0.068	0.064	0.063	0.074	0.066	0.091
0.085	0.072	0.065	6-Jun	1-May	30-Apr	3-May			
<b>Tulsa North</b> (137)			0.070	0.064	0.064	0.062	0.073	0.066	0.092
0.084	0.071	0.065	6-Jun	30-Apr	1-May	3-May			
<b>Tulsa South</b> (174)			0.067	0.061	0.058	0.058	0.071	0.063	0.097
0.083	0.069	0.062	30-Apr	6-Jun	25-Apr	1-May			
<b>OKC North</b> (1037)			0.072	0.068	0.066	0.064	0.074	0.068	0.086
0.081	0.072	0.070	1-May	30-Apr	5-Jun	3-Jun			
<b>OKC Central</b> (033)			0.075	0.071	0.067	0.066	0.073	0.069	0.086
0.079	0.073	0.069	30-Apr	1-May	2-May	3-Jun			
<b>OKC Moore</b> (049)			0.066	0.065	0.065	0.064	0.072	0.067	0.091
0.079	0.069	0.068	1-May	2-May	3-Jun	3-May			
<b>OKC Goldsby</b> (1073)			0.066	0.065	0.063	0.063	0.070	0.066	0.093
0.076	0.066	0.069	29-Apr	3-Jun	1-May	2-Jun			
<b>OKC Choctaw</b> (096)			0.069	0.068	0.067	0.064	0.071	0.066	0.093
0.080	0.069	0.066	30-Apr	2-May	1-May	25-Apr			
<b>OKC Yukon</b> (101)			0.067	0.066	0.064	0.064	0.071	0.067	0.089
0.075	0.071	0.068	1-May	3-Jun	2-May	3-May			
<b>Lawton North</b> (651)			0.068	0.063	0.062	0.061	0.073	0.067	0.087
0.080	0.072	0.069	1-May	29-Apr	30-Apr	2-May			
<b>McAlester</b> (415)			0.062	0.059	0.059	0.059	0.069	0.064	0.095
0.076	0.071	0.062	1-May	30-Apr	2-May	7-Jun			
<b>Seiling</b> (860)			0.065	0.065	0.063	0.062	0.070	0.066	0.092
0.076	0.069	0.067	31-Mar	1-May	12-Mar	30-Apr			

# Tribal Monitoring Sites

Monitoring Site	2012-2014 Design Value	65 ppb Standard	70 ppb Standard
Adair	0.070	Not Attain	Attain
Cherokee	0.068	Not Attain	Attain
Kay	0.073	Not Attain	Not Attain
Mayes	0.069	Not Attain	Attain
Ottawa	0.068	Not Attain	Attain
Roland (Sequoyah County)	0.068	Not Attain	Attain
Caddo	0.066	Not Attain	Attain

## Counties Where Measured Ozone is Above Proposed Range of Standards (65 – 70 parts per billion)



Based on 2011 – 2013 monitoring data



# EPA Projects Most Counties Would Meet the Proposed Range of Standards in 2025



Because several areas in California are not required to meet the existing standard by 2025 and may not be required to meet a revised standard until sometime between 2032 and 2037, EPA analyzed California separately. Details are available in the Regulatory Impact Analysis for this proposal.

# Counties in Jeopardy of Nonattainment (based on DEQ and Tribal monitors)

- \* Monitors above 65 to 70 ppb – Adair, Caddo, *Canadian*, Cherokee, *Cleveland*, Comanche, Creek, Dewey, Kay, Mayes, *McClain*, *Oklahoma*, Ottawa, Pittsburg, Sequoyah, and Tulsa Counties
- \* Other counties in MSAs – Cotton, *Grady*, *Lincoln*, *Logan*, Okmulgee, Osage, Pawnee, Rogers, and Wagoner

# For more information...

- \* **EPA Information on Ground Level Ozone and the Proposed Standards:** <http://www.epa.gov/glo/>
- \* **DEQ Monitoring Information:** <http://www.deq.state.ok.us/aqdnew/monitoring/index.htm>