CenSARA and LADCO Region Air Quality Overview

2014 Midwest and Central States Air Quality Workshop April 22-24, 2014 St. Louis, MO

CenSARA Members

Arkansas DEQ Iowa DNR Kansas DHE Louisiana DEQ

Missouri DNR

Nebraska DEQ

Oklahoma DEQ

Texas CEQ

Federally-funded local programs are represented on the Board of Directors by one agency each from EPA Region 6 and Region 7

Organization Purpose:

- Promote the exchange of air quality information, knowledge, experience and data
- Support members in technical projects through contract management and representation on regional/national groups
- Increase staff productivity through management of training courses for member agency staff

LADCO Members

Illinois EPA

Indiana DEM

Michigan DEQ

Minnesota PCA

Ohio EPA

Wisconsin DNR

Organization Purpose:

- Provide technical assessments for and assistance to member states on air quality problems
- Provide a forum for member states and areas that impact the states to discuss air quality issues
- Provide funds to states for training

1997 Ozone NAAQS



The Illinois portion of the St. Louis, MO-IL 8-hr Ozone (1997 Standard) nonattainment area has been redesignated, while the Missouri portion has not. The entire area is not considered in maintenance until all states in a multi-state area are redesignated.

The South Carolina portion of the Charlotte-Gastonia-Rock Hill, NC-SC 8-hr Ozone (1997 Standard) nonattainment area has been redesignated and the North Carolina portion will be redesignated effective January 2, 2014. The entire area is not considered in maintenance until all states in a multi-state area are redesignated.

The Atlanta, GA 8-hr Ozone (1997 Standard) nonattainment area will be redesignated effective January 2, 2014.

2008 Ozone NAAQS

8-Hour Ozone Nonattainment Areas (2008 Standard)







12/05/2013

SO2 NAAQS (2010)





The portions of a county designated nonattainment are indicated by color on this national map. The counties with nonattainment areas are circled. The double circles indicate that there are two nonattainment areas within the same county. The State maps provide details of the smaller nonattainment areas within the county boundaries.

Estimated Emission Changes from 2011 to 2018

Pollutant	СО	NH3	NOX	PM10	PM2_5	SO2	VOC
CenSARA Region	-12%	+2%	-24%	-50%	-29%	-55%	-3%
LADCO Region	-21%	+1%	-33%	-59%	-35%	-65%	-18%
Eastern State Total (EST)	-17%	+4%	-29%	-56%	-30%	-59%	-11%
CONUS	-16%	+3%	-29%	-54%	-29%	-57%	-10%

Source: EPA's 2011 and 2018 emissions modeling platform for the transport and NAAQS rules: http://www.epa.gov/ttn/chief/emch.index.html#2011. Does not include biogenics.

Estimated Emissions in 2018

	СО	NH3	NOX	PM10	PM2.5	SO2	VOC
CenSARA % of Eastern State Total (EST)	31%	43%	35%	52%	40%	28%	42%
LADCO % of EST	20%	22%	21%	17%	18%	27%	16%

Source: EPA's 2018 emissions modeling platform for the transport and NAAQS rules: http://www.epa.gov/ttn/chief/emch.index.html#2011. Does not include biogenics.

Deep Thoughts

- How can technical "building blocks" like those we'll see in the Workshop help with transport, NAAQS, Regional Haze SIPs, Section 111(b) and (d) and ?????
 - Regional haze Phase II SIPs are due to EPA by July 31, 2018; NAAQS SIP due dates vary; transport SIPs due ??
 - As sources of interest decrease in size, technical analysis needs increase.
 - How can/should technical projects be coordinated within the regions, with other regions, and with EPA?

Appendix

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State	со	NH3	NOX	PM10	PM2_5	SO2	voc	State
Arkansas	1,229,995	138,155	168,135	224,131	107,278	45,332	302,687	X
lowa	698,953	297,667	156,868	306,839	82,321	49,948	165,664	X
Kansas	1,480,709	191,338	251,645	550,663	184,552	32,934	429,044	X
Louisiana	2,050,575	95,348	417,661	278,457	185,171	120,247	663,993	X
Missouri	1,604,799	141,700	295,743	402,433	134,270	99,418	337,200	X
Nebraska	453,889	187,070	159,293	317,869	69,986	30,483	105,675	X
Oklahoma	1,681,049	131,527	323,614	488,281	158,818	50,604	579,743	X
Texas	4,662,382	320,515	1,020,492	1,728,786	465,472	259,804	2,252,072	X
CenSARA total	13,862,351	1,503,319	2,793,451	4,297,459	1,387,870	688,769	4,836,079	
Illinois	1,347,273	121,320	332,522	358,821	104,224	95,185	315,611	X
Indiana	1,181,560	117,853	299,898	231,048	76,298	184,837	214,072	X
Michigan	1,652,542	66,196	328,620	195,079	93,801	161,830	347,994	X
Minnesota	1,955,799	211,724	207,324	315,565	182,721	45,528	424,130	X
Ohio	1,780,892	107,510	358,689	181,110	90,276	149,419	300,757	X
Wisconsin	1,015,732	120,540	164,916	140,584	72,717	27,947	221,822	X
LADCO total	8,933,798	745,143	1,691,969	1,422,207	620,037	664,746	1,824,386	
CONUS Total	74,274,612	5,833,001	12,773,540	15,620,191	6,049,681	3,440,686	20,288,115	
Eastern State Total	45,389,013	3,461,184	8,056,069	8,343,940	3,449,603	2,459,124	11,479,749	

2018 Inventory State Totals do not include Biogenics. Afdust is post-adjusted