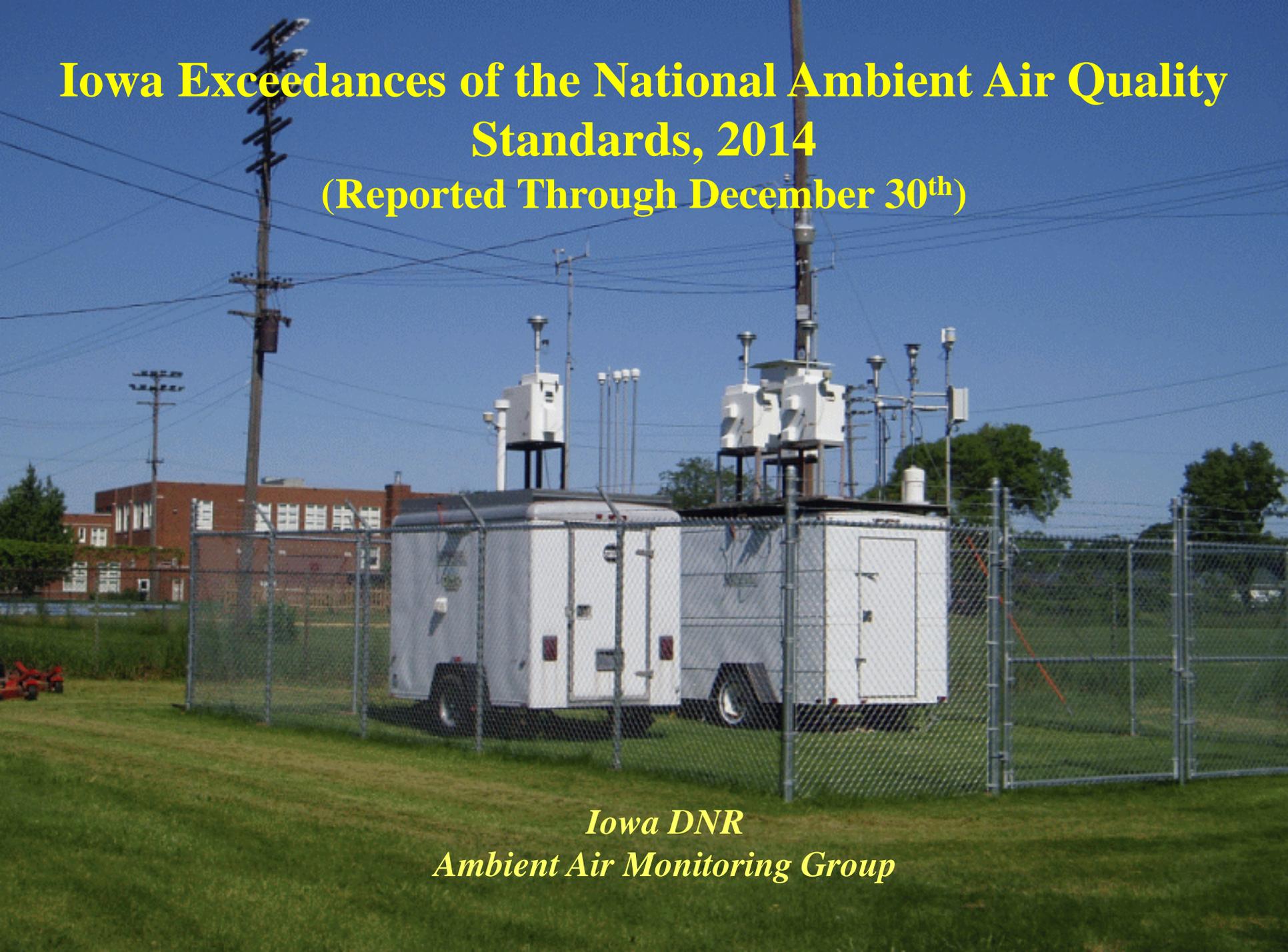


Iowa Exceedances of the National Ambient Air Quality Standards, 2014

(Reported Through December 30th)



*Iowa DNR
Ambient Air Monitoring Group*

What Are the NAAQS?

The Clean Air Act requires EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air quality standards.

Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.

Secondary standards set limits to protect public welfare, including protection against decreased visibility, or damage to animals, crops, vegetation, and buildings. The table and key on the following page lists the NAAQS for the six criteria pollutants.

National Ambient Air Quality Standards

Pollutant	Averaging Period	Exceedance Level	Units
Ozone	8hr (1)	76	ppb
PM _{2.5}	24hr (2)	35.5	micrograms per cubic meter
	annual (3)	12.05	micrograms per cubic meter
PM ₁₀	24hr (4)	155	micrograms per cubic meter
Sulfur dioxide	1hr (5)	75.5	ppb
	3hr (6)	0.55	ppm
Carbon monoxide	1hr (6)	35.5	ppm
	8hr (6)	9.5	ppm
Nitrogen dioxide	annual	0.0535	ppm
	1 hr (7)	100.5	ppb
Lead	Rolling 3-month average (8)	0.155	micrograms per cubic meter

(1) To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 75 ppb.

(2) To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35.5 µg/m³ (effective December 17, 2006).

(3) To attain this standard, the 3-year average of the weighted annual mean PM_{2.5} concentrations from a community-oriented monitor must not exceed 12.05 µg/m³ (effective March 16, 2013).

(4) Not to be exceeded more than once per year on average over 3 years.

(5) Final rule signed June 2, 2010. To attain this standard, the 3-year average of the 99th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 75 ppb.

(6) Not to be exceeded more than once per year.

(7) To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010).

(8) Final rule signed October 15, 2008.

See 40CFR Part 50 for details on attainment calculations

Ozone Data in This Report

Nitrogen oxides (NO_x) and volatile organic compounds (VOC's) react in sunlight and hot weather and can cause ground-level ozone to form in harmful concentrations in the air. Ozone is considered a summertime pollutant and data is collected seasonally from April 1 through October 31.

Both urban and rural areas may experience high ozone levels because wind can carry ozone and the pollutants that form it hundreds of miles away from their original sources.

Ozone monitors are continuous instruments that report hourly averages for each hour of each day of the ozone season.

Particulate Data Used for this Report

Particulate data in this report is from filter based samplers where the data is collected over a 24-hour period and then analyzed in a laboratory. Filter samplers are normally operated on a schedule of one sample every third day (1 in 3). In areas of high population or high concentration, the samplers may be operated on an accelerated schedule (1 in 2 or daily).

EPA has encouraged States to use automated continuous samplers to inform the public of current air quality levels. EPA has approved the use of data from certain types of continuous samplers for regulatory purposes. Data from continuous monitors that pass EPA equivalency tests may be included in this report in the future.

Iowa NAAQS Exceedances, 2014

(Reported Through December 30th)

Date	PM _{2.5}	PM ₁₀	Ozone	SO ₂	Lead
1/3/14				2	
1/12/14				1	
1/29/14				1	
3/6/14	3				
3/7/14	7				
3/26/14				3	
3/27/14	1			1	
3/30/14	1			2	
3/31/14				2	
4/3/14	1				
4/12/14				1	
4/17/14				1	
4/18/14				1	
4/19/14				1	
4/23/14				1	
4/24/14				2	
4/27/14	1			1	
5/6/14				1	
5/7/14				1	
5/19/14				2	
6/1/14				1	
6/6/14				1	

Iowa NAAQS Exceedances, 2014

(Reported Through December 30th), Continued

Date	PM _{2.5}	PM ₁₀	Ozone	SO ₂	Lead
6/14/14				2	
6/15/15				2	
6/16/14				2	
6/17/14				1	
6/27/14				2	
6/28/14				1	
6/30/14				1	
7/20/14				2	
7/21/14				1	
7/22/14				2	
7/25/14				2	
8/7/14				1	
8/18/14				1	
8/28/14				1	
8/29/14				1	
8/31/14				2	
9/3/14				3	
9/4/14				2	
9/8/14				1	
9/9/14				1	
9/19/14				2	
9/22/14				1	
10/1/14				1	

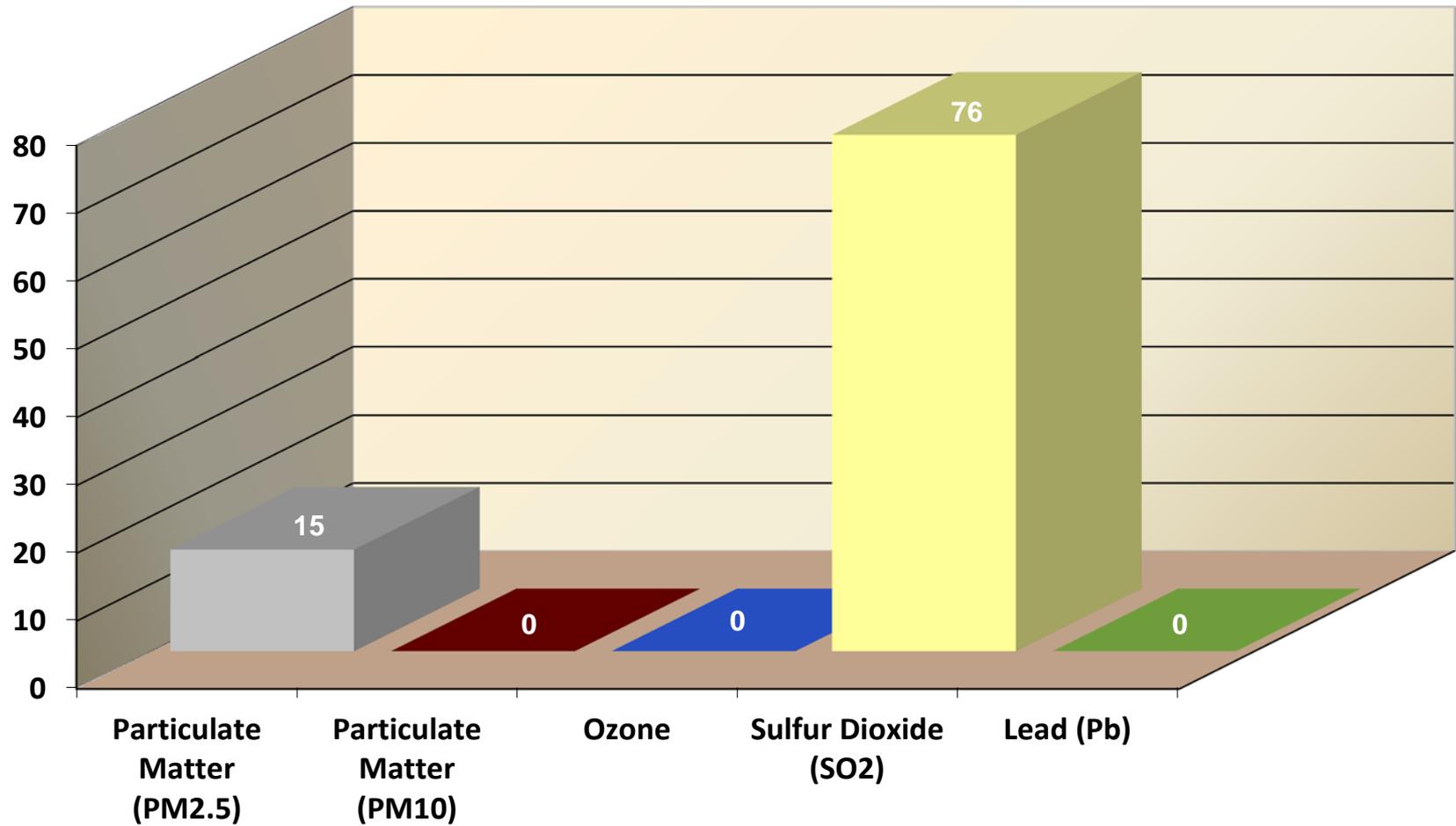
Iowa NAAQS Exceedances, 2014

(Reported Through December 30th), Continued

Date	PM _{2.5}	PM ₁₀	Ozone	SO ₂	Lead
10/12/14				1	
10/23/14				1	
10/27/14				2	
11/2/14				2	
11/3/14				1	
11/7/14				1	
11/9/14				1	
11/10/14				1	
11/18/14				1	
11/22/14				1	
11/23/14				1	
12/5/14	1				
12/25/14				1	
12/26/14				1	
TOTAL	15	0	0	76	0

Iowa NAAQS Exceedances, 2014

(Reported Through December 30th)



2014 NAAQS Exceedances (reported through December 30th)

Monitor Type	Site Location	Site Name	Exceedance Date	Concentration	Units	AQI
SO ₂	Muscatine	Musser Park	1/3/14	92.2	ppb	108
SO ₂	Cedar Rapids	Tait Cummins Park	1/3/14	86.6	ppb	105
SO ₂	Muscatine	Musser Park	1/12/14	145.6	ppb	132
SO ₂	Cedar Rapids	Tait Cummins Park	1/29/14	121.6	ppb	121
PM _{2.5}	Sioux City	Bryant Elementary	3/6/14	38.2	µg/m ³	108
PM _{2.5}	Council Bluffs	Franklin Elementary	3/6/14	39.5	µg/m ³	111
PM _{2.5}	Montgomery County	Viking Lake State Park	3/6/14	36.1	µg/m ³	102
PM _{2.5}	Central Davenport	Jefferson Elementary	3/7/14	36.9	µg/m ³	104
PM _{2.5}	Clinton	Chancy Park	3/7/14	38.7	µg/m ³	109
PM _{2.5}	Davenport	Hayes Elementary	3/7/14	37.7	µg/m ³	106
PM _{2.5}	Muscatine	Muscatine HS E Campus (Garfield)	3/7/14	36.4	µg/m ³	103
PM _{2.5}	Clinton	Rainbow Park	3/7/14	38.2	µg/m ³	108
PM _{2.5}	Cedar Rapids	Linn Public Health	3/7/14	40.0	µg/m ³	112
PM _{2.5}	Iowa City	Hoover Elementary	3/7/14	38.3	µg/m ³	108
SO ₂	Muscatine	Greenwood Cemetery	3/26/14	121.3	ppb	121
SO ₂	Muscatine	Musser Park	3/26/14	76.0	ppb	101
SO ₂	Cedar Rapids	Tait Cummins Park	3/26/14	95.0	ppb	110
SO ₂	Muscatine	Musser Park	3/27/14	193.2	ppb	154
PM _{2.5}	Muscatine	Musser Park	3/27/14	40.2	µg/m ³	113

2014 NAAQS Exceedances (reported through December 30th) continued

Monitor Type	Site Location	Site Name	Exceedance Date	Concentration	Units	AQI
PM _{2.5}	Sioux City	Bryant Elementary	3/30/14	35.8	µg/m ³	102
SO ₂	Muscatine	Greenwood Cemetery	3/30/14	82.1	ppb	104
SO ₂	Muscatine	Musser Park	3/30/14	170.3	ppb	143
SO ₂	Muscatine	Musser Park	3/31/14	203.7	ppb	158
SO ₂	Cedar Rapids	Tait Cummins Park	3/31/14	112.9	ppb	117
PM _{2.5}	Muscatine	Muscatine HS E Campus (Garfield)	4/3/14	41.2	µg/m ³	115
SO ₂	Muscatine	Musser Park	4/12/14	87.7	ppb	106
SO ₂	Muscatine	Musser Park	4/17/14	93.1	ppb	109
SO ₂	Muscatine	Muscatine HS E Campus (Garfield)	4/18/14	111.0	ppb	117
SO ₂	Muscatine	Muscatine HS E Campus (Garfield)	4/19/14	139.8	ppb	129
SO ₂	Muscatine	Muscatine HS E Campus (Garfield)	4/23/14	147.9	ppb	133
SO ₂	Muscatine	Muscatine HS E Campus (Garfield)	4/24/14	235.9	ppb	171
SO ₂	Muscatine	Musser Park	4/24/14	94.0	ppb	109
SO ₂	Muscatine	Muscatine HS E Campus (Garfield)	4/27/14	199.8	ppb	156
PM _{2.5}	Muscatine	Muscatine HS E Campus (Garfield)	4/27/14	44.2	µg/m ³	122
SO ₂	Muscatine	Muscatine HS E Campus (Garfield)	5/6/14	202.2	ppb	158
SO ₂	Muscatine	Musser Park	5/7/14	107.5	ppb	115
SO ₂	Muscatine	Greenwood Cemetery	5/19/14	97.5	ppb	110
SO ₂	Muscatine	Musser Park	5/19/14	159.2	ppb	138

2014 NAAQS Exceedances (reported through December 30th) continued

Monitor Type	Site Location	Site Name	Exceedance Date	Concentration	Units	AQI
SO ₂	Muscatine	Musser Park	6/1/14	76.7	ppb	101
SO ₂	Muscatine	Greenwood Cemetery	6/6/14	88.4	ppb	106
SO ₂	Muscatine	Musser Park	6/14/14	76.6	ppb	101
SO ₂	Muscatine	Greenwood Cemetery	6/14/14	115.6	ppb	119
SO ₂	Muscatine	Musser Park	6/15/14	118.6	ppb	120
SO ₂	Muscatine	Greenwood Cemetery	6/15/14	168.9	ppb	142
SO ₂	Muscatine	Musser Park	6/16/14	131.0	ppb	126
SO ₂	Muscatine	Greenwood Cemetery	6/16/14	107.1	ppb	115
SO ₂	Muscatine	Musser Park	6/17/14	75.5	ppb	100
SO ₂	Muscatine	Musser Park	6/27/14	113.3	ppb	118
SO ₂	Muscatine	Greenwood Cemetery	6/27/14	83.4	ppb	104
SO ₂	Muscatine	Musser Park	6/28/14	95.2	ppb	110
SO ₂	Muscatine	Musser Park	6/30/14	103.7	ppb	113
SO ₂	Muscatine	Musser Park	7/20/14	81.3	ppb	103
SO ₂	Muscatine	Greenwood Cemetery	7/20/14	93.6	ppb	109
SO ₂	Muscatine	Greenwood Cemetery	7/21/14	116.5	ppb	119
SO ₂	Cedar Rapids	Tait Cummins Park	7/22/14	78.1	ppb	102
SO ₂	Muscatine	Musser Park	7/22/14	82.1	ppb	104
SO ₂	Cedar Rapids	Tait Cummins Park	7/25/14	79.1	ppb	102

2014 NAAQS Exceedances (reported through December 30th) continued

Monitor Type	Site Location	Site Name	Exceedance		Units	AQI
			Date	Concentration		
SO ₂	Muscatine	Musser Park	7/25/14	83.9	ppb	104
SO ₂	Muscatine	Muscatine HS E Campus (Garfield)	8/7/14	117.7	ppb	119
SO ₂	Muscatine	Musser Park	8/18/14	87.3	ppb	106
SO ₂	Muscatine	Muscatine HS E Campus (Garfield)	8/28/14	112.6	ppb	117
SO ₂	Muscatine	Musser Park	8/29/14	81.0	ppb	103
SO ₂	Cedar Rapids	Tait Cummins Park	8/31/14	93.1	ppb	109
SO ₂	Muscatine	Greenwood Cemetery	8/31/14	125.2	ppb	123
SO ₂	Muscatine	Musser Park	9/3/14	179.7	ppb	147
SO ₂	Cedar Rapids	Tait Cummins Park	9/3/14	166.4	ppb	141
SO ₂	Muscatine	Greenwood Cemetery	9/3/14	112.0	ppb	117
SO ₂	Cedar Rapids	Tait Cummins Park	9/4/14	182.6	ppb	149
SO ₂	Muscatine	Musser Park	9/4/14	230.7	ppb	169
SO ₂	Muscatine	Musser Park	9/8/14	104.5	ppb	114
SO ₂	Muscatine	Musser Park	9/9/14	92.3	ppb	108
SO ₂	Muscatine	Musser Park	9/19/14	101.2	ppb	112
SO ₂	Cedar Rapids	Tait Cummins Park	9/19/14	98.5	ppb	111
SO ₂	Muscatine	Muscatine HS E Campus (Garfield)	9/22/14	109.0	ppb	116
SO ₂	Muscatine	Muscatine HS E Campus (Garfield)	10/1/14	116.7	ppb	119

2014 NAAQS Exceedances (reported through December 30th) continued

Monitor Type	Site Location	Site Name	Exceedance		Units	AQI
			Date	Concentration		
SO ₂	Muscatine	Muscatine HS E Campus (Garfield)	10/12/14	112.1	ppb	117
SO ₂	Muscatine	Greenwood Cemetery	10/23/14	88.1	ppb	106
SO ₂	Muscatine	Greenwood Cemetery	10/27/14	109.9	ppb	116
SO ₂	Muscatine	Musser Park	10/27/14	79.4	ppb	102
SO ₂	Muscatine	Greenwood Cemetery	11/2/14	109.2	ppb	116
SO ₂	Muscatine	Musser Park	11/2/14	166.8	ppb	141
SO ₂	Muscatine	Musser Park	11/3/14	158.7	ppb	138
SO ₂	Muscatine	Musser Park	11/7/14	124.5	ppb	123
SO ₂	Muscatine	Musser Park	11/9/14	93.2	ppb	109
SO ₂	Muscatine	Musser Park	11/10/14	124.1	ppb	123
SO ₂	Muscatine	Musser Park	11/18/14	78.0	ppb	102
SO ₂	Muscatine	Musser Park	11/22/14	98.7	ppb	111
SO ₂	Muscatine	Musser Park	11/23/14	76.1	ppb	101
PM _{2.5}	Muscatine	Muscatine HS E Campus (Garfield)	12/5/14	37.7	µg/m ³	106
SO ₂	Muscatine	Greenwood Cemetery	12/25/14	99.6	ppb	111
SO ₂	Muscatine	Musser Park	12/26/14	104.4	ppb	114

Web Resources

Real-time Air Monitoring Data:

In Polk County:

<http://www.polkcountyiowa.gov/airquality/air-quality-monitoring/current-aqi-real-time-data/>

In Linn County:

<http://www.linncleanair.org/>

Outside Polk and Linn Counties:

<http://www.shl.uiowa.edu/env/ambient/data.xml>

Attainment Calculations:

<http://epa.gov/airtrends/values.html>

National Ozone and Particulate Maps:

<http://airnow.gov/>

Historical Air Monitoring Data for Iowa and Other States:

<http://www.epa.gov/airdata/>