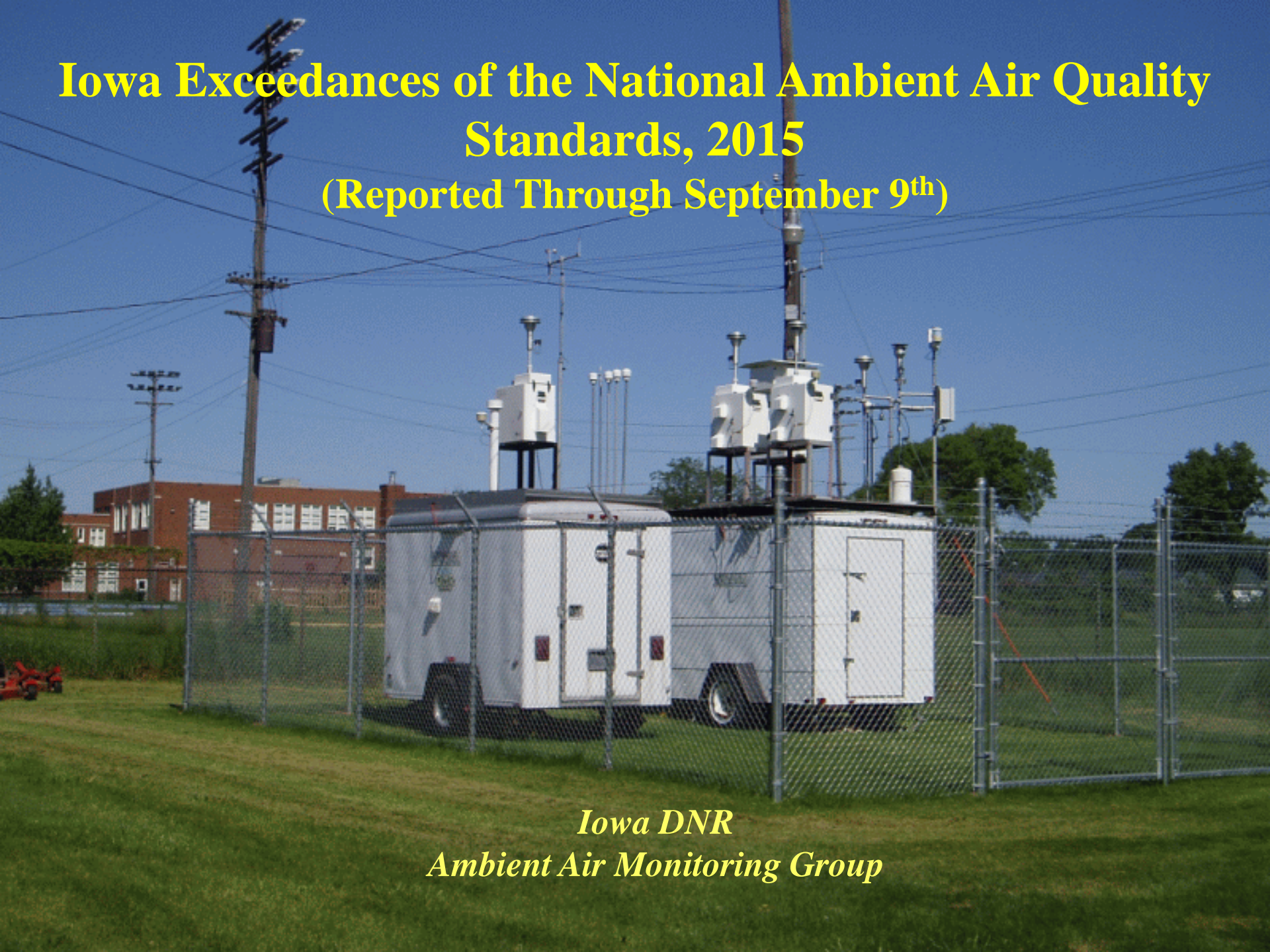


# Iowa Exceedances of the National Ambient Air Quality Standards, 2015 (Reported Through September 9<sup>th</sup>)



*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 <sub>2.5</sub>	24hr (2)	35.5	micrograms per cubic meter
	annual (3)	12.05	micrograms per cubic meter
PM <sub>10</sub>	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/m<sup>3</sup> (effective December 17, 2006).

(3) To attain this standard, the 3-year average of the weighted annual mean PM<sub>2.5</sub> concentrations from a community-oriented monitor must not exceed 12.05 µg/m<sup>3</sup> (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<sub>x</sub>) 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, 2015

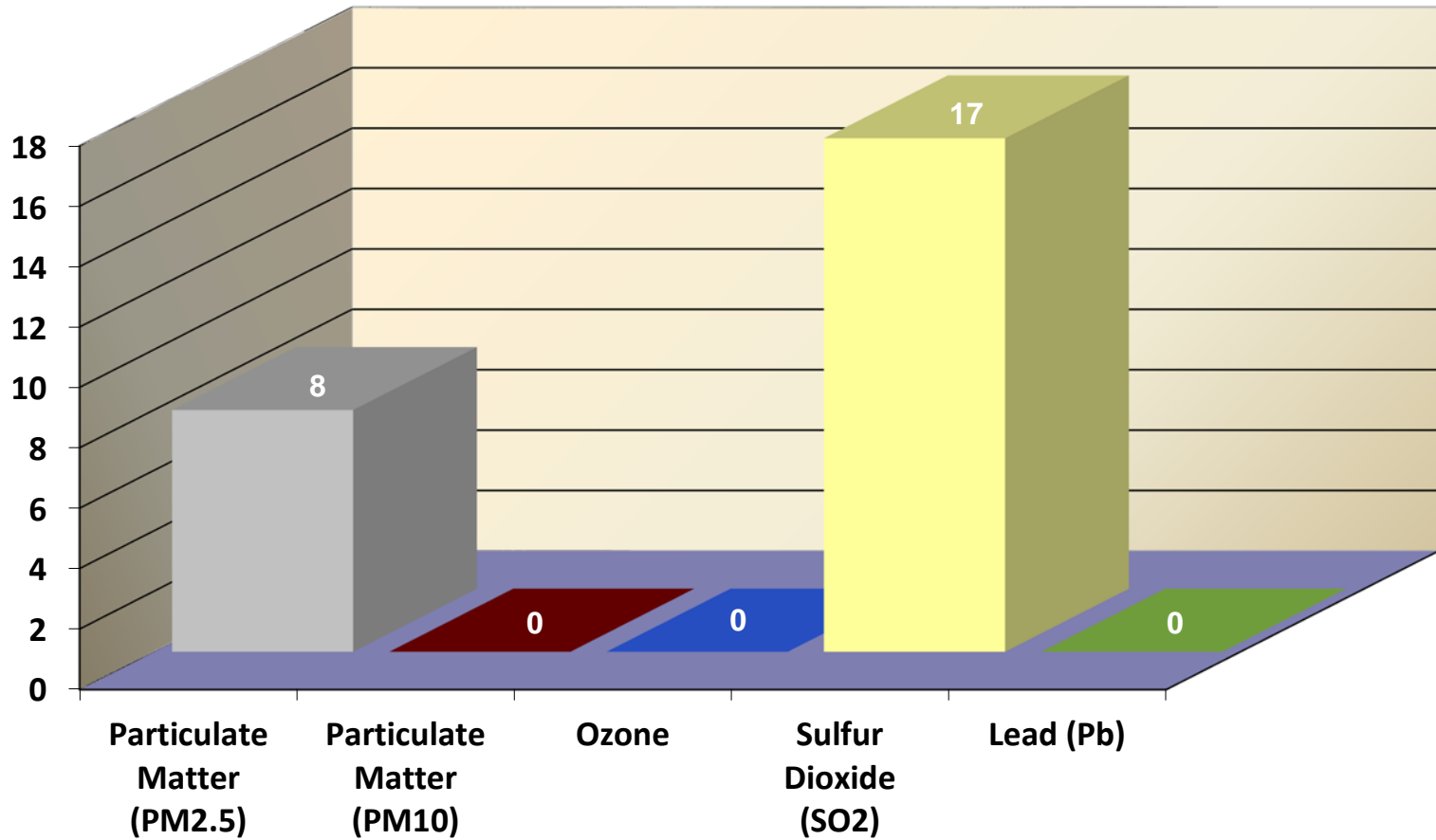
(Reported Through September 9<sup>th</sup>)

Date	PM <sub>2.5</sub>	PM <sub>10</sub>	Ozone	SO <sub>2</sub>	Lead
1/8/15				1	
1/10/15				1	
1/28/15				1	
2/20/15				1	
3/6/15				1	
3/19/15				1	
3/24/15				1	
3/28/15				1	
3/29/15				2	
4/1/15				1	
4/2/15				1	
4/12/15				1	
5/7/15				2	
5/13/15				1	
6/7/15				1	
7/4/15	1				
7/7/15	7				
<b>TOTAL</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>0</b>



# Iowa NAAQS Exceedances, 2015

(Reported Through September 9<sup>th</sup>)



**2015 NAAQS Exceedances (reported through September 9<sup>th</sup>)**

Monitor Type	Site Location	Site Name	Exceedance Date	Concentration	Units	AQI
SO <sub>2</sub>	Muscatine	Musser Park	1/8/15	84.8	ppb	105
SO <sub>2</sub>	Muscatine	Musser Park	1/10/15	105.3	ppb	114
SO <sub>2</sub>	Muscatine	Greenwood Cemetery	1/28/15	120.8	ppb	121
SO <sub>2</sub>	Muscatine	Musser Park	2/20/15	101.5	ppb	112
SO <sub>2</sub>	Muscatine	Musser Park	3/6/15	132.5	ppb	126
SO <sub>2</sub>	Muscatine	Muscatine HS E Campus (Garfield)	3/19/15	93.7	ppb	109
SO <sub>2</sub>	Muscatine	Muscatine HS E Campus (Garfield)	3/24/15	90.7	ppb	107
SO <sub>2</sub>	Muscatine	Greenwood Cemetery	3/28/15	105.1	ppb	114
SO <sub>2</sub>	Muscatine	Greenwood Cemetery	3/29/15	126.4	ppb	123
SO <sub>2</sub>	Muscatine	Musser Park	3/29/15	146.6	ppb	132
SO <sub>2</sub>	Muscatine	Musser Park	4/1/15	187.5	ppb	151
SO <sub>2</sub>	Muscatine	Musser Park	4/2/15	115.5	ppb	119
SO <sub>2</sub>	Muscatine	Musser Park	4/12/15	116.0	ppb	119
SO <sub>2</sub>	Muscatine	Greenwood Cemetery	5/7/15	90.5	ppb	107
SO <sub>2</sub>	Muscatine	Musser Park	5/7/15	84.5	ppb	105
SO <sub>2</sub>	Muscatine	Muscatine HS E Campus (Garfield)	5/13/15	104.7	ppb	114
SO <sub>2</sub>	Muscatine	Musser Park	6/7/15	92.4	ppb	108
PM <sub>2.5</sub>	Central Davenport	Jefferson Elementary	7/4/15	37.6	µg/m <sup>3</sup>	106



**2015 NAAQS Exceedances (reported through September 9<sup>th</sup>) continued**

<b>Monitor Type</b>	<b>Site Location</b>	<b>Site Name</b>	<b>Exceedance Date</b>	<b>Concentration</b>	<b>Units</b>	<b>AQI</b>
PM <sub>2.5</sub>	Cedar Rapids	Linn Public Health	7/7/15	36.3	µg/m <sup>3</sup>	103
PM <sub>2.5</sub>	Central Davenport	Jefferson Elementary	7/7/15	49.2	µg/m <sup>3</sup>	135
PM <sub>2.5</sub>	Clinton	Chancy Park	7/7/15	45.8	µg/m <sup>3</sup>	126
PM <sub>2.5</sub>	Davenport	Hayes Elementary	7/7/15	51.8	µg/m <sup>3</sup>	141
PM <sub>2.5</sub>	Iowa City	Hoover Elementary	7/7/15	45.3	µg/m <sup>3</sup>	125
PM <sub>2.5</sub>	Muscatine	Muscatine HS E Campus (Garfield)	7/7/15	50.3	µg/m <sup>3</sup>	137
PM <sub>2.5</sub>	Clinton	Rainbow Park	7/7/15	46.3	µg/m <sup>3</sup>	128

# 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/>