Iowa Monitoring Locations and Design Values for Sulfur Dioxide 2012-2014

A design value is a tool that can be used to understand pollution levels at a specific location. A design value may be set for any pollutant. The U.S. EPA's official definition is explained this way: "a design value is the mathematically determined pollutant concentration at a particular site that must be reduced to, or maintained at or below the National Ambient Air Quality Standard to assume attainment." The design value number tells us how a particular site or area compares with the National Ambient Air Quality Standards (NAAQS).

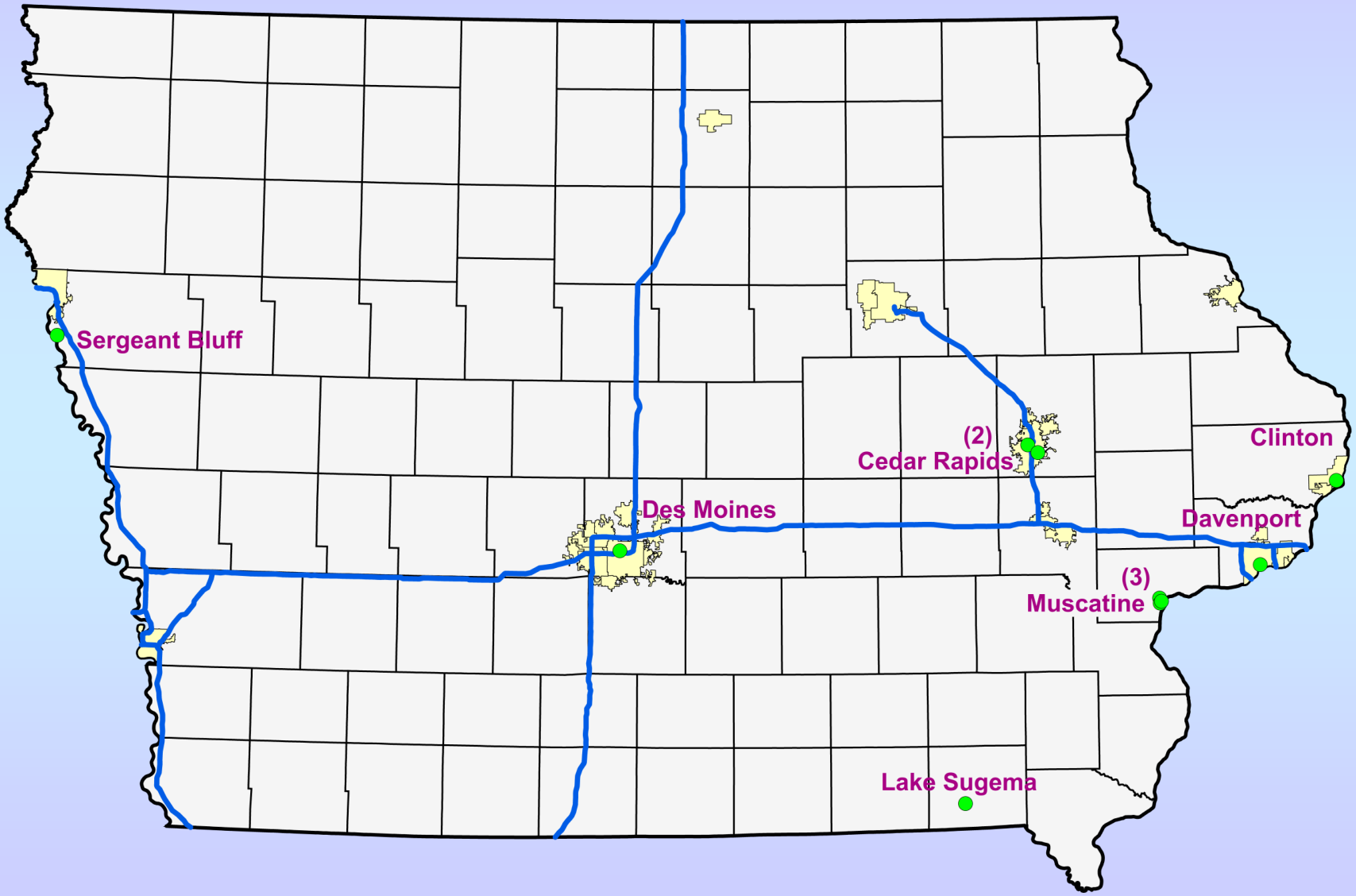
Iowa sulfur dioxide (SO_2) monitor location and information is detailed on the following pages. The EPA design value for 1-hour SO_2 is equal to the average of the annual 99th percentile daily maximum 1-hour value for the most recent three years. The EPA revised the SO_2 NAAQS in June of 2010. A monitoring site must have a design value less than 76 parts per billion to be considered "in attainment" with the SO_2 NAAQS. Additional information on the revised SO_2 standard is available here:
http://www.epa.gov/airquality/sulfurdioxide/actions.html

Iowa SO_2 Monitors (2014)

AQS Site ID	Site Name	Location	County	Design Value?	Reason*
19-045-0019	Chancy Park	Clinton	Clinton	Yes	
19-113-0040	Public Health	Cedar Rapids	Linn	Yes	
19-113-0041	Tait Cummins Park	Cedar Rapids	Linn	No	Started 1/14
19-139-0016	Greenwood Cemetery	Muscatine	Muscatine	Yes	
19-139-0019	High School East Campus	Muscatine	Muscatine	No	Started 8/12
19-139-0020	Musser Park	Muscatine	Muscatine	Yes	
19-153-0030	Health Department	Des Moines	Polk	Yes	
19-163-0015	Jefferson School	Davenport	Scott	Yes	
19-177-0006	Lake Sugema	Keosauqua	Van Buren	Yes	
19-193-0020	George Neal North	Sergeant Bluff	Woodbury	No	Started 7/12

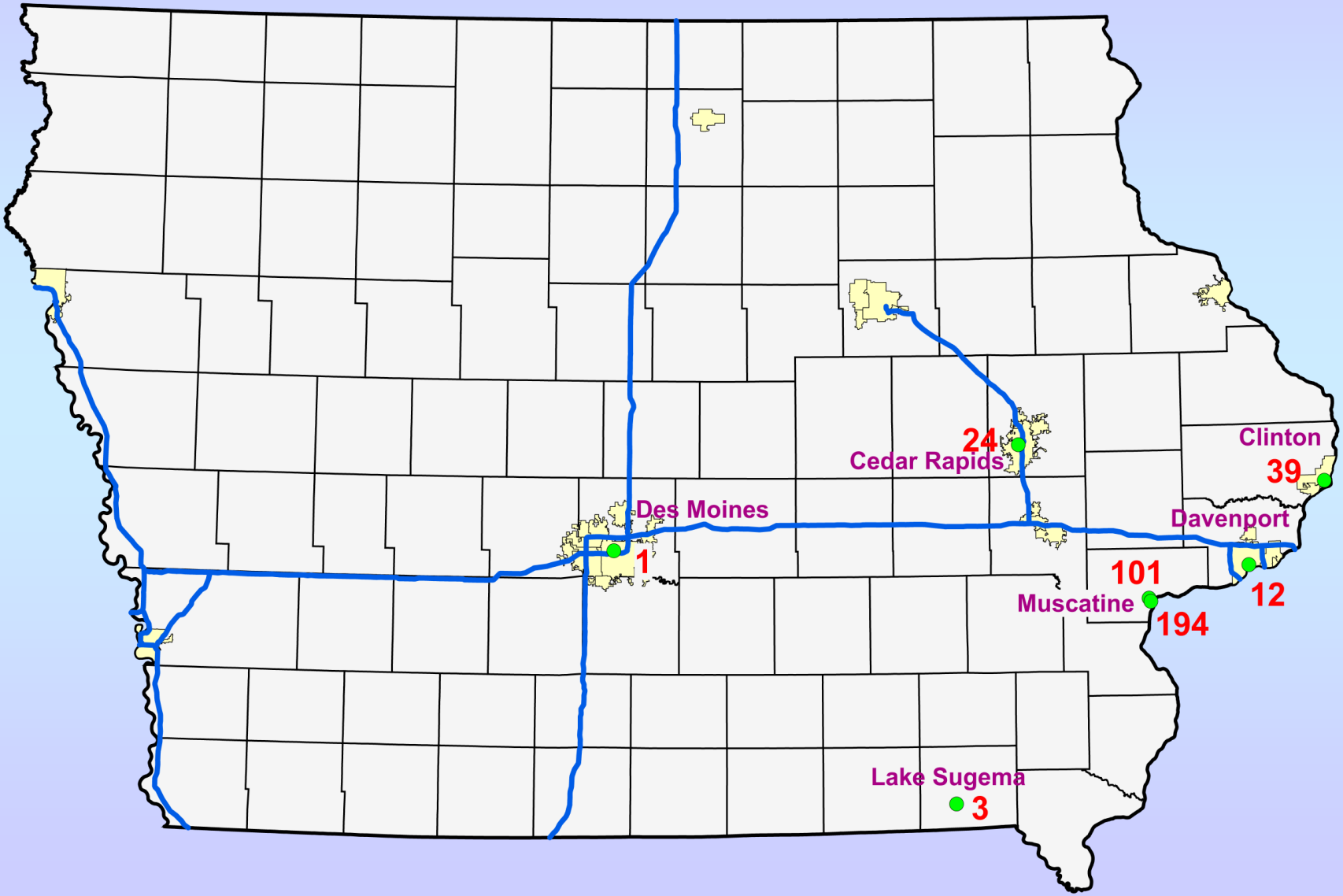
* A site must be operational for at least three years to compute a design value and meet additional completeness requirements specified in 40 CFR 50 Appendix T.

Iowa SO_2 Monitoring Network 2014



Iowa SO_2 Design Values: 2012-2014

Concentrations listed in ppb. Values greater than 75 exceed the standard.



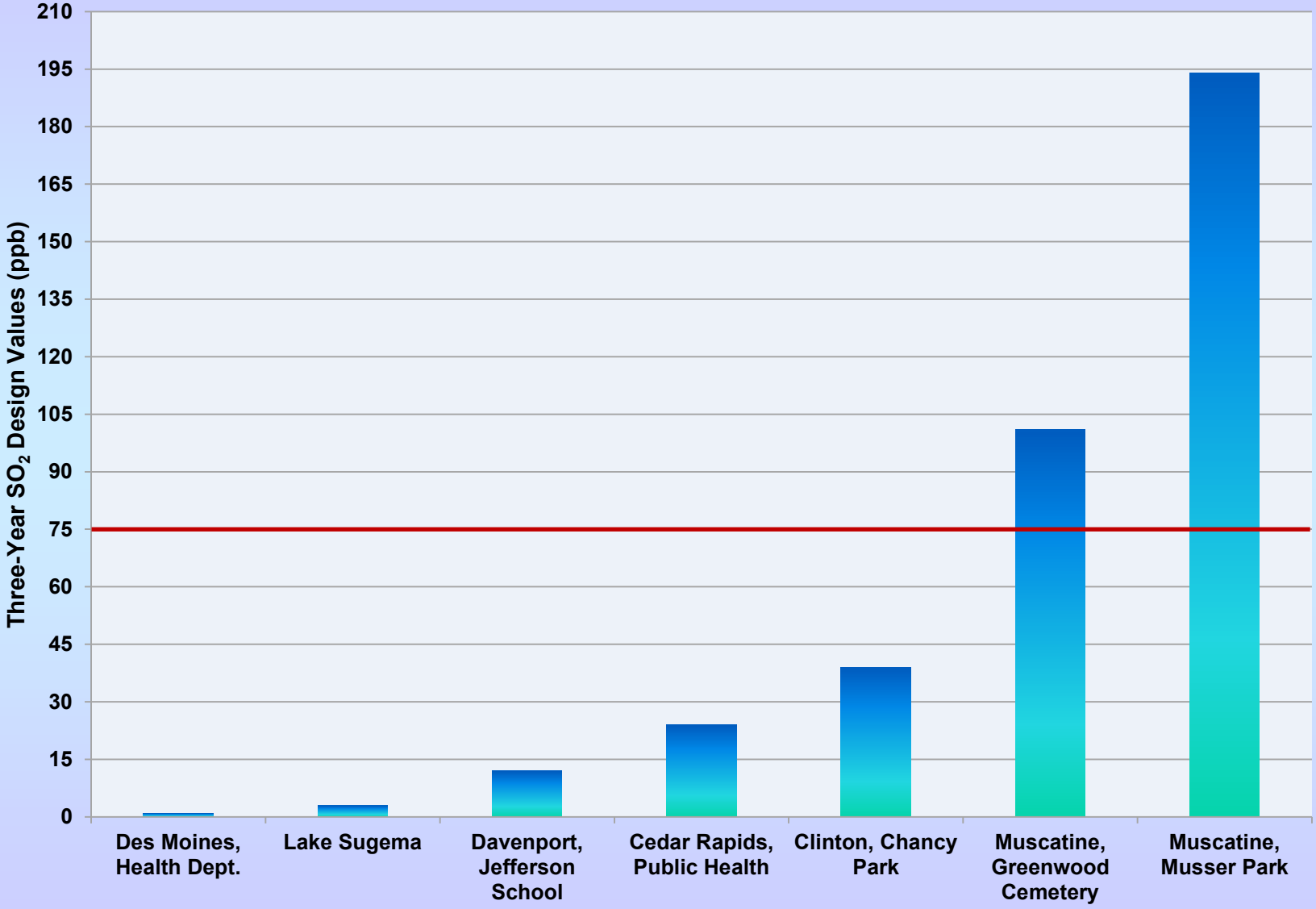
Iowa SO_2 Design Values 2014

County	City	EPA Site Id	Year	99th Percentile Daily Maximum Hourly SO_2 Concentration (ppb)	3-year Average of 99th Percentile (ppb)	Years Averaged
Clinton	Clinton	19-045-0019	2012	60.3		
			2013	34.5		
			2014	22	39	2012-2014
Linn	Cedar Rapids	19-113-0040	2012	23.3		
			2013	24.8		
			2014	24.8	24	2012-2014
Muscatine	Muscatine	13-139-0016	2012	104.2		
			2013	83.7		
			2014	116.5	101	2012-2014
Muscatine	Muscatine	19-139-0020	2012	224		
			2013	178.5		
			2014	179.7	194	2012-2014
Polk	Des Moines	19-153-0030	2012	1.4		
			2013	1.2		
			2014	1.1	1	2012-2014
Scott	Davenport	19-163-0015	2012	11.6		
			2013	14.6		
			2014	10.1	12	2012-2014
Van Buren	Keosauqua	19-177-0006	2012	2.7		
			2013	2.5		
			2014	3	3	2012-2014

Three Year Averages Greater Than 75 ppb Indicate Non-Attainment with the 1-hour NAAQS.

Values are based on certified data.

Iowa SO_2 Design Values Chart: 2012-2014



Web Resources

Iowa Real-time Data Reporting :

In Polk County:

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

In Linn County:

http://www.linncleanair.org/Default.aspx

Outside Polk and Linn Counties:

http://www.shl.uiowa.edu/env/ambient/index.xml

Design Values for All Pollutants Nationwide:

http://www.epa.gov/airtrends/values.html

Trends in Sulfur Dioxide Levels:

http://www.epa.gov/airtrends/sulfur.html

Historical Air Pollution Data for Iowa and Other States:

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