Iowa Monitoring Locations and Design Values for Nitrogen Dioxide 2017-2019

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).

lowa nitrogen dioxide (NO_2) monitor location and information is detailed on the following pages. The EPA design value for 1-hour NO_2 is equal to the average of the 98th percentile 1-hour value for the most recent three years. EPA revised the NO_2 NAAQS in April of 2012. A monitoring site must have a design value less than 100 parts per billion to be considered "in attainment" with the NO_2 NAAQS. All monitoring sites in lowa are in attainment with the 1-hour NO_2 NAAQS. Additional information on the revised NO_2 standard is available here:

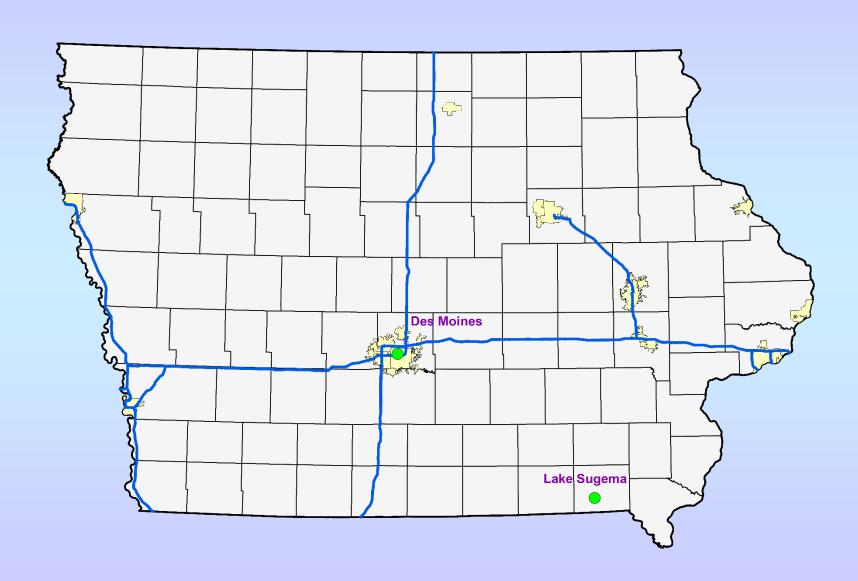
https://www.epa.gov/no2-pollution

Iowa Nitrogen Dioxide Monitors (2019)

AQS Site ID	Site Name	Location	County	Design Value?
19-153-0030	Health Department	Des Moines	Polk	Yes
19-177-0006	Lake Sugema	Keosauqua	Van Buren	Yes

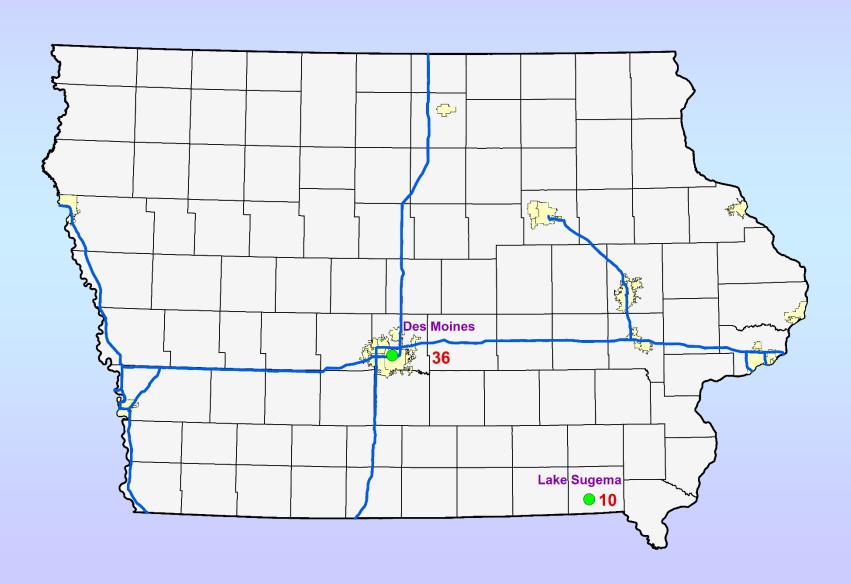
A site must be operational for at least three years to compute a design value and meet additional completeness requirements specified in 40 CFR 50 Appendix S.

Iowa NO₂ Monitoring Network 2019



Iowa NO₂ Design Values: 2017-2019

Concentrations listed in ppb. Values greater than 100 exceed the standard.



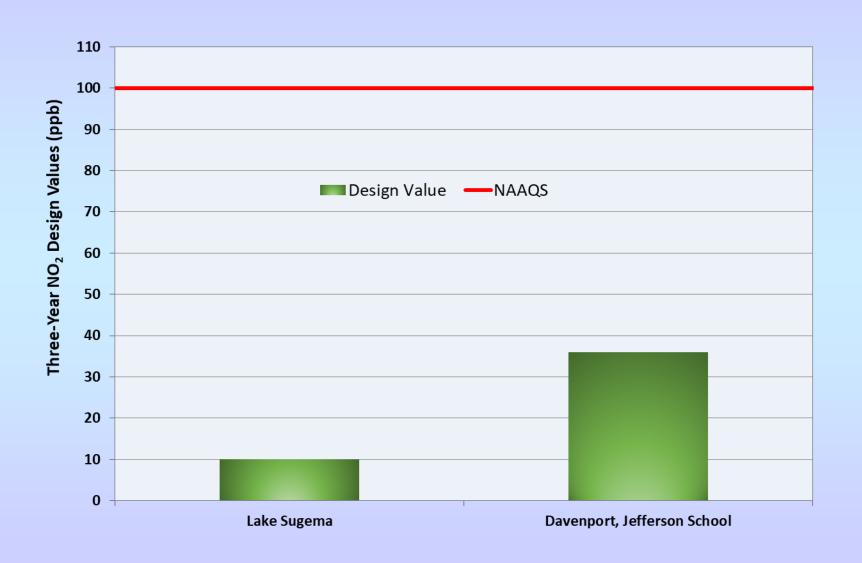
Iowa NO₂ Design Values: 2017-2019

County	City	EPA Site Id	Year	98th Percentile Hourly NO ₂ Concentration (ppb)	3-year Average of 98th Percentile (ppb)	Years Averaged		
Polk	Des Moines	191530030	2017	38.2				
			2018	34.0				
			2019	37.0	36	2017-2019		
Van Buren	Not in a City	191770006	2017	9.9				
			2018	11.3				
			2019	8.6	10	2017-2019		
(Three Year Averages Greater Than 100 ppb Indicate Non-Attainment with the 1-hour NAAQS)								

Values are based on preliminary data. Data will be certified in May 2020.

Three Year Averages Greater Than 100 ppb Indicate Non-Attainment with the 1-hour NAAQS. Values are based on preliminary data. Data will be certified in May 2019.

Iowa NO₂ Design Values Chart: 2017-2019



Web Resources

Iowa Real-time Data Reporting:

In Polk County:

https://www.polkcountyiowa.gov/public-works/air-quality/air-quality-monitoring/current-aqi-real-time-data/

In Linn County:

https://monitoring.linncleanair.org/

Outside Polk and Linn Counties:

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

Design Values for All Pollutants Nationwide:

https://www.epa.gov/air-trends

Trends in Nitrogen Dioxide Levels:

https://www.epa.gov/air-trends/nitrogen-dioxide-trends

Historical Air Pollution Data for Iowa and Other States:

https://www.epa.gov/outdoor-air-quality-data