National Ambient Air Quality Standards for Nitrogen Dioxide

Attainment Analysis

Lake Michigan Air Directors Consortium

December 21, 2009

DATA SUMMARY

Annual Nitrogen Dioxide Standard = 0.053 ppm

Number of Nitrogen Dioxide Monitors Exceeding the Nitrogen Dioxide Standard Based on 2008 Data:

- Illinois – 0 out of 5 (0.0%)
- Indiana – 0 out of 3 (0.0%)
- Michigan – 0 out of 1 (0.0%)
- Minnesota – 0 out of 2 (0.0%)
- Ohio – 0 out of 4 (0.0%)
- Wisconsin – 0 out of 1 (0.0%)

On June 26, 2009, EPA proposed to strengthen the NAAQS for nitrogen dioxide. EPA is proposing to revise the primary NO2 standard to a level between 80 and 100 ppb measured over 1-hour.

For the new 1-hour NO2 standard, EPA is proposing that the form be a 3-year average of the 4^{th} highest daily maximum 1-hour average concentration in a year, or its equivalent (a 3-year average of the 99^{th} percentile of the annual distribution of daily maximum 1-hour average concentrations).

The first two pages are a summary of 1-hour nitrogen dioxide concentrations by county based on 2005 – 2007 monitoring data.

The next page lists the NO2 design values for all active air quality monitors, as of 2008, for the following time periods: 2007 and 2008. The state-specific design values are sorted based on 2008 data and shaded according to their nearness to exceeding the NO2 standard.

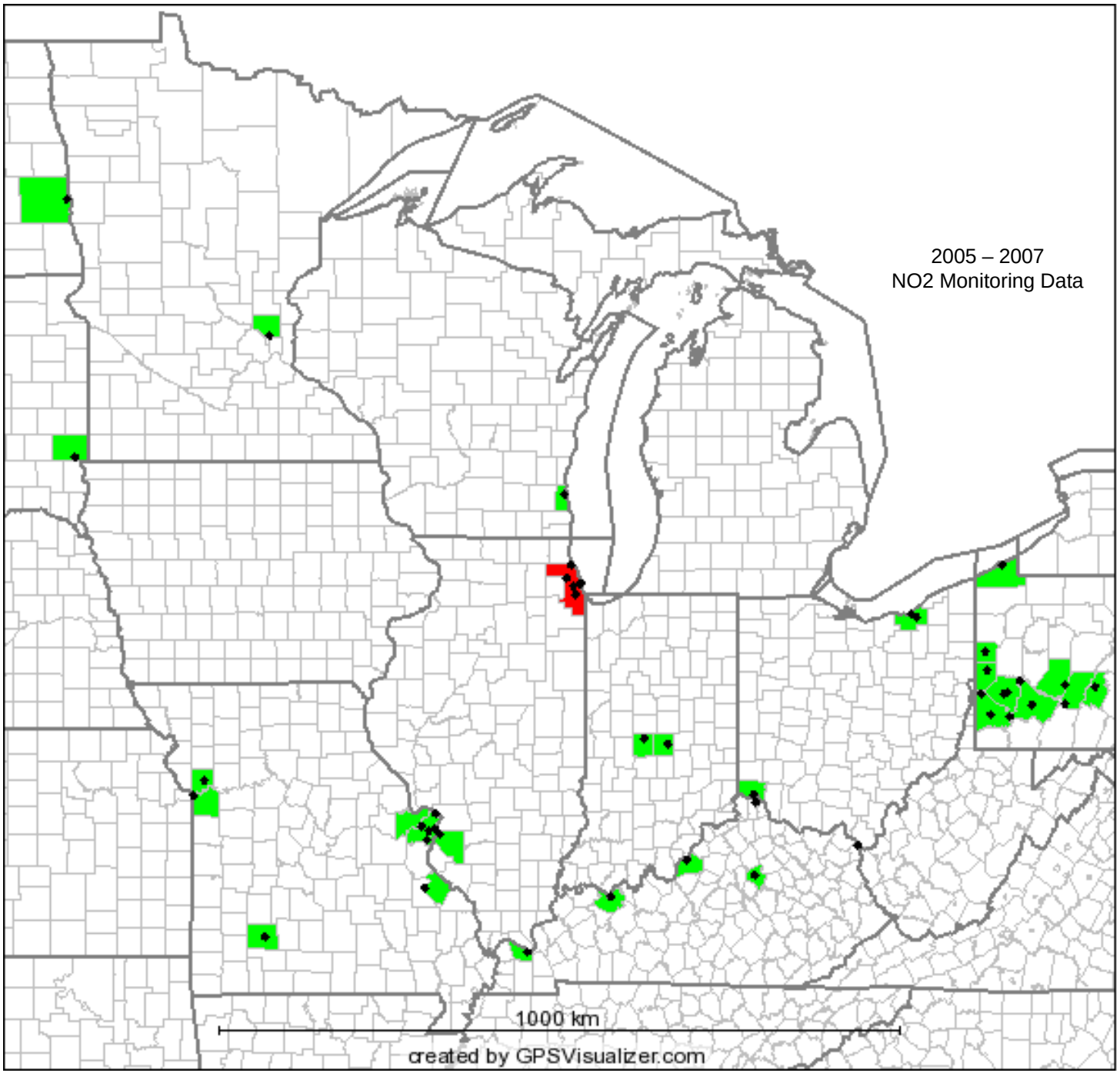
Reference: http://www.epa.gov/airtrends/values.html

Nitrogen Dioxide Concentrations by County (3-Year Average 1-Hour 99th Percentiles from 2005 - 2007)		
State	**County**	**Concentrations**
Illinois	Cook	106
Illinois	St Clair	53
Indiana	Marion	50
Indiana	Hendricks	44
Kentucky	Fayette	56
Kentucky	Jefferson	53
Kentucky	Mc Cracken	46
Kentucky	Daviess	39
Minnesota	Anoka	48
Missouri	Jackson	65
Missouri	St Louis City	63
Missouri	Greene	54
Missouri	St Louis	53
Missouri	St Charles	43
Missouri	Clay	42
Missouri	Ste Genevieve	23
North Dakota	Cass	41
North Dakota	Mercer	26
North Dakota	Oliver	25
North Dakota	Burke	15
North Dakota	Mc Kenzie	9
Ohio	Cuyahoga	69
Ohio	Hamilton	64
Pennsylvania	Allegheny	68
Pennsylvania	York	61
Pennsylvania	Bucks	59
Pennsylvania	Erie	57
Pennsylvania	Montgomery	57
Pennsylvania	Dauphin	56
Pennsylvania	Beaver	55
Pennsylvania	Blair	55
Pennsylvania	Northampton	55
Pennsylvania	Lawrence	53
Pennsylvania	Lehigh	52
Pennsylvania	Lackawanna	51
Pennsylvania	Lancaster	49
Pennsylvania	Westmoreland	48
Pennsylvania	Luzerne	47
Pennsylvania	Washington	47
Pennsylvania	Cambria	46
Pennsylvania	Centre	40
Pennsylvania	Indiana	36
Pennsylvania	Perry	27
South Dakota	Minnehaha	36
South Dakota	Jackson	9
Wisconsin	Milwaukee	54

LEGEND (ppb)	
	> 100
	80 - 100
	< 80

Reference: http://www.epa.gov/air/nitrogenoxides/actions.html#jul09

EPA's Proposed Revisions to the NAAQS for Nitrogen Dioxide (NO2)



EPA is proposing to revise the primary NO2 standard, designed to protect public health, to a level of **between 80 and 100 parts per billion (ppb)** measured over 1- hour.

LEGEND (ppb)

- > 100
- 80 - 100
- < 80

STATE	COUNTY	SITE	2007 Design Value	2008 Design Value
Illinois	Cook	170310063	0.033	0.033
Illinois	Cook	170313103	0.028	0.028
Illinois	Cook	170314002	0.022	0.022
Illinois	Cook	170310076	0.018	0.018
Illinois	Saint Clair	171630010	0.016	0.016
Indiana	Marion	180970073	0.015	0.013
Indiana	St. Joseph	181410015	0.010	0.010
Indiana	Hendricks	180630002	0.008	0.008
Michigan	Wayne	261630019	0.014	0.013
Minnesota	Anoka	270031002	0.009	0.009
Minnesota	Dakota	270370423	-	0.008
Ohio	Cuyahoga	390350060	0.020	0.020
Ohio	Hamilton	390610040	0.018	0.017
Ohio	Cuyahoga	390350070	0.016	0.016
Ohio	Athens	390090004	-	0.005
Wisconsin	Milwaukee	550790026	0.015	0.014

LEGEND

	Exceeds Standard	> 0.053 ppm
	> 75% of Standard	0.040 - 0.053 ppm
	> 50% of Standard	0.027 - 0.039 ppm
	> 25% of Standard	0.014 - 0.026 ppm
	< 25% of Standard	< 0.014 ppm