State of Illinois
Illinois Environmental Protection Agency

Illinois
Air Quality Report

2023

January 2025

ILLINOIS ANNUAL AIR QUALITY REPORT 2023

Illinois Environmental Protection Agency
Bureau of Air

Executive Summary

This report presents a summary of air quality data collected throughout the State of Illinois during calendar year 2023. Data is presented for the six criteria pollutants (those for which air quality standards have been developed – particulate matter (PM_{10} and $PM_{2.5}$), ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead – along with some heavy metals, volatile organic compounds and toxic compounds. Monitoring was conducted at 61 different site locations collecting data from 130 instruments.

In terms of the Air Quality Index (AQI), air quality during 2023 was either good or moderate 87% of the time throughout Illinois. There were two days when at least one monitoring site registered Very Unhealthy AQI (category purple). This compares with zero Very Unhealthy days in 2022. The 2023 Very Unhealthy days were due to elevated particulate concentrations from wildfire smoke. There were 10 days (six for ozone, one for $PM_{2.5}$, and three for both ozone and $PM_{2.5}$) when at least one monitoring site registered Unhealthy AQI (category red). This compares with two Unhealthy days in 2022. In 2023, there were 32 days (28 for ozone, one for $PM_{2.5,}$ and three for both ozone and particulates) when AQI in at least one part of Illinois was considered Unhealthy for Sensitive Groups (category orange).

OZONE

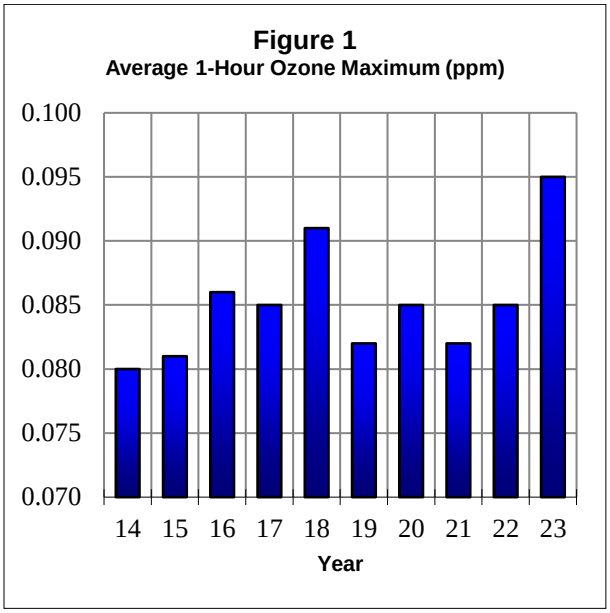
Monitoring was conducted at 36 locations during the March-October "ozone season" and at least 75 percent data capture was obtained at all 36 sites.

Elgin recorded the highest 1-hour concentration of 0.119 ppm for Illinois Chicago area monitors. This compares with the highest concentration of 0.103 ppm in 2022 at Zion. The highest 1-hour for Metro-East in 2023 was 0.099 ppm recorded at East St. Louis, compared with a 2022 high of 0.096 ppm at Alton.

Data are also presented to compare with the current 8-hour standard as of 2016 of 0.070 ppm. The appropriate statistic for comparison with the 8-hour standard is the fourth highest value, which is averaged over a three-year period. There were 36 sites in Illinois that had a fourth-high value above 0.070 ppm in 2023 compared with eight sites in 2022. The highest Illinois Chicago area fourth-high value was 0.086 ppm at Northbrook. The highest level in the Metro-East area was 0.082 ppm at Jerseyville. For the three-year period 2021-2023, 18 sites had a fourth-high average above 0.070 ppm (Table B4).

Figure 1 shows for each year the statewide average of each site's highest hourly ozone value for the ten-year period 2014-2023. The graph shows some year-to-year fluctuation with high years occurring during summers with more favorable meteorology for ozone formation and low years in summers less conducive for ozone formation. The statewide average for 2023 was 0.095 ppm compared with 0.085 ppm in 2022 and 0.082 ppm in 2021.

Statewide, the total number of 1-hour excursion days in 2023 was zero compared with zero in 2022 and zero in 2021.



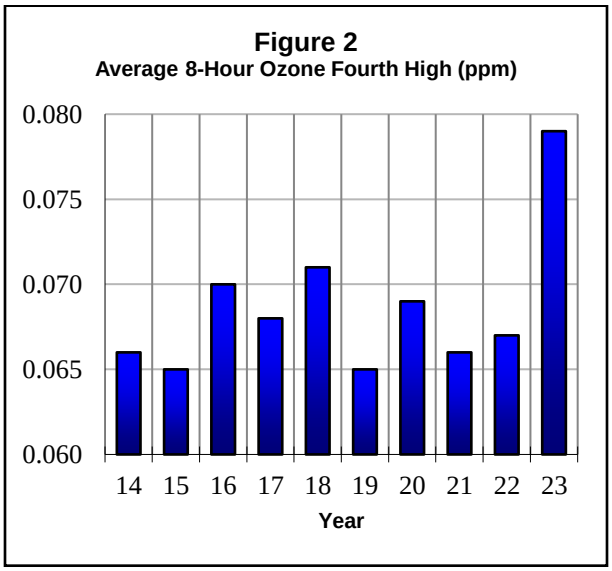


Figure 2 shows for each year the statewide annual average of the fourth highest 8-hour ozone value 2014-2023. The statewide average for 2023 was 0.079 ppm compared with 0.067 ppm in 2022 and 0.066 in 2021.

PARTICULATE MATTER

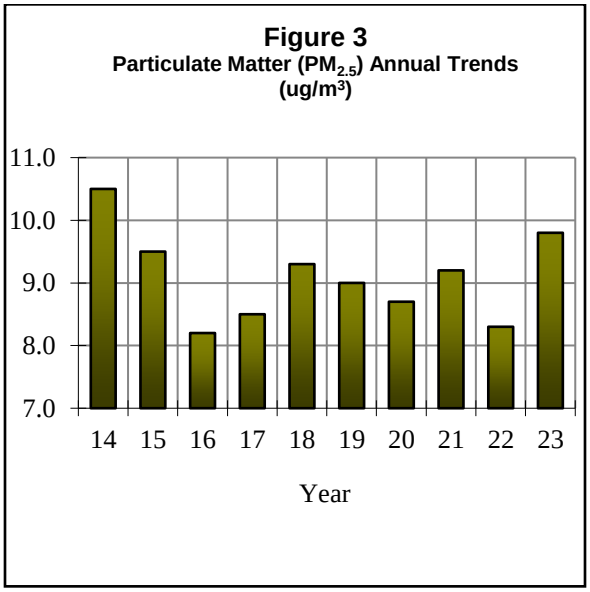
Monitoring was conducted at 34 sites for $PM_{2.5}$. In 2023, no sites recorded an average above 12.0 ug/m^3, the level of the annual standard. The statewide average of the annual averages was 9.8 ug/m^3 in 2023 compared to 8.3 ug/m^3 in 2022. Note, in 2024 the annual standard was revised to 9.0 ug/m3. In 2023, 18 non-exempt sites recorded an annual design value above 9.0 ug/m3.

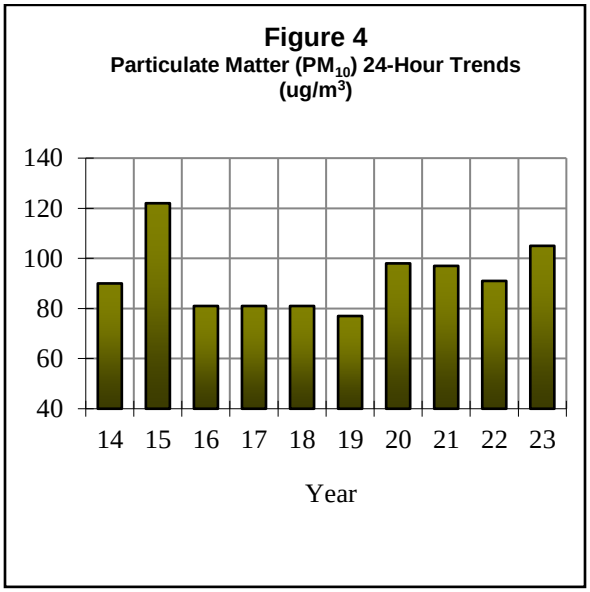
Figure 3 shows the trend of the statewide annual averages for $PM_{2.5}$ for the period 2014-2023. There were 84 exceedances of the 24-hour standard of 35 ug/m^3 in 2023 compared with one exceedance in 2022 and 10 exceedances in 2021. The statewide peak of 213.1 ug/m^3, due to wildfire smoke, was recorded in Normal. In 2023, the statewide 98-percentile 24-hour average was 25.1 ug/m^3. This compares with 21.1 ug/m^3 in 2022 and 21.8 ug/m^3 in 2021.

In 2023 there were four sites monitoring PM_{10}. The statewide annual average was 25 ug/m^3 compared with 28 ug/m^3 in 2022 and 29 ug/m^3 in 2021. The highest annual average was 32 ug/m^3 in Lyons Township. The lowest annual was 16 ug/m^3 at Northbrook.

For $PM_{10,}$ the statewide average of the maximum 24-hour averages in 2023 was 105 ug/m^3 compared with 91 ug/m^3 in 2022 and 97 ug/m^3 in 2021. **Figure 4** depicts this information for the period 2014-2023.

There was one exceedance of the 24-hour primary standard of 150 ug/m^3 in 2023. The highest 24-hour average was recorded in Lyons Township with a value of 155 ug/m^3 compared with a high 24-hour value of 139 ug/m^3 in Lyons Township in 2022.

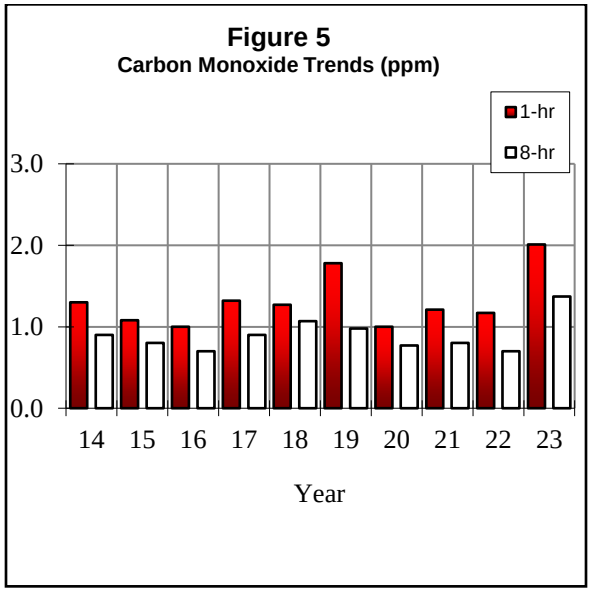




CARBON MONOXIDE

There were no exceedances of either the 1-hour primary standard of 35 ppm or the 8-hour primary standard of 9 ppm in 2023. The highest 1-hour average was 3.2 ppm recorded at the Lansing-Kingery near-road location. The highest 8-hour average was 1.6 ppm also recorded at the Lansing-Kingery near-road location.

Figure 5 shows the trend for the period 2014-2023 for the statewide average of the 1-hour and 8-hour high CO values. The statewide average of the 1-hour high was 2.01 ppm in 2023 compared with 1.17 ppm in 2022. The statewide average for the 8-hour high was 1.37 ppm in 2023 compared with 0.70 ppm in 2022.



SULFUR DIOXIDE

There were four exceedances of the 1-hour primary standard of 75 ppb in 2023 compared with five exceedances in 2022. The highest 1-hour average was 147 ppb recorded at the Decatur-Primient location compared with 293 ppb at the Decatur-Primient location in 2022. The statewide average of the 1-hour high in 2022 was 31 ppb. This compares with 50 ppb in 2022. There were no sites over the primary 1-hour standard of 75 ppb for the 2021-2023 period (Table B17).

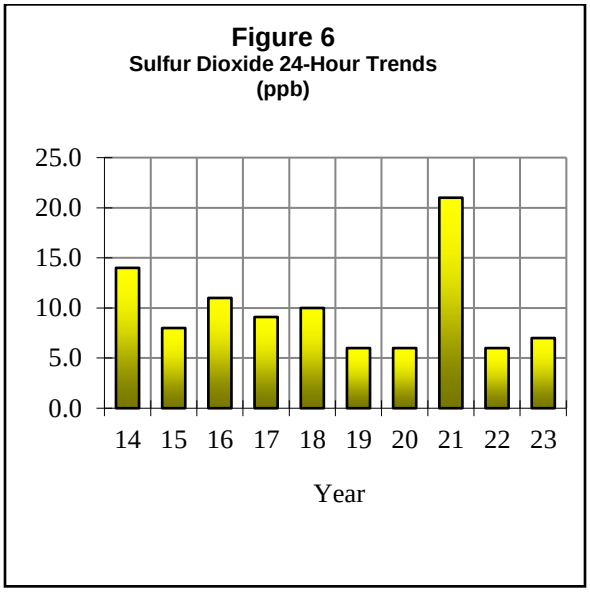
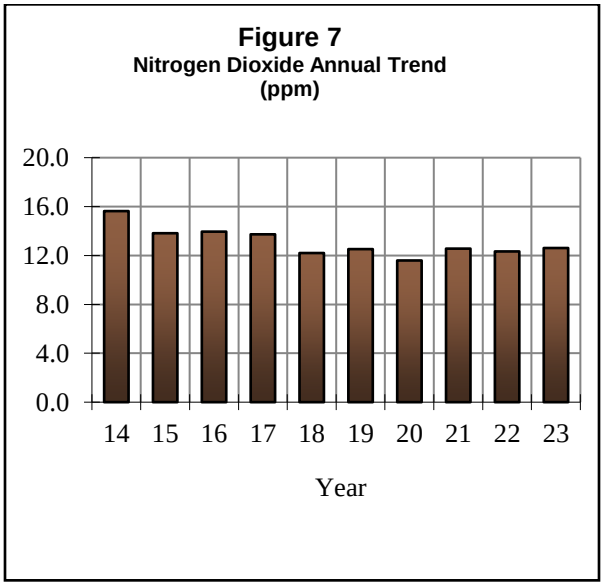


Figure 6 shows the statewide trend for the maximum 24-hour averages for the period 2014-2023. The statewide average for 2023 was 7 ppb. This compares with an average of 6 ppb in 2022.

NITROGEN DIOXIDE

There were no violations of the annual primary standard of 53 ppb recorded in Illinois during 2023. The highest annual average of 17.0 ppb was recorded at Schiller Park. The statewide annual average for 2023 was 12.6 ppb compared with 12.3 ppb in 2022 and 12.6 ppb in 2021. There were no violations of the 1-hour primary standard, and there were also no violations in 2022. There were no sites over the 1-hour primary standard of 100 ppb for the 2021-2023 period compared to zero sites for the 2020-2022 period (Table B20).

Figure 7 depicts the trend of statewide annual averages from 2014-2023. There have been no violations of the annual standard since 1980.



LEAD

There were no violations of the rolling three-month maximum mean standard for the 2021 to 2023 period (Table B23).

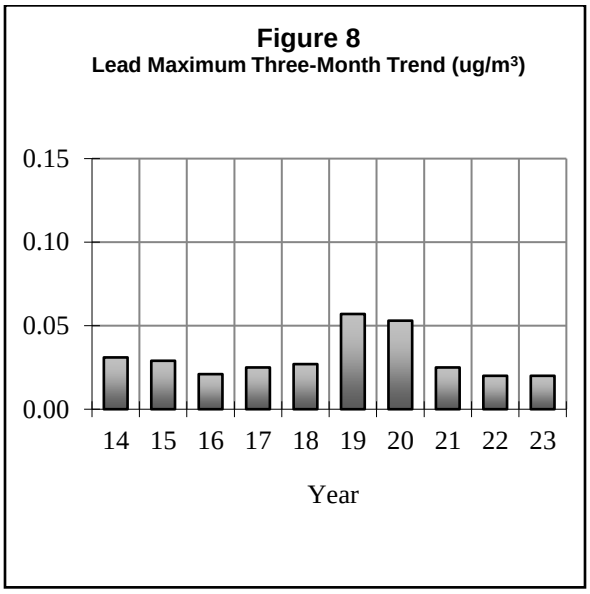


Figure 8 shows the trend of the statewide maximum rolling three-month averages from 2014-2023. All monitoring locations in the State have three-year maximum averages under the national standard for lead (Table B23). The statewide average for all sites was 0.020 ug/m^3 in 2023 compared to 0.020 ug/m^3 in 2022 and 0.025 ug/m^3 in 2021.

FILTER ANALYSIS RESULTS

The total suspended particulate samples were analyzed, in addition to lead, for specific metals (Table B24). Several of the metals analyzed (cadmium, chromium, manganese, and nickel) have known toxic properties. There are currently no state or federal ambient air quality standards for these parameters.

The areas with the highest metals concentrations in Illinois are generally the heavily industrialized areas of the Metro-East (Granite City), south Chicago, and near source-oriented monitors. The highest 24-hour average for nickel was 0.057 ug/m^3 measured in Granite City. The monitor at Chicago Washington High School recorded the highest cadmium concentration with a 24-hour average of 0.005 ug/m^3. The highest 24-hour chromium average was 0.091 ug/m^3 recorded at Chicago Washington High School. The highest 24-hour manganese average was 0.956 ug/m^3 also recorded at Chicago Washington High School.

TOXIC COMPOUNDS

Sampling for toxic compounds other than metals (see Filter Analysis Section, **Table B24**) was conducted at Northbrook and Schiller Park. Most compounds were below the method detection limits. **Table B25** has a listing of various toxic compound maximums and annual averages.

Section 2: Air Quality Index

The Air Quality Index (AQI) is the national standard method for reporting air pollution levels to the public. An index such as the AQI is necessary because there are several air pollutants, each with different typical ambient concentrations and each with different levels of harm, and to report actual concentrations for all of them would be confusing. The AQI uses a single number and a short descriptor to define the air quality in an easy-to-remember and easy-to-understand way, taking all the pollutants into account.

The AQI is based on the short-term federal National Ambient Air Quality Standards (NAAQS), for six of the criteria pollutants, namely:

- Ozone (O_3)
- Sulfur dioxide (SO_2)
- Carbon monoxide (CO)
- Particulate matter (PM_{10})
- Particulate matter ($PM_{2.5}$)
- Nitrogen dioxide (NO_2)

In each case, the short-term primary NAAQS corresponds to 100 on the AQI scale – the top end of the Moderate category. The next concentration above the NAAQS would begin the Unhealthy for Sensitive Groups category at 101 on the AQI scale. **Table 3** lists all the AQI ranges and their descriptor categories. Each category corresponds to a different level of health concern. **Table 4** lists each AQI category and its corresponding meaning.

Unhealthy for Sensitive Groups occurs on occasion for 8-hour ozone, $PM_{2.5}$, and downwind of certain SO_2 sources. Unhealthy air quality is uncommon in Illinois, and Very Unhealthful air quality is rare. There has never been an occurrence of Hazardous AQI in Illinois.

The AQI is computed as follows: data from pollution monitors in an area are collected, and the AQI sub index for each pollutant is computed using formulas derived from the index and concentration relations. Nomograms and tables are also available for this purpose. The data used are:

- O_3 estimate of the highest 8-hour average for that calendar day
- SO_2 the highest 1-hour average with a max AQI of 200. AQI over 200 uses 24-hour averages for that calendar day.
- CO the highest 8-hour average so far that calendar day
- PM_{10} the most recent 24-hour average
- $PM_{2.5}$ estimate of the 24-hour average for that calendar day
- NO_2 the highest 1-hour average

Continuous monitors are utilized for all the pollutants, including PM_{10} and $PM_{2.5}$.

Once all the sub-indices for the various pollutants have been computed, the highest is chosen. That is the AQI for the area and the pollutant giving rise to it is the "critical pollutant." Thus if, for Anytown, Illinois, the following sub-indices were obtained:

O_3 = 45
SO_2 = 23
CO = 19
PM_{10} = 41
$PM_{2.5}$ = 61

Anytown's AQI for that day would be 61, which is in the Moderate category, and the critical pollutant would be particulates ($PM_{2.5}$). If data for one of the pollutants used in computing AQI is missing, the AQI is computed using the data available, ignoring the missing data. It occasionally happens that two pollutants have the same sub index; in such cases there are two critical pollutants.

The Illinois EPA issues an AQI forecast for 14 areas, or sectors, in Illinois (**Table 5**). These correspond to metropolitan areas with populations greater than 100,000.

Table 3: Air Quality Index Categories		
AQI Values	**AQI Descriptor**	**Colors**
***When the AQI is in this range*:**	***...air quality conditions are:***	***...as symbolized by this color:***
0-50	**Good**	**Green**
51-100	**Moderate**	**Yellow**
101-150	**Unhealthy for Sensitive Groups**	**Orange**
151 to 200	**Unhealthy**	**Red**
201 to 300	**Very Unhealthy**	**Purple**
301 to 500	**Hazardous**	**Maroon**

Table 4: Air Quality Index Health Concerns		
Air Quality Index Levels of Health Concern	**Numerical Value**	**Meaning**
Good	**0 to 50**	**Air quality is considered satisfactory, and air pollution poses little or no risk.**
Moderate	**51 to 100**	**Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.**
Unhealthy for Sensitive Groups	**101 to 150**	**Members of sensitive groups may experience health effects. The general public is not likely to be affected.**
Unhealthy	**151 to 200**	**Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.**
Very Unhealthy	**201 to 300**	**Health warnings of emergency conditions. The entire population is more likely to be affected.**
Hazardous	**301 to 500**	**Health alert: everyone may experience more serious health effects.**

Table 5: Air Quality Index Sectors in Illinois	
Sector/Sub-Sector	**Coverage Area**
Lake County	Sub-Sector of Chicago Metropolitan Area including Lake County sites and Cary PM2.5
Chicago	Sub-Sector of Chicago Metropolitan Area including all areas within the city limits of Chicago and including monitoring sites at Springfield Pump Station, Kennedy Near Road, South Water Filtration Plant, Taft High School, and ComEd/Lawndale
North and West Suburbs	Sub-Sector of Chicago Metropolitan Area including parts of Cook, Du Page, and McHenry Counties north of I-290 (Eisenhower Expressway) and outside of the Chicago city limits
South and West Suburbs	Sub-Sector of Chicago Metropolitan Area including parts of Cook and Du Page Counties south of I-290 and outside of the Chicago city limits
Will County/Joliet	Sub-Sector of Chicago Metropolitan Area including Will County only
Aurora-Elgin	Sub-Sector of Chicago Metropolitan Area including the eastern part of Kane County
Rockford	Rockford Metropolitan Area
Rock Island	The Illinois portion of the Quad Cities area
Peoria	Peoria Metropolitan Area
Champaign	Champaign-Urbana Metropolitan Area
Normal	Bloomington-Normal Metropolitan Area
Decatur	Decatur Metropolitan Area
Springfield	Springfield Metropolitan Area
Metro-East St. Louis	The Illinois portion of the St. Louis Metropolitan Area

Illinois EPA AQI forecasts and AQI information can be obtained on EPA's AirNow website at http://www.airnow.gov. The AirNow website shows estimated real-time AQI levels for all sectors in Illinois as well as other areas around the country. AQI information can further be obtained via e-mail and/or cell phones through the EnviroFlash program located at http://illinois.enviroflash.info/signup.cfm. The AirNow website and residents subscribed to EnviroFlash program can also receive alerts when high pollution levels are occurring or expected to occur. Additionally, Illinois AQI forecasts and current AQI levels are picked up and reported by various media outlets, weather websites, and electronic application programs.

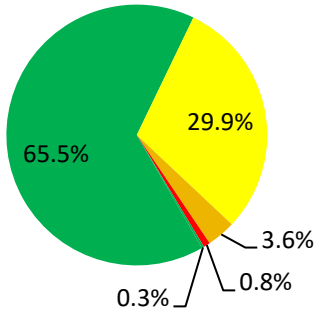
2023 Illinois AQI Sector Summary

In order to present a more representative AQI, 24-hour calendar day FRM $PM_{2.5}$ and PM_{10} values from the total network were used to determine the percentages in the AQI pie charts even though these values were not available for issuing the daily AQI. The pie charts show the percent of days each sector was in a particular category.

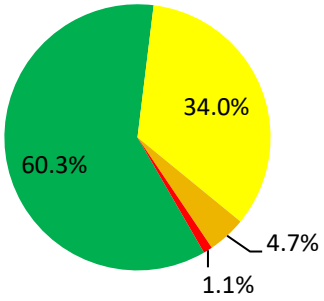
Air quality was in the "Good" and "Moderate" categories most often in 2023. Most sectors had a higher frequency of "Good" than "Moderate" as well as a higher frequency of "Moderate" than "Unhealthy for Sensitive Groups."

In 2023, there were no ozone advisories issued in Illinois. An advisory is declared when ozone levels have reached the level of the former 1-hour standard (0.125 ppm) on a particular day. There were 17 Air Pollution Action Days issued for the Chicago MSA in 2023. Of those, five were statewide Action Days. This compares with one Action Day in 2022 for the Chicago MSA and zero statewide Action Days.

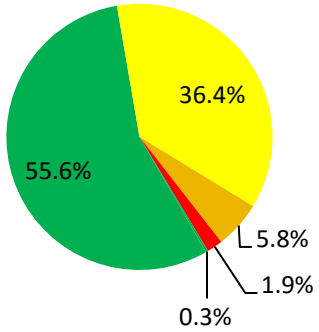
Chicago Sector - Lake County



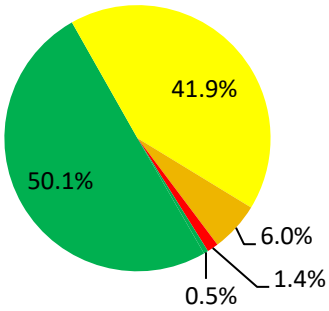
Chicago Sector - Chicago



Chicago Sector - North & West Suburbs



Chicago Sector - South & West Suburbs



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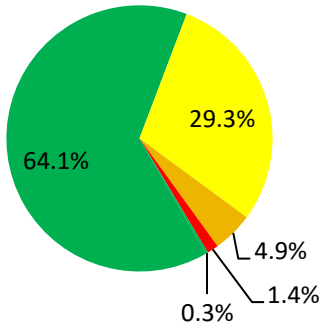
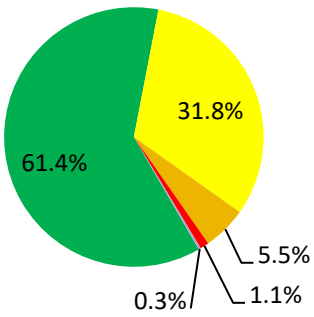
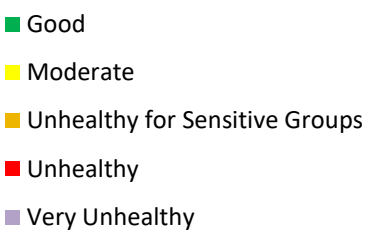


Joliet/Will County





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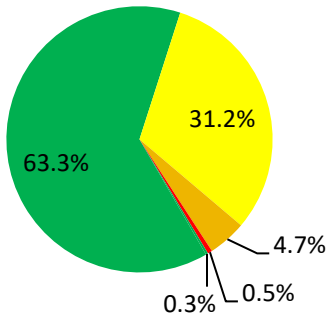

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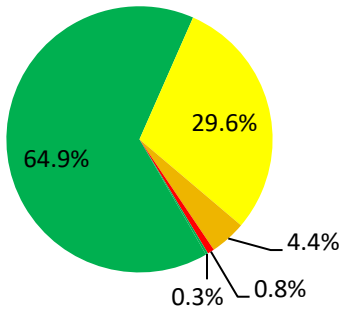

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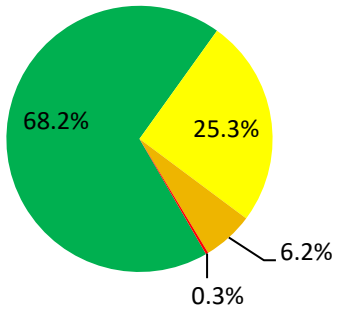

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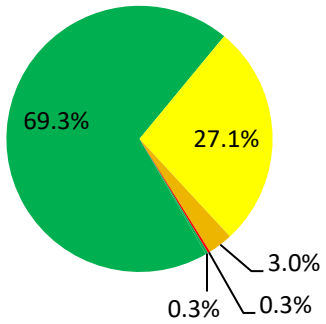

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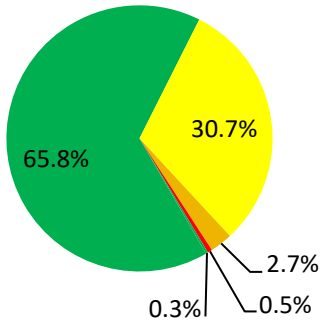

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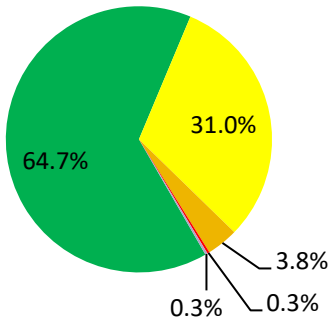
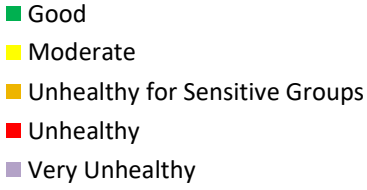
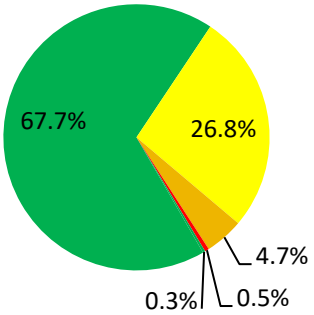




Springfield



Metro-East (St. Louis)

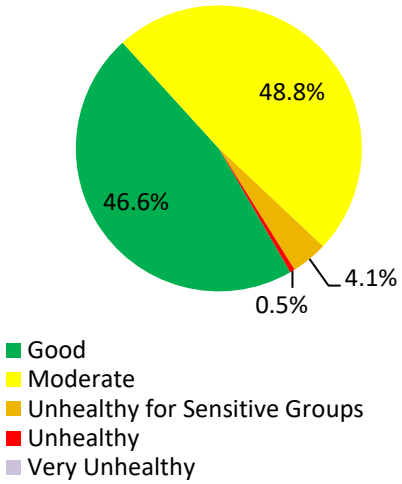


Table 1: Summary of National and Illinois Ambient Air Quality Standards					
Pollutant		**Primary/ Secondary**	**Averaging Time**	**Level**	**Form**
Carbon Monoxide		primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead		primary and secondary	Rolling 3-month average	0.15 µg/m^3	Not to be exceeded
Nitrogen Dioxide		primary	1-hour	100 ppb	98th percentile, averaged over 3 years
		primary and secondary	Annual	53 ppb	Annual Mean
Ozone		primary and secondary	8-hour	0.070 ppm	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years
Particle Pollution	$PM_{2.5}$	primary	Annual	9.0 µg/m^3	Annual mean, averaged over 3 years
		secondary	Annual	15.0 µg/m^3	Annual mean, averaged over 3 years
		primary and secondary	24-hour	35 µg/m^3	98th percentile, averaged over 3 years
	PM_{10}	primary and secondary	24-hour	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide		primary	1-hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year
$PM_{2.5}$ standards are referenced to local conditions of temperature and pressure rather than standard conditions (760 mmHg and 25 degrees Celsius).					

Table 2: Illinois Air Pollution Episode Levels				
Pollutant	**Advisory**	**Yellow Alert**	**Red Alert**	**Emergency**
Particulate Matter (µg/m^3)	2-hour 420	24-hour 350	24-hour 420	24-hour 500
Sulfur Dioxide (ppm)	2-hour 0.30	4-hour 0.30	4-hour 0.35	4-hour 0.40
Carbon Monoxide (ppm)	2-hour 30	8-hour 15	8-hour 30	8-hour 40
Nitrogen Dioxide (ppm)	2-hour 0.40	1-hour 0.60 or 24-hour 0.15	1-hour 1.20 or 24-hour 0.30	1-hour 1.60 or 24-hour 0.40
Ozone (ppm)	1-hour 0.12	1-hour 0.20	1-hour 0.30	1-hour 0.50

Appendix A: Air Sampling Network

Description of the Air Sampling Network

The Illinois air monitoring network is composed of instrumentation owned and operated by both the Illinois EPA and by cooperating local agencies. This network has been designed to measure ambient air quality levels throughout the State of Illinois following federal guidelines.

The network contains both continuous and non-continuous instruments. The continuous instruments operate throughout the year, while non-continuous instruments operate intermittently based USEPA's sampling calendar (3-day, 6-day, or 12-day schedule) This is the official non-continuous sampling schedule used by the Illinois EPA and can be found at https://www.epa.gov/amtic/sampling-schedule-calendar.

In accordance with USEPA air quality monitoring requirements as set forth in Title 40 of the Code of Federal Regulations, Part 58 (40 CFR 58), five types of monitoring stations are used to collect ambient air data. These include State and Local Air Monitoring Stations (SLAMS), National Air Monitoring Stations (NAMS), Photochemical Assessment Monitoring Stations (PAMS), Special Purpose Monitoring Stations (SPMS), and National Core Monitoring Stations (NCore). The types of stations are distinguished from one another on the basis of the general monitoring objectives they are designed to meet.

The SLAMS, NAMS, PAMS, SPMS, and NCORE designations for the sites operated within the State of Illinois are provided in the Illinois Annual Network Plan. An updated air monitoring plan is submitted to USEPA each year for review. This plan can be found at http://epa.illinois.gov/topics/air-quality/outdoor-air/air-monitoring.html.

Table A1 is a summary of the distribution of pollutants through the years along with the total number of instruments and the total number of sites. The site directory is listed in **Table A2** and the monitoring directory is listed in **Table A3.**

1. **State/Local Air Monitoring Station (SLAMS) Network -** The SLAMS network is designed to meet a minimum of four basis monitoring objectives:

   a. To determine the highest concentrations expected to occur in the area covered by the network.

   b. To determine representative concentrations in areas of high population density.

   c. To determine the air quality impact of significant sources or source categories.

   d. To determine general background concentration levels.

2. **National Air Monitoring Station (NAMS) Network -** The NAMS network is a subset of stations selected from the SLAMS network with emphasis given to urban and multisource areas. The primary objectives of the NAMS network are:

   a. To measure expected maximum concentrations.

   b. To measure concentrations in areas where poor air quality is combined with high population exposure.

   c. To provide data useable for the determination of national trends.

   d. To provide data necessary to allow the development of nationwide control strategies.

3. **Photochemical Assessment Monitoring Station (PAMS) Network -** The PAMS network is required in serious, severe, and extreme ozone nonattainment areas to obtain detailed data for ozone, precursors (NOx and VOC), and meteorology. NO_X and VOC sampling is required for the period June - August each year. Ozone sampling occurs during the ozone season, March - October. Network design is based on four monitoring types. In Illinois, PAMS are required in the Chicago metropolitan area only.

   a. Type 1 sites are located upwind of the nonattainment area and are located to measure background levels of ozone and precursors coming into the area

   b. Type 2 sites are located slightly downwind of the major source areas of ozone precursors.

   c. Type 3 sites are located at the area of maximum ozone concentrations.

   d. Type 4 sites are located at the domain edge of the nonattainment area and measure ozone and precursors leaving the area.

4. **Special Purpose Monitoring Station (SPMS) Network -** Any monitoring site that is not a designated SLAMS or NAMS is considered a special purpose monitoring station. Some of the SPMS network objectives are as follows:

   a. To provide data as a supplement to stations used in developing local control strategies, including enforcement actions.

b. To verify the maintenance of ambient standards in areas not covered by the SLAMS/NAMS network.

c. To provide data on non-criteria pollutants.

5. National Core Station (NCore) Network - NCore is a multi-pollutant network that integrates several advanced measurement systems. In Illinois, Northbrook and Bondville are considered NCore sites. A few of the NCore network objectives are as follows:

a. Support for development of emission strategies and accountability of emission strategy progress through tracking long-term trends of pollutants and their precursors.

b. Support of long-term health assessments that contribute to review of national standards.

c. Support to scientific studies ranging across technological, health, and atmospheric process disciplines.

d. Support to ecosystem assessments recognizing that national air quality networks benefit ecosystems assessments.

Table A1
Distribution of Air Monitoring Equipment

Parameter	2023	2022	2021	2020	2019
Particulate Matter Federal Reference Method ($PM_{2.5}$ FRM)	21	22	23	25	25
$PM_{2.5}$ Federal Equivalent Method ($PM_{2.5}$ FEM)	21	20	19	17	17
$PM_{10\text{-}2.5}$ (PM Coarse)	1	1	1	1	1
$PM_{2.5}$ Air Quality Index (non-FEM)	5	5	7	7	7
$PM_{2.5}$ Speciation	4	4	4	4	4
Particulate Matter (PM_{10})	5	5	5	5	5
Lead (Pb)	5	7	7	5	5
Sulfur Dioxide (SO_2)	13	13	13	14	14
Nitrogen Dioxide (NO_2)	8	8	8	7	7
Total Reactive Nitrogen (NO_y)	2	2	2	2	2
Ozone (O_3)	36	37	37	37	37
Carbon Monoxide (CO)	3	3	3	3	4
Volatile Organic Compounds	2	2	2	2	2
Semi Volatile Organic Compounds	1	1	1	1	1
Semi Non-Methane Organic Compounds	1	1	1	1	1
Carbonyls	2	2	2	2	2
Total Instruments	130	133	135	133	134
Total Sites	61	64	64	64	64

Note, the above table includes collocated monitors but does not include meteorological instrumentation.

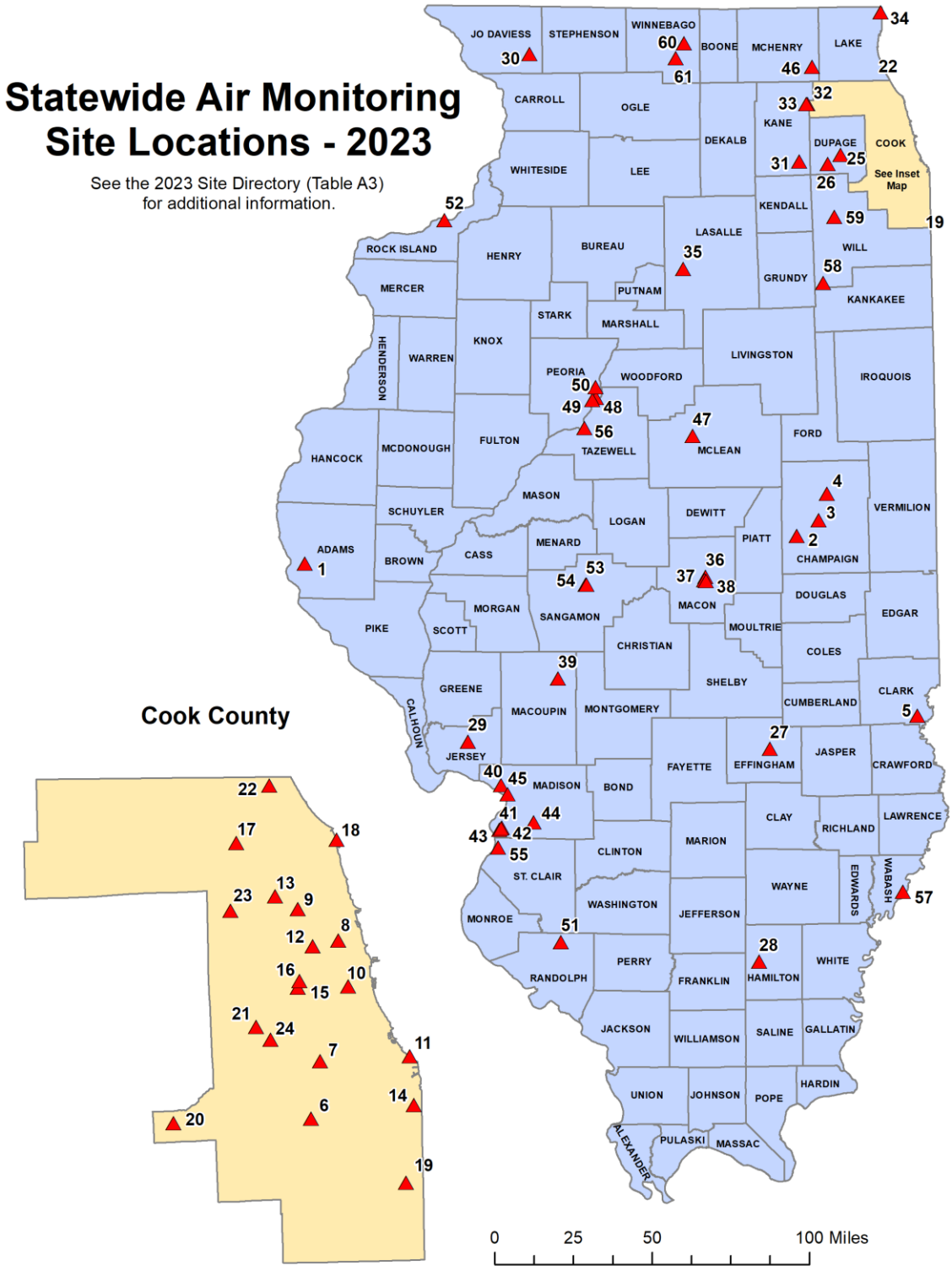

Statewide Air Monitoring Site Locations - 2023
See the 2023 Site Directory (Table A3) for additional information.
Cook County
See Inset Map
JO DAVIESS
STEPHENSON
WINNEBAGO
BOONE
MCHENRY
LAKE
CARROLL
OGLE
DEKALB
KANE
DUPAGE
COOK
WHITESIDE
LEE
KENDALL
LASALLE
WILL
ROCK ISLAND
HENRY
BUREAU
GRUNDY
KANKAKEE
MERCER
PUTNAM
STARK
MARSHALL
HENDERSON
WARREN
KNOX
LIVINGSTON
IROQUOIS
PEORIA
WOODFORD
HANCOCK
MCDONOUGH
FULTON
TAZEWELL
MCLEAN
FORD
MASON
SCHUYLER
LOGAN
DEWITT
VERMILION
ADAMS
BROWN
CASS
MENARD
PIATT
CHAMPAIGN
MORGAN
SANGAMON
MACON
DOUGLAS
EDGAR
PIKE
SCOTT
CHRISTIAN
MOULTRIE
COLES
GREENE
MACOUPIN
MONTGOMERY
SHELBY
CUMBERLAND
CLARK
CALHOUN
JERSEY
FAYETTE
EFFINGHAM
JASPER
CRAWFORD
MADISON
BOND
CLAY
RICHLAND
LAWRENCE
CLINTON
MARION
ST. CLAIR
WAYNE
EDWARDS
WABASH
WASHINGTON
JEFFERSON
MONROE
PERRY
WHITE
RANDOLPH
FRANKLIN
HAMILTON
JACKSON
WILLIAMSON
SALINE
GALLATIN
UNION
JOHNSON
POPE
HARDIN
ALEXANDER
PULASKI
MASSAC
0
25
50
100 Miles

Table A2
Site Directory

Site Map ID	AQS ID	County	City	Address	Latitude Longitude	Owner / Operator
1	17-001-0007	Adams	Quincy	John Wood Comm. College 1301 South 48th St.	+39.91540937 -91.33586832	IL EPA
2	17-019-1001	Champaign	Bondville	State Water Survey Township Rd. 500 E.	+40.052780 -88.372510	IL EPA/US EPA
3	17-019-0006	Champaign	Champaign	Ameren Substation 904 N. Walnut	+40.1237962 -88.229531	IL EPA
4	17-019-0007	Champaign	Thomasboro	North Thomas St.	+40.244913 -88.188519	IL EPA
5	17-023-0001	Clark	West Union	416 S. State Highway 1 & West Union	+39.210883 -87.668416	Indiana DEP
6	17-031-0001	Cook	Alsip	Village Garage 4500 W. 123rd St.	+41.6709919 -87.7324569	CCDES
7	17-031-0076	Cook	Chicago	Com Ed Maintenance Bldg. 7801 Lawndale	+41.75139998 -87.71348815	CCDES
8	17-031-0219	Cook	Chicago	Kennedy Near-road #2 Kennedy Expy. & W. Webster Ave.	+41.920681 -87.674425	IL EPA
9	17-031-0052	Cook	Chicago	Mayfair Pump Station 4850 Wilson Ave.	+41.96548483 -87.74992806	CCDES
10	17-031-0110	Cook	Chicago	Perez Elementary School 1241 19th St.	+41.855771 -87.657932	CCDES
11	17-031-0032	Cook	Chicago	South Water Filtration Plant 3300 E. Cheltenham Pl.	+41.75583241 -87.54534967	CCDES
12	17-031-0057	Cook	Chicago	Springfield Pump Station 1745 N. Springfield Ave.	+41.912739 -87.722673	CCDES
13	17-031-1003	Cook	Chicago	Taft High School 6545 W. Hurlbut St	+41.98433233 -87.7920017	CCDES
14	17-031-0022	Cook	Chicago	Washington High School 3535 E. 114th St.	+41.68716544 -87.53931548	CCDES
15	17-031-4002	Cook	Cicero	Cook County Trailer 1820 S. 51st Ave	+41.85524313 -87.7524697	CCDES
16	17-031-6005	Cook	Cicero	Liberty School 13th St. & 50th Ave.	+41.86442642 -87.74890238	CCDES
17	17-031-4007	Cook	Des Plaines	Regional Office Building 9511 W. Harrison St	+42.06028469 -87.86322543	IL EPA
18	17-031-7002	Cook	Evanston	Water Pumping Station 531 E. Lincoln	+42.062053 -87.675254	IL EPA
19	17-031-0119	Cook	Lansing	Kingery Near-road #1 Kingery Expy. & Torrence Ave.	+41.578603 -87.557392	IL EPA
20	17-031-1601	Cook	Lemont	Cook County Trailer 729 Houston	+41.66812034 -87.99056969	CCDES
21	17-031-1016	Cook	Lyons Township	Village Hall 50th St & Glencoe	+41.801180 -87.832349	IL EPA
22	17-031-4201	Cook	Northbrook	Northbrook Water Plant 750 Dundee Rd.	+42.13999619 -87.79922692	IL EPA
23	17-031-3103	Cook	Schiller Park	IEPA Trailer 4743 Mannheim Rd.	+41.96519348 -87.87626473	IL EPA
24	17-031-3301	Cook	Summit	Graves Elementary School 60th St. & 74th Ave.	+41.78276601 -87.80537679	CCDES

Table A2
Site Directory

Site Map ID	AQS ID	County	City	Address	Latitude Longitude	Owner / Operator
25	17-043-6001	DuPage	Lisle	Morton Arboretum Route 53	+41.81304939 -88.0728269	IL EPA
26	17-043-4002	DuPage	Naperville	City Hall 400 S. Eagle St.	+41.77107094 -88.15253365	IL EPA
27	17-049-1001	Effingham	Effingham	Central Grade School 10421 N. US Hwy. 45	+39.06715932 -88.54893401	IL EPA
28	17-065-0002	Hamilton	Knight Prairie	Ten Mile Creek DNR Office State Route 14	+38.08215516 -88.6249434	IL EPA
29	17-083-0117	Jerseyville	Jerseyville	1320 Maple Summit Rd.	+39.101439 -90.344494	IL EPA
30	17-085-9991	Jo Daviess	Stockton	10952 E. Parker Rd.	+42.2869 -89.9997	US EPA
31	17-089-0007	Kane	Aurora	Health Department 1240 N. Highland	+41.78471651 -88.32937361	IL EPA
32	17-089-0005	Kane	Elgin	Larsen Junior High School 665 Dundee Rd.	+42.04914776 -88.27302929	IL EPA
33	17-089-0003	Kane	Elgin	McKinley School 258 Lovell St.	+42.050403 -88.28001471	IL EPA
34	17-097-1007	Lake	Zion	Camp Logan Illinois Beach State Park	+42.4675733 -87.81004705	IL EPA
35	17-099-0007	La Salle	Oglesby	308 Portland Ave.	+41.29301454 -89.04942498	IL EPA
36	17-115-0013	Macon	Decatur	IEPA Trailer 2200 N. 22nd	+39.866933 -88.925452	IL EPA
37	17-115-0217	Macon	Decatur	Tate & Lyle North 899 N. Folk St.	+39.850712 -88.933635	ERM Inc.
38	17-115-0317	Macon	Decatur	Tate & Lyle South 2200 E. El Dorado St.	+39.846856 -88.923323	ERM Inc.
39	17-117-0002	Macoupin	Nilwood	IEPA Trailer Heaton & Dubois	+39.39607533 -89.80973892	IL EPA
40	17-119-0120	Madison	Alton	Horace Mann School 2708 Edwards St.	+38.901316 -90.146211	IL EPA
41	17-119-0010	Madison	Granite City	Air Products 15th & Madison	+38.69443831 -90.15395426	IL EPA
42	17-119-1007	Madison	Granite City	Fire Station #1 23rd & Madison	+38.70453426 -90.13967484	IL EPA
43	17-119-0024	Madison	Granite City	Gateway Medical Center 2100 Madison Ave.	+38.7006315 -90.14476267	IL EPA
44	17-119-0122	Madison	Maryville	8B Schiber Ct.	+38.730263 -89.950053	IL EPA
45	17-119-3007	Madison	Wood River	Water Treatment Plant 54 N. Walcott	+38.86066947 -90.10585111	IL EPA
46	17-111-0001	McHenry	Cary	Cary Grove High School 1st St. & Three Oaks Rd.	+42.22144166 -88.24220734	IL EPA
47	17-113-2003	McLean	Normal	ISU Physical Plant Main & Gregory	+40.51873537 -88.99689571	IL EPA
48	17-143-0037	Peoria	Peoria	City Office Building 613 N.E. Jefferson	+40.697326 -89.584084	IL EPA
49	17-143-0024	Peoria	Peoria	Fire Station #8 MacArthur & Hurlburt	+40.68742038 -89.60694277	IL EPA

Table A2
Site Directory

Site Map ID	AQS ID	County	City	Address	Latitude Longitude	Owner / Operator
50	17-143-1001	Peoria	Peoria Heights	Peoria Heights High School 508 E. Glen Ave.	+40.74550393 -89.58586902	IL EPA
51	17-157-0001	Randolph	Houston	IEPA Trailer Hickory Grove & Fallview	+38.17627761 -89.78845862	IL EPA
52	17-161-3002	Rock Island	Rock Island	Rock Island Arsenal 32 Rodman Ave.	+41.51472697 -90.51735026	IL EPA
53	17-167-0012	Sangamon	Springfield	Agricultural Building State Fair Grounds	+39.83192087 -89.64416359	IL EPA
54	17-167-0014	Sangamon	Springfield	Illinois Building State Fair Grounds	+39.831522 -89.640926	IL EPA
55	17-163-0010	St. Clair	East St. Louis	RAPS Trailer 13th & Tudor	+38.61203448 -90.16047663	IL EPA
56	17-179-0004	Tazewell	Pekin	Fire Station #3 272 Derby	+40.55643203 -89.65402083	IL EPA
57	17-185-0001	Wabash	Mount Carmel	Division St.	+38.397276 -87.773631	Indiana DEP
58	17-197-1011	Will	Braidwood	Com Ed Training Center 36400 S. Essex Rd.	+41.22153707 -88.19096718	IL EPA
59	17-197-1002	Will	Joliet	Pershing Elementary School Midland & Campbell Sts.	+41.52688509 -88.11647381	IL EPA
60	17-201-2001	Winnebago	Loves Park	Maple Elementary School 1405 Maple Ave.	+42.33498222 -89.0377748	IL EPA
61	17-201-0118	Winnebago	Rockford	Fire Department 204 S. 1st St.	+42.2670002 -89.089170	IL EPA

Table A3
Monitoring Directory

AQS ID	City	CO	NOy	NO2	Ozone	PM10	PM Coarse	PM2.5 FRM	PM2.5 FEM	PM2.5 AQI	PM2.5 Speciation	SO2	VOC	Toxics	TSP Pb, Metals	Meteorological
17-001-0007	Quincy															
17-019-0006	Champaign N. Walnut															
17-019-0007	Thomasboro															
17-019-1001	Bondville	T										T				
17-023-0001	West Union															
17-031-0001	Alsip															
17-031-0022	Chicago Washington High School					C		2								
17-031-0032	Chicago South Water Filtration															
17-031-0052	Chicago Mayfair Pump Station															
17-031-0057	Chicago Springfield Pump Station															
17-031-0076	Chicago Com Ed Maintenance															
17-031-0110	Chicago Perez Elementary														2	
17-031-0119	Lansing Kingery near-road #1															
17-031-0219	Chicago Kennedy near-road #2															
17-031-1003	Chicago Taft High School															
17-031-1016	Lyons Township					C		2								
17-031-1601	Lemont															
17-031-3103	Schiller Park															
17-031-3301	Summit							2								
17-031-4002	Cicero Cook County Trailer															

Active Monitor	Site/Monitor Installed	Site/Monitor Removed	C = Continuous PM_{10}, T = Trace level 2 = 2nd Collocated monitor

Table A3
Monitoring Directory

AQS ID	City	CO	NOy	NO2	Ozone	PM10	PM Coarse	PM2.5 FRM	PM2.5 FEM	PM2.5 AQI	PM2.5 Speciation	SO2	VOC	Toxics	TSP Pb, Metals	Meteorological
17-031-4007	Des Plaines															
17-031-4201	Northbrook	T		P								T				
17-031-6005	Cicero Liberty School															
17-031-7002	Evanston															
17-043-4002	Naperville															
17-043-6001	Lisle															
17-049-1001	Effingham															
17-065-0002	Knight Prairie															
17-083-0117	Jerseyville															
17-085-9991	Stockton															
17-089-0003	Elgin McKinley School															
17-089-0005	Elgin Larsen Jr. High School															
17-089-0007	Aurora															
17-097-1007	Zion															
17-099-0007	Oglesby															
17-111-0001	Cary															
17-113-2003	Normal								2							
17-115-0013	Decatur IEPA Trailer															
17-115-0217	Decatur Tate & Lyle North															
17-115-0317	Decatur Tate & Lyle South															

Active Monitor | Site/Monitor Installed | Site/Monitor Removed | T = Trace level P = PAMS season only. 2 = 2nd Collocated monitor

Table A3
Monitoring Directory

AQS ID	City	CO	NOy	NO2	Ozone	PM10	PM Coarse	PM2.5 FRM	PM2.5 FEM	PM2.5 AQI	PM2.5 Speciation	SO2	VOC	Toxics	TSP Pb, Metals	Meteorological
17-117-0002	Nilwood															
17-119-0120	Alton Horace Mann School															
17-119-0010	Granite City Air Products														2	
17-119-0024	Granite City Gateway Medical Center															
17-119-1007	Granite City Fire Station #1							2								
17-119-0122	Maryville Maintenance Bldg															
17-119-3007	Wood River															
17-119-9991	Highland															
17-143-0024	Peoria Fire Station #8															
17-143-0037	Peoria City Office Building															
17-143-1001	Peoria Heights															
17-157-0001	Houston															
17-161-3002	Rock Island															
17-163-0010	East St. Louis															
17-167-0012	Springfield Agricultural Building															
17-167-0014	Springfield Illinois Building															
17-179-0004	Pekin															
17-185-0001	Mount Carmel															
17-197-1002	Joliet Pershing Elementary															
17-197-1011	Braidwood															
Active Monitor	Site/Monitor Installed	Site/Monitor Removed			C = Continuous PM_{10} 2 = 2nd Collocated monitor											

Table A3
Monitoring Directory

AQS ID	City	CO	NOy	NO2	Ozone	PM10	PM Coarse	PM2.5 FRM	PM2.5 FEM	PM2.5 AQI	PM2.5 Speciation	SO2	VOC	Toxics	TSP Pb, Metals	Meteorological
17-201-0118	Rockford Fire Department															
17-201-2001	Loves Park															

Active Monitor	Site/Monitor Installed	Site/Monitor Removed

Air Quality Data Interpretation

In order to provide a uniform procedure for determining whether a sufficient amount of air quality data has been collected by a sensor in a given time period (year, quarter, month, day, etc.) to accurately represent air quality during that time period, a minimum statistical selection criteria was developed.

In order to calculate an annual average for non-continuous parameters, a minimum of 75% of the data that was scheduled to be collected must be available, i.e., 45 samples per year for an every-six-day schedule (total possible of 60 or 61 samples). Additionally, in order to have proper quarterly balance, each site on an every sixth day schedule should have at least 10 samples per calendar quarter. This provides for a 20% balance in each quarter if the minimum required annual sampling is achieved.

PM_{10} and $PM_{2.5}$ samplers operate on one of three sampling frequencies:

- Every-day sampling (68 samples required each quarter for 75% data capture)
- Every-third-day sampling (23 samples required each quarter for 75% data capture)
- Every-six-day sampling (12 samples required each quarter for 75% data capture).

To calculate an annual PM_{10} or $PM_{2.5}$ mean, arithmetic means are calculated for each quarter in which valid data is recorded in at least 75% of the possible sampling periods. The annual mean is then the arithmetic average of the four quarterly means.

To determine an annual average for continuous data 75% of the total possible yearly observations are necessary, i.e., a minimum of 6570 hours (75% of the hours available) are needed. In order to provide a balance between the respective quarters, each quarter should have at least 1300 hours which is 20% of the 75% minimum annual requirement. To calculate quarterly averages at sites which do not meet the annual criteria, 75% of the total possible observations in a quarter are needed, i.e., a minimum of 1647 hours of 2200 hours available. Monthly averages also require 75% of the total possible observations in a month, i.e., 540 hours as a minimum. Additionally, for short-term running averages (24-hour, 8-hour, and 3-hour) 75% of the data during the particular time period is needed, i.e., 18 hours for a 24-hour average, six hours for an 8-hour average and three hours for a 3-hour average.

For ozone, a valid 8-hour average has at least six valid 1-hour averages within the 8-hour period. The daily maximum 8-hour ozone concentration is based on 17 consecutive moving 8-hour periods in each day, beginning with the 8-hour period from 7:00 a.m. to 3:00 p.m. and ending with the 8-hour period from 11:00 p.m. to 7:00 a.m. The daily maximum value is considered valid if 8-hour averages are available for at least 13 of the 17 consecutive moving 8-hour periods, or if the daily maximum value is greater than the level of the NAAQS. Complete sampling over a three-year period requires an average of 90% valid days with each year having at least 75% valid days.

Data listed as not meeting the minimum statistical selection criteria in this report were so noted after evaluation using the criteria above. Although short term averages (3, 8, 24 hours) have been computed for certain sites not meeting the annual criteria, these averages may not be representative of an entire year's air quality. In certain circumstances where even the 75% criteria is met, the number and/or magnitude of short-term averages may not be directly comparable from one year to the next because of seasonal distributional differences.

For summary purposes, the data is expressed in the number of figures to which the raw data is validated. Extra figures may be carried in the averaging technique, but the result is rounded to the appropriate number of figures. For example, the values 9, 9, and 10 are

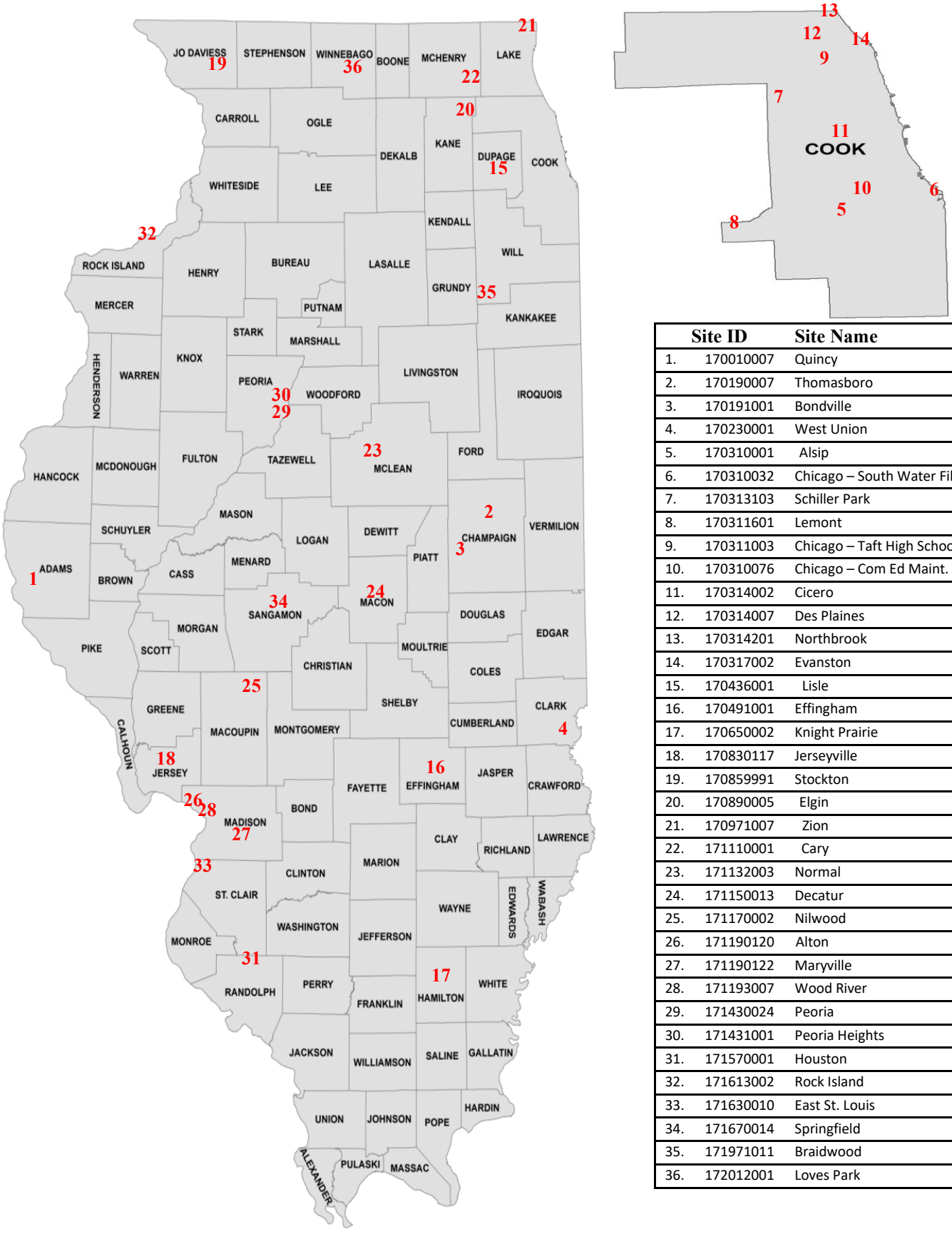
averaged to give 9; whereas the values 9.0, 9.0, and 10.0 are averaged to 9.3. The raw data itself should not be expressed to more significant figures than the sensitivity of the monitoring methodology allows.

In comparing data to the various air quality standards, the data are implicitly rounded to the number of significant figures specified by that standard. For example, to exceed the 0.15 ug/m^3 three-month lead standard, a three-month average value must be 0.155 ug/m^3 or higher; to exceed the 9 ppm CO 8-hour standard, an 8-hour average must be 9.5 ppm or higher. Peak averages, though, will be expressed to the number of significant figures appropriate to that monitoring methodology.

The NAAQS for CO has a short-term standard for ambient air concentrations not to be exceeded more than once per year. SO_2 has a 1-hour standard which is the three-year average of each year's 99^{th} percentile values. NO_2 has a 1-hour standard which is the three-year average of each year's 98^{th} percentile values. PM_{10} has a 24-hour standard which cannot average more than one exceedance over a three-year period (in three years). $PM_{2.5}$ has a 24-hour standard which is a three-year average of each year's 98^{th} percentile values. In the case of ozone, the 8-hour standard is concentration-based and as such is the average of the fourth highest value each year over a three-year period. The standards are promulgated in this manner in order to protect the public from excessive levels of pollution both in terms of acute and chronic health effects.

The following data tables detail and summarize air quality in Illinois. The tables of short-term exceedances list those sites which exceeded any of the short-term primary standards (24 hours or less). The detailed data tables list averages and peak concentrations for all monitoring sites in Illinois.

Ozone Monitoring Sites



	Site ID	Site Name
1.	170010007	Quincy
2.	170190007	Thomasboro
3.	170191001	Bondville
4.	170230001	West Union
5.	170310001	Alsip
6.	170310032	Chicago – South Water Filtration
7.	170313103	Schiller Park
8.	170311601	Lemont
9.	170311003	Chicago – Taft High School
10.	170310076	Chicago – Com Ed Maint. Bldg.
11.	170314002	Cicero
12.	170314007	Des Plaines
13.	170314201	Northbrook
14.	170317002	Evanston
15.	170436001	Lisle
16.	170491001	Effingham
17.	170650002	Knight Prairie
18.	170830117	Jerseyville
19.	170859991	Stockton
20.	170890005	Elgin
21.	170971007	Zion
22.	171110001	Cary
23.	171132003	Normal
24.	171150013	Decatur
25.	171170002	Nilwood
26.	171190120	Alton
27.	171190122	Maryville
28.	171193007	Wood River
29.	171430024	Peoria
30.	171431001	Peoria Heights
31.	171570001	Houston
32.	171613002	Rock Island
33.	171630010	East St. Louis
34.	171670014	Springfield
35.	171971011	Braidwood
36.	172012001	Loves Park

Table B1
1-Hour Ozone Exceedances

EXCEEDANCES OF THE FORMER 1-HOUR PRIMARY STANDARD OF 0.12 PPM		
Date	**City**	**Concentration**
None	None	None
Total Over 0.12 ppm	0	
Total Days Over 0.12 ppm	0	

Table B2
8-Hour Ozone Exceedances

EXCEEDANCES OF THE 8-HOUR PRIMARY STANDARD OF 0.070 PPM						
Date	**City**	**Concentration**		**Date**	**City**	**Concentratio**
04/14/23	Chicago - SWFP	0.083		05/24/23	Decatur	0.079
04/14/23	Cicero	0.074		05/24/23	Knight Prairie	0.074
04/14/23	Des Plaines	0.076		05/24/23	Nilwood	0.079
04/14/23	Evanston	0.083		05/24/23	Normal	0.081
04/14/23	Northbrook	0.082		05/24/23	Peoria	0.086
04/14/23	Zion	0.081		05/24/23	Peoria Heights	0.086
05/11/23	Cary	0.071		05/24/23	Quincy	0.071
05/11/23	Chicago - SWFP	0.075		05/24/23	Rock Island	0.075
05/11/23	Des Plaines	0.075		05/24/23	Springfield - Illinois Bldg	0.080
05/11/23	Elgin	0.072		05/24/23	Thomasboro	0.078
05/11/23	Evanston	0.074		05/24/23	West Union	0.078
05/11/23	Northbrook	0.075		05/28/23	Springfield - Illinois Bldg	0.071
05/11/23	Zion	0.075		05/29/23	Alsip	0.074
05/22/23	Braidwood	0.071		05/29/23	Braidwood	0.075
05/22/23	Cary	0.071		05/29/23	Cary	0.074
05/22/23	Elgin	0.075		05/29/23	Des Plaines	0.073
05/22/23	Lemont	0.071		05/29/23	Elgin	0.078
05/22/23	Peoria Heights	0.072		05/29/23	Lemont	0.073
05/22/23	Stockton	0.072		05/29/23	Lisle	0.071
05/23/23	Alsip	0.080		05/29/23	Schiller Park	0.073
05/23/23	Braidwood	0.079		05/29/23	Alton	0.075
05/23/23	Cary	0.079		05/29/23	East St. Louis	0.076
05/23/23	Chicago - Com Ed	0.076		05/29/23	Houston	0.076
05/23/23	Chicago - SWFP	0.071		05/29/23	Jerseyville	0.076
05/23/23	Chicago - Taft	0.072		05/29/23	Maryville	0.075
05/23/23	Des Plaines	0.077		05/29/23	Wood River	0.074
05/23/23	Elgin	0.082		05/29/23	Bondville	0.072
05/23/23	Evanston	0.071		05/29/23	Nilwood	0.073
05/23/23	Lemont	0.079		05/29/23	Peoria	0.076
05/23/23	Lisle	0.076		05/29/23	Peoria Heights	0.075
05/23/23	Northbrook	0.071		05/29/23	Quincy	0.074
05/23/23	Bondville	0.072		05/29/23	Rock Island	0.079
05/23/23	Decatur	0.072		05/29/23	Rockford - Loves Park	0.071
05/23/23	Normal	0.073		05/29/23	Springfield - Illinois Bldg	0.073
05/23/23	Peoria	0.073		05/29/23	Stockton	0.071
05/23/23	Peoria Heights	0.075		05/30/23	Alsip	0.078
05/23/23	Rock Island	0.075		05/30/23	Braidwood	0.072
05/23/23	Rockford - Loves Park	0.074		05/30/23	Cary	0.074
05/23/23	Springfield - Illinois Bldg	0.071		05/30/23	Chicago - Com Ed	0.071
05/24/23	Braidwood	0.073		05/30/23	Chicago - SWFP	0.072
05/24/23	Alton	0.080		05/30/23	Des Plaines	0.072
05/24/23	East St. Louis	0.077		05/30/23	Elgin	0.079
05/24/23	Houston	0.077		05/30/23	Evanston	0.074
05/24/23	Jerseyville	0.082		05/30/23	Lemont	0.080
05/24/23	Maryville	0.081		05/30/23	Lisle	0.072
05/24/23	Wood River	0.077		05/30/23	Zion	0.075
05/24/23	Bondville	0.081		05/30/23	Alton	0.076

Table B2
8-Hour Ozone Exceedances

EXCEEDANCES OF THE 8-HOUR PRIMARY STANDARD OF 0.070 PPM						
Date	**City**	**Concentration**		**Date**	**City**	**Concentratio**
05/30/23	East St. Louis	0.076		06/02/23	Zion	0.078
05/30/23	Houston	0.073		06/02/23	Alton	0.073
05/30/23	Jerseyville	0.078		06/02/23	Houston	0.072
05/30/23	Maryville	0.076		06/02/23	Jerseyville	0.075
05/30/23	Wood River	0.074		06/02/23	Maryville	0.075
05/30/23	Decatur	0.075		06/02/23	Wood River	0.073
05/30/23	Effingham	0.078		06/02/23	Bondville	0.077
05/30/23	Knight Prairie	0.073		06/02/23	Decatur	0.079
05/30/23	Normal	0.071		06/02/23	Effingham	0.076
05/30/23	Peoria	0.076		06/02/23	Knight Prairie	0.072
05/30/23	Peoria Heights	0.077		06/02/23	Nilwood	0.075
05/30/23	Quincy	0.076		06/02/23	Normal	0.080
05/30/23	Rock Island	0.077		06/02/23	Peoria	0.080
05/30/23	Rockford - Loves Park	0.080		06/02/23	Peoria Heights	0.080
05/30/23	Springfield - Illinois Bldg	0.075		06/02/23	Rockford - Loves Park	0.080
05/30/23	Stockton	0.074		06/02/23	Springfield - Illinois Bldg	0.077
05/31/23	Alton	0.074		06/02/23	Thomasboro	0.075
05/31/23	Jerseyville	0.084		06/02/23	West Union	0.081
05/31/23	Wood River	0.072		06/03/23	Alsip	0.078
05/31/23	Decatur	0.074		06/03/23	Braidwood	0.080
05/31/23	Nilwood	0.071		06/03/23	Cary	0.073
05/31/23	Peoria	0.075		06/03/23	Chicago - Com Ed	0.075
05/31/23	Peoria Heights	0.075		06/03/23	Chicago - Taft	0.071
05/31/23	Springfield - Illinois Bldg	0.073		06/03/23	Cicero	0.074
05/31/23	Stockton	0.076		06/03/23	Des Plaines	0.074
06/01/23	Cary	0.079		06/03/23	Elgin	0.076
06/01/23	Chicago - Com Ed	0.072		06/03/23	Lemont	0.081
06/01/23	Chicago - Taft	0.073		06/03/23	Lisle	0.072
06/01/23	Cicero	0.073		06/03/23	Schiller Park	0.073
06/01/23	Des Plaines	0.078		06/03/23	Alton	0.082
06/01/23	Elgin	0.071		06/03/23	East St. Louis	0.084
06/01/23	Evanston	0.072		06/03/23	Houston	0.087
06/01/23	Zion	0.073		06/03/23	Jerseyville	0.084
06/01/23	Rockford - Loves Park	0.071		06/03/23	Maryville	0.083
06/02/23	Alsip	0.085		06/03/23	Wood River	0.081
06/02/23	Braidwood	0.086		06/03/23	Bondville	0.079
06/02/23	Cary	0.083		06/03/23	Decatur	0.082
06/02/23	Chicago - Com Ed	0.083		06/03/23	Effingham	0.076
06/02/23	Chicago - SWFP	0.073		06/03/23	Knight Prairie	0.077
06/02/23	Chicago - Taft	0.077		06/03/23	Nilwood	0.079
06/02/23	Cicero	0.079		06/03/23	Normal	0.078
06/02/23	Des Plaines	0.082		06/03/23	Peoria	0.083
06/02/23	Elgin	0.087		06/03/23	Peoria Heights	0.082
06/02/23	Evanston	0.076		06/03/23	Quincy	0.081
06/02/23	Lemont	0.085		06/03/23	Rock Island	0.083
06/02/23	Lisle	0.082		06/03/23	Rockford - Loves Park	0.076
06/02/23	Schiller Park	0.074		06/03/23	Springfield - Illinois Bldg	0.081

Table B2
8-Hour Ozone Exceedances

EXCEEDANCES OF THE 8-HOUR PRIMARY STANDARD OF 0.070 PPM						
Date	**City**	**Concentration**		**Date**	**City**	**Concentratio**
06/03/23	Stockton	0.077		06/10/23	Houston	0.082
06/03/23	Thomasboro	0.076		06/10/23	Jerseyville	0.083
06/03/23	West Union	0.075		06/10/23	Maryville	0.078
06/04/23	Decatur	0.072		06/10/23	Wood River	0.078
06/04/23	Peoria	0.074		06/10/23	Bondville	0.077
06/04/23	Peoria Heights	0.073		06/10/23	Decatur	0.079
06/04/23	Rock Island	0.077		06/10/23	Effingham	0.079
06/04/23	Springfield - Illinois Bldg	0.072		06/10/23	Knight Prairie	0.075
06/05/23	Effingham	0.071		06/10/23	Nilwood	0.074
06/05/23	Rock Island	0.074		06/10/23	Normal	0.077
06/06/23	Alton	0.079		06/10/23	Peoria	0.077
06/06/23	East St. Louis	0.093		06/10/23	Peoria Heights	0.079
06/06/23	Houston	0.088		06/10/23	Rock Island	0.076
06/06/23	Jerseyville	0.076		06/10/23	Rockford - Loves Park	0.072
06/06/23	Maryville	0.086		06/10/23	Springfield - Illinois Bldg	0.079
06/06/23	Wood River	0.081		06/10/23	Thomasboro	0.072
06/06/23	Bondville	0.075		06/14/23	East St. Louis	0.077
06/06/23	Decatur	0.079		06/14/23	Houston	0.079
06/06/23	Effingham	0.082		06/14/23	Jerseyville	0.072
06/06/23	Knight Prairie	0.081		06/14/23	Maryville	0.074
06/06/23	Nilwood	0.076		06/14/23	Wood River	0.074
06/06/23	Normal	0.073		06/14/23	Knight Prairie	0.071
06/06/23	Peoria	0.079		06/14/23	Quincy	0.072
06/06/23	Peoria Heights	0.079		06/15/23	Alton	0.073
06/06/23	Quincy	0.080		06/15/23	East St. Louis	0.076
06/06/23	Rock Island	0.075		06/15/23	Houston	0.080
06/06/23	Springfield - Illinois Bldg	0.075		06/15/23	Jerseyville	0.072
06/06/23	West Union	0.076		06/15/23	Maryville	0.078
06/09/23	East St. Louis	0.074		06/15/23	Wood River	0.074
06/09/23	Houston	0.075		06/15/23	Bondville	0.072
06/09/23	Jerseyville	0.071		06/15/23	Decatur	0.071
06/09/23	Maryville	0.073		06/15/23	Effingham	0.073
06/09/23	Wood River	0.071		06/15/23	Knight Prairie	0.074
06/10/23	Alsip	0.072		06/15/23	Peoria	0.074
06/10/23	Braidwood	0.074		06/15/23	Peoria Heights	0.075
06/10/23	Cary	0.071		06/15/23	Quincy	0.073
06/10/23	Chicago - Com Ed	0.071		06/15/23	Springfield - Illinois Bldg	0.073
06/10/23	Chicago - SWFP	0.084		06/17/23	Elgin	0.076
06/10/23	Cicero	0.073		06/17/23	Lemont	0.073
06/10/23	Des Plaines	0.077		06/17/23	Lisle	0.072
06/10/23	Elgin	0.073		06/17/23	Alton	0.074
06/10/23	Evanston	0.086		06/17/23	East St. Louis	0.072
06/10/23	Lemont	0.071		06/17/23	Houston	0.074
06/10/23	Northbrook	0.086		06/17/23	Jerseyville	0.073
06/10/23	Zion	0.084		06/17/23	Maryville	0.075
06/10/23	Alton	0.078		06/17/23	Wood River	0.073
06/10/23	East St. Louis	0.077		06/17/23	Effingham	0.071

Table B2
8-Hour Ozone Exceedances

EXCEEDANCES OF THE 8-HOUR PRIMARY STANDARD OF 0.070 PPM						
Date	**City**	**Concentration**		**Date**	**City**	**Concentratio**
06/18/23	Alsip	0.081		06/20/23	Nilwood	0.073
06/18/23	Cary	0.079		06/20/23	Normal	0.074
06/18/23	Chicago - Com Ed	0.079		06/20/23	Peoria	0.080
06/18/23	Chicago - SWFP	0.078		06/20/23	Peoria Heights	0.079
06/18/23	Chicago - Taft	0.072		06/20/23	Quincy	0.077
06/18/23	Cicero	0.080		06/20/23	Rock Island	0.083
06/18/23	Des Plaines	0.083		06/20/23	Rockford - Loves Park	0.073
06/18/23	Elgin	0.078		06/20/23	Springfield - Illinois Bldg	0.074
06/18/23	Evanston	0.075		06/20/23	Stockton	0.076
06/18/23	Lemont	0.074		06/21/23	Alsip	0.080
06/18/23	Lisle	0.072		06/21/23	Braidwood	0.074
06/18/23	Northbrook	0.081		06/21/23	Cary	0.072
06/18/23	Schiller Park	0.081		06/21/23	Chicago - SWFP	0.076
06/18/23	Zion	0.077		06/21/23	Cicero	0.075
06/18/23	Peoria	0.073		06/21/23	Des Plaines	0.073
06/18/23	Peoria Heights	0.074		06/21/23	Elgin	0.076
06/18/23	Rockford - Loves Park	0.073		06/21/23	Evanston	0.073
06/19/23	Alsip	0.081		06/21/23	Lemont	0.079
06/19/23	Braidwood	0.078		06/21/23	Lisle	0.078
06/19/23	Cary	0.079		06/21/23	Northbrook	0.076
06/19/23	Chicago - Com Ed	0.077		06/21/23	Schiller Park	0.071
06/19/23	Chicago - SWFP	0.074		06/21/23	Zion	0.076
06/19/23	Chicago - Taft	0.072		06/21/23	Chicago - Com Ed	0.074
06/19/23	Cicero	0.078		06/21/23	Peoria	0.071
06/19/23	Des Plaines	0.078		06/21/23	Peoria Heights	0.071
06/19/23	Elgin	0.081		06/22/23	Alsip	0.071
06/19/23	Evanston	0.075		06/22/23	Lemont	0.071
06/19/23	Lemont	0.080		06/22/23	Northbrook	0.072
06/19/23	Northbrook	0.080		06/22/23	Peoria	0.080
06/19/23	Schiller Park	0.076		06/22/23	Peoria Heights	0.080
06/19/23	Zion	0.077		06/22/23	Quincy	0.071
06/19/23	Peoria	0.075		06/22/23	Rock Island	0.073
06/19/23	Peoria Heights	0.074		06/22/23	Springfield - Illinois Bldg	0.071
06/19/23	Quincy	0.075		06/23/23	Braidwood	0.082
06/19/23	Rock Island	0.084		06/23/23	Chicago - SWFP	0.074
06/19/23	Rockford - Loves Park	0.080		06/23/23	Elgin	0.073
06/19/23	Stockton	0.079		06/23/23	Evanston	0.071
06/20/23	Braidwood	0.075		06/23/23	Lisle	0.071
06/20/23	Elgin	0.072		06/23/23	Northbrook	0.072
06/20/23	Lemont	0.073		06/23/23	Alton	0.071
06/20/23	Alton	0.074		06/23/23	East St. Louis	0.073
06/20/23	East St. Louis	0.072		06/23/23	Jerseyville	0.073
06/20/23	Houston	0.073		06/23/23	Maryville	0.074
06/20/23	Jerseyville	0.076		06/23/23	Wood River	0.072
06/20/23	Maryville	0.075		06/23/23	Decatur	0.071
06/20/23	Wood River	0.074		06/23/23	Nilwood	0.074
06/20/23	Decatur	0.071		06/23/23	Peoria	0.072

Table B2
8-Hour Ozone Exceedances

EXCEEDANCES OF THE 8-HOUR PRIMARY STANDARD OF 0.070 PPM						
Date	**City**	**Concentration**		**Date**	**City**	**Concentratio**
06/23/23	Peoria Heights	0.072		06/28/23	Des Plaines	0.082
06/23/23	Quincy	0.076		06/28/23	Elgin	0.084
06/23/23	Rock Island	0.079		06/28/23	Evanston	0.078
06/23/23	Springfield - Illinois Bldg	0.075		06/28/23	Lemont	0.080
06/24/23	Alsip	0.082		06/28/23	Lisle	0.082
06/24/23	Braidwood	0.071		06/28/23	Northbrook	0.089
06/24/23	Cary	0.086		06/28/23	Zion	0.077
06/24/23	Chicago - Com Ed	0.078		06/28/23	Alton	0.071
06/24/23	Chicago - Taft	0.073		06/28/23	Jerseyville	0.072
06/24/23	Cicero	0.078		06/28/23	Maryville	0.073
06/24/23	Des Plaines	0.083		06/28/23	Wood River	0.071
06/24/23	Elgin	0.082		06/28/23	Decatur	0.081
06/24/23	Lemont	0.083		06/28/23	Effingham	0.081
06/24/23	Lisle	0.086		06/28/23	Nilwood	0.075
06/24/23	Northbrook	0.076		06/28/23	Normal	0.076
06/24/23	Schiller Park	0.081		06/28/23	Peoria	0.078
06/24/23	Zion	0.073		06/28/23	Peoria Heights	0.081
06/24/23	Alton	0.071		06/28/23	Quincy	0.072
06/24/23	Jerseyville	0.072		06/28/23	Rock Island	0.078
06/24/23	Wood River	0.072		06/28/23	Rockford - Loves Park	0.086
06/24/23	Bondville	0.078		06/28/23	Springfield - Illinois Bldg	0.077
06/24/23	Decatur	0.077		06/28/23	Stockton	0.087
06/24/23	Effingham	0.077		06/28/23	Thomasboro	0.075
06/24/23	Normal	0.075		06/29/23	Cary	0.076
06/24/23	Peoria	0.078		06/29/23	Elgin	0.072
06/24/23	Peoria Heights	0.080		06/29/23	Northbrook	0.072
06/24/23	Rock Island	0.071		06/29/23	Zion	0.075
06/24/23	Rockford - Loves Park	0.075		06/29/23	Rockford - Loves Park	0.079
06/24/23	Springfield - Illinois Bldg	0.074		06/30/23	Cicero	0.071
06/24/23	Stockton	0.073		06/30/23	East St. Louis	0.075
06/24/23	Thomasboro	0.074		06/30/23	Knight Prairie	0.072
06/24/23	West Union	0.071		07/01/23	Cicero	0.071
06/27/23	Braidwood	0.080		07/04/23	Chicago - SWFP	0.079
06/27/23	Lemont	0.076		07/04/23	Evanston	0.075
06/27/23	Lisle	0.073		07/04/23	Northbrook	0.071
06/27/23	Normal	0.071		07/23/23	Chicago - SWFP	0.075
06/27/23	Peoria	0.074		07/24/23	Lemont	0.072
06/27/23	Peoria Heights	0.071		07/25/23	Alsip	0.084
06/27/23	Rock Island	0.077		07/25/23	Cary	0.084
06/27/23	Rockford - Loves Park	0.076		07/25/23	Chicago - Com Ed	0.083
06/28/23	Alsip	0.080		07/25/23	Chicago - SWFP	0.089
06/28/23	Braidwood	0.076		07/25/23	Chicago - Taft	0.087
06/28/23	Cary	0.090		07/25/23	Cicero	0.085
06/28/23	Chicago - Com Ed	0.080		07/25/23	Des Plaines	0.093
06/28/23	Chicago - SWFP	0.079		07/25/23	Elgin	0.086
06/28/23	Chicago - Taft	0.071		07/25/23	Evanston	0.092
06/28/23	Cicero	0.081		07/25/23	Lemont	0.078

Table B2
8-Hour Ozone Exceedances

EXCEEDANCES OF THE 8-HOUR PRIMARY STANDARD OF 0.070 PPM						
Date	**City**	**Concentration**		**Date**	**City**	**Concentratio**
07/25/23	Lisle	0.088				
07/25/23	Northbrook	0.099				
07/25/23	Schiller Park	0.084				
07/25/23	Zion	0.097				
07/25/23	Rockford - Loves Park	0.073				
07/27/23	Cary	0.086				
07/27/23	Elgin	0.095				
07/27/23	Lemont	0.083				
07/27/23	Lisle	0.088				
07/27/23	Schiller Park	0.072				
07/28/23	Chicago - Taft	0.071				
07/28/23	Northbrook	0.072				
08/02/23	Northbrook	0.073				
08/03/23	Alsip	0.083				
08/03/23	Chicago - Com Ed	0.090				
08/03/23	Chicago - SWFP	0.083				
08/03/23	Chicago - Taft	0.090				
08/03/23	Cicero	0.085				
08/03/23	Des Plaines	0.086				
08/03/23	Evanston	0.081				
08/03/23	Lemont	0.072				
08/03/23	Lisle	0.075				
08/03/23	Northbrook	0.092				
08/03/23	Schiller Park	0.082				
08/03/23	Zion	0.085				
08/20/23	Lemont	0.075				
08/22/23	Cary	0.074				
08/22/23	Elgin	0.071				
Total Over 0.070 ppm				498		
Total Days Over 0.070 ppm				42		

Table B3
Ozone Highs

AQS ID	City	Number Of Days 8-Hour Greater Than 0.070 ppm			Fourth Highest Samples 1-Hour (ppm)				Fourth Highest Samples 8-Hour (ppm)			
		2023	2022	2021								
17-001-0007	Quincy	12	0	0	0.084	0.083	0.082	0.080	0.081	0.080	0.077	0.076
17-019-0007	Thomasboro	6	1	0	0.085	0.084	0.080	0.080	0.078	0.076	0.075	0.075
17-019-1001	Bondville	9	1	0	0.087	0.083	0.082	0.082	0.081	0.079	0.078	0.077
17-023-0001	West Union	5	1	0	0.092	0.081	0.080	0.079	0.081	0.078	0.076	0.075
17-031-0001	Alsip	14	4	2	0.093	0.092	0.091	0.089	0.085	0.084	0.083	0.082
17-031-0032	Chicago South Water Filtration	15	4	10	0.100	0.089	0.088	0.087	0.089	0.084	0.083	0.083
17-031-0076	Chicago Com Ed Maintenance	13	4	3	0.103	0.095	0.090	0.090	0.090	0.083	0.083	0.080
17-031-1003	Chicago Taft High School	11	3	2	0.103	0.093	0.086	0.086	0.090	0.087	0.077	0.073
17-031-1601	Lemont	21	4	4	0.109	0.093	0.092	0.091	0.085	0.083	0.083	0.081
17-031-3103	Schiller Park	10	1	0	0.100	0.100	0.095	0.089	0.084	0.082	0.081	0.081
17-031-4002	Cicero Cook County Trailer	14	3	2	0.100	0.099	0.092	0.091	0.085	0.085	0.081	0.080
17-031-4007	Des Plaines	16	3	2	0.109	0.108	0.100	0.097	0.093	0.086	0.083	0.083
17-031-4201	Northbrook	17	3	8	0.107	0.105	0.102	0.093	0.099	0.092	0.089	0.086
17-031-7002	Evanston	15	4	11	0.103	0.095	0.089	0.087	0.092	0.086	0.083	0.081
17-043-6001	Lisle	15	1	2	0.105	0.097	0.091	0.090	0.088	0.088	0.086	0.082
17-049-1001	Effingham	10	0	0	0.087	0.085	0.083	0.082	0.082	0.081	0.079	0.078
17-065-0002	Knight Prairie	9	0	1	0.083	0.080	0.079	0.078	0.081	0.077	0.075	0.074
17-083-0117	Jerseyville	16	5	2	0.094	0.088	0.087	0.087	0.084	0.084	0.083	0.082
17-085-9991	Stockton	9	0	0	0.092	0.083	0.080	0.080	0.087	0.079	0.077	0.076
17-089-0005	Elgin Larsen Jr. High School	21	3	0	0.119	0.093	0.092	0.090	0.095	0.087	0.086	0.084
17-097-1007	Zion	14	3	9	0.113	0.095	0.092	0.091	0.097	0.085	0.084	0.081
17-111-0001	Cary	18	3	2	0.112	0.103	0.102	0.097	0.090	0.086	0.086	0.084
17-113-2003	Normal	11	2	0	0.085	0.084	0.083	0.083	0.081	0.080	0.078	0.077
17-115-0013	Decatur IEPA Trailer	14	2	0	0.087	0.085	0.085	0.084	0.082	0.081	0.079	0.079
17-117-0002	Nilwood	10	2	0	0.085	0.083	0.081	0.080	0.079	0.079	0.076	0.075

Table B3
Ozone Highs

AQS ID	City	Number Of Days 8-Hour Greater Than 0.070 ppm			Fourth Highest Samples 1-Hour (ppm)				Fourth Highest Samples 8-Hour (ppm)			
		2023	2022	2021								
17-119-0120	Alton	14	6	3	0.086	0.086	0.084	0.083	0.082	0.080	0.079	0.078
17-119-0122	Maryville	14	1	3	0.090	0.089	0.084	0.083	0.086	0.083	0.081	0.078
17-119-3007	Wood River	16	6	2	0.086	0.085	0.085	0.084	0.081	0.081	0.078	0.077
17-119-9991	Highland	-	3	0	-	-	-	-	-	-	-	-
17-143-0024	Peoria Fire Station #8	20	0	1	0.093	0.090	0.088	0.086	0.086	0.083	0.080	0.080
17-143-1001	Peoria Heights	21	0	0	0.094	0.088	0.088	0.086	0.086	0.082	0.081	0.080
17-157-0001	Houston	12	2	1	0.094	0.092	0.087	0.086	0.088	0.087	0.082	0.080
17-161-3002	Rock Island	16	0	2	0.093	0.089	0.087	0.087	0.084	0.083	0.083	0.079
17-163-0010	East St. Louis	13	1	2	0.099	0.092	0.090	0.082	0.093	0.084	0.077	0.077
17-167-0014	Springfield	17	3	0	0.085	0.085	0.083	0.083	0.081	0.080	0.079	0.077
17-197-1011	Braidwood	15	2	2	0.099	0.093	0.092	0.088	0.086	0.082	0.080	0.080
17-201-2001	Loves Park	15	0	0	0.092	0.091	0.088	0.087	0.086	0.080	0.080	0.080
Statewide Average					0.095	0.090	0.087	0.086	0.086	0.082	0.080	0.079
Total Over 0.070 ppm		498	81	76								
Total Days Over 0.070 ppm		42	16	23								

Table B4
Ozone Design Values

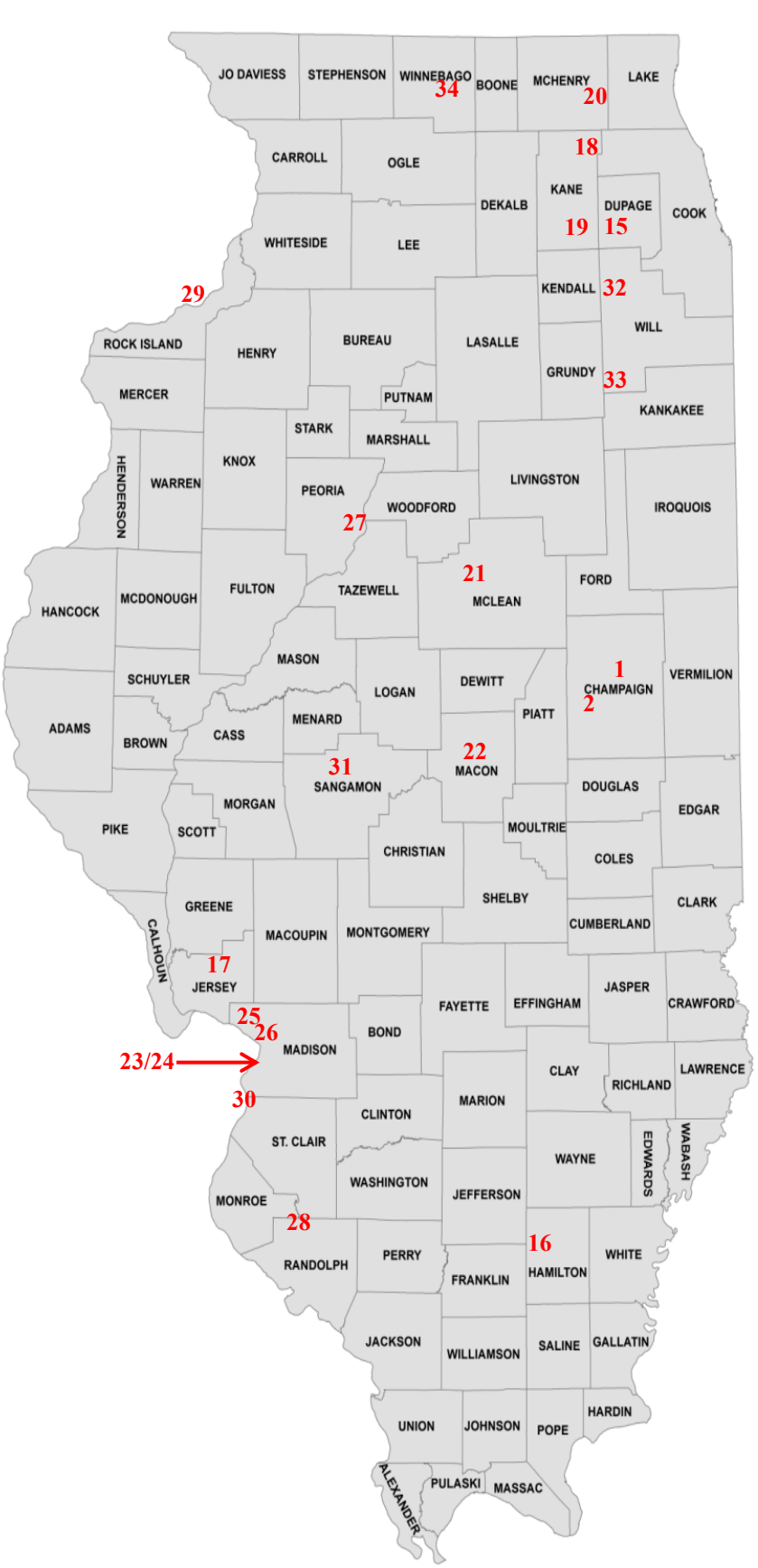
AQS ID	City	Fourth High 8-Hour Concentrations (ppm)					Design Values* (ppm)		
		2023	2022	2021	2020	2019	2021-2023	2020-2022	2019-2021
17-001-0007	Quincy	0.076	0.056	0.064	0.064	0.062	0.065	0.061	0.063
17-019-0007	Thomasboro	0.075	0.064	0.064	0.069	0.062	0.067	0.065	0.065
17-019-1001	Bondville	0.077	0.068	0.060	0.062	0.058	0.068	0.063	0.060
17-023-0001	West Union	0.075	0.062	0.062	0.060	0.060	0.066	0.061	0.060
17-031-0001	Alsip	0.082	0.073	0.068	0.076	0.070	**0.074**	**0.072**	**0.071**
17-031-0032	Chicago South Water Filtration	0.083	0.072	0.077	0.077	0.071	**0.077**	**0.075**	**0.075**
17-031-0076	Chicago Com Ed Maintenance	0.080	0.074	0.070	0.068	0.065	**0.074**	0.070	0.067
17-031-1003	Chicago Taft High School	0.073	0.070	0.068	0.077	0.069	0.070	**0.071**	**0.071**
17-031-1601	Lemont	0.081	0.071	0.072	0.078	0.068	**0.074**	**0.073**	**0.072**
17-031-3103	Schiller Park	0.081	0.062	0.060	0.068	0.064	0.067	0.063	0.064
17-031-4002	Cicero Cook County Trailer	0.080	0.068	0.067	0.079	0.064	**0.071**	**0.071**	0.070
17-031-4007	Des Plaines	0.083	0.070	0.069	0.072	0.066	**0.074**	0.070	0.069
17-031-4201	Northbrook	0.086	0.070	0.075	0.079	0.069	**0.077**	**0.074**	**0.074**
17-031-7002	Evanston	0.081	0.071	0.078	0.074	0.069	**0.076**	**0.074**	**0.073**
17-043-6001	Lisle	0.082	0.068	0.069	0.073	0.070	**0.073**	0.070	0.070
17-049-1001	Effingham	0.078	0.067	0.060	0.062	0.063	0.068	0.063	0.061
17-065-0002	Knight Prairie	0.074	0.064	0.066	0.067	0.064	0.068	0.065	0.065
17-083-0117	Jerseyville	0.082	0.072	0.065	0.062	0.069	**0.073**	0.066	0.065
17-085-9991	Stockton	0.076	0.059	0.064	0.063	0.059	0.066	0.062	0.062
17-089-0005	Elgin Larsen Jr. High School	0.084	0.070	0.068	0.073	0.071	**0.074**	0.070	0.070
17-097-1007	Zion	0.081	0.070	0.077	0.076	0.066	**0.076**	**0.074**	**0.073**
17-111-0001	Cary	0.084	0.070	0.069	0.076	0.070	**0.074**	**0.071**	**0.071**
17-113-2003	Normal	0.077	0.069	0.062	0.070	0.063	0.069	0.067	0.065
17-115-0013	Decatur Illinois EPA Trailer	0.079	0.065	0.064	0.065	0.063	0.069	0.064	0.064
17-117-0002	Nilwood	0.075	0.062	0.062	0.063	0.063	0.066	0.062	0.062

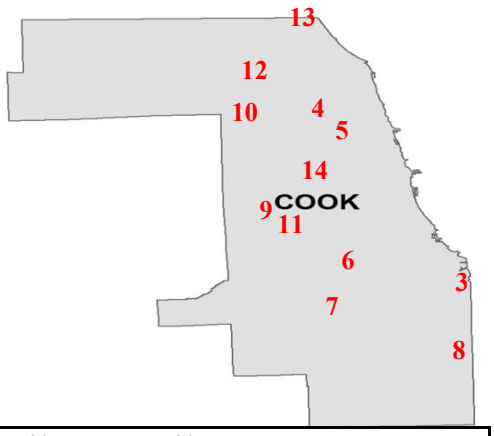
Table B4
Ozone Design Values

AQS ID	City	Fourth High 8-Hour Concentrations (ppm)					Design Values* (ppm)		
		2023	2022	2021	2020	2019	2021-2023	2020-2022	2019-2021
17-119-0120	Alton	0.078	0.076	0.070	0.069	0.067	**0.074**	**0.071**	0.068
17-119-0122	Maryville	0.078	0.067	0.070	0.067	0.064	**0.071**	0.068	0.067
17-119-3007	Wood River	0.077	0.072	0.070	0.069	0.070	**0.073**	0.070	0.069
17-119-9991	Highland	-	0.070	0.067	0.066	0.062	-	0.067	0.064
17-143-0024	Peoria Fire Station #8	0.080	0.059	0.064	0.064	0.062	0.067	0.062	0.063
17-143-1001	Peoria Heights	0.080	0.065	0.062	0.070	0.064	0.069	0.065	0.065
17-157-0001	Houston	0.080	0.068	0.065	0.061	0.060	**0.071**	0.064	0.062
17-161-3002	Rock Island	0.079	0.061	0.066	0.063	0.066	0.068	0.063	0.065
17-163-0010	East St. Louis	0.077	0.067	0.066	0.065	0.064	0.070	0.066	0.065
17-167-0014	Springfield State Fairgrounds	0.077	0.064	0.057	0.067	0.062	0.066	0.062	0.062
17-197-1011	Braidwood	0.080	0.064	0.065	0.067	0.060	0.069	0.065	0.064
17-201-2001	Loves Park	0.080	0.066	0.067	0.067	0.066	**0.071**	0.066	0.066
Statewide Average		0.079	0.067	0.067	0.069	0.065	0.071	0.067	0.067

*The design value is the three-year average of the fourth high concentration. Design value greater than 0.070 ppm is a violation of the National Ambient Air Quality Standard.

$PM_{2.5}$ FRM and FEM Monitoring Sites





	Site ID	Site Name
1.	170190006	Champaign
2.	170191001	Bondville
3.	170310022	Chicago – Washington High School
4.	170310052	Chicago – Mayfair Pump Station
5.	170310057	Chicago – Springfield Pump Station
6.	170310076	Chicago – Com Ed Maint. Bldg.
7.	170310001	Alsip
8.	170310119	Lansing – Kingery near-road
9.	170311016	Lyons Township
10.	170313103	Schiller Park
11.	170313301	Summit
12.	170314007	Des Plaines
13.	170314201	Northbrook
14.	170316005	Cicero
15.	170434002	Naperville
16.	170650002	Knight Prairie
17.	170831001	Jerseyville
18.	170890003	Elgin
19.	170890007	Aurora
20.	171110001	Cary
21.	171132003	Normal
22.	171150013	Decatur
23.	171190024	Granite City – Gateway Medical
24.	171191007	Granite City – 23rd and Madison
25.	171190120	Alton
26.	171193007	Wood River
27.	171430037	Peoria
28.	171570001	Houston
29.	171613002	Rock Island
30.	171630010	East St. Louis
31.	171670012	Springfield
32.	171971002	Joliet
33.	171971011	Braidwood
34.	172010118	Rockford

Table B5
$PM_{2.5}$ 24-Hour Exceedances

EXCEEDANCES OF THE 24-HOUR PRIMARY STANDARD OF 35 ug/m3		
Date	**Location**	**Concentration (ug/m3)**
06/06/23	Knight Prairie	47.1
06/15/23	Rock Island	48.4
06/23/23	Normal	39.3
	Rockford	39.0
06/26/23	Naperville	35.8
06/27/23	Braidwood	118.4
	Cary	152.9
	Des Plaines	146.2
	Joliet	144.8
	Kingery Near-Road	135.4
	Naperville	157.2
	Northbrook	130.8
	Schiller Park	118.2
	Jerseyville	51.8
	Bondville	94.3
	Decatur	91.7
	Normal	115.4
	Rock Island	120.1
	Rockford	138.0
	Springfield - Ag Bldg	67.5
06/28/23	Braidwood	158.6
	Cary	118.2
	Des Plaines	136.3
	Elgin	59.4
	Joliet	169.3
	Kingery Near-Road	117.6
	Naperville	151.0
	Northbrook	136.5
	Schiller Park	102.4
	East St. Louis	66.5
	Houston	38.9
	Jerseyville	76.4
	Bondville	200.4
	Decatur	210.5
	Knight Prairie	63.5
	Normal	213.1
	Rock Island	155.4
	Rockford	166.1
	Springfield - Ag Bldg	171.1
06/29/23	Alsip	46.5
	Aurora	54.5
	Braidwood	47.7
	Cary	78.3
	Chicago - Com Ed	47.8
	Chicago - Springfield Pump	54.3
	Chicago - Summit	48.3

Table B5
$PM_{2.5}$ 24-Hour Exceedances

EXCEEDANCES OF THE 24-HOUR PRIMARY STANDARD OF 35 ug/m3		
Date	**Location**	**Concentration (ug/m3)**
	Chicago - Washington	45.7
	Cicero - Liberty	53.2
	Des Plaines	64.2
	Elgin	65.9
	Joliet	59.1
	Kingery Near-Road	50.9
	McCook	50.7
	Naperville	65.4
	Northbrook	68.1
	Schiller Park	53.0
	Rock Island	77.2
	Rockford	112.2
07/16/23	Braidwood	57.9
	Cary	39.1
	Des Plaines	44.4
	Joliet	56.8
	Kingery Near-Road	54.7
	Northbrook	41.3
	Schiller Park	47.2
	Jerseyville	36.0
	Bondville	53.4
	Decatur	52.7
	Knight Prairie	35.7
	Normal	74.5
	Rock Island	59.9
	Rockford	42.2
	Springfield - Ag Bldg	47.4
07/24/23	Cary	38.7
	Joliet	36.3
	Schiller Park	40.5
	Rockford	37.2
07/25/23	Cary	44.3
	Des Plaines	50.1
	Joliet	46.5
	Kingery Near-Road	53.1
	Northbrook	48.3
	Schiller Park	54.7
	Rockford	43.3
Total Over 35 ug/m3	84	
Total Days Over 35 ug/m3	10	

Table B6
$PM_{2.5}$ Highs

AQS ID	City	Total Samples	Samples Greater Than 35 ug/m3			Highest Samples 2023							
			2023	2022	2021	1st	2nd	3rd	4th	5th	6th	7th	8th
17-019-0006	Champaign	120	0	0	0	28.6	25.8	22.1	18.3	18.2	18.1	17.3	15.5
17-019-1001	Bondville	363	3	0	0	200.4	94.3	53.4	28.5	27.2	24.8	23.9	22.4
17-031-0001	Alsip	59	1	0	0	46.5	26.0	22.7	22.5	19.3	18.8	18.4	18.2
17-031-0022	Chicago Washington High School	121	1	0	0	45.7	30.5	22.8	22.6	20.0	19.3	19.2	18.6
17-031-0052	Chicago Mayfair Pump Station	115	0	0	0	29.0	23.8	22.0	20.5	20.0	19.0	18.9	18.8
17-031-0057	Chicago Springfield Pump Station	60	1	0	0	54.3	24.9	22.9	19.4	18.5	17.4	16.1	16.0
17-031-0076	Chicago Com Ed Maintenance	60	1	0	0	47.8	24.8	23.7	19.5	19.0	18.5	18.0	16.1
17-031-0119	Lansing Kingery near-road #1	365	5	0	0	135.4	117.6	54.7	53.1	50.9	34.8	32.2	30.3
17-031-1016	Lyons Township	118	1	0	0	50.7	28.9	24.6	24.2	22.9	20.2	19.6	19.3
17-031-3103	Schiller Park	360	6	0	1	118.2	102.4	54.7	53.0	47.2	40.5	28.1	26.1
17-031-3301	Summit	119	1	0	0	48.3	24.8	23.5	22.8	21.1	20.5	19.4	19.0
17-031-4007	Des Plaines	357	5	0	1	146.2	136.3	64.2	50.1	44.4	33.6	33.3	30.7
17-031-4201	Northbrook	365	5	0	1	136.5	130.8	68.1	48.3	41.3	34.6	30.8	29.0
17-031-6005	Cicero Liberty School	54	1	0	0	53.2	24.0	23.0	22.2	21.9	19.0	16.7	16.4
17-043-4002	Naperville	351	4	0	0	157.2	151.0	65.4	35.8	33.0	29.6	27.5	26.9
17-065-0002	Knight Prairie	365	3	0	1	63.5	47.1	35.7	27.6	26.9	23.6	23.4	23.1
17-083-0117	Jerseyville	365	3	0	0	76.4	51.8	36.0	24.7	23.5	23.5	22.6	21.6
17-089-0003	Elgin McKinley School	118	2	0	1	65.9	59.4	26.0	23.0	21.7	19.5	19.1	18.9
17-089-0007	Aurora	120	1	0	0	54.5	28.5	25.9	24.1	23.3	19.0	17.9	17.7
17-111-0001	Cary	365	6	0	0	152.9	118.2	78.3	44.3	39.1	38.7	33.1	29.4
17-113-2003	Normal	365	4	0	1	213.1	115.4	74.5	39.3	33.9	33.6	29.5	27.3
17-115-0013	Decatur Illinois EPA Trailer	365	3	0	3	210.5	91.7	52.7	30.7	30.5	28.2	25.1	24.9
17-119-0024	Granite City Gateway Medical Center	103	0	0	0	31.1	24.7	22.0	21.9	20.6	18.5	18.5	17.2
17-119-1007	Granite City Fire Station #1	60	0	0	0	23.0	22.2	17.4	17.1	17.0	15.9	15.4	15.4
17-119-0120	Alton Horace Mann	107	0	0	0	22.1	20.8	20.3	18.5	17.8	17.1	17.1	17.0
17-119-3007	Wood River	179	0	0	0	23.8	19.9	19.6	19.3	18.2	17.2	16.8	16.5
17-143-0037	Peoria	224	0	0	0	29.6	21.9	20.8	20.6	19.8	19.5	18.6	18.4

Table B6
$PM_{2.5}$ Highs

AQS ID	City	Total Samples	Samples Greater Than 35 ug/m3			Highest Samples 2023							
			2023	2022	2021	1st	2nd	3rd	4th	5th	6th	7th	8th
17-157-0001	Houston	357	1	0	0	38.9	28.3	26.5	23.7	22.6	21.9	21.8	21.5
17-161-3002	Rock Island	365	5	0	1	155.4	120.1	77.2	59.9	48.4	35.1	29.4	27.7
17-163-0010	East St. Louis	360	1	0	0	66.5	34.6	33.2	31.9	29.8	25.6	24.9	24.8
17-167-0012	Springfield Agricultural Building	364	3	1	0	171.1	67.5	47.4	26.5	23.7	23.0	22.7	22.1
17-197-1002	Joliet Pershing Elementary	361	6	0	0	169.3	144.8	59.1	56.8	46.5	36.3	33.4	31.2
17-197-1011	Braidwood	365	4	0	0	158.6	118.4	57.9	47.7	30.5	28.3	28.1	27.8
17-201-0118	Rockford Fire Dept.	365	7	0	0	166.1	138.0	112.2	43.3	42.2	39.0	37.2	34.2
Total Over 35 ug/m3			84	1	10								
Total Days Over 35 ug/m3			10	1	6								

Table B7
$PM_{2.5}$ 24-Hour Design Values

AQS ID	City	98th Percentile Concentrations (ug/m3)					Design Values* (ug/m3)		
		2023	2022	2021	2020	2019	2021-2023	2020-2022	2019-2021
17-019-0006	Champaign	22.1	15.9	21.0	17.3	19.8	20	18	19
17-019-1001	Bondville	22.4	16.1	19.7	16.1	18.7	19	17	18
17-031-0001	Alsip	26.0	23.7	19.1	14.9	16.0	23	19	17
17-031-0022	Chicago Washington High School	22.8	23.1	21.5	22.3	24.8	22	22	23
17-031-0052	Chicago Mayfair Pump Station	22.0	23.2	22.0	24.0	24.7	22	23	24
17-031-0057	Chicago Springfield Pump Station	24.9	28.3	20.0	22.4	18.6	24	24	20
17-031-0076	Chicago Com Ed Maintenance	24.8	22.3	19.3	14.5	24.9	22	19	20
17-031-0119	Lansing Kingery near-road #1	30.3	20.8	22.5	23.1	21.6	25	22	22
17-031-1016	Lyons Township	24.6	29.5	24.4	19.4	25.8	26	24	23
17-031-3103	Schiller Park	26.1	22.5	22.8	20.0	26.3	24	22	23
17-031-3301	Summit	23.5	23.3	20.7	21.4	19.3	23	22	20
17-031-4007	Des Plaines	30.7	18.5	25.9	18.0	29.0	25	21	24
17-031-4201	Northbrook	29.0	17.8	20.7	15.0	20.7	23	18	19
17-031-6005	Cicero Liberty School	24.0	29.2	17.8	21.9	19.3	24	23	20
17-043-4002	Naperville	27.5	18.8	20.7	20.9	22.8	22	20	21
17-065-0002	Knight Prairie	23.1	18.3	20.1	16.9	17.3	21	18	18
17-083-0117	Jerseyville	21.6	18.3	20.4	16.9	16.9	20	19	18
17-089-0003	Elgin McKinley School	26.0	26.0	27.1	25.7	24.9	26	26	26
17-089-0007	Aurora	25.9	18.0	19.4	20.5	24.5	21	19	21
17-111-0001	Cary	29.4	19.0	26.5	17.1	18.6	25	21	21
17-113-2003	Normal	27.3	19.6	21.7	18.9	20.6	23	20	20
17-115-0013	Decatur Illinois EPA Trailer	24.9	17.6	23.6	17.6	20.4	22	20	21
17-119-0120	Alton Horace Mann	20.3	22.4	20.8	22.4	19.2	21	22	21
17-119-0024	Granite City Gateway Medical Center	22.0	21.1	23.0	23.7	25.0	22	23	24
17-119-1007	Granite City Fire Station #1	22.2	23.8	19.3	22.3	23.8	22	22	22

Table B7
$PM_{2.5}$ 24-Hour Design Values

AQS ID	City	98th Percentile Concentrations (ug/m3)					Design Values* (ug/m3)		
		2023	2022	2021	2020	2019	2021-2023	2020-2022	2019-2021
17-119-3007	Wood River	19.3	22.4	21.8	26.1	22.7	21	23	24
17-143-0037	Peoria City Office Building	19.8	23.2	22.2	19.6	19.3	22	22	20
17-157-0001	Houston	21.5	17.3	19.1	18.6	16.9	19	18	18
17-161-3002	Rock Island	27.7	21.1	23.7	17.5	20.1	24	21	20
17-163-0010	East St. Louis	24.8	21.2	23.1	22.1	22.9	23	22	23
17-167-0012	Springfield Agricultural Building	22.1	18.2	22.4	17.6	17.9	21	19	19
17-197-1002	Joliet Pershing Elementary	31.2	18.0	23.4	21.0	21.4	24	21	22
17-197-1011	Braidwood	27.8	18.3	21.3	19.1	20.6	22	20	20
17-201-0118	Rockford Fire Department	34.2	21.1	24.1	21.3	23.4	26	22	23
Statewide Average		25.1	21.1	21.8	19.9	21.4	22.6	20.9	21.0

*The design value is the three-year average of the 98th percentile concentration. Design value greater than or equal to 35.5 ug/m^3 is a violation of the National Ambient Air Quality Standard.

Table B8
$PM_{2.5}$ Annual Design Values

AQS ID	City	Annual Arithmetic Mean Concentrations (ug/m3)					Design Values* (ug/m3)		
		2023	2022	2021	2020	2019	2021-2023	2020-2022	2019-2021
17-019-0006	Champaign	8.6	7.4	8.5	7.3	7.5	8.2	7.8	7.8
17-019-1001	Bondville	8.7	7.4	8.2	7.3	7.8	8.1	7.6	7.8
17-031-0001	Alsip	10.6	8.6	9.1	8.6	7.9	9.4	8.7	8.5
17-031-0022	Chicago Washington High School	10.3	9.0	9.4	8.8	10.3	9.6	9.1	9.5
17-031-0052	Chicago Mayfair Pump Station	10.0	8.6	9.5	10.3	9.2	9.4	9.5	9.7
17-031-0057	Chicago Springfield Pump Station	10.5	8.7	9.1	8.3	8.8	9.4	8.7	8.7
17-031-0076	Chicago Com Ed Maintenance	10.4	8.8	8.7	8.3	8.3	9.3	8.6	8.5
17-031-0119	Lansing Kingery near-road #1	11.2	8.6	10.1	10.8	10.8	10.0	9.8	10.6
17-031-3103	Schiller Park	10.4	9.6	10.5	9.9	10.8	10.2	10.0	10.4
17-031-3301	Summit	10.4	9.2	9.8	8.7	9.3	9.8	9.3	9.3
17-031-4007	Des Plaines	10.2	7.5	9.7	8.4	10.3	9.1	8.5	9.5
17-031-4201	Northbrook	9.8	7.0	8.1	7.3	8.5	8.3	7.5	7.9
17-031-6005	Cicero Liberty School	11.1	9.1	8.7	9.3	9.0	9.6	9.1	9.0
17-043-4002	Naperville	10.7	8.0	9.5	9.1	10.3	9.4	8.9	9.7
17-065-0002	Knight Prairie	8.6	7.3	9.3	8.8	8.3	8.4	8.5	8.8
17-083-0117	Jerseyville	8.3	6.9	7.9	7.5	8.0	7.7	7.4	7.8
17-089-0003	Elgin McKinley School	10.2	9.7	9.0	8.8	8.5	9.7	9.2	8.8
17-089-0007	Aurora	9.4	9.1	9.6	8.4	8.7	9.4	9.1	8.9
17-111-0001	Cary	9.5	7.8	8.6	8.2	7.8	8.6	8.2	8.2
17-113-2003	Normal	10.2	7.9	8.9	8.5	9.0	9.0	8.4	8.8
17-115-0013	Decatur IEPA Trailer	9.7	7.3	9.6	8.6	9.5	8.8	8.5	9.2
17-119-0120	Alton Horace Mann	9.2	8.9	9.3	9.0	9.1	9.1	9.1	9.1
17-119-1007	Granite City Fire Station #1	10.2	9.9	10.0	10.1	10.5	10.0	10.0	10.2
17-119-3007	Wood River	9.0	9.6	9.7	9.2	9.1	9.4	9.5	9.3
17-143-0037	Peoria City Office Building	8.6	8.3	9.6	8.3	8.0	8.9	8.7	8.6

Table B8
$PM_{2.5}$ Annual Design Values

AQS ID	City	Annual Arithmetic Mean Concentrations (ug/m3)					Design Values* (ug/m3)		
		2023	2022	2021	2020	2019	2021-2023	2020-2022	2019-2021
17-157-0001	Houston	8.0	6.9	8.1	8.3	7.7	7.7	7.8	8.0
17-161-3002	Rock Island	10.1	7.6	8.8	8.1	8.6	8.9	8.2	8.5
17-163-0010	East St. Louis	10.6	9.0	10.0	9.5	9.1	9.9	9.5	9.5
17-167-0012	Springfield Agricultural Building	9.6	8.4	8.7	7.6	8.2	8.9	8.2	8.2
17-197-1002	Joliet Pershing Elementary	10.8	7.9	9.7	9.8	9.7	9.5	9.1	9.8
17-197-1011	Braidwood	9.7	7.5	8.6	8.2	8.8	8.6	8.1	8.5
17-201-0118	Rockford Fire Department	10.5	7.1	9.4	9.1	10.3	9.0	8.5	9.6
Statewide Average		9.8	8.3	9.2	8.7	9.0	9.1	8.7	9.0

*The design value is the three-year average of the annual arithmetic mean concentrations. Design value greater than 9.0 ug/m^3 is a violation of the National Ambient Air Quality Standard.

Shaded cells indicate completeness criteria were not met.

PM_{10} Monitoring Sites

	Site ID	Site Name
1.	170310022	Chicago – Washington High School
2.	170311016	Lyons Township
3.	170314201	Northbrook
4.	171190010	Granite City – 23rd and Madison

Table B9
PM_{10} 24-Hour Exceedances

EXCEEDANCES OF THE 24-HOUR PRIMARY STANDARD OF 150 ug/m3		
Date	**City**	**Concentration (ug/m3)**
6/28	McCook	155
Total Over 150 ug/m3	1	
Total Days Over 150 ug/m3	1	

Table B10
PM_{10} 24-Hour Highs and Design Values

AQS ID	City	Total Samples	Highest 24-Hour Samples								Samples Greater Than 150 ug/m3			Three-year Exceedance Average*
			1st	2nd	3rd	4th	5th	6th	7th	8th	2023	2022	2021	
17-031-0022	Chicago Washington High School	337	138	120	108	70	68	68	66	65	0	0	0	0.0
17-031-1016	Lyons Township	339	155	137	111	94	91	87	86	83	1	0	0	0.3
17-031-4201	Northbrook	60	63	36	36	35	32	32	31	30	0	0	0	0.0
17-119-1007	Granite City Fire Station #1	58	65	53	49	47	47	44	41	40	0	0	0	0.0
Statewide Average			105	87	76	62	60	58	56	55				
Total Over 150 ug/m3											1	0	0	
Total Days Over 150 ug/m3											1	0	0	

*The 24-hour PM_{10} standard is an exceedance-based standard set at 150 ug/m^3. The level is not to be exceeded more than once per year on average over three years. Three-year averages more than one are a violation of the National Ambient Air Quality Standard.

Table B11
PM_{10} Annual Design Values

AQS ID	City	Annual Arithmetic Mean Concentration (ug/m3)					Design Values* (ug/m3)		
		2023	2022	2021	2020	2019	2021-2023	2020-2022	2019-2021
17-031-0022	Chicago Washington High School	26	29	29	32	27	28	30	29
17-031-1016	Lyons Township	32	38	42	37	30	37	39	36
17-031-4201	Northbrook	16	16	19	20	14	17	18	18
17-119-1007	Granite City Fire Station #1	27	30	25	32	35	27	29	31
Statewide Average		25	28	29	30	27	27	29	29

*The annual PM_{10} standard was revoked in 2007. Previously the standard was a three-year average of the annual means. Concentrations above 50 ug/m^3 were a violation of the former National Ambient Air Quality Standard. Currently only the 24-hour PM_{10} standard is in place (see Table B10).

Carbon Monoxide Monitoring Sites

	Site ID	Site Name
1.	170191001	Bondville
2.	170310119	Lansing - Kingery near-road
3.	170314201	Northbrook

Table B12
Carbon Monoxide Exceedances

EXCEEDANCES OF EITHER THE 1-HOUR (35 PPM) OR 8-HOUR (9 PPM) PRIMARY STANDARDS			
Date	**City**	**Concentration**	**Averaging Period**
None	None	None	None

Total 1-hour Over 35 ppm	0	Total 8-hour Over 9 ppm	0
Total Days 1-hour Over 35 ppm	0	Total Days 8-hour Over 9 ppm	0

Table B13
Carbon Monoxide Highs

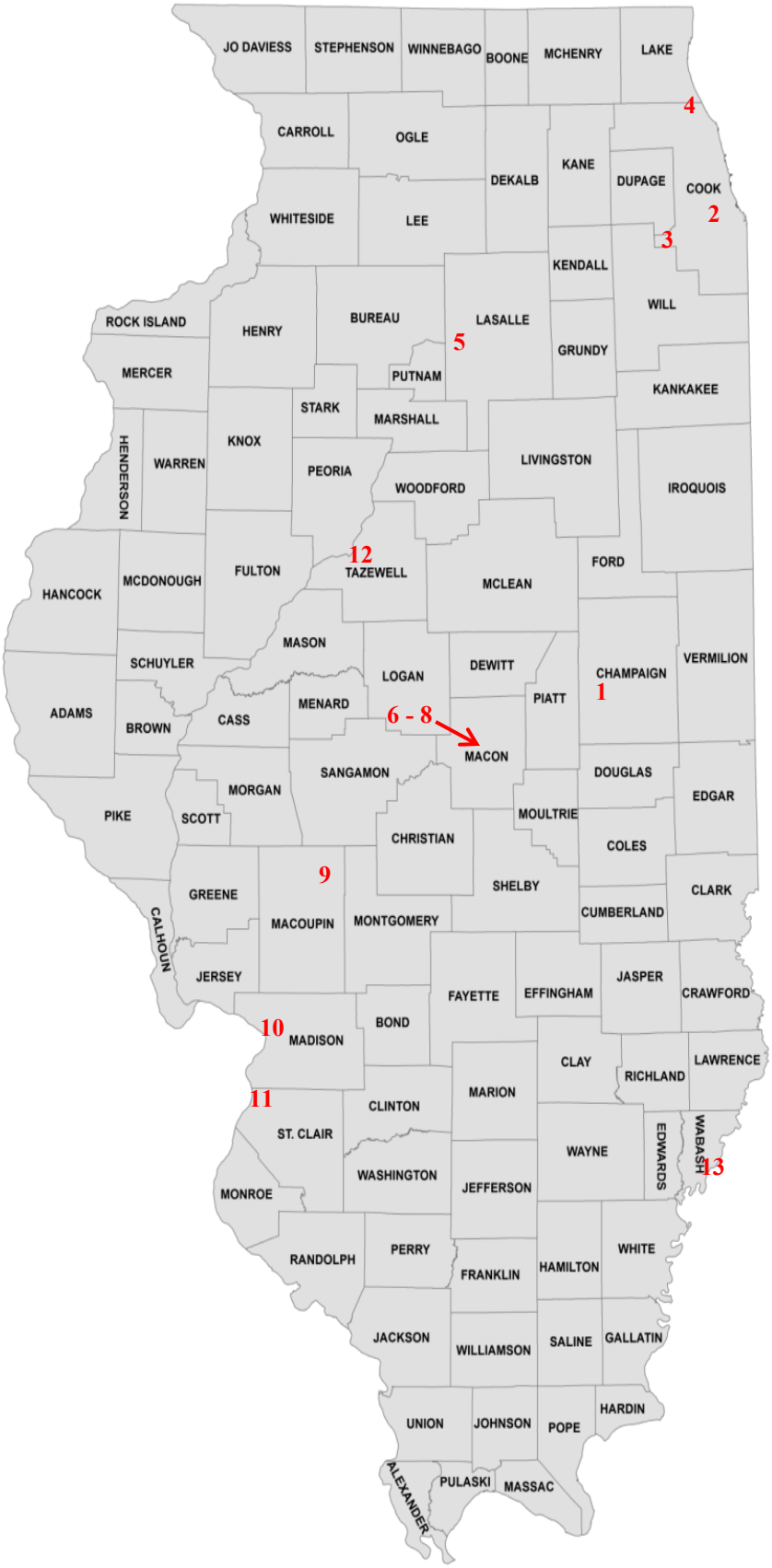
AQS ID	City	Total Hourly Samples	Fourth Highest Daily Samples 1-Hour (ppm)				Fourth Highest Samples 8-Hour (ppm)			
17-019-1001	Bondville	5901	1.59	1.40	0.38	0.35	1.5	1.3	0.4	0.4
17-031-0119	Lansing Kingery near-road #1	8274	3.2	3.0	2.4	2.2	1.6	1.5	1.4	1.4
17-031-4201	Northbrook	8287	1.23	1.15	1.11	1.00	1.0	0.9	0.9	0.9
Statewide Average			2.01	1.85	1.30	1.18	1.37	1.23	0.90	0.90

Table B14
Carbon Monoxide 1-Hour and 8-Hour Design Values

AQS ID	City	1-Hour Samples Greater than 35 (ppm)					8-Hour Samples Greater than 9 (ppm)				
		2023	2022	2021	2020	2019	2023	2022	2021	2020	2019
17-019-1001	Bondville	0	0	0	0	0	0	0	0	0	0
17-031-0119	Lansing Kingery near-road #1	0	0	0	0	0	0	0	0	0	0
17-031-4201	Northbrook	0	0	0	0	0	0	0	0	0	0

*The 1-hour and 8-hour carbon monoxide standard is an exceedance-based standard. The 1-hour standard is set at 35 ppm and is not to be exceeded more than once per year. The 8-hour standard is set at 9 ppm and is not to be exceeded more than once per year. More than one exceedance in a year is a violation of the National Ambient Air Quality Standard.

Sulfur Dioxide Monitoring Sites



	Site ID	Site Name
1.	170191001	Bondville
2.	170310076	Chicago – Com Ed Maint. Bldg.
3.	170311601	Lemont
4.	170314201	Northbrook
5.	170990007	Oglesby
6.	171150013	Decatur
7.	171150218	Decatur - Primient North
8.	171150318	Decatur - Primient South
9.	171170002	Nilwood
10.	171193007	Wood River
11.	171630010	East St. Louis
12.	171790004	Pekin
13.	171850001	Mount Carmel

Table B15
Sulfur Dioxide Exceedances

EXCEEDANCES OF THE 1-HOUR PRIMARY STANDARD OF 75 ppb		
Date	**City**	**Concentration (ppb)**
8/17	Decatur – Primient South	90.2
9/26	Decatur – Primient South	86.1
9/29	Decatur – Primient North	147.3
9/30	Decatur – Primient North	94.4
Total Over 75 ppb	4	
Total Days Over 75 ppb	4	

Table B16
Sulfur Dioxide Highs

AQS ID	City	Total Hourly Samples	Samples Greater Than 75 ppb			Highest Daily 1-Hour Samples (ppb)			
			2023	2022	2021	1st	2nd	3rd	4th
17-019-1001	Bondville	6876	0	0	0	6.5	3.8	3.7	3.2
17-031-0076	Chicago Com Ed Maintenance	8179	0	0	0	21.5	17.1	11.8	10.6
17-031-1601	Lemont	8357	0	0	0	11.0	6.9	6.6	6.5
17-031-4201	Northbrook	8465	0	0	0	8.5	8.0	6.9	6.4
17-099-0007	Oglesby	8702	0	0	0	21.1	19.0	16.7	15.6
17-115-0013	Decatur Illinois EPA Trailer	8474	0	0	0	21.7	21.5	19.0	17.6
17-115-0217	Decatur Primient North	8667	2	2	0	147.3	94.4	56.6	50.3
17-115-0317	Decatur Primient South	8657	2	2	1	90.2	86.1	72.9	66.1
17-117-0002	Nilwood	8639	0	0	0	9.2	4.8	3.9	3.1
17-119-3007	Wood River	8698	0	0	3	18.7	17.0	14.5	13.9
17-163-0010	East St. Louis	7943	0	0	0	19.0	18.6	13.2	11.2
17-179-0004	Pekin	8601	0	0	0	8.5	5.3	4.7	4.6
17-185-0001	Mount Carmel	8335	0	1	0	23.8	20.8	12.8	10.2
Statewide Average						31.3	24.9	18.7	16.9
Total Over 75 ppb			4	5	4				
Total Days Over 75 ppb			4	5	4				

Table B17
Sulfur Dioxide 1-Hour Design Values

AQS ID	City	99th Percentile Concentrations (ppb)					Design Values* (ppb)		
		2023	2022	2021	2020	2019	2021-2023	2020-2022	2019-2021
17-019-1001	Bondville	3.7	4.5	3.2	2.6	3.8	4	3	3
17-031-0076	Chicago Com Ed Maintenance	10.6	10.5	9.7	14.4	10.5	10	12	12
17-031-1601	Lemont	6.5	7.1	6.9	4.8	6.6	7	6	6
17-031-4201	Northbrook	6.4	3.6	5.7	6.1	4.1	5	5	5
17-099-0007	Oglesby	15.6	4.5	5.3	7.6	22.4	8	6	12
17-115-0013	Decatur Illinois EPA Trailer	19.0	18.2	16.6	21.6	23.4	18	19	21
17-115-0117	Decatur ADM	-	-	-	16.3	17.0	-	-	-
17-115-0217	Decatur Primient North	50.3	55.4	42.6	38.8	41.8	49	46	41
17-115-0317	Decatur Primient South	66.1	44.5	51.8	38.5	34.2	54	45	42
17-117-0002	Nilwood	3.1	4.2	3.4	2.9	4.6	4	4	4
17-119-3007	Wood River	13.9	9.1	12.0	7.2	9.3	12	9	10
17-163-0010	East St. Louis	11.2	13.8	12.4	8.3	10.6	12	12	10
17-179-0004	Pekin	4.6	11.0	12.2	14.3	17.3	9	13	15
17-185-0001	Mount Carmel	10.2	24.9	21.0	48.9	30.5	19	32	33
Statewide Average		17.0	16.3	15.6	16.6	16.9	16	16	16

*The design value is the three-year average of the 99th percentile concentration. Design value greater than 75 ppb is a violation of the National Ambient Air Quality Standard.

Nitrogen Dioxide Monitoring Sites

	Site ID	Site Name
1.	170310076	Chicago - Com Ed Maintenance
2.	170310219	Chicago - Kennedy near-road
3.	170310119	Lansing - Kingery near-road
4.	170313103	Schiller Park
5.	170314002	Cicero
6.	170314201	Northbrook (PAMS only)
7.	171170002	Nilwood
8.	171630010	East St. Louis

Table B18
Nitrogen Dioxide 1-Hour Exceedances

EXCEEDANCES OF THE 1-HOUR PRIMARY STANDARD OF 100 PPB		
Date	**City**	**Concentration (ppb)**
None	None	None
Total Over 100 ppb	0	
Total Days Over 100 ppb	0	

Table B19
Nitrogen Dioxide Highs

AQS ID	City	Total Hourly Samples	Samples Greater Than 100 ppb			Highest Samples							
			2023	2022	2021	1st	2nd	3rd	4th	5th	6th	7th	8th
17-031-0076	Chicago Com Ed Maintenance	6809	0	0	0	65.8	61.4	52.2	50.5	48.1	47.1	46.7	46.7
17-031-0119	Lansing Kingery near-road #1	8743	0	0	0	69.6	57.9	56.9	56.5	55.2	54.9	53.7	53.1
17-031-0219	Chicago Kennedy near-road #2	8475	0	0	0	60.8	59.4	59.1	58.9	55.9	53.8	53.0	52.5
17-031-3103	Schiller Park	8698	0	0	0	83.1	60.6	58.6	55.8	55.5	55.0	54.4	54.1
17-031-4002	Cicero Cook County Trailer	6551	0	0	0	77.2	67.5	60.0	55.9	55.6	54.7	54.6	54.4
17-031-4201	Northbrook PAMS only June -Aug	2911	0	0	0	55.3	50.0	46.4	42.9	41.2	37.1	34.0	33.0
17-117-0002	Nilwood	8697	0	0	0	17.8	17.7	17.3	16.6	16.4	16.2	15.4	14.8
17-163-0010	East St. Louis	8490	0	0	0	41.6	40.8	39.3	39.0	38.6	38.6	38.3	38.0
Total Over 100 ppb			0	0	0								
Total Days Over 100 ppb			0	0	0								

Table B20
Nitrogen Dioxide 1-Hour Design Values

AQS ID	City	98th Percentile Concentrations (ppb)					Design Values* (ppb)		
		2023	2022	2021	2020	2019	2021-2023	2020-2022	2019-2021
17-031-0076	Chicago Com Ed Maintenance	47.1	50.3	46.9	44.4	46.8	48	47	46
17-031-0119	Lansing Kingery near-road #1	53.1	51.7	49.0	47.8	51.1	51	50	49
17-031-0219	Chicago Kennedy near-road #2	52.5	52.7	52.1	49.9	44.7	52	52	49
17-031-3103	Schiller Park	54.1	51.6	54.3	50.2	54.1	53	52	53
17-031-4002	Cicero Cook County Trailer	54.7	55.3	56.6	49.4	55.7	56	54	54
17-031-4201	Northbrook PAMS only June -Aug	46.4	31.4	28.2	-	-	35	30	-
17-117-0002	Nilwood	14.8	13.5	13.0	15.5	15.0	14	14	15
17-163-0010	East St. Louis	38.0	38.6	38.8	39.1	39.1	38	39	39
Statewide Average		45.1	43.1	42.4	42.3	43.8	43	42	44

*The design value is the three-year average of the 98th percentile concentration. Design value greater than 100 ppb is a violation of the National Ambient Air Quality Standard.

Table B21
Nitrogen Dioxide Annual Design Values

AQS ID	City	Annual Arithmetic Mean Concentrations* (ppb)				
		2023	2022	2021	2020	2019
17-031-0076	Chicago Com Ed Maintenance	12.48	11.51	11.86	11.33	11.89
17-031-0119	Lansing Kingery near-road #1	16.91	17.09	17.49	16.46	16.64
17-031-0219	Chicago Kennedy near-road #2	15.79	15.56	15.70	14.74	16.37
17-031-3103	Schiller Park	17.01	17.21	17.14	15.19	17.43
17-031-4002	Cicero Cook County Trailer	15.49	14.53	14.77	12.75	14.14
17-031-4201	Northbrook PAMS only June -Aug	7.99	7.39	5.02	-	-
17-117-0002	Nilwood	2.13	1.80	2.04	2.12	2.37
17-163-0010	East St. Louis	8.45	8.62	8.90	8.56	8.82
Statewide Average (year-round sites only)		12.61	12.33	12.56	11.59	12.52

*The design value is the highest annual average concentration during the most recent two years. Design value greater than 53 ppb is a violation of the National Ambient Air Quality Standard.

Lead Monitoring Sites

	Site ID	Site Name
1.	170310022	Chicago – Washington High School
2.	170310110	Chicago – Perez Elementary
3.	171190010	Granite City – 15th and Madison

Table B22
Lead Highs

AQS ID	City	Total Sample Days	Highest Monthly Means					Maximum Three-Month Mean
			1st	2nd	3rd	4th	5th	
17-031-0022	Chicago Washington High School	59	0.013	0.013	0.012	0.009	0.009	0.01
17-031-0110	Chicago Perez Elementary	57	0.031	0.024	0.018	0.015	0.015	0.02
17-119-0010	Granite City Air Products	59	0.056	0.031	0.026	0.024	0.021	0.03
Statewide Average			0.033	0.023	0.019	0.016	0.015	0.02

Table B23
Lead Design Values

AQS ID	City	Maximum Three-Month Rolling Mean (ug/m3)					Design Values* (ug/m3)		
		2023	2022	2021	2020	2019	2021-2023	2020-2022	2019-2021
17-031-0022	Chicago Washington High School	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.02
17-031-0110	Chicago Perez Elementary	0.02	0.01	0.01	0.02	0.01	0.02	0.02	0.02
17-119-0010	Granite City Air Products	0.03	0.04	0.03	0.12	0.15	0.04	0.12	0.15
17-119-0121	Alton Olin Inc. Temporary Discontinued Site	-	0.02	0.05	-	-	-	0.05	0.05
Statewide Average		0.020	0.020	0.025	0.053	0.057	0.02	0.05	0.06

*The design value is the maximum three-month rolling mean over the latest three-year period. Design value greater than 0.15 ug/m3 is a violation of the National Ambient Air Quality Standard.

Table B24
Metals Filter Analysis Data

AQS ID	City	Total Samples	Highs (ug/m3)		Annual Mean	Total Samples	Highs (ug/m3)		Annual Mean
			1st	2nd			1st	2nd	
		Cadmium				**Chromium**			
17-031-0022	Chicago Washington High School	59	0.002	0.001	0.000	59	0.047	0.025	0.006
17-031-0110	Chicago Perez Elementary	57	0.000	0.000	0.000	57	0.013	0.010	0.004
17-119-0010	Granite City Air Products	59	0.001	0.001	0.000	59	0.029	0.016	0.007
		Manganese				**Nickel**			
17-031-0022	Chicago Washington High School	59	0.386	0.239	0.070	59	0.011	0.010	0.003
17-031-0110	Chicago Perez Elementary	57	0.114	0.082	0.029	57	0.009	0.008	0.002
17-119-0010	Granite City Air Products	59	0.456	0.247	0.071	59	0.013	0.013	0.004

Table B25
Toxic Compounds

AQS ID	City	Compounds	Highest 24-hour Samples (ppbc)				2023 Annual Average
			1st	2nd	3rd	4th	
17-031-4201	Northbrook*	1,3 Butadiene	0.042	0.039	0.029	0.026	0.011
		Dichloromethane	41.400	31.300	4.810	4.550	3.286
		Chloroform	14.900	14.700	14.200	10.300	4.876
		Carbon Tetrachloride	0.182	0.128	0.110	0.108	0.095
		Tetrachloroethylene	0.076	0.075	0.056	0.052	0.021
		Trichloroethylene	0.010	0.008	0.008	0.007	0.005
		1,2 Dichloropropane	0.055	0.034	0.032	0.032	0.005
		Vinyl Chloride	0.020	0.018	0.018	0.018	0.005
		Benzene	0.652	0.310	0.271	0.267	0.177
		Toluene	0.910	0.872	0.746	0.707	0.443
		Formaldehyde	5.070	4.500	3.990	3.330	1.978
		Acetaldehyde	2.140	1.990	1.780	1.760	1.030
		Acrolein	1.610	1.260	0.990	0.856	0.428
17-031-3103	Schiller Park**	1,3 Butadiene	0.128	0.063	0.052	0.036	0.045
		Dichloromethane	0.255	0.220	0.144	0.136	0.153
		Chloroform	0.037	0.020	0.021	0.020	0.023
		Carbon Tetrachloride	0.093	0.087	0.087	0.087	0.084
		Tetrachloroethylene	0.090	0.054	0.029	0.029	0.034
		Trichloroethylene	0.056	0.000	0.000	-	0.019
		1,2 Dichloropropane	0.000	0.000	0.000	0.000	0.000
		Vinyl Chloride	0.007	0.003	0.003	0.002	0.002
		Benzene	0.499	0.305	0.260	0.250	0.260
		Toluene	1.000	0.444	0.319	0.222	0.344
		Formaldehyde	3.520	2.100	1.930	1.820	1.767
		Acetaldehyde	2.510	1.570	1.450	1.270	1.252
		Acrolein	0.476	0.261	0.248	0.208	0.244

*Data set for period of March 14th – December 31st 2023.

**Data set for period of November 9th – December 31st 2023.

Illinois EPA's Website Information

To access the online version of the Annual Air Quality Report, various pollutant averages and exceedances, the monitoring network plan and emission trends:

- https://www2.illinois.gov/epa/topics/air-quality/Pages/default.aspx

Air Quality Index Information

To view current Air Quality Index numbers and forecasts across the country:

- http://www.airnow.gov

To sign up for air quality information such as forecasts and pollution alerts:

- https://www.enviroflash.info/signup.cfm

Monitoring Data Access Information

To access yearly Air Quality Index summaries, air quality statistics and monitoring concentrations:

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

To access status and trends of key air pollutants:

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

To access historical Design Values (statistic to compare to the National Ambient Air Quality Standards):

- https://www.epa.gov/air-trends/air-quality-design-values

Nonattainment Areas and Designations (regions in violation of the various National Ambient Air Quality Standards):

- http://www.epa.gov/green-book

Other

- Ambient Monitoring Technology Information Center: https://www.epa.gov/amtic
- Toxic Release Inventory Search: http://www.epa.gov/enviro/tri-search
- Toxic Release Inventory Data and Tools: https://www.epa.gov/toxics-release-inventory-tri-program/tri-data-and-tools