2017 OZONE SEASON

Air Quality Advisory Committee

October 24, 2017

EAST-WEST GATEWAY
Council of Governments
Creating Solutions Across Jurisdictional Boundaries

Ozone Data Sharing Project

- Ozone Season - March 1 to October 31
- East-West Gateway acts as a clearinghouse for ozone data
- Initial quality assurance screening
- Prepare reports

Ozone Monitor Network
St. Louis Metropolitan Area
EAST-WEST GATEWAY
Council of Governments
May 2014
Alton
Wood River
Orchard Farm
West Alton
Maryland Heights
Maryville
Blair
East St. Louis
Pacific
Arnold West
MADISON COUNTY
ST. CHARLES COUNTY
ST. LOUIS COUNTY
CITY OF ST. LOUIS
ST. CLAIR COUNTY
FRANKLIN COUNTY
JEFFERSON COUNTY
MONROE COUNTY
LEGEND
Monitor Locations
Major Roads
Interstate Highway
County Boundary
State Boundary
River or Lake
N
0
5
10 Miles
Sources: East-West Gateway Council of Governments
ILLINOIS
MISSOURI
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Transport Tracking Ozone Monitor Network
St. Louis Metropolitan Area
East-West Gateway
Council of Governments
Creating Solutions Across Jurisdictions Boundaries
May 2014
Nilwood
Jerseyville
Foley
Houston
Bonne Terre
LINCOLN COUNTY
CALHOUN COUNTY
JERSEY COUNTY
MACOUPIN COUNTY
ST. CHARLES COUNTY
MADISON COUNTY
WARREN COUNTY
ST. LOUIS COUNTY
CITY OF ST. LOUIS
ST. CLAIR COUNTY
FRANKLIN COUNTY
MONROE COUNTY
JEFFERSON COUNTY
RANDOLPH COUNTY
STE. GENEVIEVE COUNTY
LEGEND
Monitor Locations
Major Roads
Interstate Highway
County Boundary
State Boundary
River or Lake
N
0
10
20 Miles
Sources: East-West Gateway Council of Governments
ILLINOIS
MISSOURI

2015 Ozone Standard

- Standard is 70 parts per billion (ppb)
- Exceedance is when an 8-hour average for a monitor is >70 ppb
- Violation is when 3-year average of 4th highest annual average for a monitor is > 70 ppb

Ground-Level Ozone

- Weather influences
  - Strong sunshine
  - Low winds
  - Temperature 85° +

- Formed when hydrocarbons and nitrogen oxides from car and truck exhaust and other industrial processes chemically react with oxygen in the lower atmosphere
- Carried by wind

2017 Ozone Season

- Non-Attainment Area
  - 10 days with 21 exceedances
- Transport/Tracking Monitors
  - 5 days with 7 exceedances

2017 Exceedances

March 1 - October 22, 2017
Monitors with Exceedances of the 2015 Eight-Hour Ozone Standard
Based on Information Received by East-West Gateway Council of Governments

	Days with Exceedances										
Date	5-13	5-15	6-2	6-3	6-21	7-21	7-26	8-19	9-14	9-19	Total Days 10
Monitors											Total Exceedances
Missouri	Ozone Values in ppb										by Monitor
Arnold West											0
West Alton		72	78	76					73		4
Orchard Farm			82	77							2
Maryland Heights			83								1
Pacific											0
Blair Street			75								1
Illinois											
Wood River			78	71	72						3
Maryville	73		77	74	82	71	75	73			7
Alton									75	72	2
East St. Louis			71								1
Total by Day	1	1	7	4	2	1	1	1	2	1	21

ppb - parts per billion
Exccedance occurs when an 8-hour average of values is calculated to be greater than or equal to 71 ppb

1999 – 2017 Exceedances

2017 data is preliminary – still to be quality assured

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General Ozone Trends

*2017 data is preliminary – still to be quality assured

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For Additional Information

On-line Air Quality Resource Center

www.ewgateway.org/community-planning/environmental/air-quality

June 2017 AQI Calendar

EAST-WEST GATEWAY
Council of Governments
Creating Solutions Across Jurisdictional Boundaries

Mid day October 28, 1938 looking east along Pine
from 200 block of N. Tucker - St. Louis Post-Dispatch

May 4, 2016 – Looking east from SSM
St. Mary's Health Center
MDNR Visual Air Pollution Camera