2018 Ozone Season

Air Quality Advisory Committee Meeting

October 30th, 2018

Ozone Data Sharing Project

- Ozone Season - March 1 to October 31
- East-West Gateway acts as a clearinghouse for ozone data
- Twelve hour period from 9 AM – 9 PM
- Initial quality assurance screening
- Prepare weekly and monthly reports

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Ozone Monitor Network
St. Louis Metropolitan Area
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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
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May 2014
Nilwood
Jerseyville
Foley
Houston
Bonne Terre
LINCOLN COUNTY
CALHOUN COUNTY
JERSEY COUNTY
MACOUPIN COUNTY
MADISON COUNTY
ST. CHARLES 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
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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

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Non-Attainment Area
2015 Ozone Standard

St. Louis Metropolitan Area

August 2018

Source: East-West Gateway Council of Governments

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2008 Ozone Standard Maintenance Area

St. Louis Metropolitan Area

October 2018

Source: East-West Gateway Council of Governments

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2018 Ozone Season*

- St. Louis (MO-IL) Region
  - 14 days
  - 53 exceedances
  - All ten monitors have recorded exceedances
- Transport/Tracking Monitors
  - 7 days
  - 10 exceedances
  - Four of five monitors have a recorded exceedance

* As of October 29, 2018

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1999-2018 Exceedances

* 2018 data is preliminary and still needs to be quality assured

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General Ozone Trends

* 2016-2018 average still to be quality assured

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Days with Incomplete 1-Hour Data By Monitor

- Four or more hours with no values recorded at a monitor
- Incomplete does not always mean unmonitored
- Cause provided by partner agencies

* 2018 data is preliminary and still needs to be quality assured

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Air Quality Index

- EPA's Air Quality Index (AQI) calculator informs people about air pollution levels and associated health impacts
- Calculator takes the eight-hour average and converts it to a standardized AQI value (0 to 500)
- 70 ppb is equal to 100 on the AQI scale
- AQI has six color-coded categories each with different health concern

Air Quality Index					
Good	Moderate	Unhealthy for sensitive groups	Unhealthy	Very Unhealthy	Hazardous
0 ↔ 50	51 ↔ 100	101 ↔ 150	151 ↔ 200	201 ↔ 300	301 ↔ +

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Air Quality Index (AQI) Calendar

- East-West Gateway displays the AQI data as a calendar

June 2018 *

* 2018 data is preliminary and still needs to be quality assured

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Products

- Tables
  - 1-hour ozone values by monitor by day
  - Days with 8-hour exceedances
  - 4th highest 8-hour averages by monitor
  - Days with incomplete data
- East-West Gateway Website
  - Maximum 8-hour values by monitor
  - AQI calendar

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For Additional Information

On-line Air Quality Resource Center

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

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

October 29, 2018 – Looking east from SSM St. Mary's Health Center
MDNR Visual Air Pollution Camera