

**MINUTES**  
**MISSOURI AIR CONSERVATION COMMISSION**  
**Elm Street Conference Center**  
**1730 East Elm Street – Lower Level**  
**Bennett Springs Conference Room**  
**Jefferson City, MO 65101**  
**March 29, 2018**  
**9:00 a.m.**

**Commissioners Present**

Mark Garnett, Member  
Jack Jones, Vice Chairman  
Gary Pendergrass, Chairman  
Kevin Rosenbohm, Member

**Staff Members Present**

Aaron Basham, Air Quality Planning Section, Air Pollution Control Program (APCP)  
Van Beydler, Public Information Coordinator, Soil and Water Conservation Program  
Darcy Bybee, Director, APCP  
David Gilmore, Director's Office, APCP  
Wayne Graf, Air Quality Planning Section, APCP  
Kendall Hale, Permits Section Chief, APCP  
Steve Hall, Air Quality Analysis Section Chief, APCP  
Patricia Maliro, Air Quality Analysis Section, APCP  
Kyra Moore, Deputy Director, Division of Environmental Quality  
Paul Myers, Air Quality Planning Section, APCP  
Amy Poos, Public Information Coordinator, Department of Natural Resources  
Bob Randolph, Air Quality Planning Section, APCP  
Shelly Reimer, Air Quality Planning Section, APCP  
Seanmichael Stanley, Air Quality Planning Section, APCP  
Richard Swartz, Compliance and Enforcement Section Chief, APCP  
Richard Waters, Assistant General Counsel, Department of Natural Resources  
Emily Wilbur, Air Quality Planning Section, APCP  
Chris Wood, Compliance and Enforcement Section, APCP

**Others Present by Attendance Record**

Paul Brugmann, Cummins Inc.  
Tracey Casburn, Environmental Protection Agency  
Kathrina Donegan, St. Louis County, Department of Health  
Dave Fraley, Diamond Sky Ventures  
Mike Hutcheson, Ameren  
Ross Keeling, Attorney General's Office  
David Shanks, Boeing  
Roger Walker, Regulatory Environmental Group for Missouri

## **A. Call to Order**

Chairman Gary Pendergrass called the March 29, 2018, meeting of the Missouri Air Conservation Commission to order. The following commissioners were present: Gary Pendergrass, Jack Jones, Mark Garnett, and Kevin Rosenbohm.

## **B. Minutes from March 29, 2018**

Commissioner Rosenbohm moved to approve the March 29, 2018, minutes as written. Vice Chairman Jones seconded the motion, and all commissioners voted to approved the March 29, 2018 minutes as written.

## **C. Welcome and Introductions**

Ms. Kyra Moore officially welcomed Ms. Darcy Bybee as the Director of the Air Pollution Control Program.

## **D. Reports – The following referenced reports are in the March 29, 2018, Missouri Air Conservation Commission Briefing Document and available online at [dnr.mo.gov/env/apcp/macc.htm](http://dnr.mo.gov/env/apcp/macc.htm).**

### **1) COMPLIANCE/ENFORCEMENT REPORT**

The video for the Compliance/Enforcement Report can be viewed at <https://dnr.mo.gov/videos/archive-meetings.htm>. Please note that the video will be removed 90 days after the date of the commission meeting.

#### **a) Concern Report**

Mr. Richard Swartz said the Compliance/Enforcement Report begins on page 41 with the Concern Report. A total of 95 concerns were received from December 16, 2017 through February 15, 2018. During this time period 89 investigations were completed by regional office staff. One notice of violation was issued. And there were no referral notices of violation.

The potential modification to the Concern Report discussed last month is currently not feasible so the way concerns are reported to the commission will remain the same.

#### **b) Ongoing Negotiations Report**

The Ongoing Negotiations Report can be found on page 73. There are 11 enforcement actions in the negotiation process at this time. Two asbestos cases have been added to the report and Prestige Cleaners has dropped off.

**c) Finalized Agreement Report**

The Finalized Agreement Report is on page 75. This report covers the time period from December 16, 2017 through February 18, 2018. Four agreements were finalized during that timeframe.

**d) Pending Referrals Report**

The Pending Referrals Report can be found on page 77. Two cases have been referred to the Attorney General's Office.

**2) PERMIT REPORT**

Mr. Hale stated the Permit Report begins on page 79 of the briefing document with the Permit Applications Received Report. For the months of January and February the Permit Section received 73 construction and 37 operating permit projects.

The Permit Applications Completed Report begins on page 91 of the briefing document. For the months of January and February the Permit Section completed 60 construction and 46 operating permit projects. This information is searchable on the Air Pollution Control Program's website and is updated weekly.

The Open Permits Report is on page 103 of the briefing document. This report details the types of projects currently open in the Permit Section. There are currently 151 construction and 247 operating permit projects open.

There are currently 12 operation permit projects on public notice. Comments can be submitted electronically and in writing. For details on how to submit comments visit the Air Pollution Control Program's website at <https://dnr.mo.gov/env/apcp/permit-public-notices.htm>. The Plant wide Applicability Permit for the Ford Motor Company permit in Kansas City has come off of public notice and has been issued.

EPA recently came out with new guidance on how to determine a significant increase for construction permitting for major sources.

**3) AIR QUALITY PLANNING REPORT**

The slides from Ms. Emily Wilbur's presentation are available in Attachment A of these minutes or on the commission's website at <http://dnr.mo.gov/env/apcp/macc.htm>.

**a) Red Tape Reduction**

Information regarding the Department's Red Tape Reduction process can be found at [www.dnr.mo.gov/redtapereduction/nomoredtape.com/](http://www.dnr.mo.gov/redtapereduction/nomoredtape.com/) There will be nine rule rescissions that will be presented at public hearing today. Eleven more rule rescissions will be filed late this month or early next month, and it is anticipated that these rule rescissions will be brought before the commission at their meeting

in May. The Air Quality Planning Section is working on several amendments. Ms. Wilbur provided the commission with a memo detailing the rules that will be updated.

**b) Rule and State Implementation Plan (SIP) Agenda**

The Rule and SIP Agenda begins on page 105 and continues through page 107 of the briefing document. As previously noted, nine items will be presented at today's public hearing and those items will be presented for adoption at the April commission meeting in Kansas City. No items will be presented for adoption today and there are no public hearing items scheduled for the Kansas City commission meeting.

**c) Rules in Progress Schedule**

The Rules in Progress Schedule begins on page 109 and continues through page 111 of the briefing document. Ms. Wilbur gave information on the nine rules that would be presented at public hearing and where they can be found in the briefing document. She also gave information on the next 11 rules that would be presented for rescission, and five rule amendments that are currently being reviewed by the Department.

**d) State Plans Report**

The State Plans Report begins on page 113 and continues through 117 of the briefing document.

Ozone

The address to the ozone monitoring data website was presented. The Program is currently working under two ozone standards: 2008 and 2015.

2008

The Program is currently working toward redesignation under the 2008 ozone standard and has submitted its redesignation request to EPA. That redesignation is expected soon.

2015

The revised recommendations for nonattainment areas was adopted at the last commission and then submitted to EPA shortly thereafter. Information on that can be found on pages 114 and 115. The Program is currently in the tail-end of the "120-day letter" process. Ms. Wilbur discussed the content of the 120-day letter, which included EPA's intended nonattainment designated areas. EPA focused on 2014 – 2016 air monitoring data. The Program submitted its revised nonattainment recommendation in a letter to EPA on February 28, 2018. The Program focused on 2015-2017 air monitoring data and

recommended the City of St. Louis and also the counties of St. Louis and St. Charles. Ms. Wilbur presented a timeline of the 2015 ozone standard.

**e) Federal Register Notices**

Ms. Wilbur presented five federal register notices. Information about each federal register notice, including web links, can be found on her presentation slides in Attachment A to these minutes.

On March 12, 2018 three groups announced their intent to file suite for EPA's failure to act on nonattainment SIPs for the 2010 SO<sub>2</sub> National Ambient Air Quality Standards. Missouri's Jefferson County and Jackson County nonattainment areas SIPs are named in the notice. A web address was provided where more information can be viewed. The Program intends to withdraw the Jefferson County nonattainment area SIP from EPA consideration and it is currently amending rule 10 CSR 10-6.261.

**4) DIRECTOR'S REPORT**

**a) Staffing**

There are currently approximately 100 total positions in the Program. Any vacancies are evaluated and filled on an as needed basis. There are currently four vacancies in the Program that are being filled: two in the Permit Section, one in the Air Quality Planning Section, and one in the Compliance and Enforcement Section.

**b) Red Tape Reduction Process**

As Ms. Wilbur noted, the commission was provided with a memo detailing the rules that will be updated. The memo has been posted on the commission's website at <https://dnr.mo.gov/env/apcp/macc.htm>.

**c) Volkswagen**

Last month Ms. Moore mentioned that the Volkswagen team was working diligently to compile comments that were received so the Department can move forward as Missouri's lead agency to develop the beneficiary mitigation plan under the Volkswagen Trust. Approximately \$41 million will be coming to the State of Missouri to spend over the next eight to ten years. It is a big responsibility and something the Department takes very seriously. There have been a lot of meetings and comments received from stakeholders. From October to November of last year, meetings were held in Jefferson City, St. Louis, Kansas City and Springfield. General information was provided at these meetings including what the Trust is, how it works, what types of projects can be funded, etc. Volkswagen stakeholder advisory committee meetings were also held in December 2017 and again in January 2018 in the Jefferson City. These meetings had more pointed discussions and also question and answer sessions. The program

also sent 2 different questionnaires/surveys . The program received a lot of great feedback. At the last count, 94 comments had been received through the webpage and 27 e-mail comments had been received. That is approximately 277 pages of comments received. These comments have been posted on the web at <https://dnr.mo.gov/env/apcp/vw/index.html>. The Program intends to have a draft plan available in March. Another meeting will be scheduled in the near future.

**d) Next Commission Meeting**

The April commission will be held at the Kansas City Regional Office in Lee's Summit. At this time, there is no presentation scheduled. However, the Mid-America Regional Council (MARC) has given the commission a presentation in the past about their operations. Ms. Bybee asked the commission to let her know if they would like information on any topics or a special presentation.

Chairman Pendergrass said he would like to hear from the MARC at the Kansas City meeting.

**e) New Commissioner**

Yesterday, Ms. Bybee received notice that Governor Greitens had submitted Mr. Ron Boyer for appointment to the MACC. Mr. Boyer has previously served on the commission.

**5) ANNUAL AIR QUALITY UPDATE**

The slides from Mr. Steve Hall's presentation are available in Attachment B of these minutes or on the commission's website at <http://dnr.mo.gov/env/apcp/macc.htm>.

Mr. Steve Hall presented his annual air quality update to the commission. His presentation included detailed descriptions of Air Quality Analysis Section staff, emissions inventory and trends, ambient air monitoring and trends, and website resources.

**E. Public Hearing**

Chairman Pendergrass called the public hearing to order.

Ms. Shelly Reimer presented the following rules at the public hearing: 10 CSR 10-2.310 (rescission) Control of Emissions From the Application of Automotive Underbody Deadeners, 10 CSR 10-2.360 (rescission) Control of Emissions From Bakery Ovens, 10 CSR 10-3.160 (rescission) Restriction of Emission of Fluorides From Diammonium Phosphate Fertilizer Production, 10 CSR 10-5.120 (rescission) Information on Sales of Fuels to be Provided and Maintained, and 10 CSR 10-5.130 (rescission) Certain Coals to be Washed. The rules can be found on pages 119, 123, 127, 131 and 133, respectively.

Mr. Paul Myers presented the following rule at the public hearing: 10 CSR 10-5.450 (rescission) Control of VOC Emissions From Traffic Coatings. The rule can be found on page 135 of the briefing document.

Mr. David Shanks presented testimony in regard to 10 CSR 10-5.450 (rescission) Control of VOC Emissions From Traffic Coatings.

Mr. Seanmichael Stanley presented the following rule at the public hearing: 10 CSR 10-6.100 (rescission) Alternate Emission Limits. The rule can be found on page 139 of the briefing document.

Mr. Aaron Basham presented the following rules at the public hearing: 10 CSR 10-6.350 (rescission) Emission Limitations and Emissions Trading of Oxides of Nitrogen and 10 CSR 10-6.360 (rescission) Control of NOx Emissions From Electric Generating Units and Non-Electric Generating Boilers. These rules can be found on pages 147 and 169 of the briefing document.

Chairman Pendergrass closed the public hearing.

To obtain a copy of the public hearing transcript, please contact Kathy Porter by writing to Midwest Litigation Services, 711 North 11th Street, St. Louis, MO 63101, or by phone at 1-800-280-3376.

**F. Recommended for Adoption**

None.

**G. New Business**

None.

**H. Unfinished Business**

None.

**I. Appeals and Variance Requests**

None.

**J. Open Comment Session**

Chairman Pendergrass thanked Ms. Moore for her guidance and for her years of service in the Air Pollution Control Program. He said the commission looks forward to working with Ms. Bybee.

## **K. Future Meeting Dates**

**April 26, 2018 – Thursday**  
Kansas City Regional Office  
500 Northeast Colbern Road  
Missouri River Conference Room  
Lee's Summit, MO 64086

**May 31, 2018 – Thursday**  
Elm Street Conference Center  
1730 East Elm Street  
Lower Level  
Bennett Springs Conference Room  
Jefferson City, MO 65101

**July 26, 2018 – Thursday**  
St. Louis Regional Office  
7545 South Lindbergh, Suite 220  
DESE Conference Room  
St. Louis, MO 63125

**August 30, 2018 – Thursday**  
Elm Street Conference Center  
1730 East Elm Street  
Lower Level  
Bennett Springs Conference Room  
Jefferson City, MO 65101

**September 27, 2018 – Thursday**  
Elm Street Conference Center  
1730 East Elm Street  
Lower Level  
Bennett Springs Conference Room  
Jefferson City, MO 65101

**October 25, 2018 – Thursday**  
Southwest Regional Office  
2040 West Woodland  
East and West Conference Rooms  
Springfield, MO 65807

**December 6, 2018 – Thursday**  
Elm Street Conference Center  
1730 East Elm Street  
Lower Level  
Bennett Springs Conference Room  
Jefferson City, MO 65101

**L. Discussion of Pending Litigation and Legal Matters**

None.

**M. Meeting Adjournment**

Commissioner Rosenbohm moved to adjourn the March 29, 2018, Missouri Air Conservation Commission meeting. Vice Chairman Jones seconded the motion, and all commissioners voted to adjourn the meeting.

Chairman Pendergrass adjourned the March 29, 2018, Missouri Air Conservation Commission meeting.

Respectfully submitted,

*Signature on File*

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Darcy A. Bybee, Director  
Air Pollution Control Program

Approved:

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Gary Pendergrass, Chairman  
Missouri Air Conservation Commission





## Air Quality Planning

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Emily Wilbur  
Air Pollution Control Program  
Chief of the State Implementation Plan Unit

Missouri Air Conservation Commission  
March 29, 2018  
Jefferson City, Mo.



## Updates for Air Quality Planning

- Upcoming red tape reductions
- Reports printed in the briefing document
  - Rule and State Implementation Plan (SIP) Agenda
  - Rules in Progress Schedule
  - State Plans Report
- Notices in Federal Register and federal legal proceedings

## Department's Process to Reduce Red Tape

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[dnr.mo.gov/redtapereduction/](http://dnr.mo.gov/redtapereduction/)  
[nomoredtape.com/](http://nomoredtape.com/)

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## MoDNR Steps for Reducing Red Tape

- Reviewed 598 rules in compliance with an executive order from governor
- Solicited comments and received more than 300
- Initiated the process to rescind 98 rules
- Additional rulemakings (amendments and rescissions in process)

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## Reducing Red Tape in the Air Program

- Moving forward with first nine rescissions
  - Public hearing today (March 29)
- Planning 11 additional rescissions
  - Expect to file late March or early April
  - Anticipate public hearing May 31
- Working on amendments
  - Update requirements of rules
  - Update incorporations by reference
  - Eliminate unnecessary regulatory requirements
  - Update definitions as needed

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## Rule and SIP Agenda

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Pages 105-107

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## Rule and SIP Agenda

Briefing document, page 105

Mar. 29, 2018, in Jefferson City

Public Hearing:

- Nine proposed rescissions to rules

Actions to be voted on:

None scheduled.

## Rule and SIP Agenda

Briefing document, pages 106-107

Apr. 26, 2018, in Kansas City, Mo.

Public hearing:

- None scheduled

Actions to be voted on:

- Nine proposed rescissions to rules

## Rules in Progress Schedule

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Pages 109-111

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## Schedule for Rules in Progress

Briefing Document, pages 109-110

- Page 109, Row 3-5,  
Page 110, Rows 1-4, 7-8

- 10 CSR 10-3.160
- 10 CSR 10-5.120
- 10 CSR 10-5.130
- 10 CSR 10-6.100
- 10 CSR 10-6.350
- 10 CSR 10-6.360
- 10 CSR 10-5.450
- 10 CSR 10-2.310
- 10 CSR 10-2.360

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## Schedule for Rules in Progress

Briefing Document, pages 110-111

- Page 110, Rows 9-16  
Page 111, Rows 1-3

- 10 CSR 10-2.215
- 10 CSR 10-2.390
- 10 CSR 10-5.360
- 10 CSR 10-5.370
- 10 CSR 10-5.410
- 10 CSR 10-5.440
- 10 CSR 10-5.455
- 10 CSR 10-5.520
- 10 CSR 10-6.362
- 10 CSR 10-6.364
- 10 CSR 10-6.366

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## Schedule for Rules in Progress

Briefing Document, page 111

- Page 111, Rows 4-8

- 10 CSR 10-1.010
- 10 CSR 10-6.180
- 10 CSR 10-2.340
- 10 CSR 10-5.570
- 10 CSR 10-6.200

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# State Plans Report

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Focus on ozone

Pages 113-117

# Ozone

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## Ozone

\* Monitoring data:

[dnr.mo.gov/env/apcp/docs/ozonemonitordata.pdf](http://dnr.mo.gov/env/apcp/docs/ozonemonitordata.pdf)

\* 2008 standard: pending redesignation

- 2016 plan: page 114, row 2
- 2017 technical correction: page 114, row 3

\* 2015 standard: initial designations

- 2016 recommendations: page 114, row 4
- 2017 revision: page 115, row 1

## The “120-day letter” Process

- EPA’s “120-day letter” dated Dec. 20, 2017
  - EPA’s intended nonattainment designations: City of St. Louis, and Franklin, Jefferson, St. Louis and St. Charles counties
  - EPA focused on 2014-2016 data from air monitors
    - Three state monitors recorded violations of standard: two in St. Charles County; one in St. Louis County
- Air Program sent response to EPA (Feb. 28, 2018)
  - Our nonattainment recommendation: City of St. Louis, and St. Louis and St. Charles counties
  - We focused on 2015-2017 air monitoring data
    - One monitor in St. Charles recorded violation of standard

## Timeline Regarding 2015 Ozone Standard

November 2017

- First round designations: attainment/unclassifiable

Dec. 20, 2017

- 120-day letters
- Intended nonattainment areas

Jan. 5-Feb. 5, 2018

- Public comment period

Feb. 28, 2018

- Due date for state's response to EPA's 120-day letter

April 30, 2018

- Final ozone designations from EPA
- Effective date within 30-60 days

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## Federal Register Notices

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## Notice #1: Clean Power Plan

Feb. 1, 2018: EPA announced three listening sessions on the repeal of the Clean Power Plan

- Feb. 21, 2018; Kansas City, Mo.
- Feb. 28, 2018; San Francisco, Calif.
- March 27, 2018; Gillette, Wyo.

EPA is also reopening the public comment period for the repeal until April 26, 2018.

<https://www.gpo.gov/fdsys/pkg/FR-2018-02-01/pdf/2018-01321.pdf>

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## Notice #2: HMIWI incinerator rule

Feb. 6, 2018: EPA proposed to approve Missouri's state plan for existing Hospital, Medical, Infectious Waste Incinerators (HMIWI) operating in Missouri. The public comment period ended Mar. 8, 2018.

<https://www.gpo.gov/fdsys/pkg/FR-2018-02-06/pdf/2018-02339.pdf>

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## Notice #3: Guidance Memo

Feb. 8, 2018: EPA announced the issuance of the guidance memorandum titled “Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act.” The EPA is also withdrawing the memorandum titled “Potential to Emit for MACT Standards—Guidance on Timing Issues.”

<https://www.gpo.gov/fdsys/pkg/FR-2018-02-08/pdf/2018-02331.pdf>

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## Notice #4: 2015 Ozone NAAQS

Mar. 9, 2018: EPA established thresholds for nonattainment classifications and set attainment dates under the 2015 standard.

<https://www.gpo.gov/fdsys/pkg/FR-2018-03-09/pdf/2018-04810.pdf>

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## Notice #5: Infrastructure SIPs

Mar. 22, 2018: EPA took final action to approve the infrastructure SIPs for the 2008 ozone, 2010 NO<sub>2</sub>, 2010 SO<sub>2</sub>, and 2012 PM<sub>2.5</sub> NAAQS.

<https://www.gpo.gov/fdsys/pkg/FR-2018-03-22/pdf/2018-05630.pdf>

## Notice of Intent to Sue EPA

Mar. 12, 2018: Three groups announced their intent to file suit for EPA's failure to act on nonattainment SIPs for the 2010 SO<sub>2</sub> NAAQS. Missouri's Jefferson County and Jackson County NAA SIPs are named in the notice.

[https://www.epa.gov/sites/production/files/2018-03/documents/cbd\\_so2\\_noi\\_0312\\_2018.pdf](https://www.epa.gov/sites/production/files/2018-03/documents/cbd_so2_noi_0312_2018.pdf)

## Withdrawals

Air program intends to withdraw:

- Jefferson County NAA SIP from EPA consideration
  - EPA issued Clean Data Determination for Jefferson County NAA
  - Based on EPA policy, NAA SIP is no longer necessary
  - Air program submitted redesignation request and maintenance plan for the area in late 2017
- 10 CSR 10-6.261
  - Currently amending the rule
  - Will re-submit as a part of RTR

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## Contact Information

Missouri Department of Natural Resources

Air Pollution Control Program

P.O. Box 176

Jefferson City, MO 65102-0176

Find us on the web at [dnr.mo.gov/env/apcp](http://dnr.mo.gov/env/apcp)

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## 2018 Air Quality Report

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Stephen Hall  
Air Pollution Control Program  
Chief of the Air Quality Analysis Section

Missouri Air Conservation Commission  
Meeting, March 29, 2018, Jefferson City, MO



## Presentation Overview

- AQA Section Staff
- Emissions Inventory and Trends
- Ambient Air Monitoring and Trends
- Website Resources

## Air Quality Analysis Section

Stephen Hall, section chief

- Data Management Unit – Nathan O’Neil, chief
  - Jeanette Barnett
  - Erin Henry
  - Jeffrey Stevens
  - Brenda Wansing
  - Jeanne Brown
  - Liberty Sitzes
  - Terry Stock
  - Daronn Williams
- Monitoring Unit – Patricia Maliro, chief
  - Jerry Downs
  - Michael Maddux
  - Eric Giroir
  - Brandi Prater
- Small Business Compliance Assistance
  - Carlton Flowers

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## Point Source Emissions Reporting

10 CSR 10-6.110 Emissions Data Reporting Rule (EIQ Rule)

- Part 70 - Full Emissions Report- Annually
  - potential to emit more than 100 tons per year of any criteria pollutants or
  - 10 tons per year of a single Hazardous air pollutant or
  - 25 tons per year of a combination of Hazardous air pollutants
- Intermediate - Full Emissions Report - every three years, otherwise reduced\* reporting
  - potential to emit more than 100 tons per year of any criteria pollutants but accepted an emission limit of less than 100 tons per year

\*Full Emissions Report is required if there is a 5 tons per year change in emissions or if there is a construction permit action.

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## Point Source Emissions Reporting

- Small sources - Full once, reduced\* subsequently
  - Basic Operating Permit - potential to emit is greater than de minimis levels but less than 100 tons per year.
  - Construction permit only - Construction Permit limits actual emissions to be below de minimis levels.

de minimis Levels: PM<sub>10</sub> = 15 tons, PM<sub>2.5</sub> 10 tons, SO<sub>x</sub>, NO<sub>x</sub>, VOC = 40 tons, CO = 100 tons, Lead = 0.6 tons, HAPs = 10 tons each/25 tons combined

\*Full Emissions Report is required if there is a 5 tons per year change in emissions or if there is a construction permit action

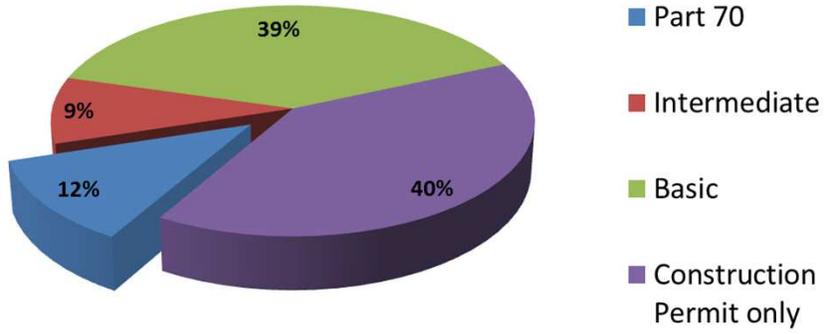
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## How many point source facilities?

Permit Type	Type of 2017 EIQ (12/14/17)		Total Number
	Full	Reduced	
Part 70	258	0	258
Intermediate	202	0	202
Basic	23	788	811
Construction Permit only*	111	800	911
<b>All permit types</b>	<b>594</b>	<b>1,588</b>	<b>2,182</b>

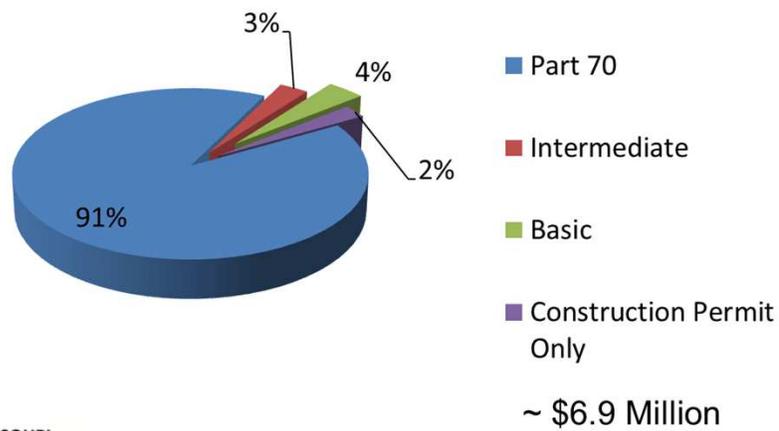
\*Construction permit limits emissions below De Minimis permit applicability limits. (CP-NOP) 6

**Permit Type as a Percent of Total Facilities  
2016 Emissions Year**

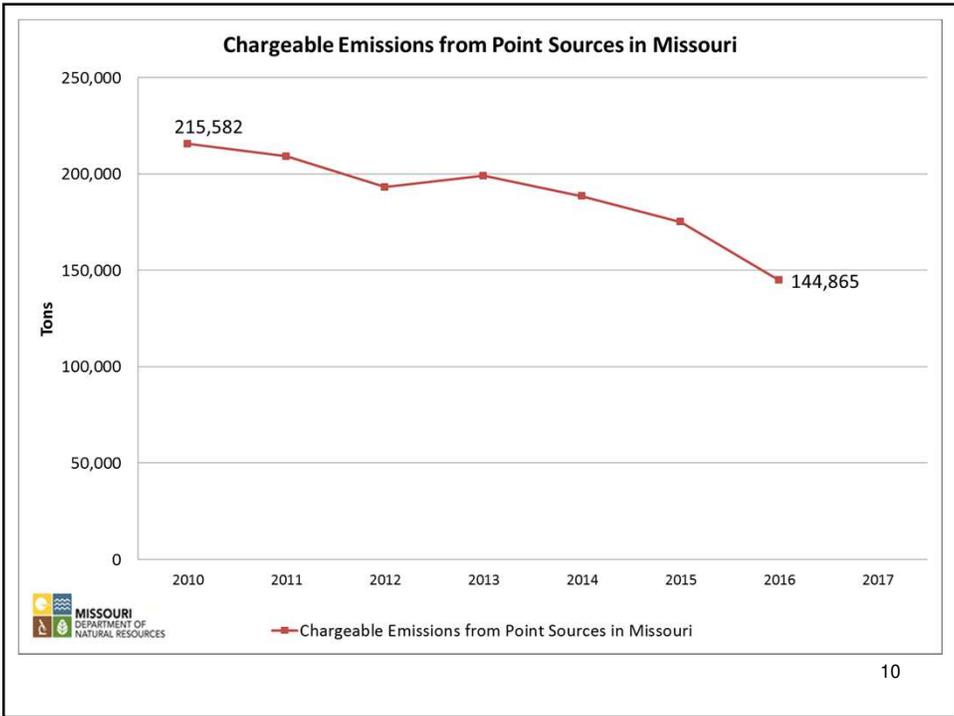
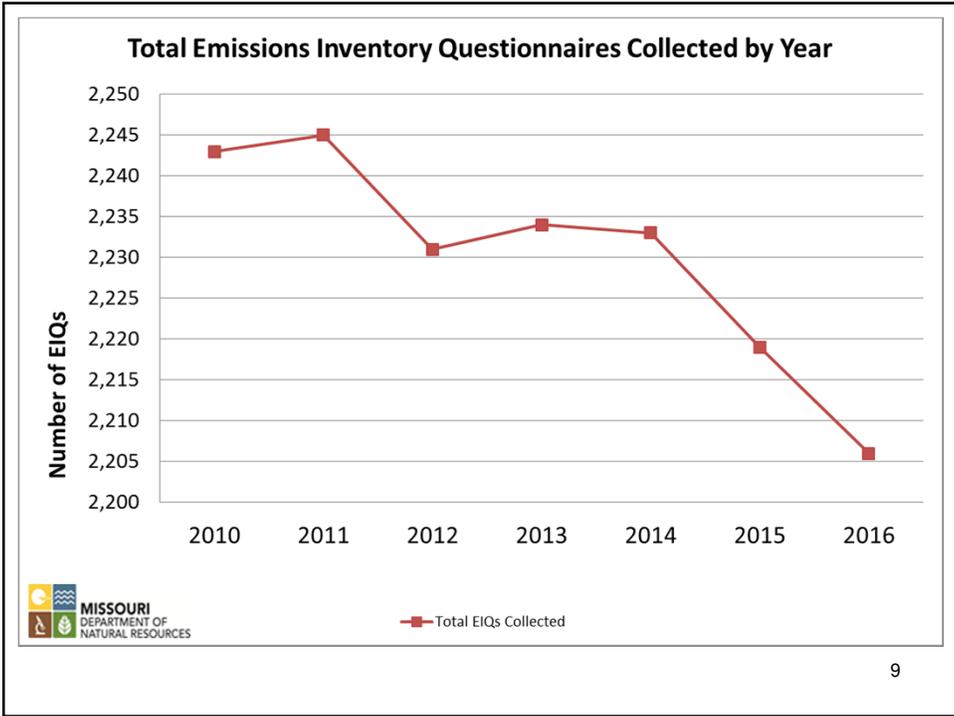


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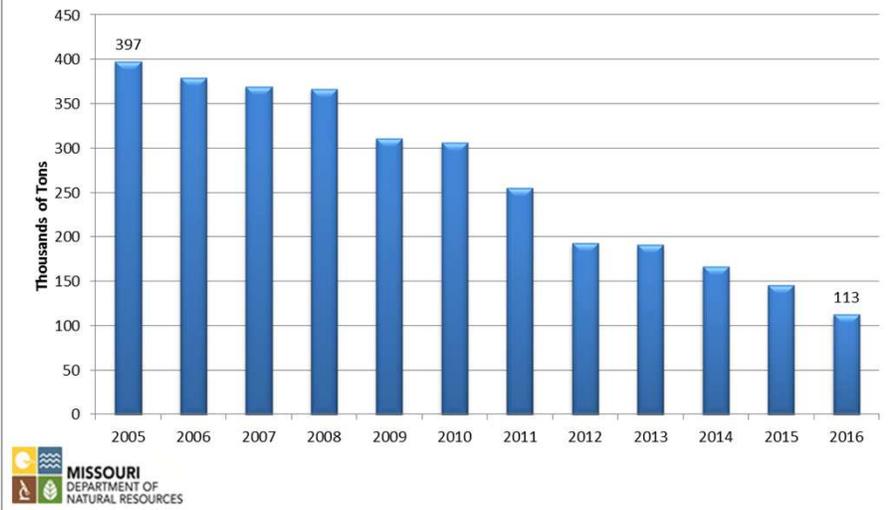
**Percentage of Emissions Fees Collected by Permit Type  
2016 Emission Year**



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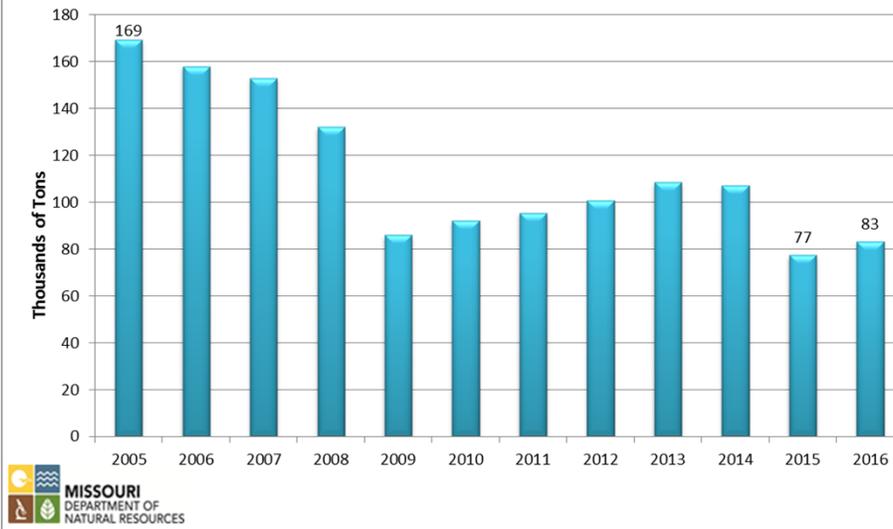


### Sulfur Dioxide (SO<sub>2</sub>) Emissions from Point Sources in Missouri

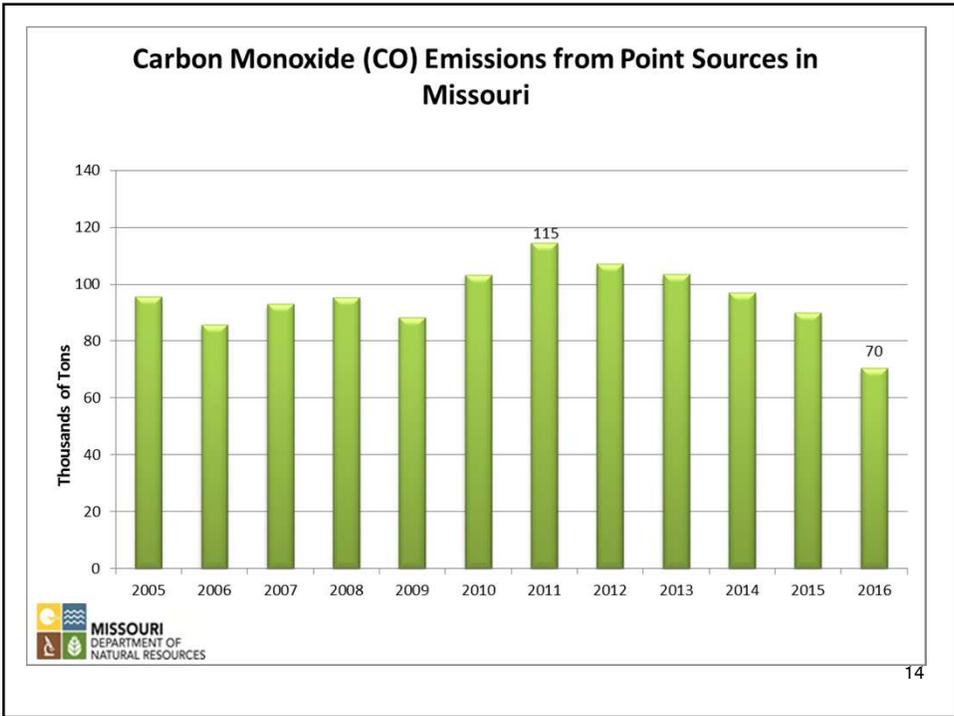
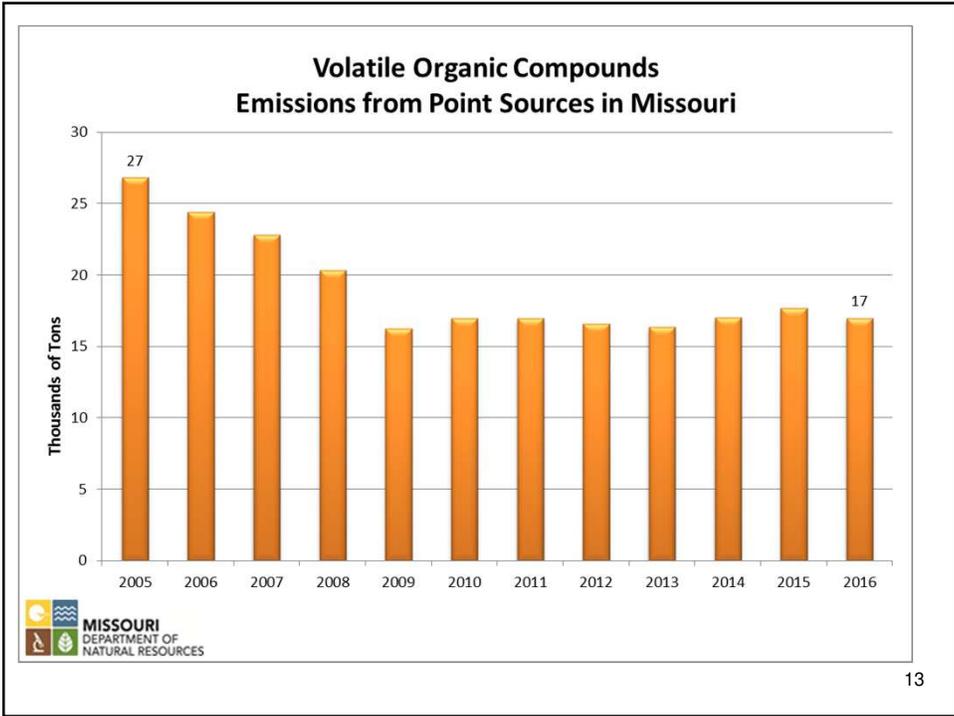


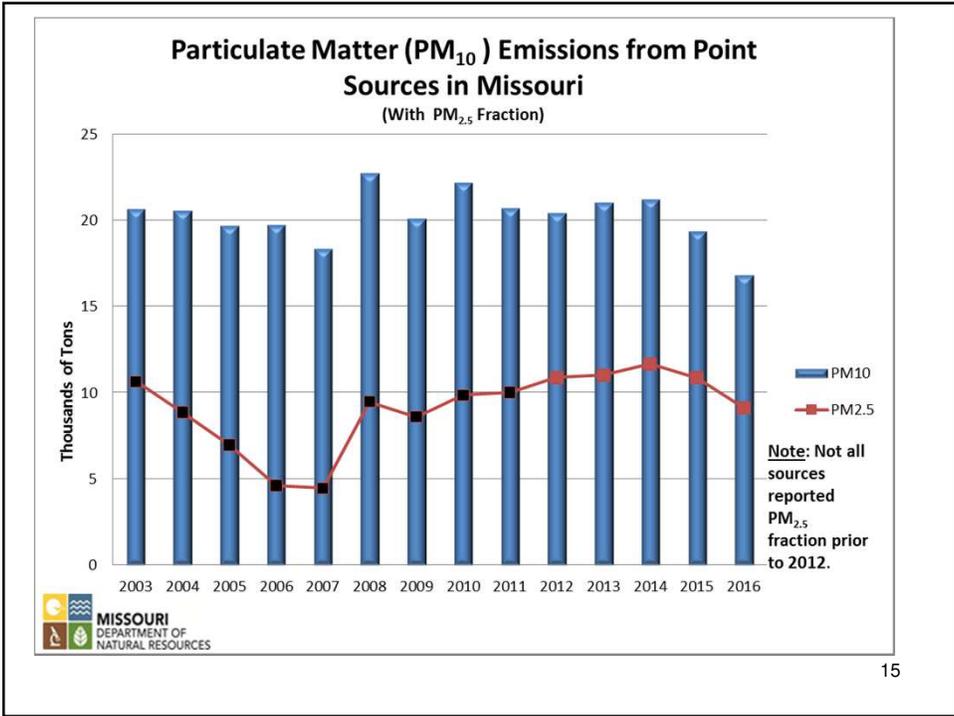
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### Nitrogen Oxides (NO<sub>x</sub>) Emissions from Point Sources in Missouri

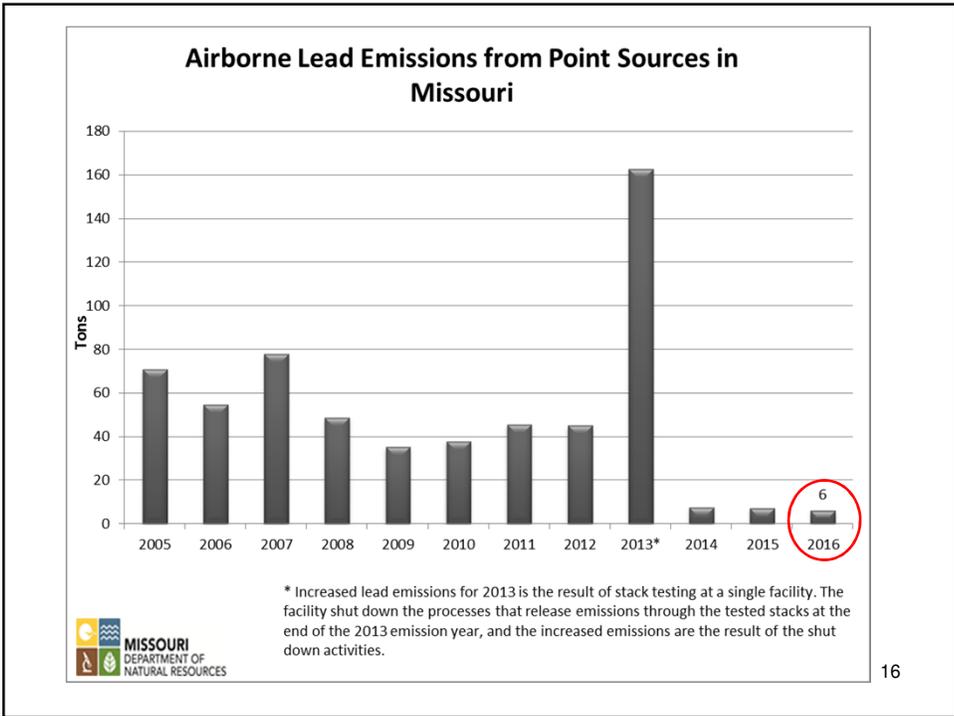


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## Ambient Air Monitoring Trends

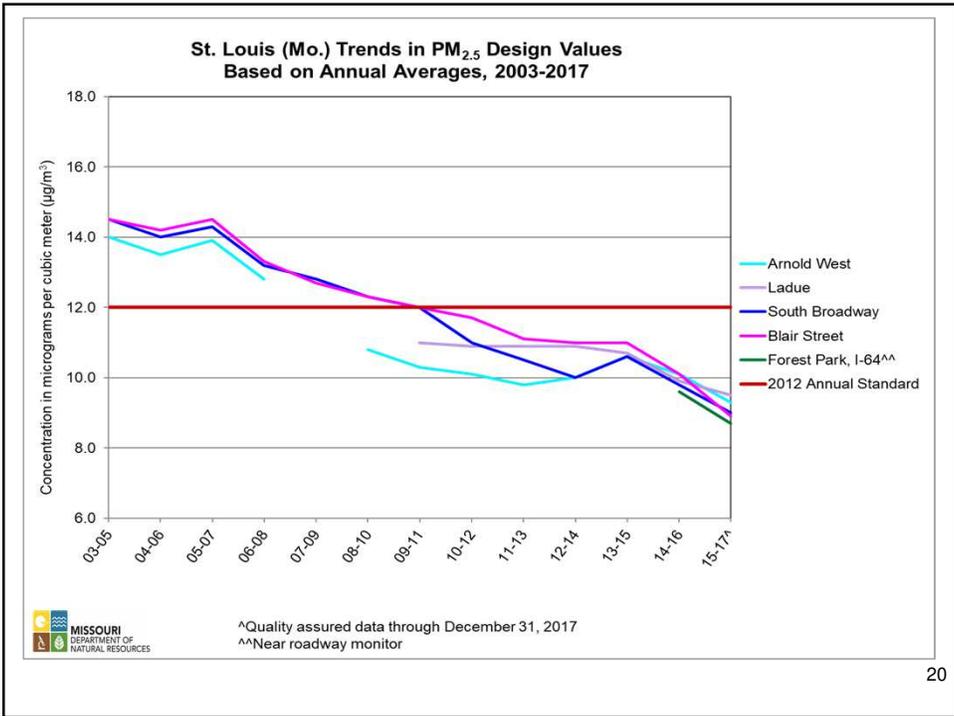
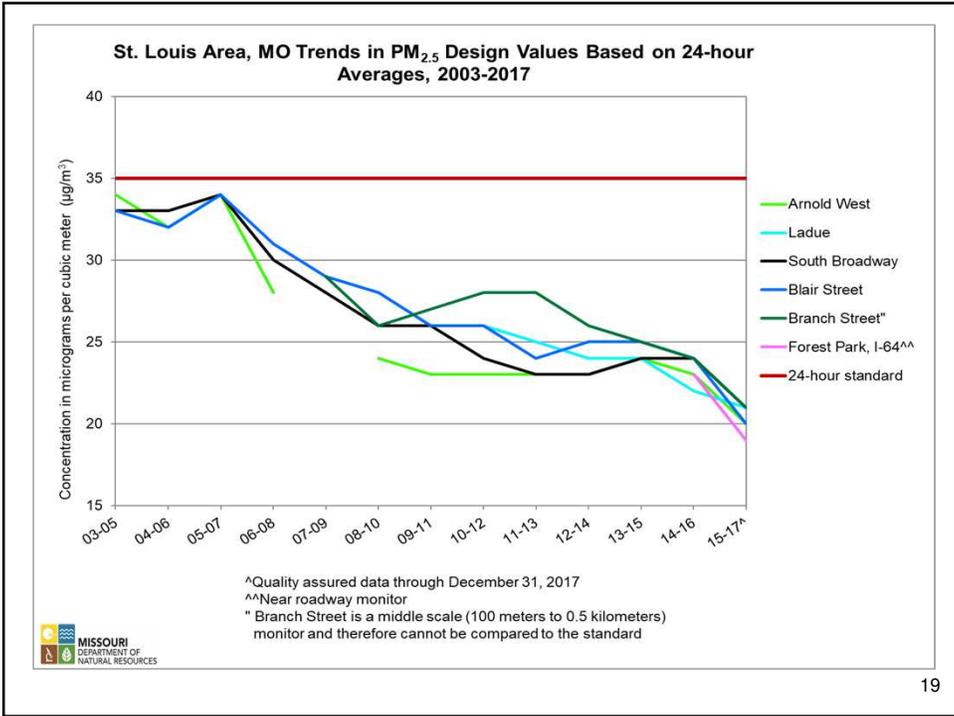
- Area wide criteria pollutant long term monitoring trends are decreasing.
- Some single source and area specific National Ambient Air Quality Standards violations are being addressed.

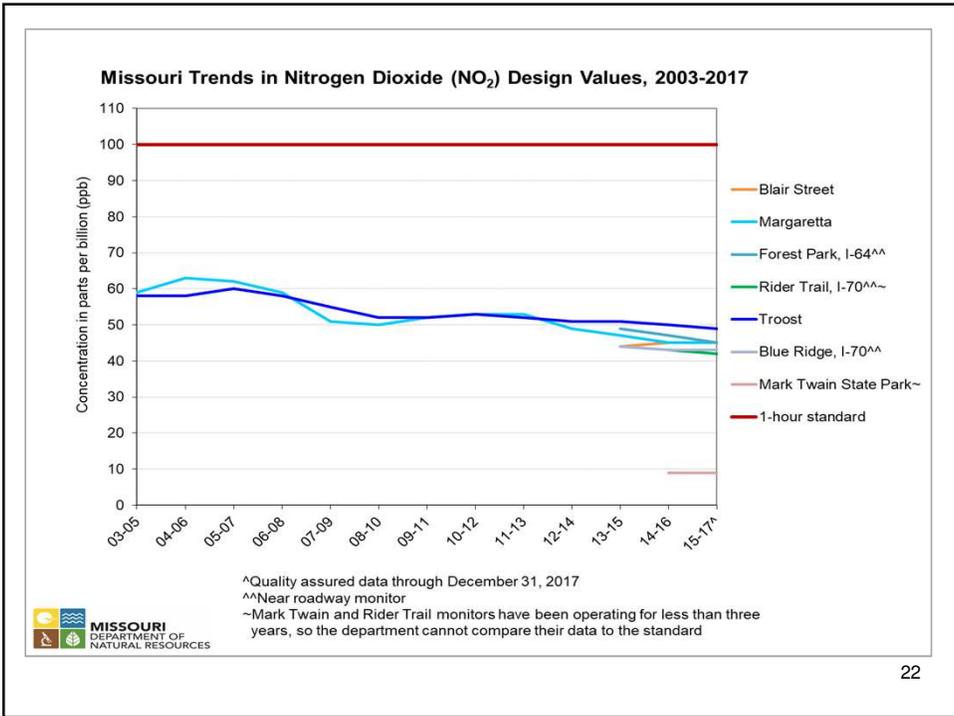
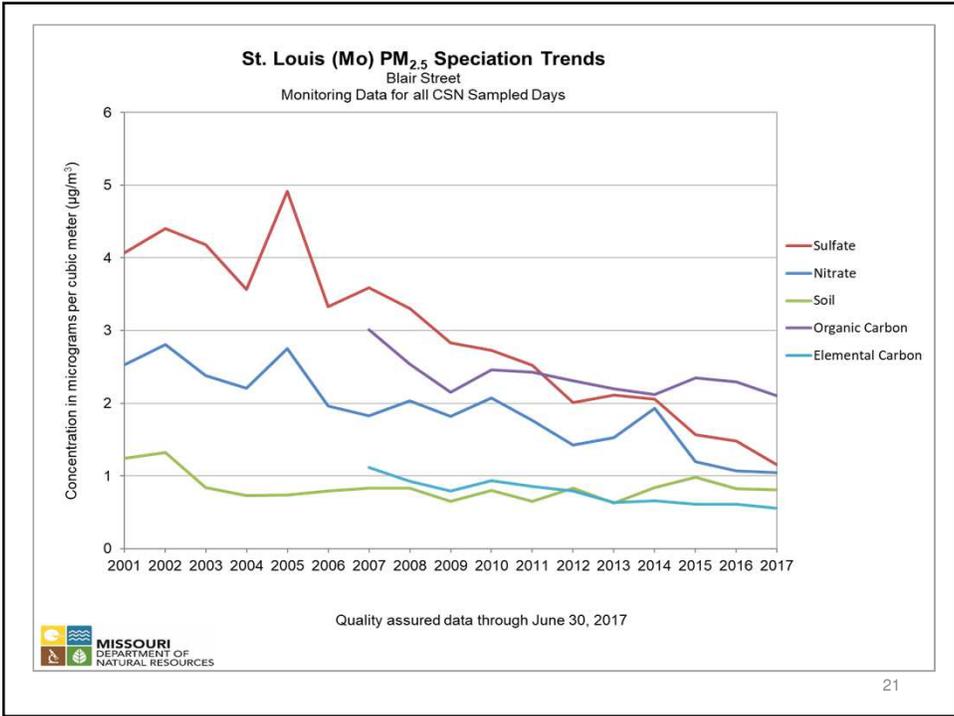
17

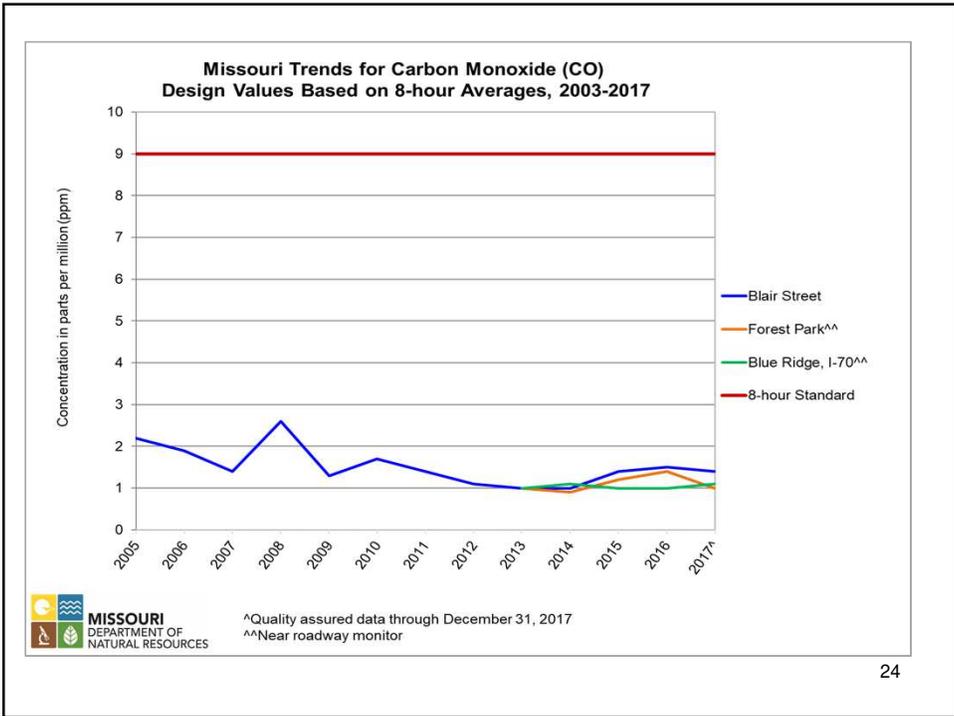
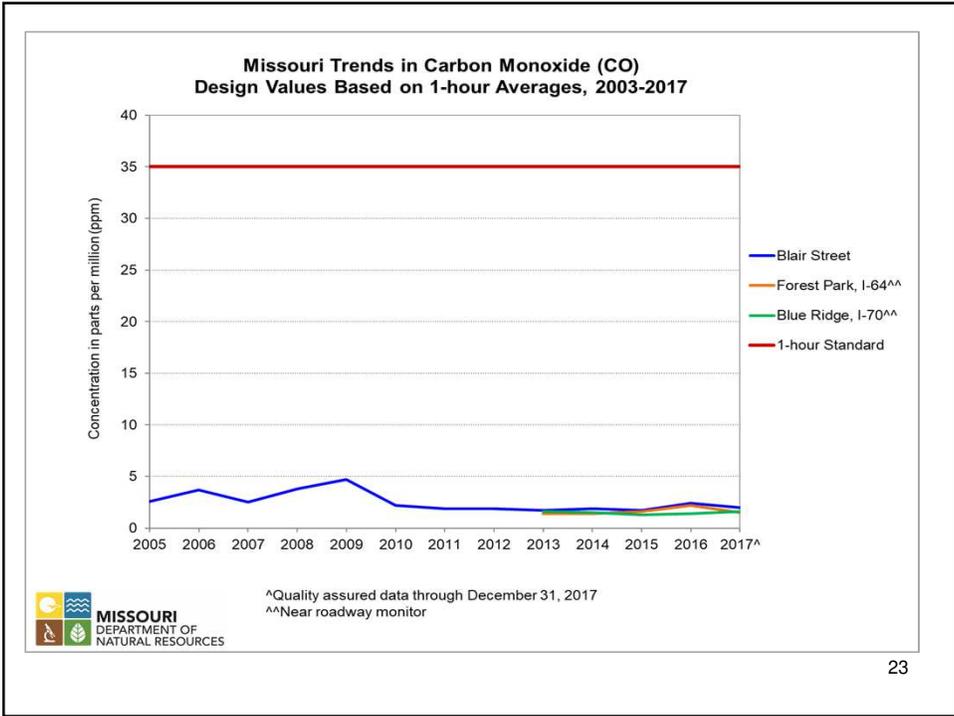
## Monitoring Compliance

- NO<sub>2</sub>: 1-hour (100 ppb) & annual (53 ppb) 2010 standard
- SO<sub>2</sub>: 1-hour (75 ppb) 2010 standard
- PM<sub>2.5</sub>: Annual (12 µg/m<sup>3</sup>) and 24-hour (35 µg/m<sup>3</sup>) 2012 standards
- PM<sub>10</sub>: 24-hour (150 µg/m<sup>3</sup>) 1987 standard
- CO: 1-hour (35 ppm) or 8-hour (9 ppm) 1971 standard

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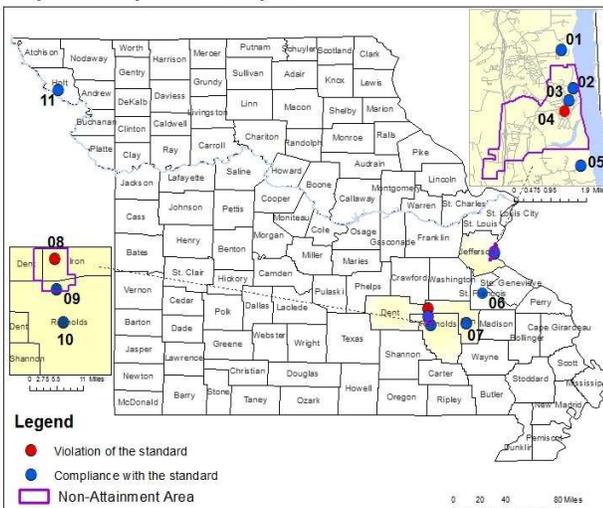
## Areas Not Monitoring Compliance

- **Ozone:** 8-hour (70 ppb) 2015 standard
  - One Area, St. Louis, one monitor
- **Lead:** 3-month avg. (0.15  $\mu\text{g}/\text{m}^3$ ) 2010 standard
  - Two Areas
    - Buick: No new violation since August 2016
    - Herculaneum: Violation in 2017 due to non-recurring smelter demolition activity

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## Missouri State Operated Lead (Pb) Monitoring Network, 2017

Rolling 3-month average standard = 0.15  $\mu\text{g}/\text{m}^3$



### 2015-2017 Design Values ( $\mu\text{g}/\text{m}^3$ )<sup>a</sup>

**Herculaneum Area**  
 01 Pevely (0.02)  
 02 Herculaneum, Sherman (0.04)  
 03 Herculaneum, Dunklin High School (0.06)  
 04 Herculaneum, Mott St. (**0.21**)  
 05 Ursuline North (0.01)

**Old Pb Belt Area**  
 06 St. Joe State Park (0.03)

**New Pb Belt Area**  
 07 Glover (0.07)  
 08 Buick NE (**0.16**)  
 09 Oates (0.04)  
 10 Fletcher (0.05)

**Outstate Area**  
 11 Forest City, Exide Levee (0.02)

<sup>a</sup>Quality assured data through December 31, 2017

Red and bold is violation of the standard

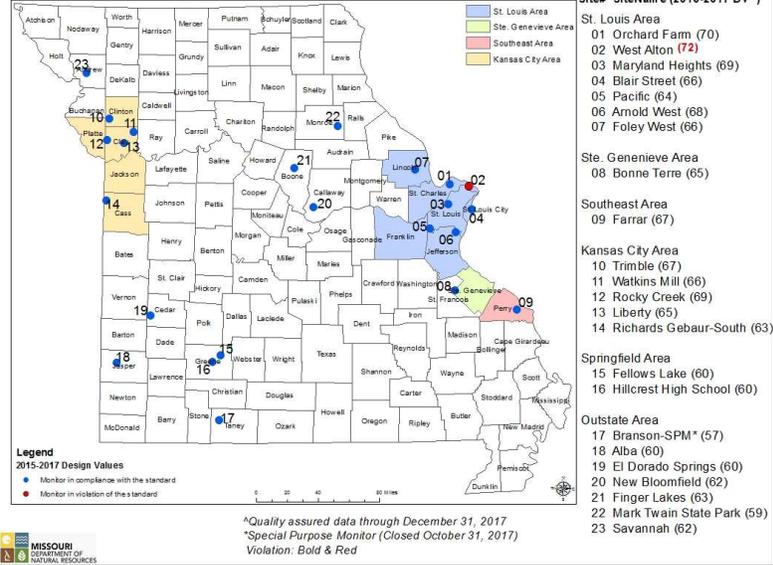
26



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**Missouri Statewide Ozone (O3) Monitoring Network, 2017**

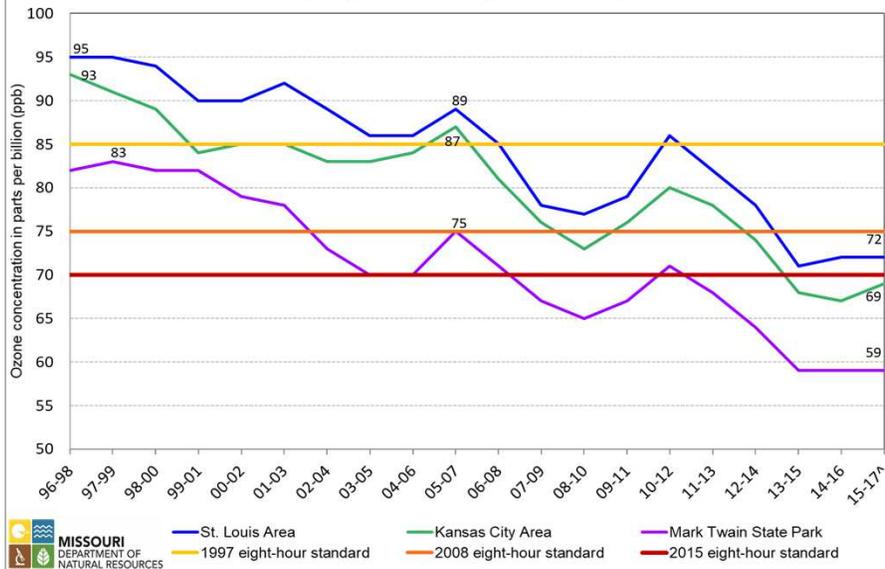
2015 8-hour standard = 70 parts per billion (ppb)



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**Trends in Eight-hour Ozone Design Values**  
**St. Louis and Kansas City Areas and Rural Site (Mark Twain)**

(\*Quality assured data through December 2017)



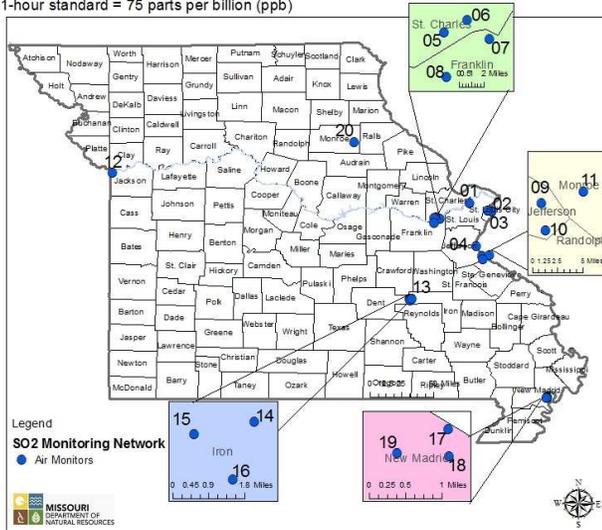
28



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### Statewide Sulfur Dioxide (SO<sub>2</sub>) Monitoring Network, 2017

1-hour standard = 75 parts per billion (ppb)



Legend  
SO<sub>2</sub> Monitoring Network  
● Air Monitors

#### 2015-2017 Design Values (ppb)<sup>^</sup>

##### St. Louis Area, MO

- 01 Rider Trail, I-70<sup>^^</sup> (15)
- 02 Margaretta (12)
- 03 Blair Street (15)
- 04 Herculaneum, Mott Street (23)
- 05 Ameren-Northwest<sup>††</sup> (25)
- 06 Ameren-North<sup>††</sup> (30)
- 07 Ameren-Valley<sup>††</sup> (27)
- 08 Ameren-Southwest<sup>††</sup> (22)
- 09 Ameren-Weaver & Hwy AA<sup>††</sup> (23)
- 10 Ameren-Natchez<sup>††</sup> (23)
- 11 Ameren-Fults, IL<sup>††</sup> (21)

##### Kansas City Area, MO

- 12 Troost (57)

##### Outstate Area, MO

- 13 Buick NE (44)
- 14 Hwy 32 Northeast<sup>††</sup> (51)
- 15 County Road 75<sup>††</sup> (47)
- 16 West Entrance<sup>††</sup> (44)

##### Outstate Area, MO

- 17 M7M Site #1-AECI Water Tower<sup>††</sup> (13)
- 18 M7M Site #2-East Graveyard<sup>††</sup> (5)
- 19 M7M Site #3-West Entrance<sup>††</sup> (7)
- 20 Mark Twain State Park (5)

<sup>^</sup>Quality assured data through December 31, 2017

<sup>††</sup>Special Purpose Monitor

<sup>†††</sup>Industry Monitor

<sup>††††</sup>Less than 3 years of data

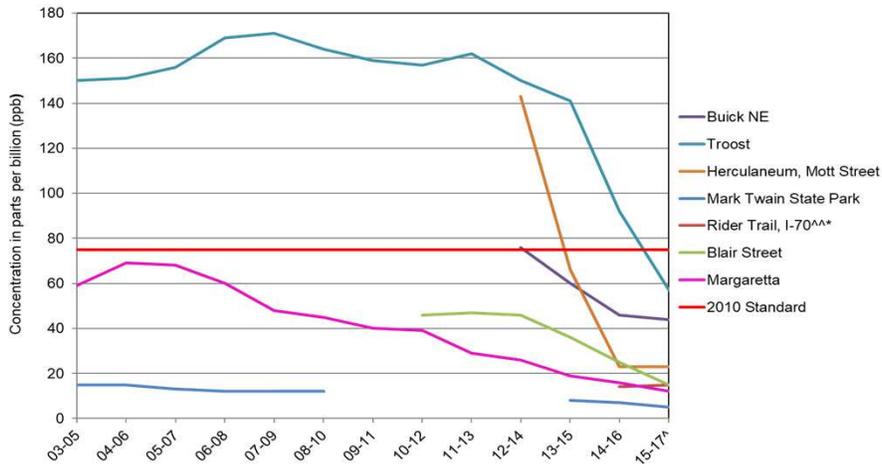
<sup>†††††</sup>Began Monitoring in 2017

Green: EPA's Data Requirements Rule Sites

M7M: Magnitude 7 Metals

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**Trends in Sulfur Dioxide (SO<sub>2</sub>) Design Values for Missouri State Operated Sites, 2003-2017**



<sup>^</sup>Quality assured data through December 31, 2017

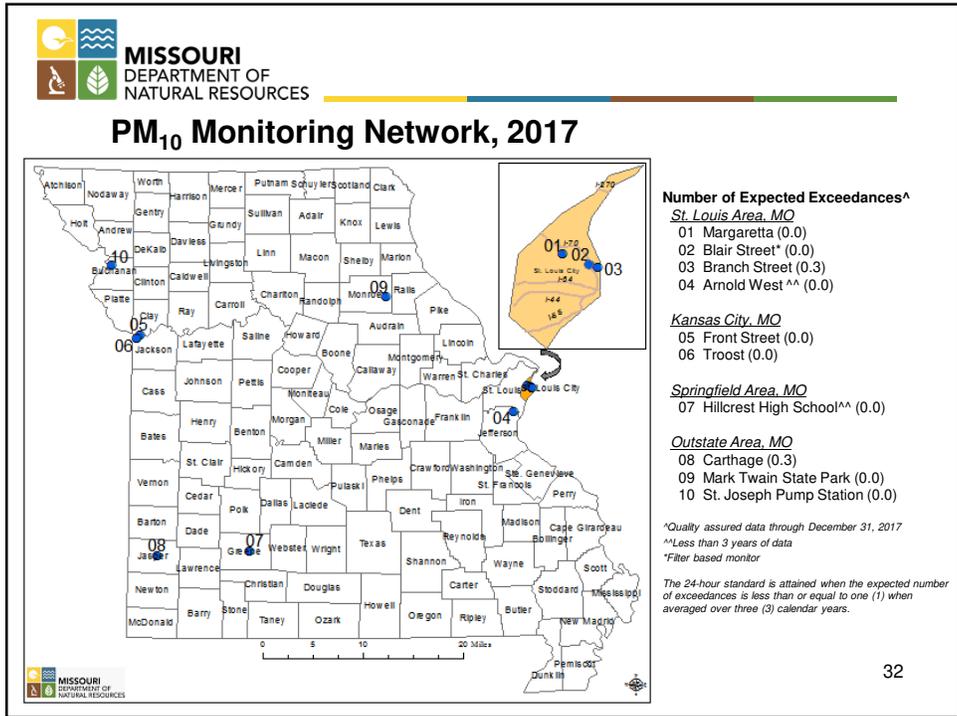
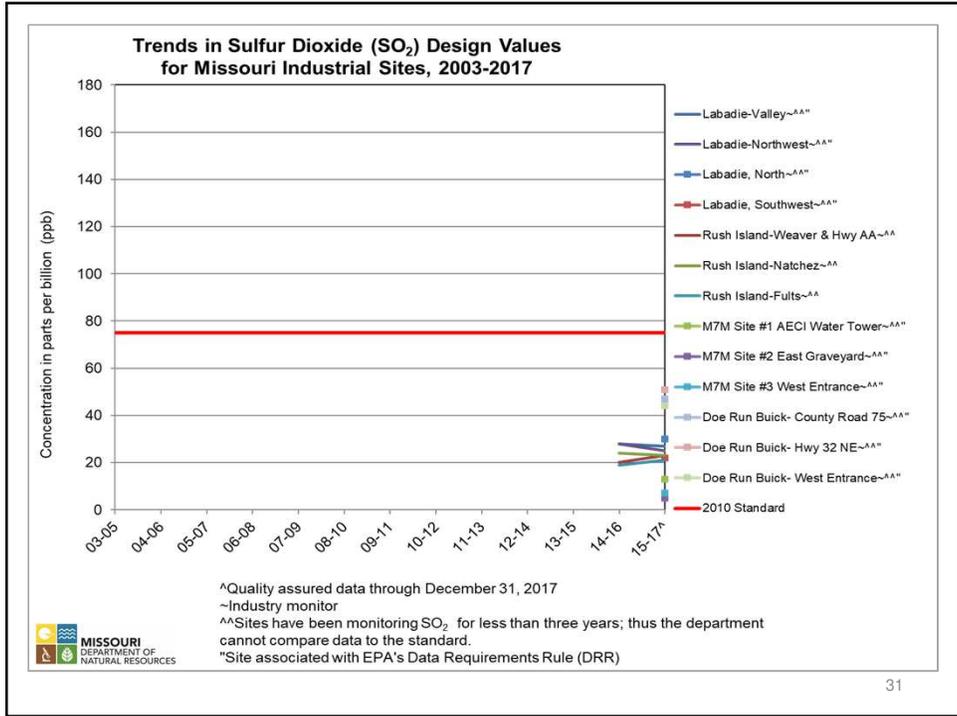
<sup>^^</sup>Rider Trail has been monitoring SO<sub>2</sub> for less than three years; thus the Department cannot compare data to the standard.

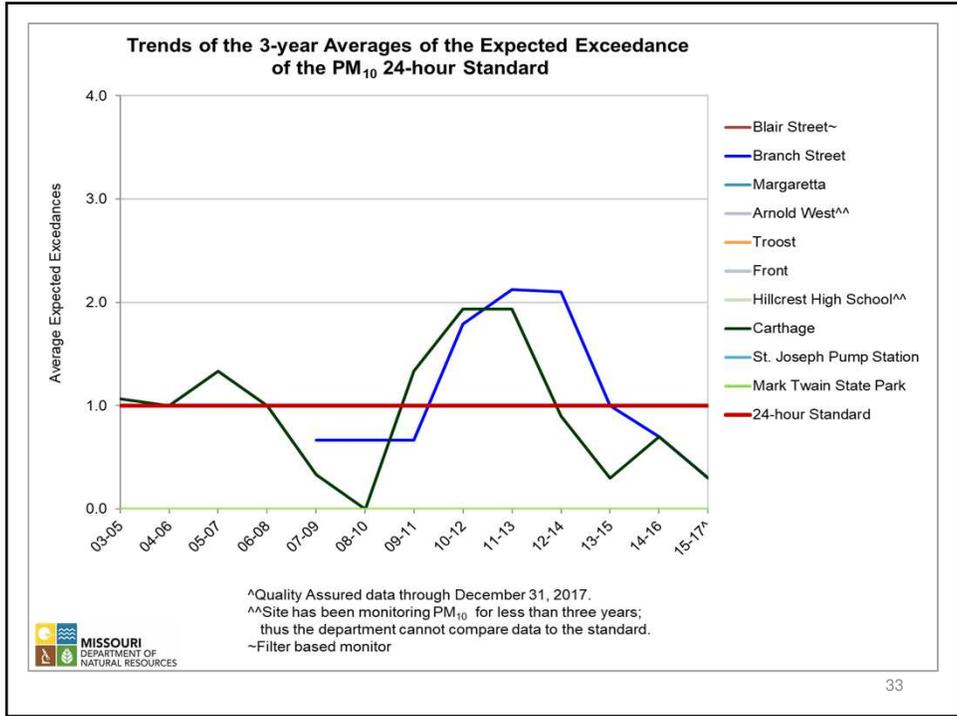
<sup>††</sup>Special Purpose Monitor



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# Website Resources

**Monitoring Information-Bookmark'**

- Design Value Reports
- Preliminary hourly data reports
- Monitoring Network Plans and More
- More improvements coming...

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# Questions?