

2010 1-Hour Sulfur Dioxide (SO₂) Standard: 2017 Designations

Proposed Area Boundary Recommendations

Air Pollution Control Program

October 25, 2016

Overview

- Designations process
- 2010 SO₂ Standard
- Recap of work completed to date
- Round 3 Recommendation



Clean Air Act Designations Process

- When EPA revises a standard, they must identify or "designate" areas as meeting or not meeting the standard
- States provide input to EPA through boundary recommendations based on technical evaluations of available data
- EPA provides feedback to states 120 days prior to final designations, "120-day letters"

2010 SO₂ Standard: Overview

- 1-hour standard: 75 ppb
- Phased Implementation
 - Designations in “Rounds”
 - 4 total Rounds
- Hybrid Monitoring and Modeling Approach

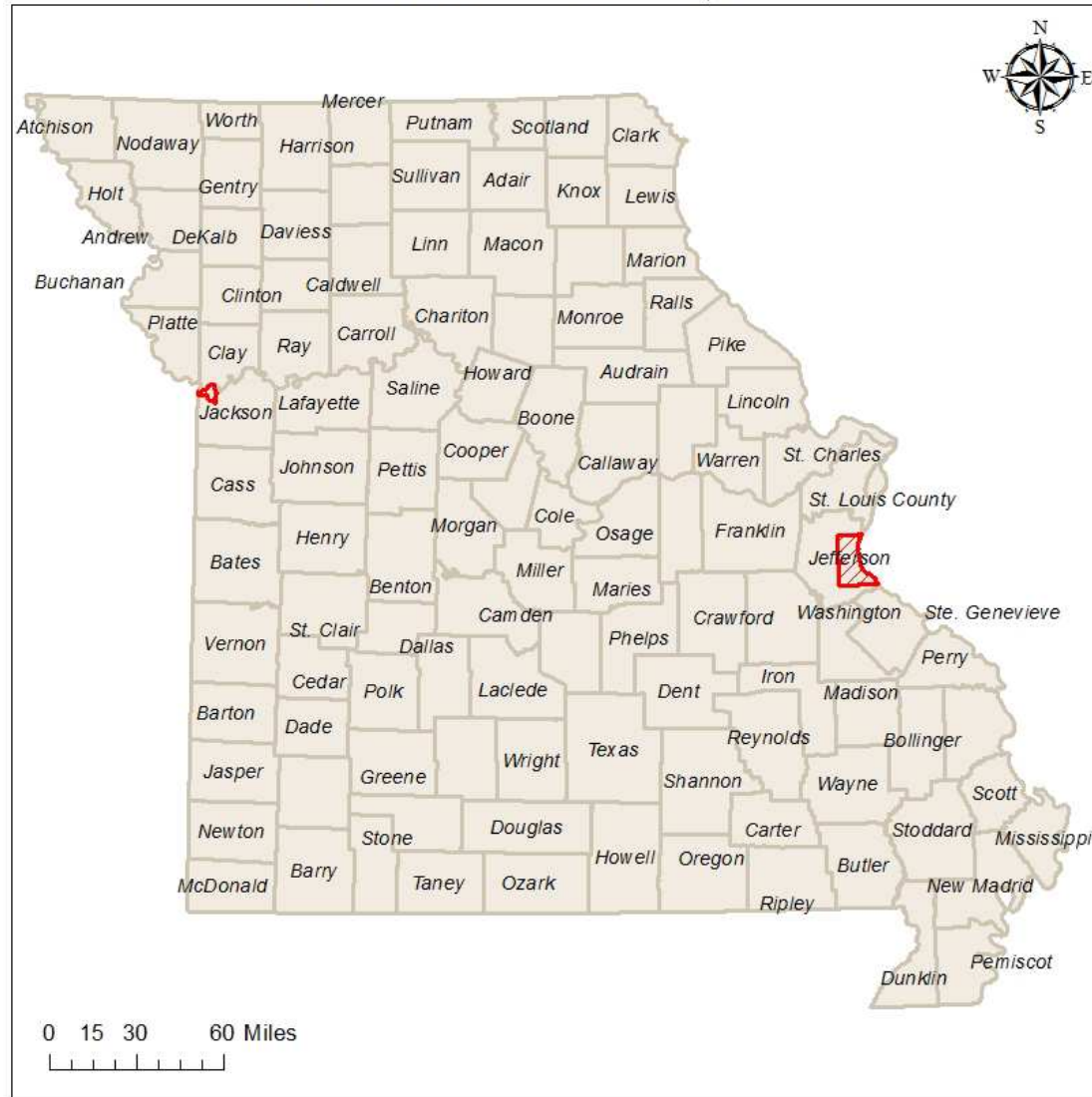
Round 1

- First round based on 2010-2012 monitoring data
 - Violations in existing monitor network
 - Two areas in Missouri designated as nonattainment (effective Oct. 2013)
 - Portion of Jackson County
 - Portion of Jefferson County*


* We anticipate submitting a redesignation request for the Jefferson County area in the near future.

2010 1-hour SO₂ Standard: Round 1 Designations

Effective Date: October 4, 2013



Legend

 Nonattainment Areas

2015 Federal Consent Decree

- EPA entered into a consent decree with Sierra Club, et. al.
- Consent decree establishes deadline for three additional rounds of designations
 - Second round by July 2, 2016;
 - Third round by December 31, 2017; and
 - Final round by December 31, 2020.

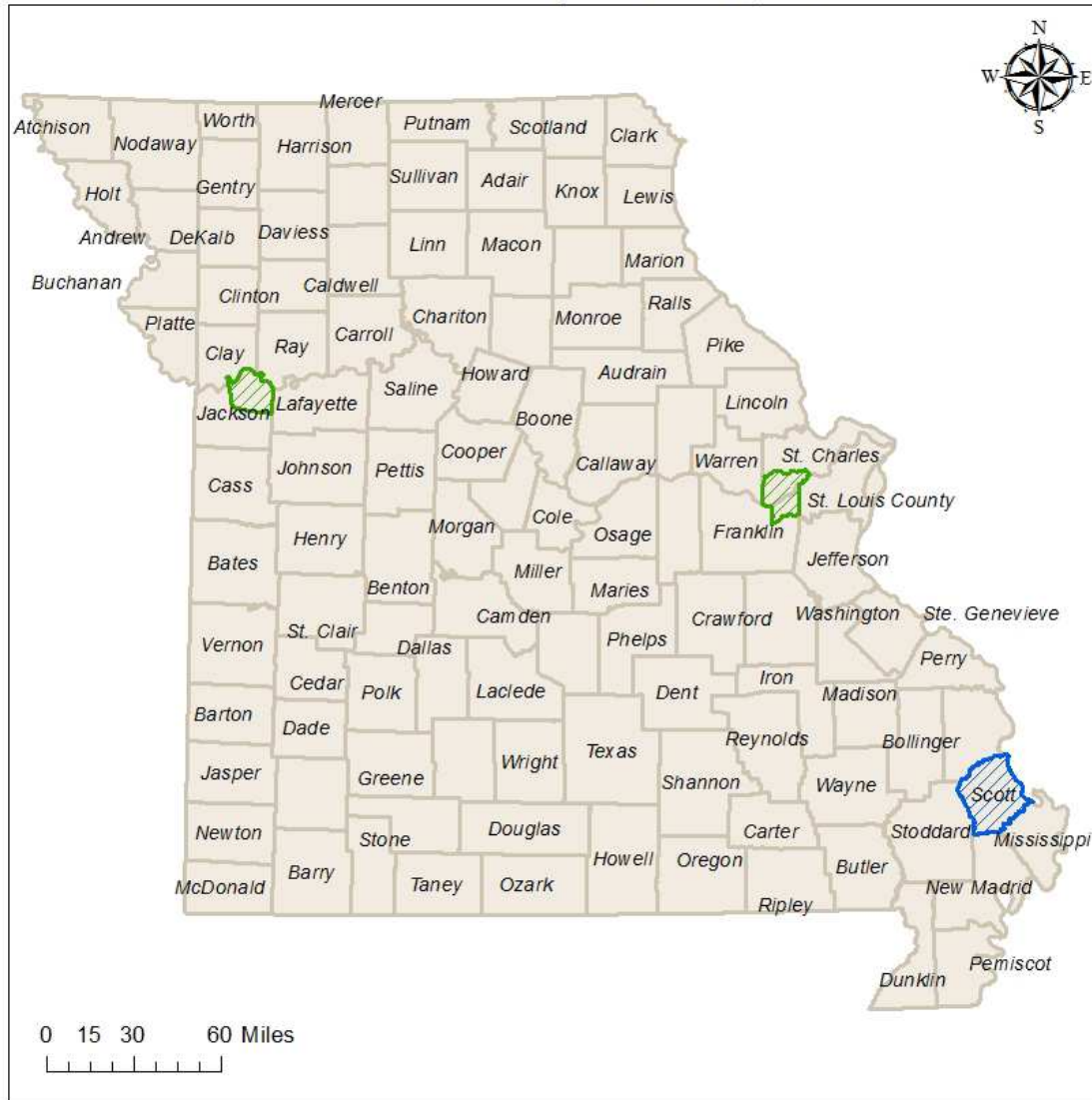
Round 2 (July 2016 Designations)

- EPA designated three areas in Missouri
- Designations effective Sept. 2016

Location	EPA's Final Designation
Sikeston Power Station	<i>Unclassifiable/Attainment</i>
Kansas City Power & Light – Sibley Generating Station	<i>Unclassifiable</i>
Ameren Missouri – Labadie Energy Center	<i>Unclassifiable</i>

2010 1-hour SO₂ Standard: Round 2 Designations

Effective Date: September 12, 2016



Legend

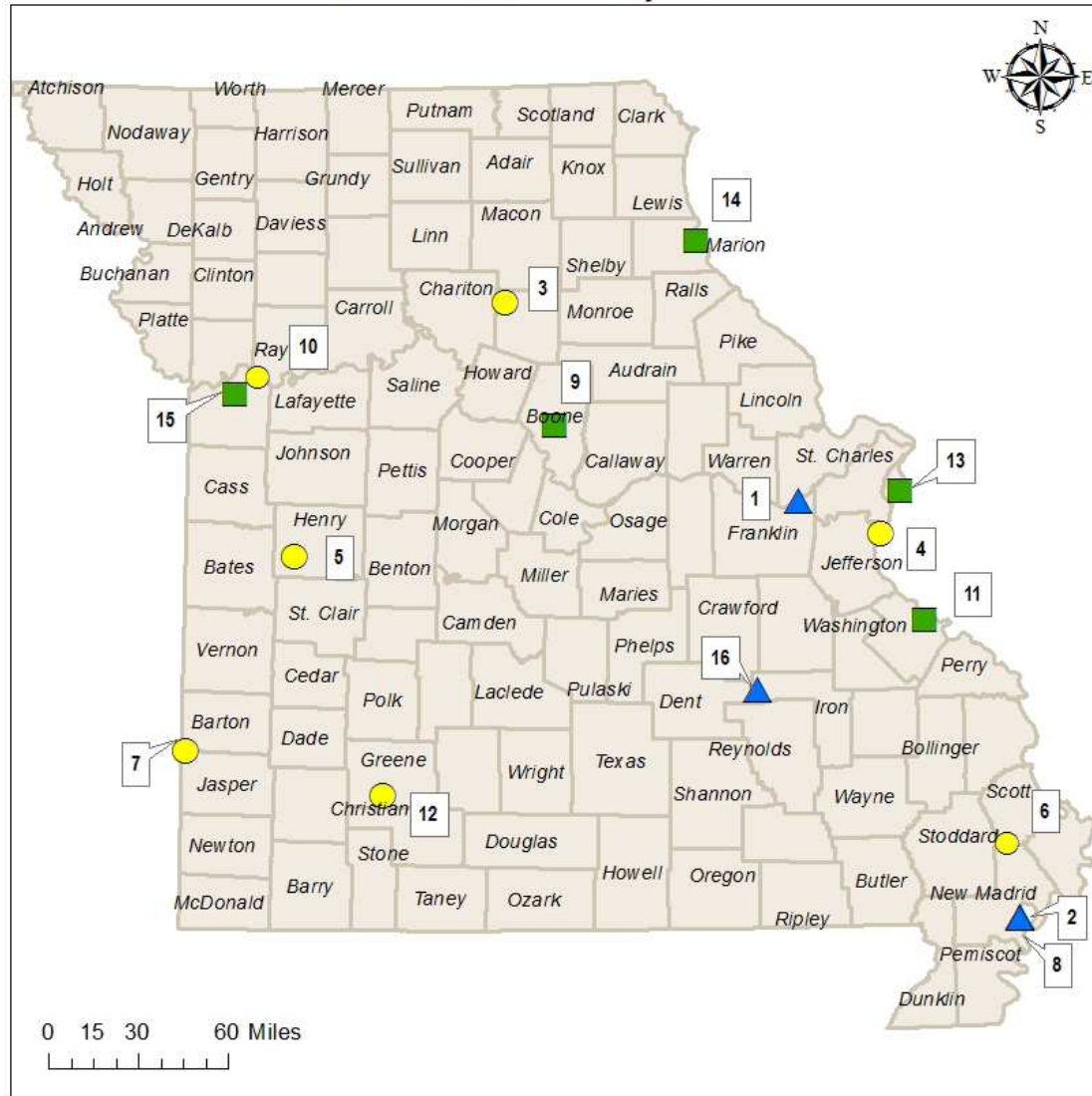
- Unclassifiable Areas
- Unclassifiable/Attainment Area

MISSOURI
 DEPARTMENT OF
 NATURAL RESOURCES
 Division of Environmental Quality
 Air Pollution Control Program
 Prepared: September 15, 2016

Data Requirements Rule

- Governs final two rounds of designations
- Affects sources that emitted greater than 2,000 tons of SO₂ in 2014 (latest emission year)
- Sources have two evaluation options
 - New monitors or modeling
- New federally enforceable limits may remove characterization obligation

2010 1-hour SO₂ Standard: Round 3 and 4 Sources affected by DRR



Legend

- Modeled Sources
- ▲ Monitoring Sources
- Limited Sources

Sources Affected by the DRR

MAP ID	FID	Plant Name	Method of Air Quality Characterization		Federally enforceable requirement to limit SO ₂ emissions to under 2,000 tpy	Description
			Monitoring	Modeling		
1	071-0003	AMEREN MISSOURI-LABADIE ENERGY CENTER	X			
2	143-0004	NEW MADRID POWER PLANT-MARSTON	X			
3	175-0001	THOMAS HILL ENERGY CENTER POWER DIVISION-THOMAS HILL		X		
4	189-0010	AMEREN MISSOURI-MERAMEC ENERGY CENTER		X		
5	083-0001	KANSAS CITY POWER AND LIGHT CO (KCP AND L)-MONTROSE GENERATING STATION		X		
6	201-0017	SIKESTON POWER STATION		X		
7	097-0001	EMPIRE DISTRICT ELECTRIC CO-ASBURY PLANT		X		
8	143-0008	NORANDA ALUMINUM INC-NEW MADRID	X			
9	019-0004	UNIVERSITY OF MISSOURI (MU)-COLUMBIA POWER PLANT			X	Facility-wide limit enforceable through construction permit
10	095-0031	KCP AND L - GREATER MO OPERATIONS-SIBLEY GENERATING STATION		X		
11	186-0001	MISSISSIPPI LIME COMPANY-STE. GENEVIEVE			X	Facility-wide limit enforceable through Title V permit
12	077-0039	CITY UTILITIES OF SPRINGFIELD - JOHN TWITTY ENERGY CENTER		X		
13	510-0003	ANHEUSER-BUSCH INC-ST. LOUIS			X	Facility-wide limit enforceable through Title V permit
14	127-0001	BASF CORPORATION-HANNIBAL PLANT			X	Reduction of potential to emit through equipment shutdown or fuel switch. Post-2016 PTE less than 2,000 tons per year.
15	095-0050	INDEPENDENCE POWER AND LIGHT-BLUE VALLEY STATION			X	Reduction of potential to emit through equipment shutdown or fuel switch. Post-2016 PTE less than 2,000 tons per year.
16	093-0009	DOE RUN -BUICK RESOURCE RECYCLING FACILITY	X			

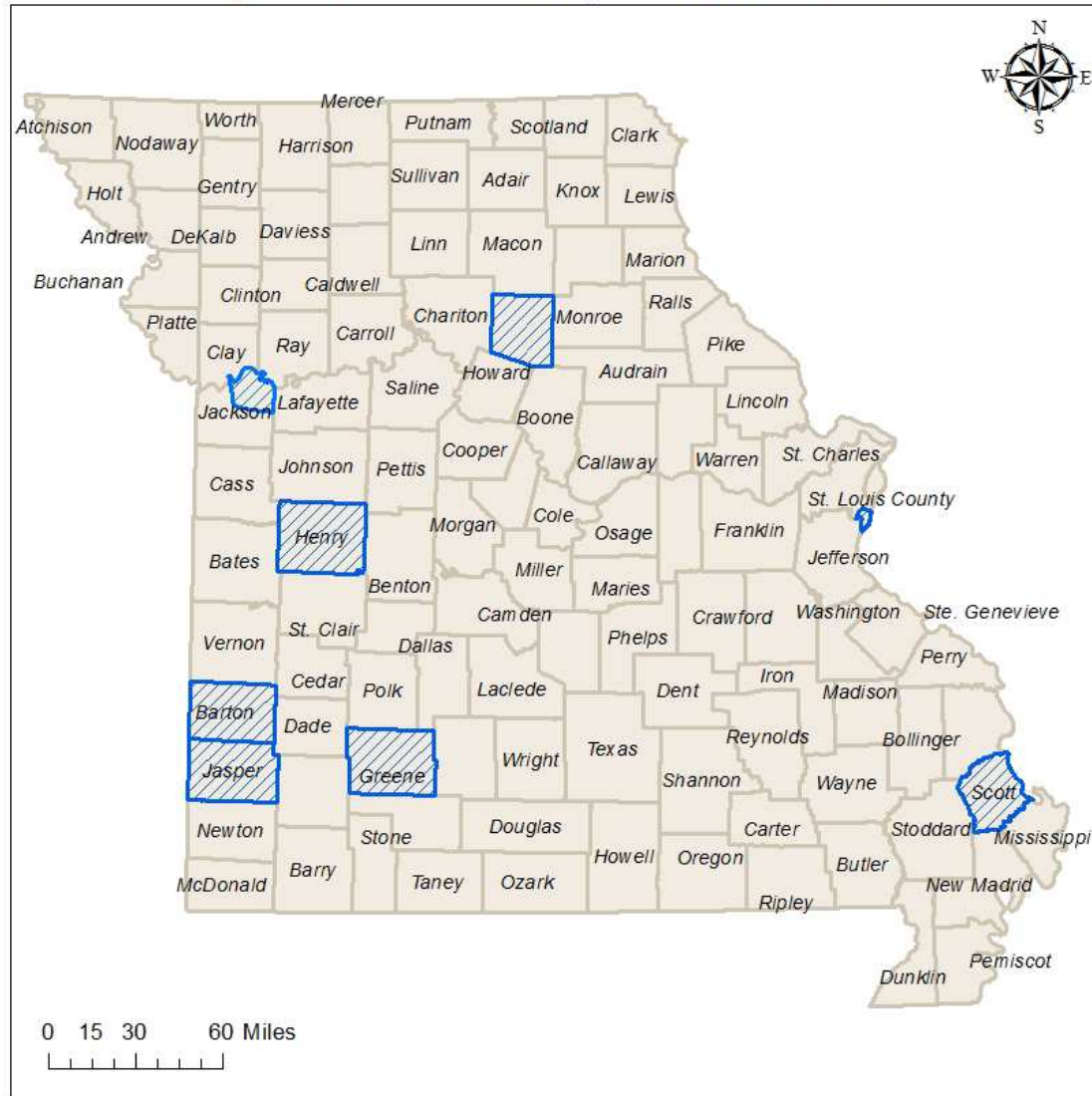
Round 3 (Dec. 2017 Designations)

- Seven DRR sources chose to demonstrate compliance with air quality modeling
- Model using recent actual emissions to approximate actual conditions
- All seven areas proposed as attainment
- Posted for public notice on Sept. 26
<http://dnr.mo.gov/env/apcp/stateplanrevisions.htm>


Round 3 Proposed Recommendation

Affected Source	Proposed Boundary	Proposed Area Designation Recommendation
Ameren Missouri-Meramec Energy Center	Portion of St. Louis County	Attainment
Empire District Electric Co-Asbury Plant	Barton and Jasper counties	Attainment
Kansas City Power And Light Co (KCP AND L)-Montrose Generating Station	Henry County	Attainment
KCP AND L - Greater Mo Operations-Sibley Generating Station	Portion of Jackson County	Attainment
Sikeston Power Station	Scott County	Attainment
City Utilities of Springfield - John Twitty Energy Center	Greene County	Attainment
Thomas Hill Energy Center Power Division-Thomas Hill	Randolph County	Attainment

2010 1-hour SO₂ Standard: Round 3 (Dec. 2017 Designations) Proposed Area Boundary Recommendations



Legend

 Proposed Attainment Area Boundaries

Recommendation Timeline

October 27

- Public Hearing at Missouri Air Conservation Commission meeting

November 3

- Public comment period ends

December 1

- Proposing for Adoption by MACC

January 13, 2017

- Submit Recommendation to EPA

August 2017

- EPA sends “120-day” letters to states

December 31, 2017

- EPA finalizes Round 3 designations

December 31, 2020

- EPA designates all remaining areas

Division of Environmental Quality Director: Leanne Tippett Mosby

Date: October 11, 2016

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