MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

St. Louis Nonattainment Area Plan for the 2015 Ozone Standard

July 27, 2023
Air Pollution Control Program
Air Quality Planning Section
State Implementation Plan Unit

Overview

- Background Information
  - Nonattainment Area Timeline
  - Ozone Monitoring Network
  - Ozone Monitoring Data Summary
- Moderate Nonattainment Area SIP Requirements
- Contact Information and Next Steps

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Nonattainment Area Timeline

2015

Oct. 26, 2015
EPA promulgates the 2015 ozone standard at 70 ppb.

2018

June 4, 2018
EPA designates St. Louis City and County, St. Charles County, and Boles Township in Franklin County as nonattainment for 2015 ozone standard. Jefferson County was attainment.

2021

July 14, 2021
EPA revises designation for Jefferson County adding it to the St. Louis nonattainment area.

Sept. 8, 2021
Department submits marginal area nonattainment plan for St. Louis to EPA.

Aug. 3, 2021
Attainment deadline for Marginal nonattainment areas under the 2015 ozone standard

2022

April 8, 2022
Department submits maintenance plan and redesignation request for St. Louis nonattainment area to EPA.

Jan. 21, 2022
All monitors have certified 2019-2021 design values in compliance with the 2015 ozone standard.

Oct. 7, 2022
EPA reclassifies St. Louis nonattainment area from marginal to moderate.

July 11, 2022
Alton, IL monitor measures preliminary violation of the 2015 ozone standard.

July 27, 2022
Public hearing for Moderate nonattainment plan for St. Louis.

2023

Jan. 1, 2023
Deadline for moderate area nonattainment plan elements.

Feb. 7, 2023
EPA approves Missouri's marginal area nonattainment plan for St. Louis.

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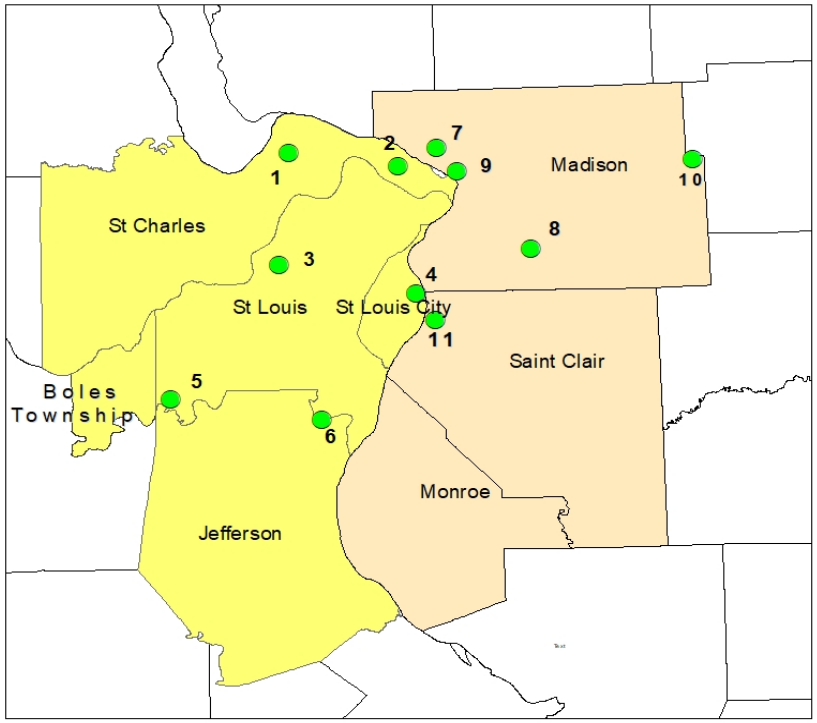
Ozone Monitoring Network



Legend: Active Ozone Monitoring Stations

Missouri

1 Orchard Farm
2 West Alton
3 Maryland Heights
4 Blair Street
5 Pacific
6 Arnold West

Illinois

7 Alton
8 Maryville
9 Wood River
10 Alhambra
11 East Saint Louis

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Ozone Monitoring Data

Ozone Design Values for 3-Year Period Ending on Applicable Year (ppb)								
State	County	**Site**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
MO	St Charles	Orchard Farm	70	72	69	68	66	65
	St Charles	West Alton	72	74	71	71	68	69
	St. Louis City	Blair Street	66	71	69	68	65	67
	St. Louis	Maryland Heights	69	70	68	71	69	68
	St. Louis	Pacific	64	66	65	66	64	63
	Jefferson	Arnold West	68	69	67	67	68	68
IL	Madison	Alton	69	70	68	69	68	71
	Madison	Maryville	68	72	71	68	67	68
	Madison	Wood River	70	71	69	70	69	70
	St. Clair	East St. Louis	67	71	68	67	65	66
	Madison	Alhambra	65	68	66	66	65	67

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- Moderate Nonattainment Area SIP Requirements
  - General Nonattainment Requirements
  - Moderate Ozone Nonattainment Requirements
- Contact Information and Next Steps

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General Nonattainment Plan Requirements

- CAA Section110(a)(2): Requires Public Participation
  - Public comment period opened June 26, 2023 and closed August 3, 2023.
- CAA Section 172(c)(1): Requires Attainment Demonstration
  - Comprehensive photochemical modeling included in Appendix D of plan
- CAA Section 172(c)(9): Requires Contingency Plan
  - EPA's rules and guidance: One year's worth of progress in Contingency Plan

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Moderate Ozone Nonattainment Plan Requirements

- CAA Section 182(b): Moderate Ozone Requirements
  - Reasonable Further Progress (RFP) – 15% reduction in VOC and NO_X within 6 years of designation.
  - Reasonably Available Control Technology (RACT) – Requirements for major industrial sources of VOC and NO_X to employ technology for the lowest emission limitation a source that is technologically and economically feasible.
  - Vehicle Inspection and Maintenance (I/M) – Gateway Vehicle Inspection Program (GVIP), plan updates the non-regulatory narrative describing how GVIP meet's EPA's minimum standards.
  - Gasoline Vapor Recovery – Historically required by Clean Air Act, EPA has required all vehicles since 1996 model year to include this technology in vehicle design
  - General Offsets – New sources of VOC and NOX must include emissions reductions 1.15 times as much as the source would increase emissions
- All Marginal Area Requirements: Section 182 (a)

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Contingency Plan

- EPA has traditionally required a Contingency Plan to achieve one year's worth of progress toward the RFP requirements

- Because RFP requires 15% emissions reduction for 5 years following designation, one year's worth of reduction is 3%

- Missouri's Contingency Plan is based on the Motor Vehicle Emissions Budget (MVEB):
  - Enforceable contingency measures are separate from RFP and modeled attainment
  - MVEB is part of Transportation Conformity which ensures that vehicle emissions do not exceed levels allowed through the SIP

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Public Participation and Next Steps

- The plan was posted on the department's website for public review and comments from June 26, 2023 to August 3, 2023.
- The department received more than 40 comments from environmental groups and members of the public.
  - A summary of comments received and responses will be presented at an upcoming MACC meeting: https://dnr.mo.gov/commissions-boards-councils/air-conservation-commission

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