



Missouri Air Compliance Seminar November 6, 2024

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Agenda

- Air Trends
- Climate
- Criteria Pollutants
- Environmental Justice
- Air Toxics

Air Trends – Annual Report 2023

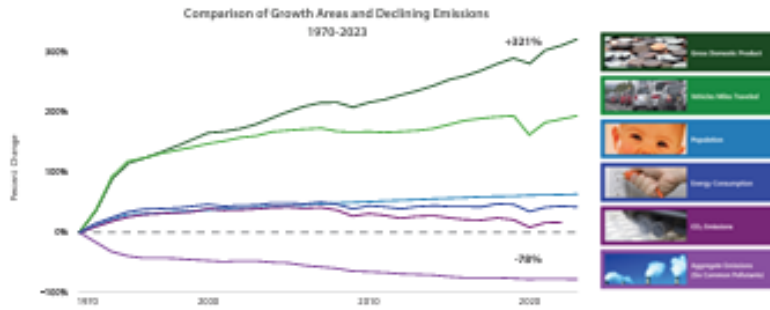


Our Nation's Air Air Quality Improves as America Grows

<https://gispub.epa.gov/air/trendsreport/2024>

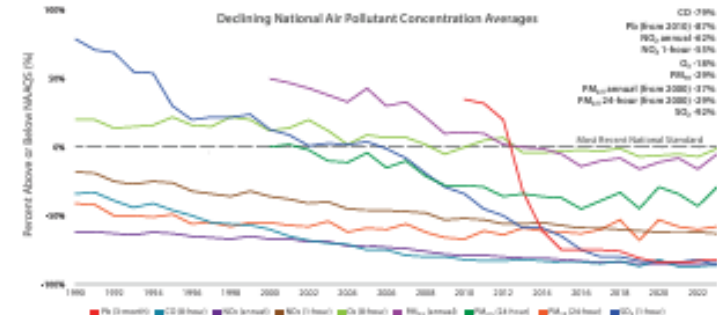
Economic Strength with Cleaner Air

Between 1970 and 2023, the combined emissions of the six common pollutants (PM_{2.5} and PM₁₀, SO₂, NO_x, VOCs, CO and Pb) dropped by 78 percent. This progress occurred while the U.S. economy continued to grow, Americans drove more miles and population and energy use increased.



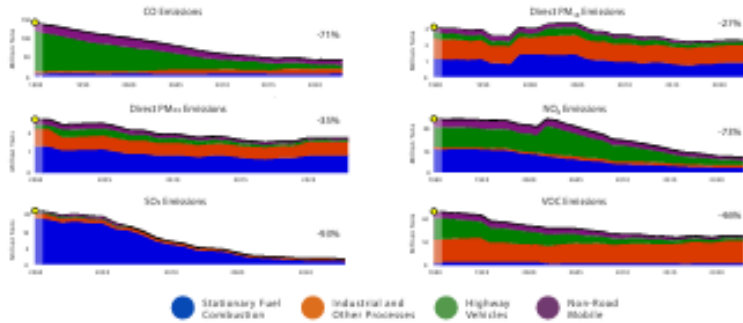
Air Quality Trends Show Clean Air Progress

While some pollutants continue to pose serious air quality problems in areas of the U.S., nationally, criteria air pollutant concentrations have dropped significantly since 1990 improving quality of life for many Americans. Air quality improves as America grows.



Air Pollutant Emissions Decreasing

Emissions of key air pollutants continue to decline from 1990 levels. These reductions are driven by federal and state implementation of stationary and mobile source regulations.



Unhealthy Air Days Show Long-Term Improvement

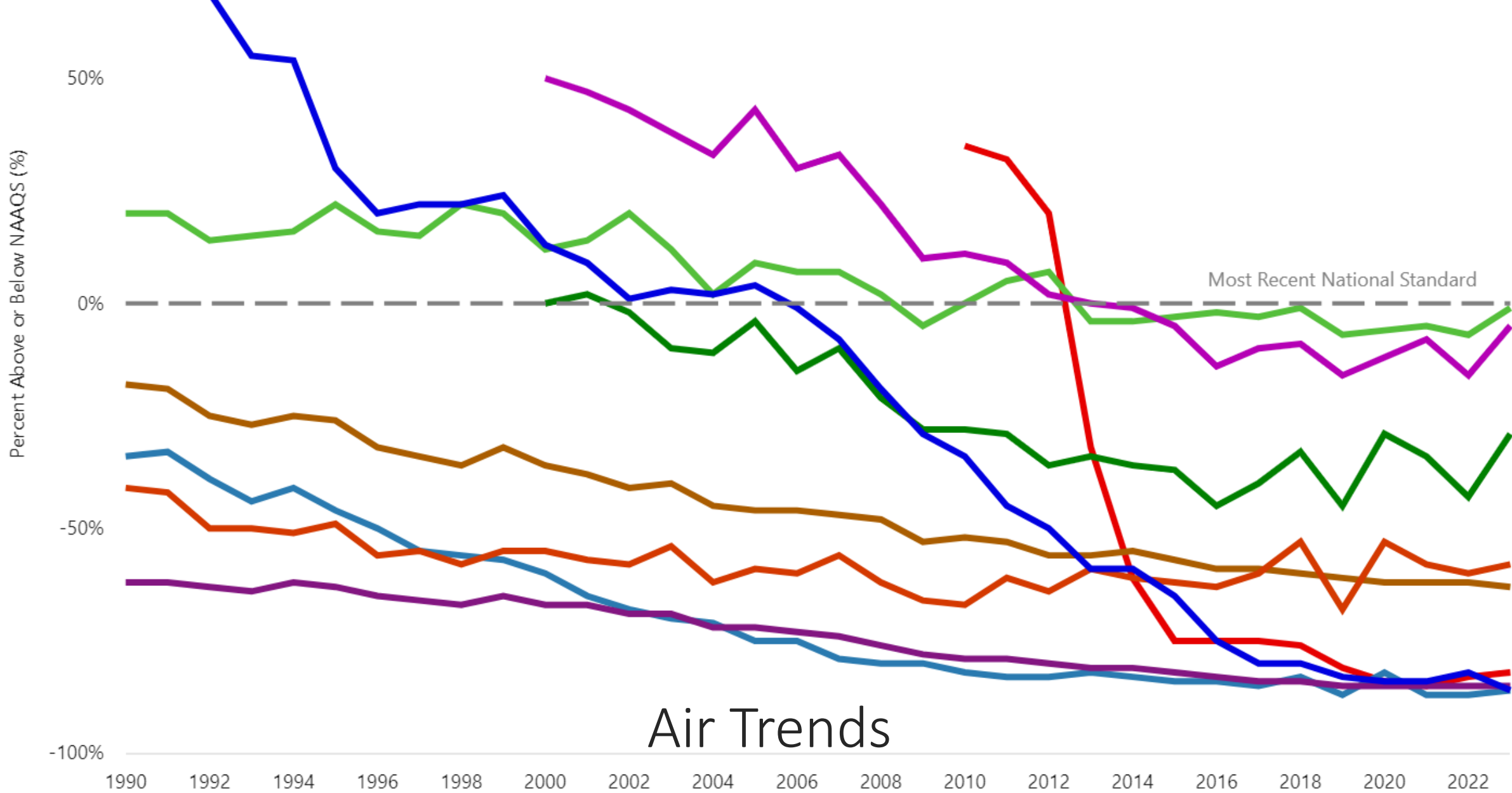
The Air Quality Index (AQI) is a color-coded index EPA uses to communicate daily air pollution for ozone, particle pollution, NO_x, CO, and SO₂. A value in the unhealthy range, above national air quality standard for any pollutant, is of concern first for sensitive groups, then for everyone as the AQI value increases. Fewer unhealthy air quality days means better health, longevity, and quality of life for all of us.



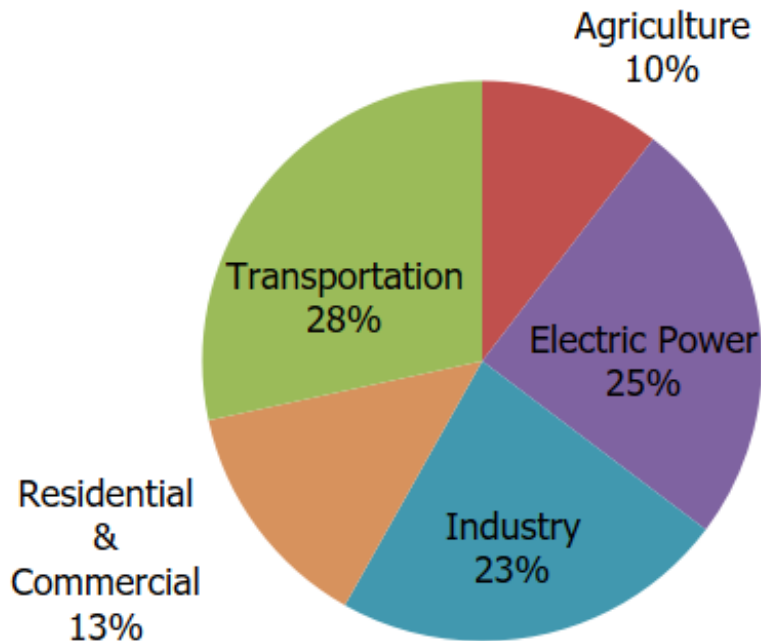
Unhealthy air quality days vary year to year, influenced not only by pollution emissions but also by natural events, such as dust storms and wildfires, and variations in weather.

Status and Trends Through 2023

Full Report Available online: <https://gispub.epa.gov/air/trendsreport/2024/#welcome>



Total U.S. Greenhouse Gas Emissions by Economic Sector in 2022

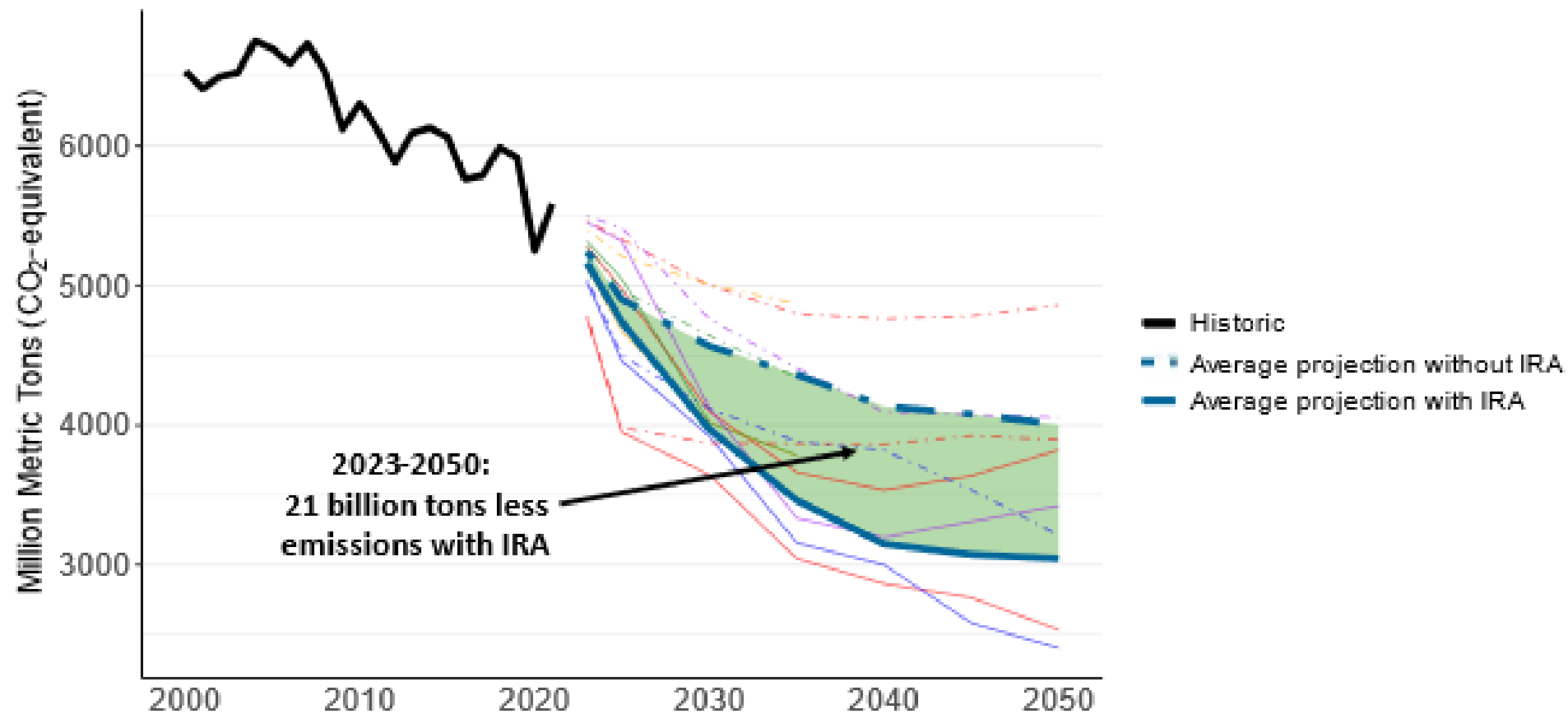


Climate - Rules

EPA undertaken rulemakings to reduce climate pollution:

- Oil and natural gas operations guidelines
- Final national pollution standards for passenger cars, light-duty trucks, and medium-duty vehicles
- Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants

Climate Grants



Climate Grants

- NDEE awarded \$307 million
- Iowa Tribe of Kansas and Nebraska recently selected for \$13M



Climate Grants

Air monitoring awards of
over \$5M to states, locals
and tribes

Advances mission to inform
and protect health and
environment from harmful
air pollution



Clean School Bus Program

In R7, since 2022, \$129M for 393 buses at 85 school districts and 1 tribal school

Open now: **2024 Clean School Bus Rebates** January 9, 2025



Grant Opportunities

[Environmental & Climate Justice Community Change Grants Program:](#)

Closes 11/21/24

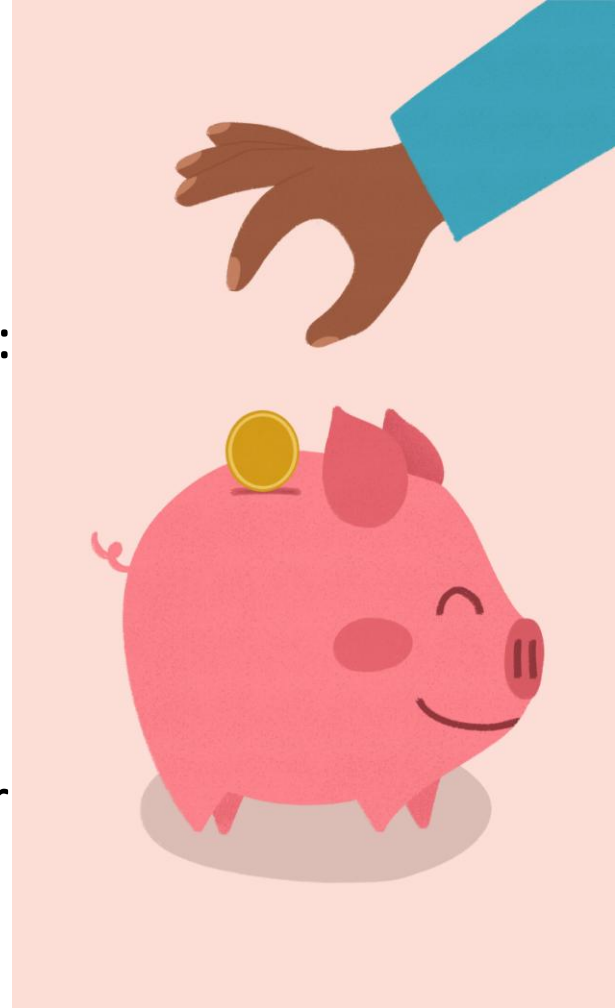
[Diesel Emissions Reduction Act \(DERA\) National Grants program:](#)

Opens Fall '24

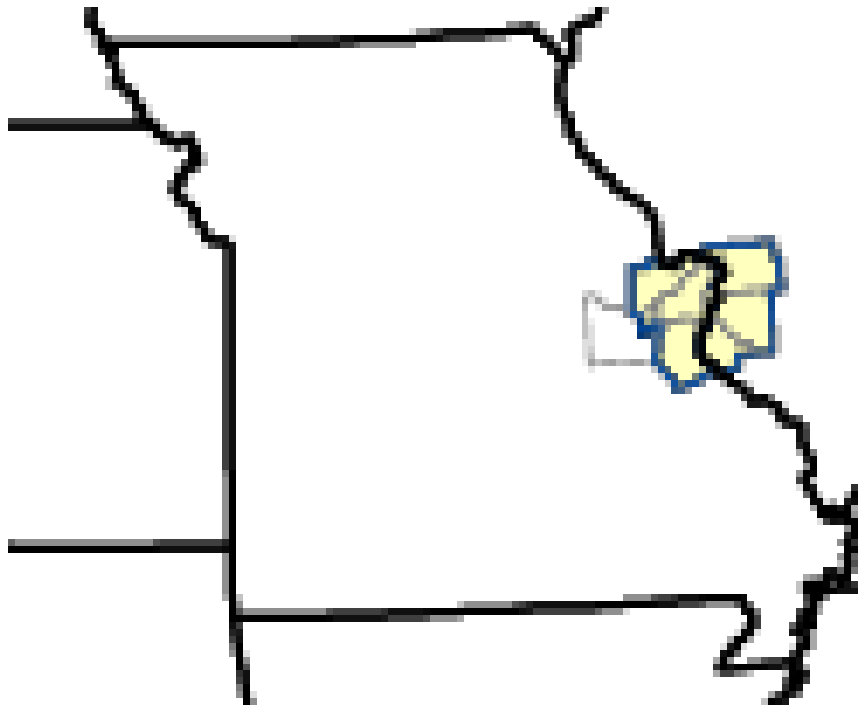
Funding to Address Greenhouse Gas and Zero-Emission Standards for Mobile Sources: Opens Winter '24

Non-grant opportunities: Greenhouse Gas Reduction Fund Financing. Please refer to the [NCIF](#), [CCIA](#), and [Solar for All](#) webpages.

See Updates at: [EPA Funding Announcements from the Bipartisan Infrastructure Law and the Inflation Reduction Act | US EPA](#)



Criteria Pollutants - Ozone



Ozone implementation for the 2015 NAAQS

Reclassification from moderate to serious

Triggers new permitting requirements

EPA HQ recently announced a proposed reclassifications requirements rule (RRR)

Criteria Pollutants – Ozone Review Standard

Currently reviewing the Ozone NAAQS

CASAC Review Phase

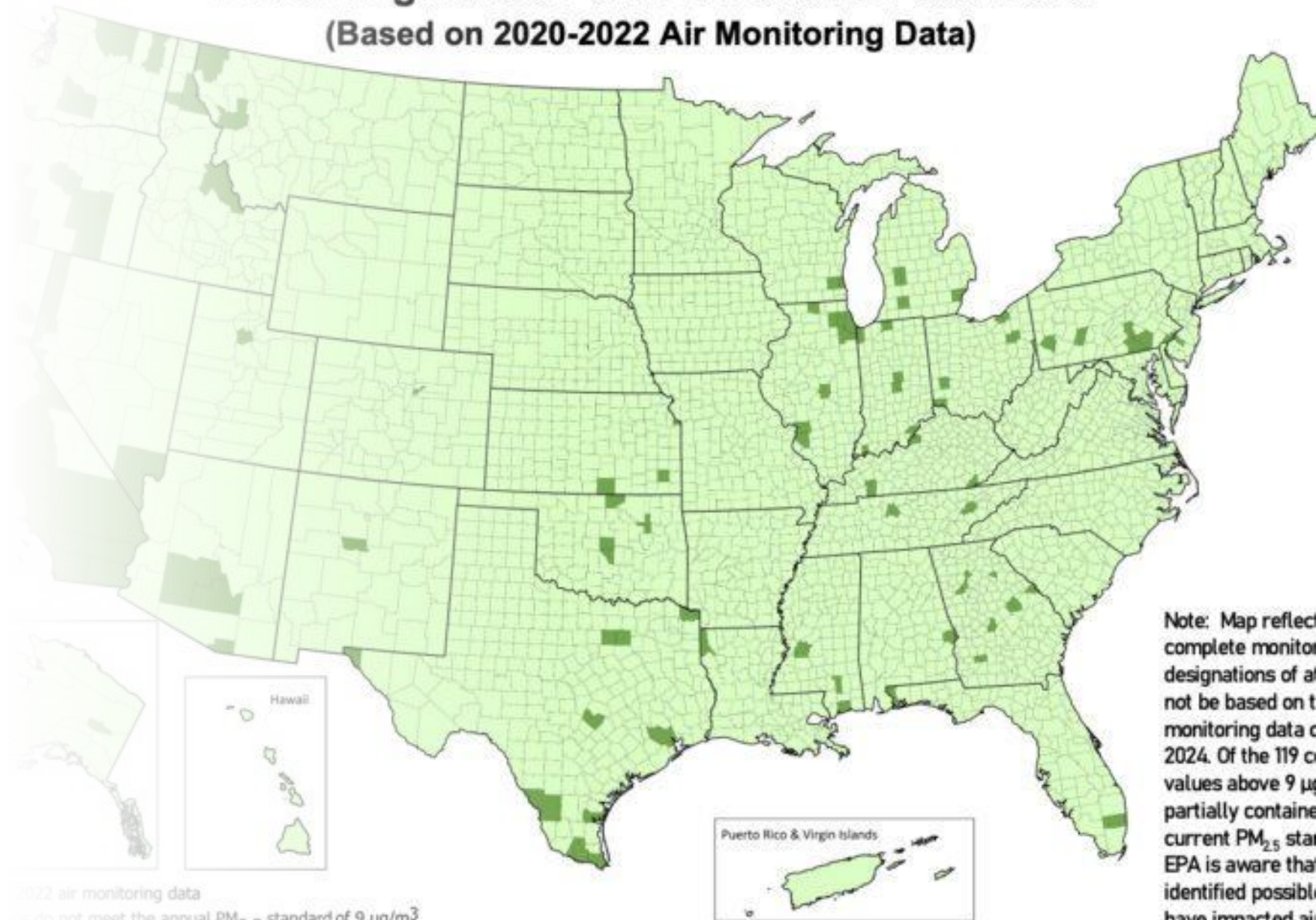


PM_{2.5}

Revised annual PM_{2.5} standard of 9 $\mu\text{g}/\text{m}^3$ effective May 6, 2024

[EPA NAAQS PM Website](#)

Most Counties with Monitors Already Meet the Strengthened Particle Pollution Standard (Based on 2020-2022 Air Monitoring Data)



Note: Map reflects complete monitoring designations of all counties as of May 6, 2024. Of the 119 counties that do not meet the standard, 100 are partially contained within current PM_{2.5} standard attainment areas. EPA is aware that some of these counties may have impacted air quality. This information is relevant to designations.

2022 air monitoring data
do not meet the annual PM_{2.5} standard of 9 $\mu\text{g}/\text{m}^3$
This information is provided for illustrative purposes only and is not intended to
be a part of any forthcoming designations process.



PM Designations

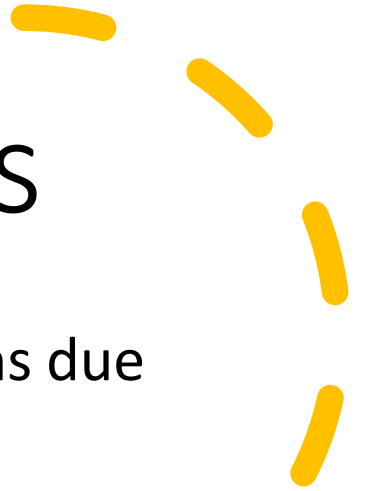
Feb. 2025: state recommendations due
(2021-2023 monitoring data)

Feb. 2026: EPA final area designations
(2022-2024 monitoring data)

Infrastructure and Attainment SIPs

PM Transport

Permitting workload



Update of PM2.5 Data from T640/T640x PM Mass Monitors

Overview of Update Process:

- Final Notice signed May 8, 2024.
- EPA implemented the data update entirely within AQSDData: all hourly T640 and T640X PM2.5 concentration data starting in 2017.
- Updated data added automatically to AQS. Final Design Values posted



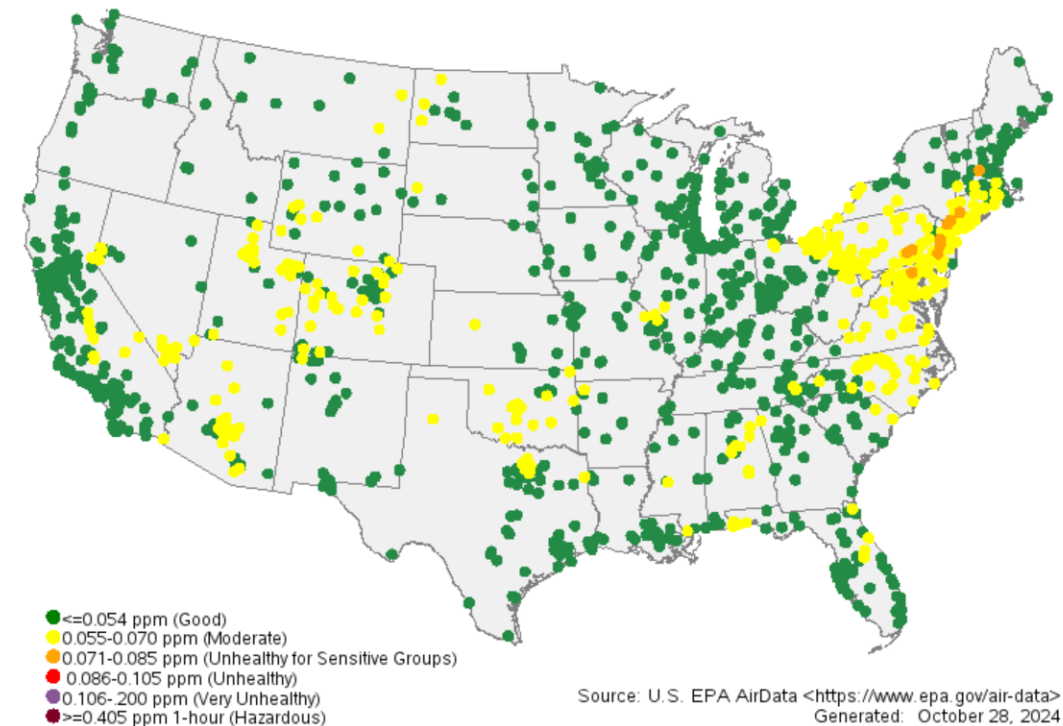
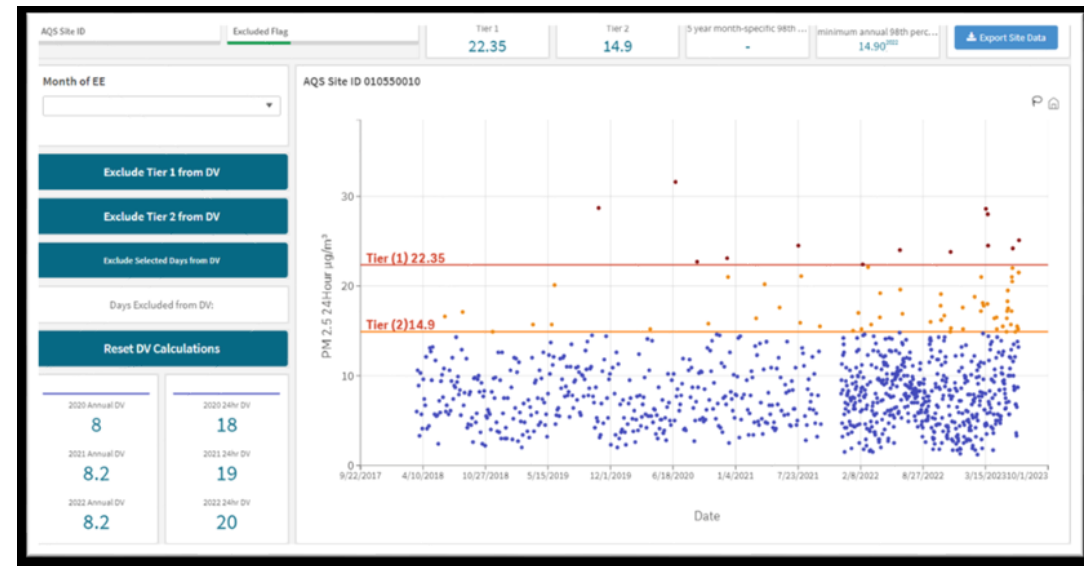
Exceptional Events

See EPA's [Wildfire Resource Document](#), written to assist air agencies.

Designation demonstrations by Feb. of next year.

Final designations by Sept. 2025.

New EE tools on [EPA's website](#) including data visualization tools.



Regional Haze

10-year planning period

First planning period (2000-2018)

Second planning period (2019-2028)



**ENVIRONMENTAL PROTECTION
AGENCY**

[EPA-HQ-OEJECR-2023-0326; FRL-
10605-02-OEJECR]

**Release of Achieving Health and
Environmental Protection Through
EPA's Meaningful Engagement Policy**

AGENCY: Environmental Protection
Agency (EPA).

ACTION: Final policy; notice of
availability.



Environmental Justice

Policy for Meaningful Engagement and
Public Participation in Agency Decision-
Making Processes

Highlights steps to help EPA staff design
effective processes for engagement with
the public

Ongoing EJ Activity

R7 and states have been
active on this front

Cumulative Impacts

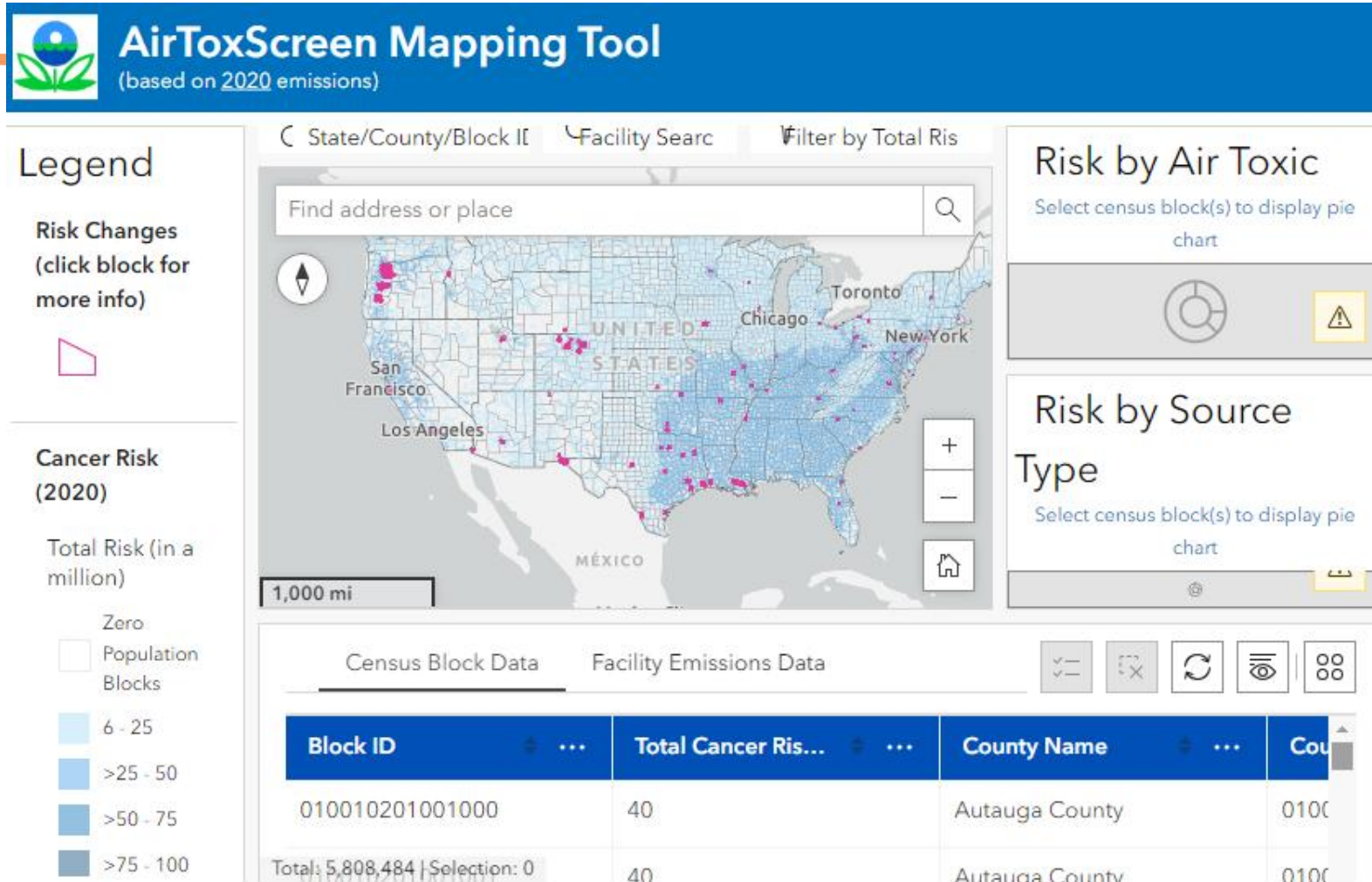


Air Toxics

AirToxScreen assessments

Commercial Sterilizer Rule

Chemical Manufacturer
Area Source Rule



Air Emissions Reporting Rule AERR

Annual HAP and CAP data collection

Rule Comments

Final rule pending

Relation to AirToxScreen

Air Emissions Reporting Requirements (AERR)

On this page:

- [Rule Summary](#)
- [Rule History](#)
- [Additional Resources](#)

Rule Summary

On July 25, 2023, EPA announced proposed updates to the AERR to improve EPA's collection of certain emissions data critical for performing air quality and risk analyses, among other regulatory and non-regulatory activities. This proposed action would allow for EPA to annually collect (starting in 2027), hazardous air pollutant (HAP) emissions data for point sources in addition to continuing the criteria air pollutant and precursor (CAP) collection in place under the existing AERR. The proposed amendments would ensure that EPA has sufficient information to identify and solve air quality and exposure problems and ensure that communities have the data needed to understand significant environmental risks that may be impacting them.

Basic Information

Legal Authorities

- 23 U.S.C. §101
- 42 U.S.C. §7401 -7671q

Federal Register Citations

- [88 FR 54118](#) [↗](#)

Docket Numbers

- [EPA-HQ-OAR-2004-0489](#) [↗](#)

Reclassification of Major Sources as Area Sources (MM2A)

Air Pollution

Air

Pollution

Program

Major Sources of

Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act

On this page:

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Rule Summary

This rule implements the Clean Air Act language that allows a "major source" of hazardous air pollutants (HAP) to reclassify as an "area source" after acting to limit emissions.

Sources of persistent and bioaccumulative HAP listed in Clean Air Act (CAA) section 112(c)(6) must continue to comply with certain major source emission standards under 112(d)(2) or standards under 112(d)(4) even if these sources reclassify as area sources.

Basic Information

Legal Authorities

- 42 U.S.C. §7401

Federal Register Citations

- [85 FR 73854](#)
- [89 FR 73293](#)

Code of Federal Regulations Citations

- [40 CFR Part 63 Subpart A](#)

Docket Numbers

- [EPA-HQ-OAR-2019-0282](#)

EPA finalized amendments to rules for certain major sources and modified the 2020 rule

Amendments maintain MM2A but put safeguards in place for certain HAPs under 112(c)(6)

MATS

Tighter filterable particulate matter (fPM) standard

PM Continuous Emissions Monitoring Systems

Mercury (Hg) standard

2021 mercury emissions from coal-fired EGUs were 90 percent lower than pre-MATS levels



R7 MATS Affected Units

Iowa	9
Kansas	9
Missouri – delegated authority	19
Nebraska – delegated authority	12
Total MATS Affected Units	49

Total MATS affected units with PM CEMS	19
Total MATS affected units without PM CEMS	30
Total MATS affected units	49

Reducing emissions from landfill gas

- Non regulatory docket open for public comment through January 23, 2025
- <https://www.epa.gov/stationary-sources-air-pollution/non-regulatory-public-docket-municipal-solid-waste-landfills>

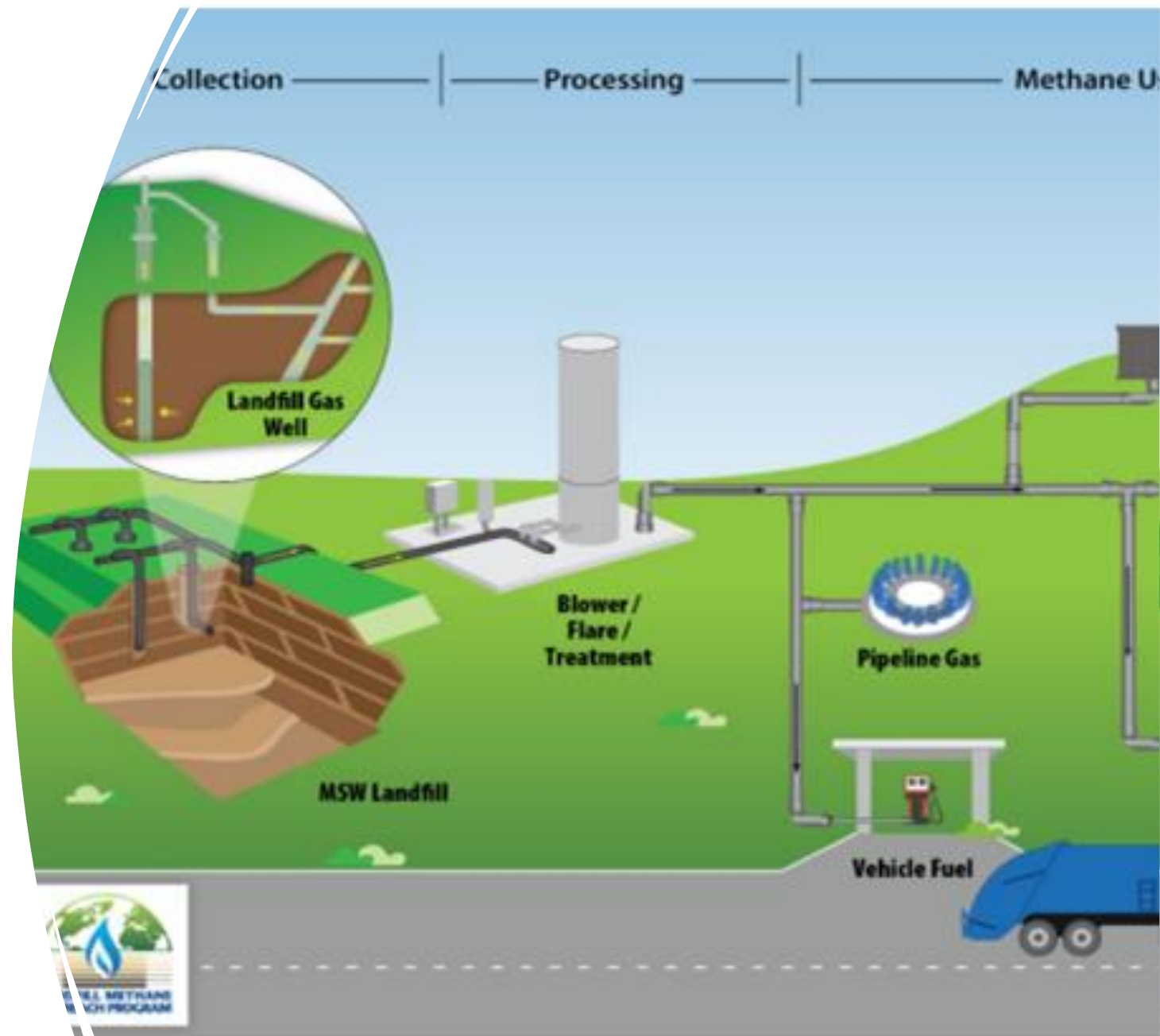


Figure 1. Graphic of LFG Collection, Processing, and End Uses (U.S. EPA, n.d.)



Questions?

Region 7 Generation Trends

Electric Generation by fuel for: IA, KS, MO, NE

