

Environmental Data & Governance Initiative

Context is Key: Enhancing Data Access, Use, and Understanding

Alejandro Paz - Session Leader Gretchen Gehrke, Steven Gentry - Session co-designers (not present) 2022 July ESIP Meeting

Environmental Data Governance Initiative (EDGI)

Who we are:

- More than 50 active members from academic institutions, non-profit, and grassroots organizations, from a variety of professions
- Some paid; mostly volunteers

What we aspire to do:

- Update Environmental Right to Know ethics and practices
- Hold governing agencies accountable
- Promote transparent, collaborative, community-centered environmental governance
- Model these **democratic values** in our own organization and work

Website Governance Project

In the past, the Website Governance Project monitored various agency websites, including:

- EPA
- DOI + BLM + FWS
- Other climate- and environment-related domains

In our reports, we:

- Documented the removal of key climate change websites and climate change-related terms
- **Revealed** systematic suppression of information relating to environmental rules and regulations under the Trump administration
- **Established** recommendations on how to safeguard and improve online federal environmental information

EPA website buries youth guide to climate change

BY REBECCA SAVRANSKY - 05/06/17 11:47 AM EDT

477 COMMENTS

TWEET

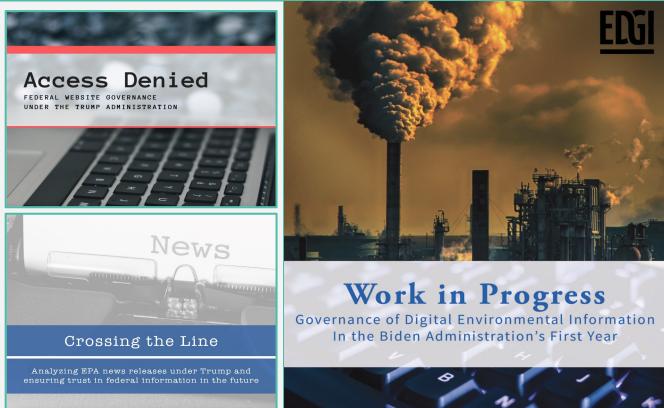
2,122 SHARES



Website Governance Project

Currently, we **report** on f**ederal website governance** (mainly as it applies to environmental topics). This includes:

- Analyzing how the federal government communicates environmental information to the public through websites
- **Recommending** website governance policies that address gaps in protections for public information
- **Promoting** communities' right to know in order to democratize environmental governance



Why This Session?

Mercury and Air Toxics Standards

Mercury and Air Toxics Standards (MATS) Home

Learn about MATS Laws and Regulations Science and Technology Cleaner Power Plants Healthier Americans

Safer Environment

Related Information

You Live

MATS Benefits Where

Safer Environment

Healthier lakes, streams and fish

. . ..

Mercury and other power plant emissions damage our environment. These compounds pollute our nation's lakes and streams poisoning fish and the people and animals that rely on them for food. Other power plant emissions such as sulfur dioxide (SO₂) can react in the atmosphere to form a haze of fine particle pollution and smog that reduces visibility in our nation's scenic vistas and treasured national parks, and damages sensitive natural ecosystems. The final Mercury and Air Toxics Standards (MATS) will significantly reduce power plant mercury emissions. The equipment used to comply with MATS will also reduce emissions of SO₂ and directly emitted fine particle pollution.



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Emissions of SO₂ from power plants can react in the environment to form weak acids that fall to earth as rain, fog, snow, or dry particles. They can cause lakes and streams to become acidic and unsuitable for many fish, damage forests, and cause deterioration of cars, buildings, and historical monuments. Sulfur deposition may also increase the rate of mercury methylation and the impact of mercury poisoning on fish and wildlife.

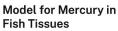
Source: epa.gov/mats/safer-environment

Environmental Mercury Mapping, Modeling, and Analysis (EMMMA)

EMMMA supports mercury research and decision-making by providing tools for Mapping, Modeling, and Analysis of mercury data.

Online Mapping Tools

Mercury Data Mapper



Environmental mercury datasets







Source: usgs.gov/emmma

What This Means For Us

- Should data always be readily accessible from informational resources?
- How much contextualization is needed to make data truly accessible?

• How can we ensure the public can interact with the data we create and manage in a meaningful manner?

What We'll Be Doing

- Evaluate the epa.gov/mats webpage using an assessment framework
- Search for datasets that were used to determine the Mercury and Air Toxics Standards (MATS)

• Evaluate dataset landing pages / data tools / data portals EPA consulted when drafting MATS

• Reflect on the connections and relationship between the information on the MATS website and the data used to draft the regulation

The MATS Rule

Mercury and Air Toxics Standards (MATS)

mercury

& air toxics

standards

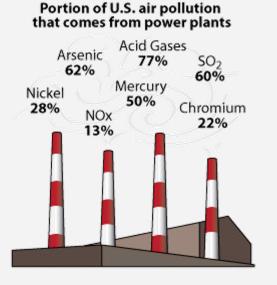


Source: youtu.be/Sx0vvn_Wn8o

Why the MATS rule?

- The MATS rule has been extremely effective in reducing mercury emitted in the US
- Data used in the development of the MATS rule was sourced from multiple types of monitoring and modeling
- EPA's website about the rule contains abundant scientific and regulatory information

Mercury and Air Toxics Standards (MATS)



Source: epa.gov/mats/cleaner-power-plants (image published in 2016)

What should I know about MATS?

- Rule was first signed by EPA on 2011
- EPA is currently proposing to revoke a 2020 finding that partially deregulated coal and oil power plants

Did you know:

When mercury is deposited in water and sediment, microorganisms can turn it into highly toxic methylmercury

Breakout groups

Part 1

- **Duration**: 7 minutes
- Quick Link: <u>https://bit.ly/3RCVQNv</u>
- Tasks:
 - Evaluate the epa.gov/mats webpage using several questions as a framework for assessment

Part 2

- **Duration**: 38 minutes
- Tasks:
 - Look for the datasets that EPA used when drafting the MATS rule.
 - Evaluate several of the landing pages that provide access to the data EPA consulted when drafting MATS
 - Reflect on the connections and relationship between the information on the MATS website and the data used to draft the regulation

Discussion

Time For a Poll!

• What is something you learned in today's session?

Examples of excellent federal resources

NASA Climate Change

Coal - US Energy Information Administration (EIA)

Clean Power Plan | US EPA (from EPA's Web Archive)

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