

Transition to the Combined Air Emissions Reporting System (CAERS)

NACAA 2023 Spring Meeting
May 9, 2023



Transition to CAERS

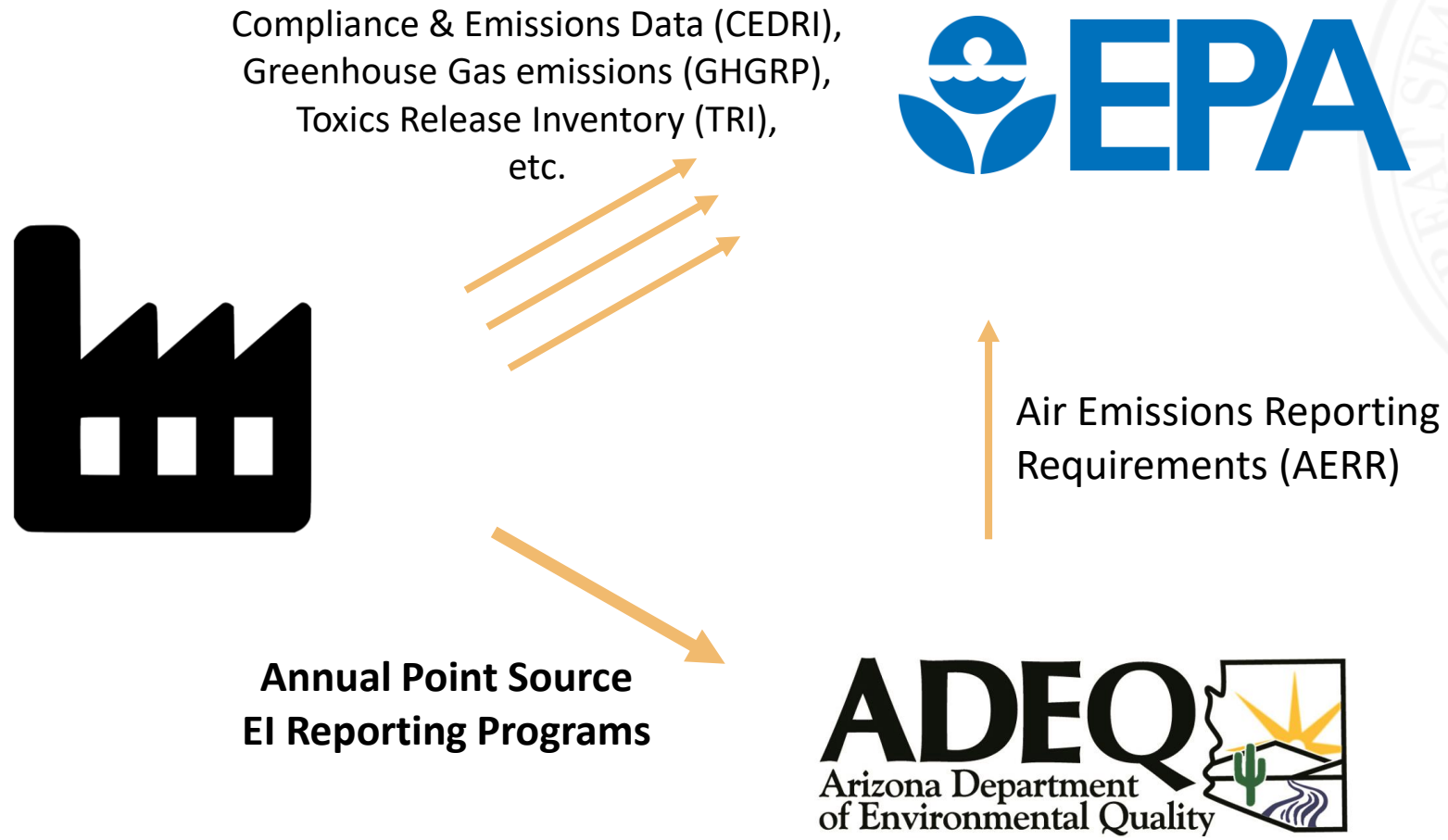
- Annual Point Source EI Reporting
- E-enterprise for the Environment
- CAERS Overview
- EI Reporting Improvements
- Onboarding Timelines
- ADEQ CAER Pilot
- Resources and Contact Information



Annual point source EI reporting



Mandatory, recurring air emissions reporting



E-Enterprise CAER Team Background

- The Combined Air Emissions Reporting Team (CAER) is part of the E-Enterprise for the Environment Initiative.



E-ENTERPRISE
for the Environment

Modernizing the business of environmental protection

- E-Enterprise for the Environment
 - supports a collaborative approach among co-regulators
 - to provide opportunities for early engagement with EPA
 - in order to deliver environmental programs and services with greater efficiency and effectiveness by streamlining and simplifying processes.

E-Enterprise CAER Product Design Team (PDT)

- The CAER project seeks to streamline the way industry reports air emissions to meet EPA, state, local, tribal, and territorial program requirements.
- Current PDT SLTT membership: AZ, Pima AZ, DC, GA, FL, LA, ME, MI, MN, MS, MT, NC, OK, OR, RI, SC, TN, TX, WI, WY.
- The CAER PDT is responsible for:
 - prioritizing CAER implementation work and research,
 - setting up Research and Development (R&D) teams, and
 - integrating work outcomes into future research and the CAER system.
- CAER PDT Members impact the focus of the team and the resulting CAER system.

<https://e-enterprisefortheenvironment.net/our-projects/combined-air-emissions-reporting-caer/>

<https://www.epa.gov/combined-air-emissions-reporting/product-design-team>

What is CAERS?

Combined Air Emissions Reporting System (CAERS): an application that allows industry from subscribed State, Local, or Tribal authorities (or SLTs) to report their air emissions so you can:

- Meet SLT-specific air emissions reporting requirements
- Report annually or triennially to Air Emissions Reporting Rule (AERR per 40 Code of Federal Regulations or CFR, Part 51) via your SLT.
- Optionally, get a head start on Toxics Release Inventory (TRI) air toxics emissions (per 40 CFR, Part 372), to be finished in TRI-MEweb

You should check with your SLT to determine if you meet the criteria.



Combined Air Emissions Reporting System

[My Facilities](#) > [Emissions Reports](#) > 2019 Emissions Report

[Help](#)

Agency ID:12345678
 FACILITY INC
 123 Main Street
 Mytown, GA 12345
 2019 Emissions Report
 Agency: GA

[Report Summary](#) <

[Report History](#)

[Quality Checks](#)

[Data Bulk Entry](#)

▼ [Facility Inventory](#)

- [Facility Information](#)
- [Emissions Units](#)
- [Release Points](#)
- [Control Devices](#)
- [Control Paths](#)

▼ [Emissions Inventory](#)

- ▶ [F1A](#)
- ▶ [F1B](#)
- ▶ [PI01](#)

Report Facility & Emissions Information

Perform Quality Checks

Submit to SLT Authority

Approved by SLT Authority

Report Summary

| Pollutant | Type | Fugitive Amount | Stack Amount | Units of Measure | 2019 Reported Emissions | Previous Year Reported Emissions | Previous Submittal Year |
|-------------------------------|------|-----------------|--------------|------------------|-------------------------|----------------------------------|-------------------------|
| Carbon Monoxide | CAP | 0 | 5.673 | Tons | 5.673 | 5.673 | 2017 |
| Nitrogen Oxides | CAP | 0 | 95.853 | Tons | 95.853 | 95.853 | 2017 |
| Sulfur Dioxide | CAP | 0 | 12.922 | Tons | 12.922 | 12.922 | 2017 |
| Volatile Organic Compounds | CAP | 41.16 | 100.3866 | Tons | 141.5466 | 47.0617 | 2017 |
| Total Emissions (Tons) | -- | -- | -- | -- | 255.9946 | 161.5097 | -- |

[Download Report](#)

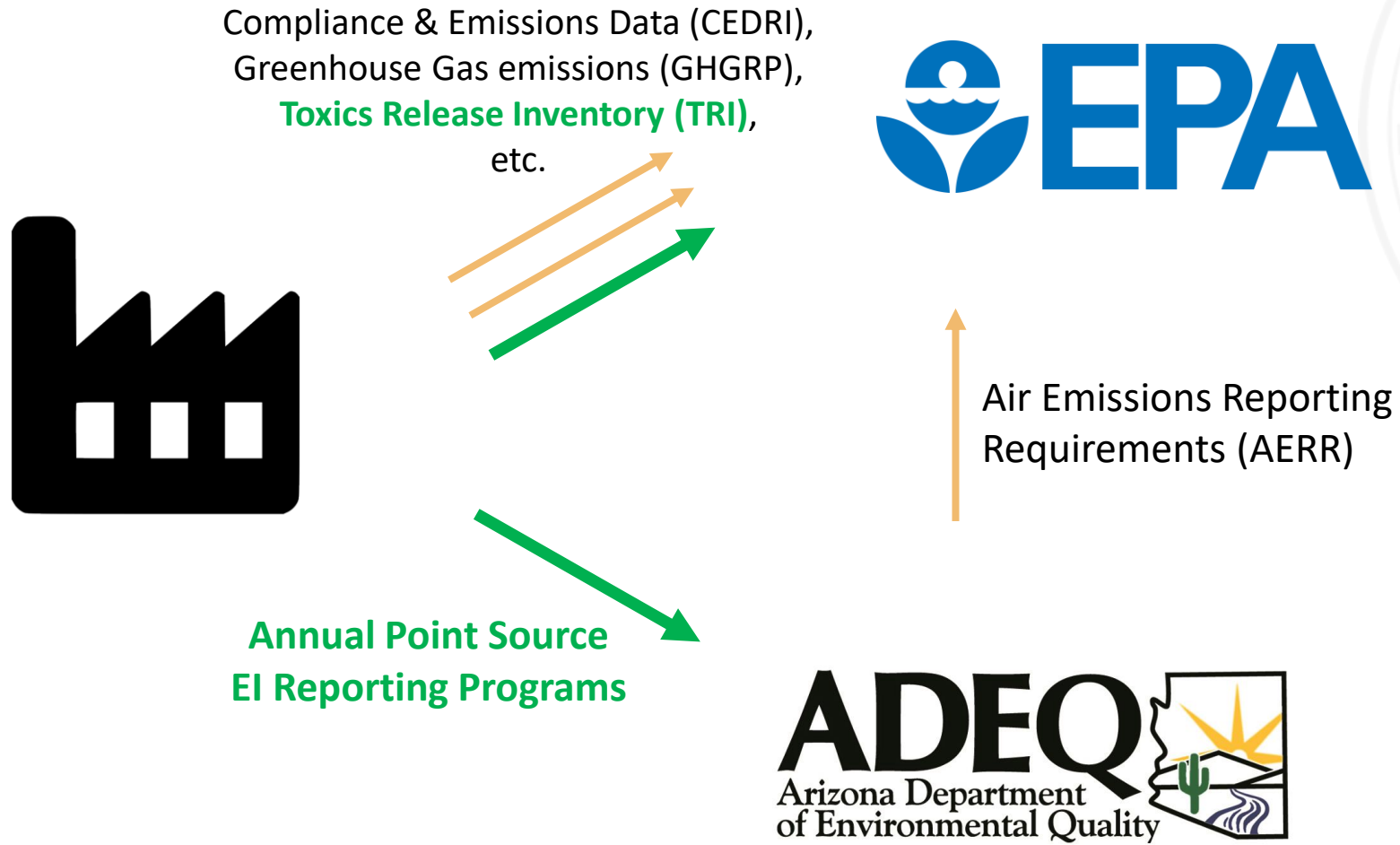
Preparer/NEI Certifier Attachments

| Date | User ID | User Name | Comments | Attachments |
|------|---------|-----------|----------|-------------|
|------|---------|-----------|----------|-------------|

Combined Air Emissions Reporting System

- Web-based reporting application
- Current users: GA, DC, RI, ME, ID, and Pima County, AZ.
- Future users: MT, AZ, MS, others?
- Eventually facilities will report shared data, via a single data submission, to the
 - National Emissions Inventory (NEI),
 - Toxics Release Inventory (TRI),
 - Compliance & Emissions Data Reporting Interface (CEDRI), and
 - Greenhouse Gas Reporting Program (GHGRP).

Dataflow consolidation



Permitted Facilities

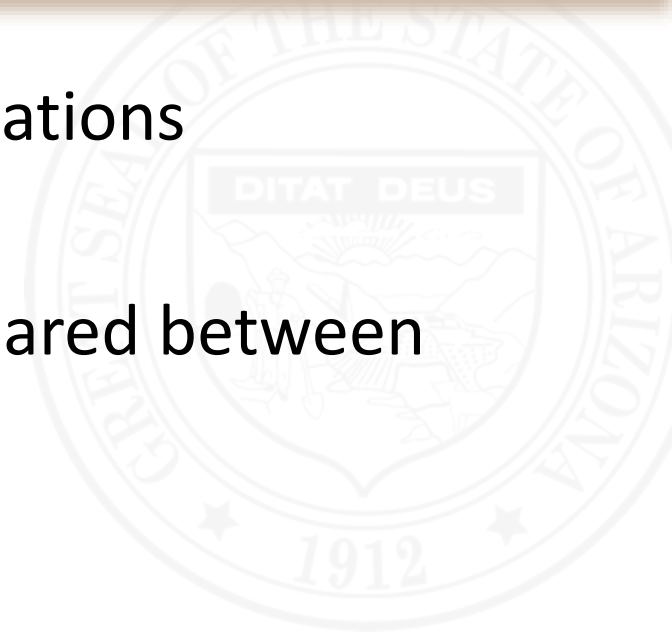
- Common emission factor (EF) research need not be repeated
- Simple year-over-year updates
- Specific, instructive, real-time feedback
- Retired object cleanup
- Expanded functionality of bulk upload template

Government Agencies

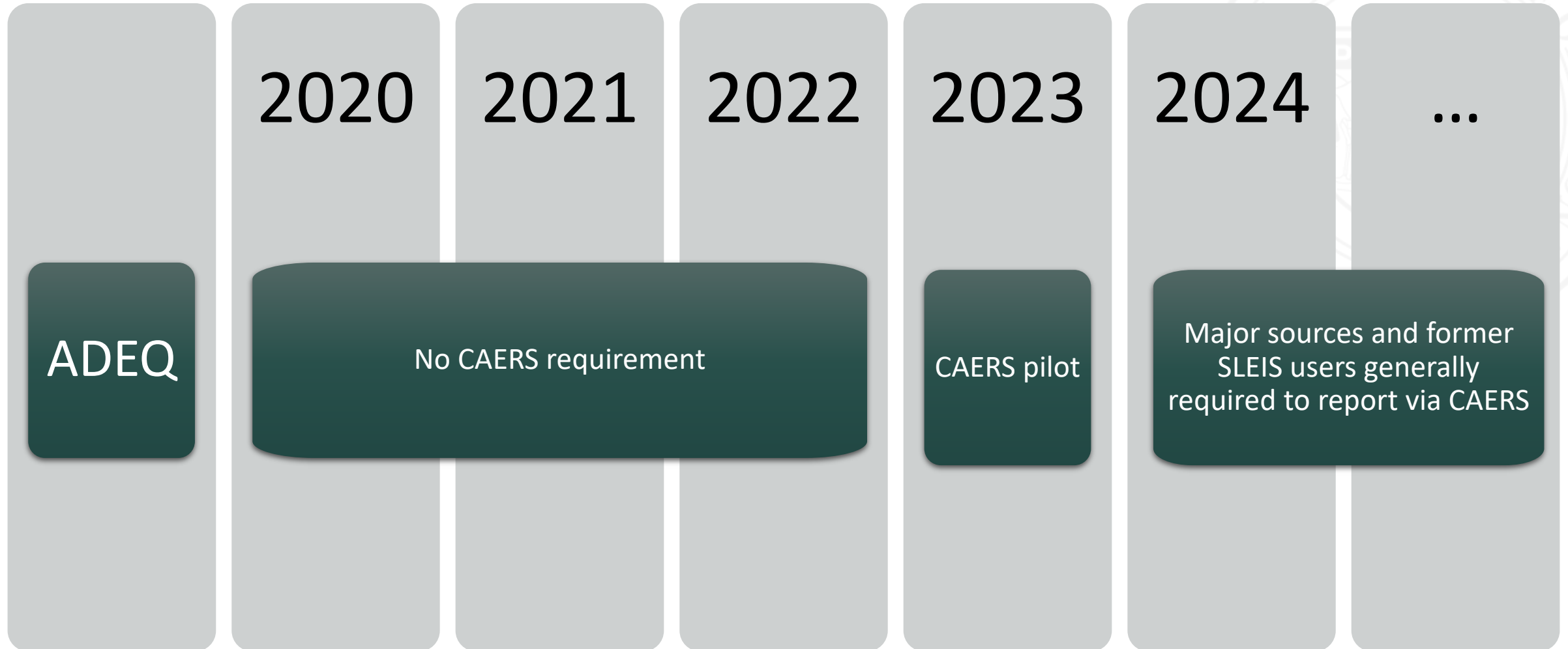
- Emissions inventory data quality assurance and quality checks (QA/QC) built into CAERS.
- Reduced redundancy in reporting air emissions data.
- Shorten review time required for data quality assurance and reconciliation.
- Reduce staff time and agency funds spent on IT related needs such as
 - customer support,
 - database hosting and updating, and
 - identity proofing.

Data quality improvement opportunities

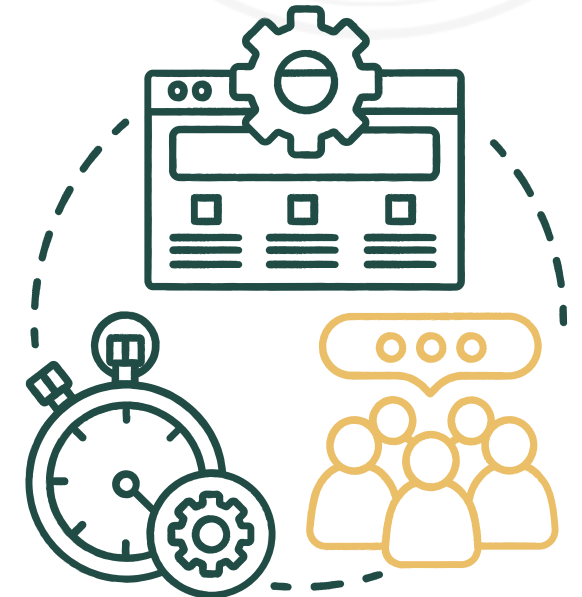
- Up-to-date Emissions Inventory System (EIS) data validations
- Improved calculation transparency and comparability
- Custom validation checks and QA/QC best practices shared between states and localities



ADEQ Onboarding timelines



- Voluntary participation; others continue using prior reporting methods
- Most participants will start from a basis of last year's SLEIS report
- Participants were able to experiment in a sandbox environment to identify major concerns and see if they wish to proceed
- Live reporting began in March 2023.
 - Attendance of workshops and 1-on-1s was encouraged
- Goals of pilot (similar to beta testing):
 - Test out options for controls, fuel, and shutdowns
 - Working out serious kinks before 2024
 - Identifying remaining process shortcomings
 - Prioritizing fixes and workarounds
 - Brainstorming future improvements/features



- If the pilot goes well, current SLEIS users and current/future Class I permit holders (other than air curtains) must use CAERS when operating
- Account creation and setup for 50+ facilities will be time consuming
 - ADEQ will likely begin working with some facilities in late 2023 to get a head start
 - Enrollment for some highly complex facilities may be delayed until 2025 if needed
 - CAERS may subsequently be opened up to additional Class II permit holders (especially synthetic minors other than general permits) at ADEQ's discretion
- Facilities that want ADEQ to hold some of the records in their report as confidential (rather than public) will need to submit an all-public version via CAERS and a more detailed confidential version separately, via email



[epa.gov/combined-air-emissions-reporting/
combined-air-emissions-reporting-system-caers](https://epa.gov/combined-air-emissions-reporting/combined-air-emissions-reporting-system-caers)



azdeq.gov/emissions-inventories



Modernizing the business of environmental protection

[http://e-enterprisefortheenvironment.net/our-
projects/combined-air-emissions-reporting-caer/](http://e-enterprisefortheenvironment.net/our-projects/combined-air-emissions-reporting-caer/)

ADEQ Contacts

- [Kelly Poole](#)
- Adam Ross and Hilary Moore – EmissionInventory@azdeq.gov

Thank you!

CAER Project Key Contacts

- [Julia Gamas](#) of EPA,
- [Tammy Manning](#) of the North Carolina Department of Environmental Quality, or
- [Stacy Knapp](#) of the Maine Department of Environmental Protection.

General Information for States:

- [Kurt Rakouskas](#) of the Environmental Council of the States (ECOS)