



Proposed Revisions to Air Emissions Reporting Requirements

Industry Focus on Point Sources

August 17, 2023

What is the AERR?

- ▶ The AERR is a regulation that requires states, local agencies¹, and some Tribes² (SLT) to report annual air emissions data to EPA
- ▶ The current regulation allows for voluntary reporting of air toxics emissions, prescribed burning, and wildfire data
- ▶ EPA uses the data collected and other resources to create the National Emissions Inventory (NEI)

¹ States may delegate reporting authority to local agencies

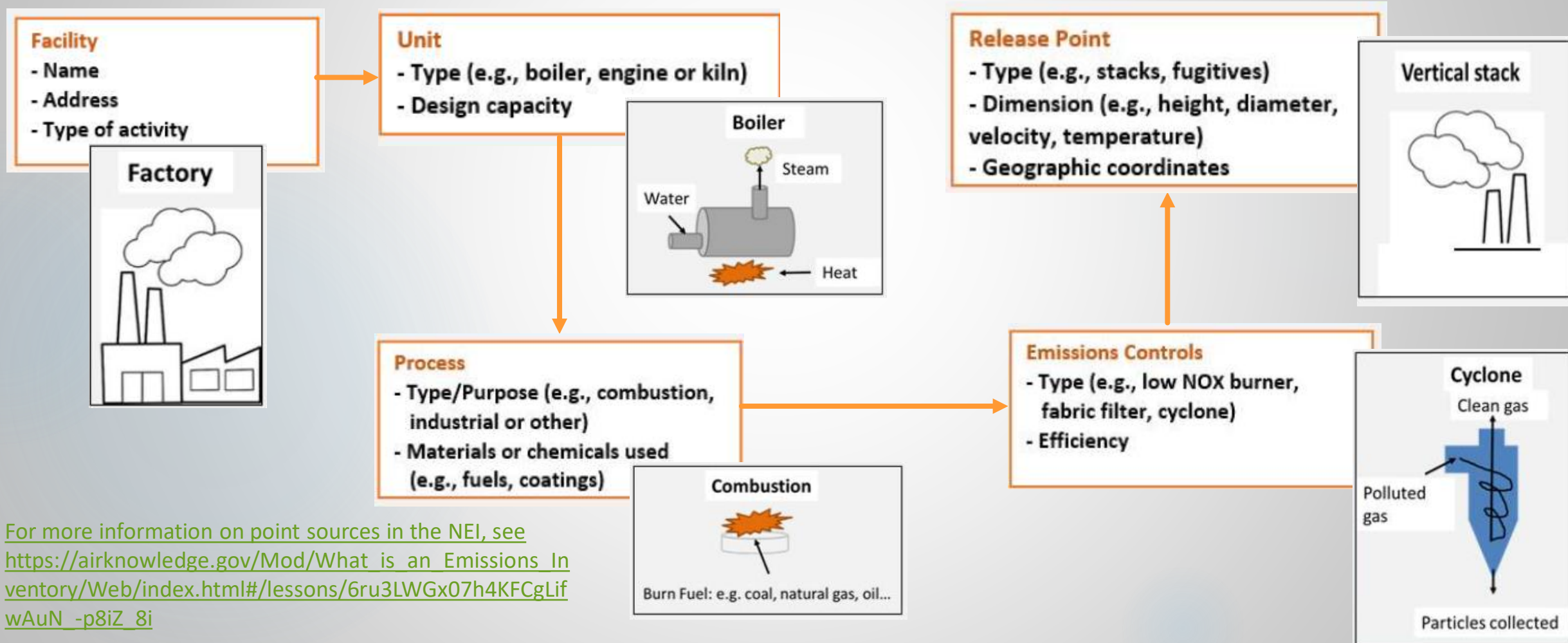
² For Tribes with Treatment as a State (TAS) for emissions inventory reporting

The National Emissions Inventory (NEI)

- ▶ The NEI supports many programs and activities:



AERR Requires Details of Emissions from Parts of a Facility



For more information on point sources in the NEI, see [https://airknowledge.gov/Mod/What is an Emissions Inventory/Web/index.html#/lessons/6ru3LWGx07h4KFCgLifwAuN_p8iZ_8i](https://airknowledge.gov/Mod/What%20is%20an%20Emissions%20Inventory/Web/index.html#/lessons/6ru3LWGx07h4KFCgLifwAuN_p8iZ_8i)

What Does the AERR Currently Require?

- ▶ The current rule requires reporting of criteria pollutants and precursors:
 - ▶ Criteria pollutants that must be reported include: carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter (PM) ≥ 10 and 2.5 microns in diameter (PM₁₀ and PM_{2.5}), and lead (Pb)
 - ▶ Precursors are pollutants that contribute to the formation of the criteria pollutants; for example, volatile organic compounds (VOC) and nitrogen oxides (NO_x) are precursors to ozone formation, and ammonia (NH₃) is a precursor to PM formation
 - ▶ Certain sources of emissions are reported as “point sources.” At each such facility, emissions are required to be reported as emissions releases within the facility
 - ▶ States report other emissions sources such as residential wood combustion and mobile sources as county-wide emissions totals or input data to emissions models

Proposed AERR Updates

- ▶ EPA published proposed updates to the AERR on August 9, 2023
- ▶ Primary objectives of the proposal:
 - ▶ Ensure that EPA has sufficient information to identify and solve air quality and exposure problems to support and carry out provisions of the Clean Air Act
 - ▶ Ensure that communities have data they can use to understand significant environmental risks that may impact them

AERR Proposed Revisions – 9 Major Parts

Affects owners/operators

All Reporters:

1. (a) Changes, additions, and clarifications to point source reporting, and (b) including new data collection about small generating units
2. Clarifies that data submitted are “emissions data” and not entitled to confidential treatment

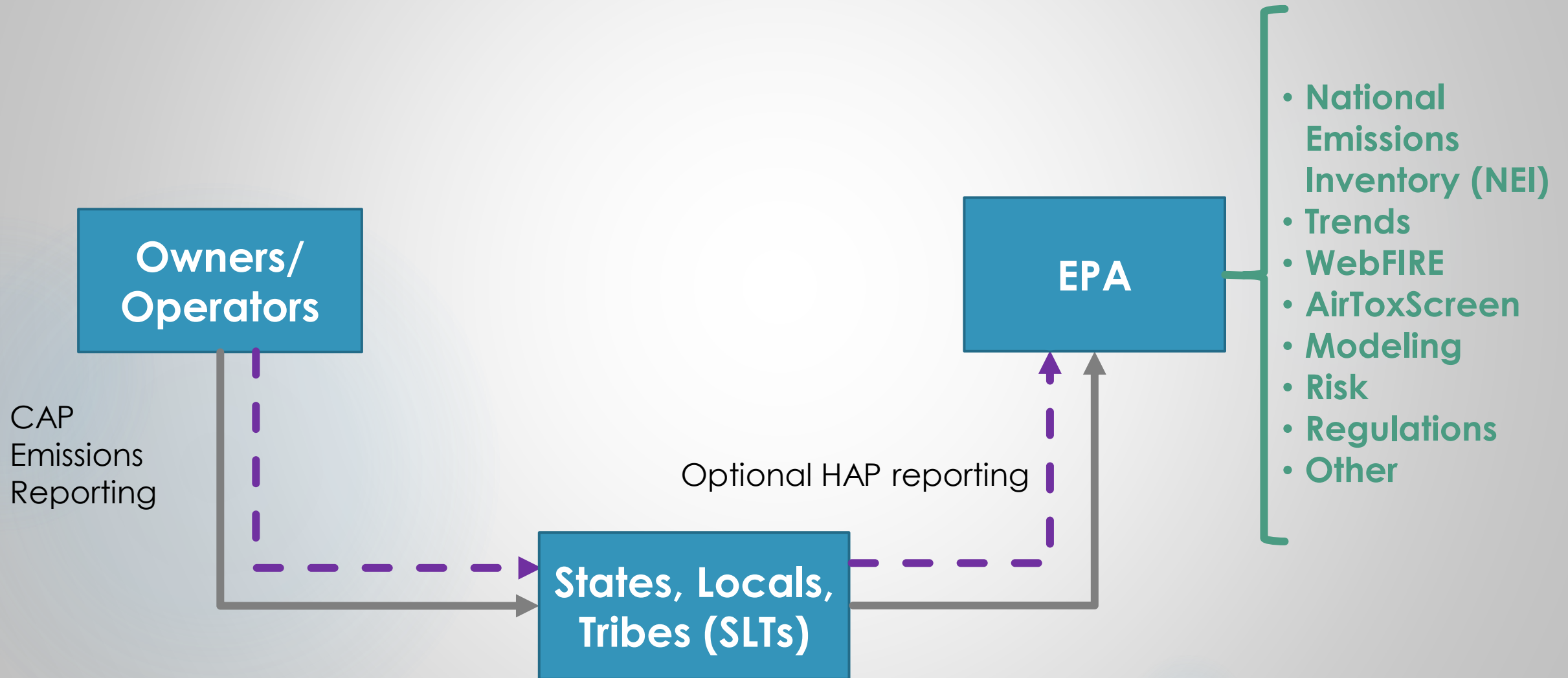
Owners/operators:

3. Requirements for (a) annual reporting of HAP emissions for certain facilities within states and (b) provisions to reduce burden on small entities
4. Requirements for annual reporting of emissions and other data for certain facilities outside of the geographic scope of a SLT’s implementation planning authority
5. Requirement for owners/operators to use electronic reporting to submit certain source tests

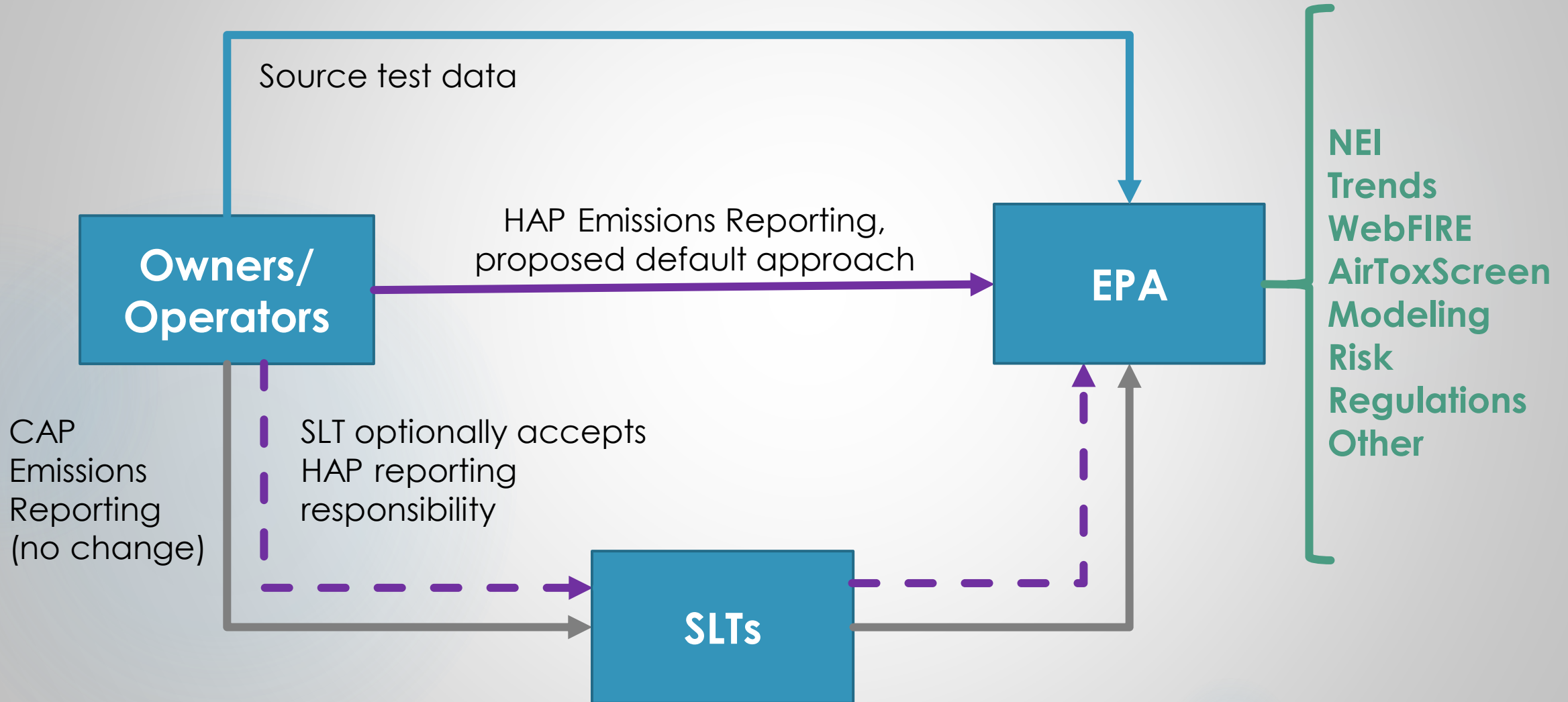
SLTs:

6. Optional HAP reporting for point sources on behalf of owners/operators (with EPA approval)
7. Requirement to report prescribed burning activity information
8. Additions and changes for (a) nonpoint (county-wide) sources and (b) mobile sources
9. Clarifications for using AERR for SIP inventory requirements

AERR Current Point Source Collection Overview



AERR Proposed Point Source Collection Overview



1a. Key Proposed Changes for Point Sources

(slide 1 of 2)

- ▶ Definition of point sources:
 - ▶ No change to current AERR CAP potential-to-emit thresholds or actual Pb threshold for CAP reports
 - ▶ Add all major sources and those non-major sources with listed industry codes and with emissions \geq HAP actual emissions thresholds
- ▶ Major sources to report all HAP
- ▶ Non-major to report those HAP \geq thresholds
- ▶ All point sources must be reported every year, starting with the 2026 inventory year to be reported in 2027 (rather than every three years)
- ▶ Phase-in of point source reporting dates

1a. Key Proposed Changes for Point Sources

(slide 2 of 2)

- ▶ Report geographic coordinates of release points (stacks and fugitives)
- ▶ Must use monitored data or source test results when available to determine annual emissions, or explain why not; and otherwise use best available data
- ▶ Must include emissions from mobile sources operating primarily within the facility (e.g., mining vehicles), which is in contrast with emissions used to determine major sources
- ▶ Requirement to report federal regulations that apply to a facility (by unit)
- ▶ Requirement to report Title V operating permit number

1a. Origin of HAP Emissions Thresholds

- ▶ Started with 2017 AirToxScreen HAP risk results
- ▶ Dropped emissions for any release point if contributed $< 20\%$ of risk or hazard index (HI) to facility for that pollutant
- ▶ Adjusted emissions for each facility, release point and pollutant to determine the emissions that would cause 1 in 1 million cancer risk and 0.5 HI
- ▶ Selected the 10th percentile of these emissions levels
- ▶ Chose the lower value when emission threshold available from both cancer risk and HI values

1a. More Additions and Clarifications to Point Source Reporting

Additions

- ▶ Requirement to indicate small entity type, when applicable (Small Business Administration (SBA) and/or Clean Air Act (CAA) definition)
- ▶ Other new point source provisions and data fields (see Appendix)
- ▶ More specifics on portable sources (see Appendix)

Clarifications

- ▶ Clarify reporting requirements for airports and railyards (affects SLT reporting only)
- ▶ Requirement to use the latest reporting codes available from the EPA
- ▶ Provide a definition of actual emissions (term used in CAA but not defined)
- ▶ Clarify that there is no exemption for unpermitted sources. SLTs don't need to issue a permit just for reporting.

1a. Proposed Phase-in of Stationary Point Source Reporting

| | Deadline in months after end of inventory year for reporting to EPA ^a | |
|----------------------------|--|--|
| Phase & Inventory Years | States | Owners/Operators |
| Phase 1: 2022 through 2024 | 12 months and 15 days | n/a |
| Phase 1: 2025 | | 5 months (facilities not within state implementation planning authority) |
| Phase 1: 2026 | | 5 months (all facilities) |
| Phase 2: 2027 through 2029 | 9 months | 5 months |
| Phase 3: 2030 and beyond | 5 months | 3 months |

^a See Appendix for proposed alternative timings for phase-in of earlier reporting

1b. Include Data for Small Generating Units

- ▶ *Small generating unit* means any boiler, turbine, internal combustion engine or other unit that combusts fuel on an occasional basis to generate electricity for the electricity grid or for on-site use by a facility other than for emergency use
- ▶ Preferred alternative (starting with 2026 inventory year):
 - ▶ State must report data for small generating units at point sources when these data are not reported to EPA directly and operated to offset demand
 - ▶ If not reported by a state, owners/operators of point sources must report such data
 - ▶ Data to be reported are date, fuel used or heat input by unit and process
- ▶ Alternative D2: Expand preferred alternative for collecting small generating unit data to gather data for all units, not just those defined as point sources
- ▶ Alternative D3: Scale back preferred alternative to gather data only from those states that have ozone non-attainment areas and those states linked to downwind non-attainment areas
- ▶ One-time collection option: EPA to collect data directly from Curtailment Service Providers (CSPs) and other operators or aggregators of small generating units

2. Emission Data Exception to Confidential Treatment

Current AERR

- ▶ Within current AERR, 40 CFR §50.15(d):
“[w]e do not consider the data in Tables 2a and 2b in Appendix A of this subpart confidential, but some states limit release of these types of data. Any data that you submit to EPA under this subpart will be considered in the public domain and cannot be treated as confidential. If Federal and state requirements are inconsistent, consult your EPA Regional Office for a final reconciliation.”
- ▶ This section has caused confusion
- ▶ Intent is to explain all data provided will be released on regular basis

Proposed Revisions

- ▶ Cite to 40 CFR 2.301(a)(2)(i) definition of “emission data”
- ▶ Rely on CAA section 114(c), which classifies emission data as not subject to confidential treatment
- ▶ AERR proposed revision that all data reported under the AERR meets the definition of “emission data” and as such is not subject to confidential treatment
 - ▶ e.g., annual emissions, throughput, emission rates, source test results, source classification codes, unit types, control devices

3a. Proposed Owner/Operator Requirements for Annual Reporting of HAP Emissions for Certain Facilities within States

- ▶ No owner/operator reporting in current AERR
- ▶ When a facility meets the point source definition and is in a state without an approved HAP reporting plan, an owner/operator of that facility must report:
 - ▶ Facility inventory (the attributes of a facility, units, processes, release points, and emissions controls)
 - ▶ Major sources to report all HAP and non-major to report those HAP \geq thresholds
 - ▶ “Incidental CAPs” as applicable
- ▶ *Incidental CAP* means a criteria pollutant or precursor emitted from a facility that meets the point source reporting definition for emissions of HAP but not for emissions of criteria pollutants and precursors
 - ▶ For example: VOC from a facility that meets the threshold for reporting Benzene
- ▶ Owners/operators must report to EPA using the Combined Air Emissions Reporting System (CAERS)
- ▶ Starting with the 2026 emission inventory year, to be reported in 2027
- ▶ Alternative A1: Collect HAP data from SLTs for facilities within their planning authorities
- ▶ Option: also require per- and polyfluoroalkyl substances (PFAS)

3b. Provisions to Reduce Burden on Small Entities

- ▶ Estimated 35,000 small businesses (firms) impacted by proposed rule (based on CAA definition); which is about 39,000 facilities.
 - ▶ Estimated about 19,000 “micro” entities affected using definition of < 20 employees or < \$3M receipts
- ▶ Options for less detailed reporting can be used by small entities:
 - ▶ Report facility total emissions
 - ▶ Report facility inventory data at unit level
- ▶ EPA could remove this option if:
 - ▶ EPA annual model results show cancer risk for a facility of 20 in 1 million or more, and
 - ▶ EPA has notified owner/operator earlier than 180 days prior to the next reporting deadline
- ▶ Exclude small entities from the collision shop industry
- ▶ EPA will provide an emissions estimation tool for small entities to determine whether they need to report and to estimate facility-total emissions for reporting to EPA

4. Proposed Owner/operator Requirements for Certain Facilities Outside of a State's Implementation Planning Authority

- ▶ When a facility meets the point source definition and is outside the geographic scope of a state's implementation planning authority (*e.g.*, within certain Indian country and federal waters)...
- ▶ An owner/operator of that facility must report:
 - ▶ Facility inventory (the attributes of a facility, units, processes, release points, and emissions controls)
 - ▶ Annual actual emissions of HAP and CAP
 - ▶ Data for small generating units
- ▶ Owners/operators must report to EPA using CAERS
- ▶ Same small entity provisions apply as for other owner/operator reporting
- ▶ Starting with the 2025 emission inventory year, to be reported in 2026
- ▶ Option: also require per- and polyfluoroalkyl substances (PFAS)

5. Requirement for Owners/Operators to use Electronic Reporting to Submit Certain Source Tests

- ▶ Existing EPA and state regulations require source tests, but not all of these are reported electronically. Current AERR has nothing about source test data collection.
- ▶ Require owners/operators of point sources to report performance test results and performance evaluations that meet all the conditions:
 - ▶ When data are not otherwise reported to the EPA based on other regulations listed at <https://www.epa.gov/electronic-reporting-air-emissions/cedri#list>
 - ▶ The data are gathered to meet any other EPA or state requirement
 - ▶ The data are supported for reporting by CEDRI* or an analogous electronic reporting system, and
 - ▶ The results were not from a project, method, device, or installation (or any component thereof) that was produced, developed, installed, and used only for research purposes
- ▶ In addition to requirements of the source testing methods, reports must include:
 - ▶ Unit capacity, load (percent capacity) during testing period, unit activity level
 - ▶ Operating conditions, process data
 - ▶ Purpose of the test, parameters being measured, description of the unit including fuels, controls, vents, and source classification code
- ▶ An owner/operator reporting source test data must report via CEDRI with ERT* (or analogous)

* CEDRI = Compliance and Emissions Data Reporting Interface; ERT = Emissions Reporting Tool

How Source Test Reporting Requirement Would Work with Other “Best Available” Proposed Provision via CAERS

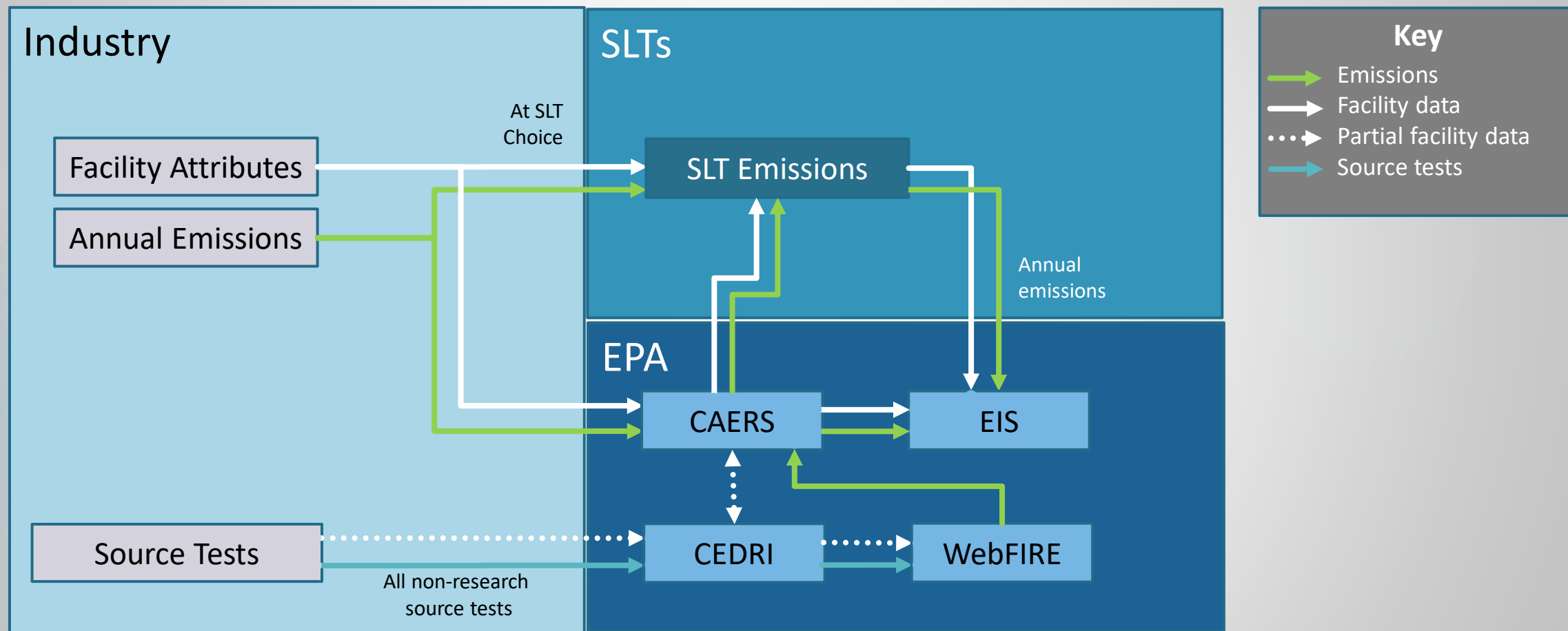
- ▶ Proposed point source requirement to use best available methods to estimate emissions, preferring source test data when available
 - ▶ “Best available” may include engineering judgement
 - ▶ Owners/operators can indicate why available source test data are not appropriate for estimating annual emissions and then select another emissions approach
- ▶ CAERS expected to help owners/operators:
 - ▶ Report source test for release points, using same, unit, process, release information as is used for annual emissions
 - ▶ Identify and select appropriate source test data from their facility for estimating emissions
 - ▶ Identify and select emission factors derived from source test data via WebFIRE
 - ▶ Provide a way to explain why source test data should not be used

6. Optional SLT HAP Reporting for Point Sources on Behalf of Owners/Operators

- ▶ A SLT electing to report HAP would first be required to:
 - ▶ Promulgate a state regulation that meets all requirements on owners/operators of AERR for HAP reporting
 - ▶ Apply for approval by EPA headquarters by showing that the SLT meets certain requirements
- ▶ If EPA approves HAP reporting application, SLT would have HAP reporting responsibilities (in addition to the current CAP reporting requirements)
 - ▶ Owners/operators of point sources would report HAP to the state
 - ▶ SLT would have same HAP reporting requirements as would owners/operators, except for reporting deadline and a requirement to report to the Emissions Inventory System (EIS) as per current AERR
 - ▶ Once approved, responsibility is generally retained to next reporting year
- ▶ Optional use of CAERS to reduce burden of SLT collection and reporting
- ▶ Proposed conditions under which a state would have to re-apply for responsibility
- ▶ Proposed process for a state to end HAP reporting responsibility
- ▶ Alternative A1: Would make this optional reporting mandatory

Proposed Reporting Requirements

Data Flows (with CAERS) as Envisioned Under Revised AERR



Webinars and Public Hearing

| Date/Time | Webinar Topic |
|--------------------------------|---|
| Aug 17, 2-3:30 pm ET | Proposed Rulemaking for changes to the AERR (for Industry Stakeholders) |
| Aug 24, 2-3:30 pm ET | Proposed Rulemaking for Changes to the AERR (for Small Businesses & Tribal Nations) |
| Aug 29, 2-3:30 pm ET | Proposed Rulemaking for Changes to the AERR (for Communities) |
| Aug 30, 10am-4:00 pm ET | Public hearing |

To register for webinars and/or for the public hearing, please use the AERR Website:
<https://www.epa.gov/air-emissions-inventories/air-emissions-reporting-requirements-aerr>

AERR Proposal Comments and Questions

- ▶ The proposal published in the Federal Register on August 9, 2023
<https://www.federalregister.gov/documents/2023/08/09/2023-16158/revisions-to-the-air-emissions-reporting-requirements>
- ▶ AERR website: <https://www.epa.gov/air-emissions-inventories/air-emissions-reporting-requirements-aerr>
- ▶ You may submit written comments through October 18, 2023
 - ▶ Comments can be sent via www.regulations.gov, docket ID EPA-HQ-OAR-2004-0489
 - ▶ Email and fax options are available in the preamble
- ▶ Clarifying questions can be sent to NEI_Help@epa.gov (Please include AERR in the subject line)

Appendix

1a. Additional information: new point source provisions and data fields

- ▶ Requirement to report HAP and CAP from the same emissions process with consistent identifiers
- ▶ Requirement to report throughput information in certain units of measure
- ▶ New definition for the facility location coordinates (*i.e.*, lat/lon) as the facility air centroid.
- ▶ Requirement to provide the speciation profile reference information when using speciation profile(s) to estimate emissions
- ▶ Requirement to use specific datum (*i.e.*, Earth shape specifications) for coordinates
- ▶ Requirement for full 6-digit North American Industry Classification System (NAICS) code with option to report 5-digit NAICS in certain cases
- ▶ Revised approach for describing emissions controls at a facility
- ▶ New approaches available for specifying fugitive release parameters
- ▶ Must consider AERR point source reporting requirements (such as mobile sources) when both (a) determining whether emissions exceed AERR thresholds and (b) estimating emissions to be reported
- ▶ Approach to report emissions for HAP pollutant groups
- ▶ Approach to report emissions when a facility has data for both a pollutant group and pollutants in the group

1a. Additional information: portable point source reporting, alternative, and option

- ▶ Base proposal:
 - ▶ *Portable source* means a facility that does not have a fixed location such as an asphalt plant or portable drilling rig, mobile offshore drilling units (MODUs), and offshore installation vessels.
 - ▶ Portable facilities operating solely within Indian country where a Tribe or state does not report CAP or HAP emissions data would be required to report
 - ▶ Portable facilities operating across state and/or Indian country boundaries would report directly to the EPA any emissions not reported by those states and/or Tribes
 - ▶ Requirement to report portable sources using county identifier “777” and eliminating the requirements to report location information
- ▶ Alternative E1: States can report portable sources aggregated by county and month
- ▶ Portable Definition Option: includes a categorization of portable facilities into two groups:
 - ▶ Reporting as stationary facilities under listed conditions
 - ▶ Reporting as portable facility otherwise

1a. Additional information: Alternatives to Proposed Phase-in of Earlier Point Source Reporting Deadlines

- ▶ The proposed approach on slide 16 would phase-in an earlier deadline for owners/operators from May 31 (phase 2) to March 31 (phase 3)
 - ▶ EPA would also consider a later deadline for owners/operators that would be either April 15th, April 30th, or May 15th of the reporting year (instead of March 31st)
- ▶ The proposed approach on slide 16 would phase in an earlier deadline for SLTs from January 15th (the next year) (phase 1) to May 31st (phase 3) of the reporting year
 - ▶ Alternative F1: slower phase-in – EPA is considering first deadline change for inventory years 2028 or 2029 (rather than 2027) and second deadline change for inventory years 2031 or 2032 (rather than 2030)
 - ▶ Alternative F2: different deadlines – EPA is considering August 31st and October 31st for first phase in deadline (instead of September 30) and considering April 1st, April 30th, and June 30th for second phase-in deadline (instead of May 31st)
- ▶ EPA requests comment and additional information on the expected impacts of the proposed deadlines

3b. Alternative Small Business Definition

- ▶ Two definitions of small businesses described in preamble
 - ▶ SBA size standards – depending on NAICS, includes firms with up to 1,500 employees
 - ▶ CAA definition – roughly - 100 employees and non-major sources
- ▶ Using SBA definition about 10,000 more small firms (17,400 facilities) would benefit from reduced reported requirements
 - ▶ Estimated 45,000 small firms impacted using SBA definition
 - ▶ Estimated 35,000 firms using definition for this proposal
- ▶ EPA would not have detailed data for small firms because of burden reduction provisions.

6. Application for Optional SLT HAP Reporting for Point Sources

- ▶ Promulgate state regulation that mirrors AERR for HAP reporting
 - ▶ Proposed regulatory text lists out how to do this in six parts
- ▶ Apply to EPA by March 31st of the first inventory year for which the SLT intends to report HAP (e.g., for the 2026 inventory year, apply by March 31, 2026)
- ▶ EPA response as expeditiously as possible and would post approval decisions on EPA website
- ▶ Reapply under certain conditions (see preamble)
- ▶ Preamble describes an approach when SLT intends to stop collecting on behalf of owners/operators

6. Additional information: Choices for SLTs about using CAERS

CAERS Cases for SLTs:

Case 4: Most cost savings possible

Case 3: Some cost savings possible

Case 1&2: No expected cost savings

