# Air Emissions Reporting Rule Updates

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March 3rd, 2015

## Purpose

Explain the final updates to the Air Emissions Reporting Rule (AERR)

Highlight key comments and how EPA addressed those

Answer any questions

## For More Information

* Please enter questions in the Q&A dialog box during this webinar
* See also AERR website: <http://www.epa.gov/ttn/chief/aerr/>
* See also AERR docket EPA‐HQ‐OAR‐2004‐0489

available at [http://www.regulations.gov](http://www.regulations.gov/)

## AERR History

* Previous rule - Promulgated December 2008
* Required States to submit annual emissions and sub-annual emissions in limited cases (e.g., Ozone nonattainment)
* Criteria air pollutant and precursor (CAP) emissions required, all sources, every 3 years
  + CO, VOC, NOx, SO2, PM10, PM2.5, NH3, and Lead (Pb)
* CAP emissions required for larger point sources every year
* Hazardous Air Pollutant (HAP) emissions voluntary
* Submissions made electronically to the Emissions Inventory System (EIS) via the Central Data Exchange (CDX)
* AERR is used to build the National Emissions Inventory (NEI)
* New Rule: Updates made in 5 areas for consistency, clarity, improved approaches and burden reduction

## Update 1: Lead reporting threshold

* Previous AERR Pb threshold for point sources was 5 tons/year
  + Threshold was based on “potential to emit”, although reported emissions are actual
* New AERR lowers threshold to 0.5 tons/year actual emissions
  + Matches the 0.5 ton/year actual emissions threshold for Pb monitoring rule
  + We proposed 0.5 ton/year *potential* emissions
  + Based on comments, we changed to 0.5 ton/year *actual* emissions (actual for Pb only)
  + As in previous AERR, if threshold is met for any pollutant, actual emissions of all required pollutants must be reported

Update 2: Clarifications for reporting fires

* Previous AERR was not accurate on fire requirements and did not reflect current practices
  + Required wildfires and agricultural fires to be reported as point or nonpoint, and did not mention prescribed fires
  + EPA now uses a method (“SMARTFIRE”) for credible day-specific,

locale-specific estimates, nationwide

* The AERR update:
  + Deletes requirement for State reporting of wildfires and allows

wildfires and prescribed fires to be voluntarily reported

* + Encourages review or submittal of fire activity data
  + Indicates wildfires and prescribed fires can only be (voluntarily) reported to the “event” data category (day-specific, locale-specific format)
  + Clarifies that agricultural fires are still required and can only be

reported as nonpoint sources (county-wide totals)

## Comments on fires changes

* 7 of 11 commenters expressed support
* 1 commenter asked that EPA continue to allow prescribed burning as nonpoint sources
  + We did not implement this comment in the final rule
  + Event format/approach is preferred for modeling
  + Too many challenges and costs associated with allowing two formats and then having to reconcile
  + A single approach allows us to strive for national consistency in data resolution

## Update 3: Mobile model inputs

* AERR previously required to submit onroad and nonroad emissions
  + Must use latest OTAQ mobile models (i.e., MOVES and NONROAD)
    - Except California and tribes
  + Model inputs previously voluntary
* AERR now requires submittal of the model inputs rather than the emissions (except for California and tribes)
  + Emissions are now voluntary (except for California)
  + Model inputs are smaller and thus a burden reduction for States to submit
  + EPA can rerun the models when they change or input errors are found
  + EPA can QA the model inputs
  + EPA has already provided an approach for submitting inputs
  + Will avoid costly past problems EPA has had in trying to use State emissions
  + Will help our modeling efforts to have more consistent base and future year emissions

## Comments on mobile changes

* 6 of 11 commenters expressed support
* 2 commenters raised concerns on the basis that their emissions calculations are more detailed or different from than the approaches used by the EPA
* The main concern was that the emissions would be different from the state-calculated emissions
  + EPA noted that there are many valid approaches for calculating on-road and nonroad emissions with MOVES and NONROAD
  + The benefits of using a consistent approach for calculating NEI and future-year emissions outweigh the concerns raised
  + NEI and SIP emissions can be different

## Update 4: Remove non-annual emissions requirements

* The previous AERR required various seasonal and typical-day emissions
  + NOx SIP Call States required to submit seasonal and typical-day emissions for ALL sources triennially and for any SIP-controlled sources annually
  + O3 NA areas and CO NA/maintenance areas required to submit typical day emissions triennially
  + Few States are partially meeting the AERR format and schedule requirements
  + Regional Offices have been getting the SIP data directly, outside of the AERR and EIS process
* Now, the AERR seasonal or typical day requirements have been moved to the associated reporting rules
  + Remove the AERR requirements to report seasonal and typical day emissions to EIS for Ozone and CO n/a areas and NOx SIP Call States
  + Not affect reporting requirements in each of those separate rules
  + Allow the EIS data system to optionally be used by States for seasonal data. If EIS submissions meet the requirements for those rules (see guidance), EIS submissions can be used to meet reporting obligations for them.

## Update 4 continued

* In addition to the AERR annual emissions requirements, good alternatives to seasonal emissions exist for modeling that are available through other means:
  + Fires, onroad, and nonroad calculated daily or monthly and

summed for NEI

* + Key nonpoint sectors (residential wood and agricultural NH3) have meteorological-based daily allocations
  + Other nonpoint and point sectors are less variable seasonally; We use monthly allocation factors for these sectors

## Comments on seasonal emissions reporting changes

* 5 of 11 commenters noted that the proposed AERR changes were inconsistent with the Ozone Implementation Rule’s and NOx SIP Call’s reliance on the AERR
  + EPA has modified the ozone implementation rule and NOx SIP call to require emissions as part of that rule rather than point to the AERR
  + EIS can be used to report emissions, though getting

data out is a “by request” process at this time.

Requests should be sent t[o info.chief@epa.gov.](mailto:info.chief@epa.gov)

## Update 5: Simplification and consistency of reported data elements

* Previous AERR needed some administrative changes to make it consistent with EIS reporting practices
* The AERR has now:
  + Sync’d EIS field names with tables in AERR
  + Added fields already in EIS and being used by States:
    - 9 fields for added or changed facilities
    - 5 fields for nonpoint emissions
  + Remove “required” status for several unneeded data

elements

## Update 5, changes to Appendix A

* Table 1: Emission Thresholds by Pollutant for Treatment as Point Source
  + Now includes thresholds for Type B (triennial) sources to be

reported as point sources

* + - Consistent with major source definitions (except Pb) using potential to emit
    - Lower thresholds in nonattainment areas for ozone, carbon monoxide, and PM10
  + PM clarified as “Primary PM” (i.e., includes filterable and condensible)
  + Includes new 0.5 ton/year actual emissions threshold for Pb
  + Corrected formerly confusing footnote – clarifies that reported

emissions are actual, but thresholds are potential

## Update 5, changes to Appendix A (continued)

* Table 2a: Facility Inventory Data Elements for Reporting Emissions from Point Sources
  + Now includes only fields for the facility inventory
  + Only needs to be submitted when source changes
  + Adds Facility Site Status, Release Point Status, Unit Status and associated years
  + Adds Aircraft Engine Type, Unit Type, and Release Point Apportionment

Percent

* + - Aircraft Engine Type is for use by EPA and does not imply a requirement for states to submit aircraft as point sources
    - Unit Type needed to allow for EIS QA of Unit Design Capacity requirement for only certain Unit Types (e.g., boilers)
  + Permitting Tribal Code element to be reported instead of State and County FIPs code
  + Now requires stack parameter units of measure
  + Either Exit Gas Velocity or Exit Gas Flow Rate is required, but not both (sending both is still allowed)
  + Facility lat/lon now required rather than stack lat/lon (but stack lat/lon still of interest when available)
  + Physical address is now explicitly the four separate data elements in EIS (Location Address, Locality Name, State Code, and Postal Code)

## Update 5, changes to Appendix A (continued)

* Revises terms:
* FIPs Code to State and County FIPs Code
  + Adding “Release Point” to the names for the 5 exit gas data elements to be consistent with EIS names
* Made optional rather than required:
  + Inventory Start Date and End Date
  + Contact Name and Phone Number
  + Hours Per Day, Days Per Week, and Weeks Per Year
  + Heat Content
  + Ash Content
  + Sulfur Content
  + Method Accuracy Description Codes
  + Maximum Nameplate Capacity

## Update 5, changes to Appendix A (continued)

* Table 2b: Data Elements for Reporting Emissions from Point, Nonpoint, Onroad-Mobile, and Nonroad Mobile Sources
  + Includes all point source emissions fields
  + Combines fields from former Tables 2a, 2b, and 2c
  + Includes Shape Identifiers – required for some data categories
  + Includes Emission Type (and definition revised)
  + Includes Reporting Period Type (annual, etc.)
  + Includes Emission Operating Type (routine, etc.), moved from Table 2a from prior rule
  + Adds Emissions Calculation method (required for point and nonpoint sources)
  + Voluntary rather than required:
    - Summer Day Emissions
    - Ozone Season Emissions
    - Winter Work Weekday Emissions
* Table 2c:
  + Is now removed by combining with Table 2b

## Update 5: Clarification of names and usage for controls

* Now required where controls exist:
  + Percent Control Approach Capture Efficiency
  + Percent Control Measures Reduction Efficiency
    - These replace the previously required Primary Capture and Control

Efficiency and Total Capture and Control Efficiency elements

* + - Not required by EIS because do not apply in every case
  + Added Control Pollutant data element
* Revises names for controls:
  + Control Device Type to Control Measure
  + Rule Effectiveness to Percent Control Approach Effectiveness
  + Point and nonpoint field names made consistent