

IOWA DEPARTMENT OF NATURAL RESOURCES

Leading Iowans in Caring For Our Natural Resources

What is the AERR?

- EPA's Air Emission Reporting Rule found in 40 CFR Part 51
- Promulgated in 2002 as emission inventory reporting requirements for States/Locals/Tribes to report emissions data to EPA
- DNR currently reports all annual Iowa Title V emissions to EPA via the Emissions Inventory System (EIS) Gateway
- DNR reviews and comments on nonpoint, biogenic, and mobile emissions calculated by EPA every three years.



Proposed 2023 AERR Revisions

- EPA proposed significant revisions to the AERR in July 2023
 - published in the Federal Register on August 8, 2023 (88 FR 54118)
- DNR submitted comments to the EPA docket on October 24, 2023
- Nick Page presented an overview of the rule to the Air Quality Client Contact Meeting on November 16, 2023
- Rule has not been finalized to date; has been at OMB since April 1.



Disclaimer

• This presentation does not include all the requirements proposed in the July 2023 AERR rulemaking. Please review the rule published in the Federal Register for the complete picture.

• This presentation focuses on the most impactful changes to point sources in lowa, both stationary and portable.



Mandatory HAP Reporting to EPA

- DNR currently submits all Title V Emissions (CAPs and HAPs) reported to DNR to EPA for the National Emissions Inventory (NEI).
 - HAPs are not required DNR does this voluntarily.
- The proposed AERR rule will revisions will require *annual* mandatory reporting of HAPs from Title V and *minor* sources starting with the 2026 Emission Inventory Year.
- The HAPs that minor sources will be required to report are determined by a reporting threshold set for each individual HAP.



Expansion of 40 CFR 51.50 Definition of Point Source

- No change to current AERR CAP thresholds
- Adds all major sources and those non-major sources with listed industry codes and with actual HAP emissions > thresholds
- All point sources must be reported every year
- Adds portable sources and mobile sources operating at major sources



TABLE 1C TO APPENDIX A OF SUBPART A—APPLICABLE PRIMARY NAICS CODES TO IDENTIFY NON-MAJOR SOURCES FOR POINT SOURCE REPORTING

NAICS ¹	Description	
21xxxx, 22xxxx, 3xxxxx except for 311811.	Industrial and manufacturing industries.	
4247xx	Petroleum and Petroleum Products Merchant Wholesalers.	
481xxx	Scheduled Air Transportation.	
486xxx	Pipeline Transportation.	
4883xx	Support Activities for Water Transportation.	
493xxx	Warehousing and Storage.	
5417xx	Scientific Research and Development Services.	
54199x	Other Professional, Scientific, and Technical Services.	
56191x	Packaging and Labeling Services.	
5622xx	Waste Treatment and Disposal.	
5629xx	Waste Management and Remediation Services.	
61131x	Colleges, Universities, and Professional Schools.	
62211x	General Medical and Surgical Hospitals.	
62231x	Specialty (except Psychiatric and Substance Abuse) Hospitals.	
811121	Automotive Body, Paint and Interior Repair and Maintenance.2	
8122xx	Death Care Services.	
812332	Industrial Launderers.	
92214x	Correctional Institutions.	
927xxx	Space Research and Technology.	
928xxx	National Security and International Affairs.	

¹Based on 2017 NAICS codes. The "x" values represent all NAICS codes starting with the digits preceding the "x" values. ²Excluding small entities for primary NAICS 811121.



TABLE 1B TO APPENDIX A OF SUBPART A—REPORTING THRESHOLDS BY POLLUTANT FOR HAZARDOUS AIR POLLUTANTS FOR TREATMENT AS POINT SOURCE—Continued

Description	Associated CAPs ¹	Pollutant code ²	Actual emissions initial threshold (short tons/year)
Hexane	voc	110543	10
Hydrazine		302012	3.8E-04
Hydrochloric Acid		7647010	10
Hydrogen Fluoride		7664393	7.8
Hydroquinone	voc	123319	10
Isophorone	VOC	78591	10
Lead	PM	7439921	0.074
Lindane (all isomers)	VOC	See Table 1D	0.0015
Maleic Anhydride	VOC	108316	0.64
Manganese	PM	7439965	0.16
Mercury Compounds	PM	See Table 1D	0.0026
Methanol	VOC	67561	10
Methyl Bromide	VOC	74839	10
Methyl Chloride	VOC	74873	10
Methyl Chloroform		71556	10
Methyl lodide	VOC	74884	10
Methyl Isobutyl Ketone	VOC	108101	10
Methyl Isocyanate	VOC	624839	1.1
Methyl Methacrylate	VOC	80626	10
Methyl Tert-Butyl Ether	VOC	1634044	5.3
Methylene Chloride		75092	10
Methylhydrazine	VOC	60344	10
Naphthalene	VOC	91203	0.027
Nickel Compounds	PM	See Table 1D	0.0021
Nitrobenzene	VOC	98953	0.076
N,N-Dimethylaniline	VOC	121697	10
N-Nitrosodimethylamine	VOC	62759	3.5E-04
N-Nitrosomorpholine	VOC	59892	6.6E-04
o-Toluidine	VOC	95534	0.058



Reporting Options

The AERR proposal offers 2 options:

- 1. Owners/Operators report HAP emission directly to EPA via the new Combined Air Emissions Reporting System (CAERS), or
- 2. DNR collects the HAP emissions data in SLEIS and reports it to EPA on behalf of owner/operators (*DNR's current practice*)

Both options significantly tighten reporting deadlines.



Current Deadlines

Title V Sources:

- Facilities report previous year's emissions to DNR by March 31.
- DNR QAs emissions from April December
- DNR reports emissions to EPA by January 15 of following year.

Minor Sources:

- Facilities in 1/3 of the state report previous year's emissions to DNR by May 15.
- DNR QAs emissions from June February
- Emissions are not reported to EPA.



Option #1 - Facilities Report HAPs Directly to EPA

If DNR chooses option #1:

- Title V sources would report HAPs to EPA annually via CAERS & submit a full inventory (all pollutants) annually to DNR via SLEIS
 - DNR would then report the Title V CAP emissions to EPA.
- Minor sources would report HAPs and incidental CAPs to EPA annually and submit a full inventory (all pollutants) every 3 years to DNR via SLEIS
 - DNR would not report any minor source emissions to EPA.



Option #1 Deadlines

El Year	EPA Deadline	Data to Report	
2026	05/31/2027		
2027	03/31/2028		
2028	03/31/2029	Title V HAPs, Minor HAPs, and Minor Incidental CAPs	
2029	03/31/2030		
2030	04/31/2031		



Option #2 Deadlines – DNR Reports to EPA on Facilities' Behalf

If DNR chooses option #2, DNR must:

- Promulgate a State regulation to collect facility inventory and actual emission data for HAPs to meet the requirements of the AERR.
- Apply in writing by 3/31/2026 for EPA approval to collect the data on behalf of owners/operators



Option #2 Deadlines

El Year	EPA Deadline	Data to Report	
2023	01/15/2025	Title V CAPs, Title V HAPs (Voluntary), Lead > 0.5 tons actual,	
2024	01/15/2026		
2025	01/15/2027		
2026	01/15/2027	Title V CAPs & HAPs, Minor HAPs, Minor Incidental CAPs, Lead > 0.5 tons actual, and Small Generating Unit Activity Data	
2027	09/30/2028		
2028	09/30/2029		
2029	09/30/2030		
2030	05/31/2031		



Additional Required Elements for Point Sources

- Title V operating permit number
- Identification of all federally enforceable regulations for each emission unit
- 5 or 6-digit facility NAICS code
- Release point latitude/longitude
- Fugitive release midpoint latitude/longitude
- Unit design capacity & unit of measure
- Regulatory code/regulation start year/regulation end year



Additional Required Elements for Point Sources (continued)

- Control percent effectiveness
- Site path name/site path identifier/site path percent effectiveness/site path pollutant code/site path control measure percent reduction/site path definition
- Emissions operating type
- Daily fuel use for combustion sources
- Elimination of confidentiality requests
- Emissions data from mobile sources operating within a facility
- Distinguish between malfunction and routine emissions



Portable Sources

- The rule proposes to include portable facilities in the revised definition of point source.
- Portable facility means a facility that does not have a fixed location such as an asphalt plant or portable land-based drilling rig.
- Facilities would be defined as portable and required to report as portable sources only for periods when the source remains within a 1-km radius for fewer than 30 days.
 - Would require that county identifier and coordinates of the centroid of operations be reported during each time period
- Facilities would be defined as stationary and be required to report as a stationary point source when the facility operates within a 1-km radius for 30 days or more.



Options for Small Entities

- Small entity definition: facilities that have 100 or fewer employees, is a small business concern as defined in the Small Business Act, is not a major source, does not emit 50 tons or more per year of any regulated pollutant, and emits less than 75 tons per year or less of all regulated pollutants
 - Excludes autobody, paint, and interior repair shops (NAICS = 811121)
- Facility-wide reporting in certain situations.
- EPA intends to provide an emissions estimation tool for small entities to estimate facility-wide emissions; when an estimation tool is not available, EPA does not expect small entities to develop their own reporting mechanism



Small Generating Unit (SGU) Requirements

• Small generating unit (SGU) 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 emergency use.

 Because DNR currently exempts many of these units from construction permitting and/or emissions reporting, DNR does not know how many SGUs will be affected or even where the SGUs are located.



SGUs (continued)

- Starting with the 2026 inventory year, DNR would be required to report the facility inventory and daily fuel consumption and associated required data elements as described in 40 CFR 51.40 for SGUs when:
 - Hourly and daily emissions and activity from the unit are not otherwise reported to EPA, and
 - The unit was operated to offset electricity demand from the electricity grid;
 and
 - The unit is located on a facility that operates on land.



Additional Concerns

- Less time for DNR to QA emissions data before it goes to EPA
- EPA estimates the yearly average per-facility burden for reporting emissions data to be just 27 hours when using in-house staff
- The proposal significantly increases the level of customer service necessary to meet EPA's goals
- Proposal requires mandatory reporting of stack tests results by facilities to EPA
- Proposal requires mandatory reporting of prescribed fire data by DNR to EPA



Iowa DNR Comments

EPA must provide adequate and stable funding to state environmental regulatory agencies to implement any substantive changes that EPA finalizes pursuant to this rulemaking.

As proposed, EPA's modifications represent a substantial and burdensome escalation in workload.

This includes tripling the number of sources required to report to EPA, resulting in significant increases in public outreach, training, compliance assistance to late and non-responding facilities, and customer service activities performed by the DNR.



Questions

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- EPA Staff
 - Mark Houyoux (<u>Houyoux.Marc@epa.gov</u>)
 - Include "AERR" in the subject line
- EPA Docket Number: EPA-HQ-OAR-2004-0489

