



February 6, 2025

Mark Smith, Deputy Regional Administrator
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

Dear Mr. Smith,

In accordance with Section 107(d)(1) of the Clean Air Act, I recommend designating all of the listed regions (Attachment I) in Wyoming as Attainment/Unclassifiable under the primary annual fine particulate matter (PM_{2.5}) National Ambient Air Quality Standards that became effective May 6, 2024 (“Reconsideration of the National Ambient Air Quality Standards for Particulate Matter,” 89 FR 16202).

The State used the last three years of PM_{2.5} monitoring data (2021-2023) to make attainment recommendations. The results and supporting data are listed in Attachments I and II. In assembling this report, the State used guidance issued by EPA on Feb. 7, 2024 in a memorandum from Joseph Goffman, Assistant Administrator, Office of Air and Radiation, entitled “Initial Area Designations for the 2024 Revised Primary Annual Fine Particle National Ambient Air Quality Standard” to determine appropriate state boundary designations.

The State has submitted “Initial Notification of Potential Exceptional Events” and flagged the data in EPA’s Air Quality System (AQS), as per 40 CFR § 50.14(c)(2)(i), as a result of elevated PM_{2.5} concentrations monitored during the most recent three years (2021-2023) of data collection. The State of Wyoming flagged 37 exceptional events within the data used in this designation and is submitting exceptional event demonstrations. All 37 exceptional events during the 2021-2023 period that the State of Wyoming evaluated occurred due to wildfire impacts. A list of all 37 exceptional events demonstrations, the dates they occurred, the locations of the ambient monitors where the data was recorded, the exceedance concentrations, etc., are included as Attachment III.

Portions of the listed regions are under the jurisdiction of Tribal authorities. I understand that Tribal designations will be made separately from State designations.

If you have any questions concerning the details of this recommendation, please feel free to contact:

Nancy Vehr, Administrator
Wyoming Department of Environmental Quality
Air Quality Division
200 West 17th St.
Cheyenne, WY 82002
307-777-7391
nancy.vehr@wyo.gov

Sincerely,



Mark Gordon
Governor

MG:nr:kh

Attachments (3):

Attachment I (pg.3) Initial designations of nonattainment, attainment, or unclassifiable areas
for Wyoming for the 2024 Revised PM_{2.5} National Ambient Air Quality
Standards

Attachment II (pg. 5) PM_{2.5} Monitored Data Summary 2021-2023

Attachment III (pg. 7) Exceptional Events Demonstrations 2021-2023

cc: Todd Parfitt, Director, Wyoming Department of Environmental Quality

ATTACHMENT I

Initial designations of nonattainment, attainment, or unclassifiable areas for Wyoming for the 2024 Revised PM_{2.5} National Ambient Air Quality Standards

The State of Wyoming used guidance issued by EPA on February 7, 2024 entitled “Initial Area Designations for the 2024 Revised Primary Annual Fine Particle National Ambient Air Quality Standard” in determining boundaries for State designations. The guidance suggests using PM_{2.5} monitored data and five factors to create nonattainment boundaries. EPA gave the option of flagging PM_{2.5} data affected by exceptional events during the last three years (2021-2023). The State of Wyoming flagged 37 exceptional events during this period; those events are detailed in Attachment III. Based on this guidance, the State requests designation of the regions listed as Attainment/Unclassifiable for the annual PM_{2.5} standard.

Region	Annual PM _{2.5} NAAQS Designation
Albany County	Attainment/Unclassifiable
Big Horn County	Attainment/Unclassifiable
Campbell County	Attainment/Unclassifiable
Carbon County	Attainment/Unclassifiable
Converse County	Attainment/Unclassifiable
Crook County	Attainment/Unclassifiable
Fremont County	Attainment/Unclassifiable
Goshen County	Attainment/Unclassifiable
Hot Springs County	Attainment/Unclassifiable
Johnson County	Attainment/Unclassifiable
Laramie County	Attainment/Unclassifiable
Lincoln County	Attainment/Unclassifiable
Natrona County	Attainment/Unclassifiable
Niobrara County	Attainment/Unclassifiable
Park County	Attainment/Unclassifiable
Platte County	Attainment/Unclassifiable
Sheridan County	Attainment/Unclassifiable
Sublette County	Attainment/Unclassifiable
Sweetwater County	Attainment/Unclassifiable
Teton County	Attainment/Unclassifiable
Uinta County	Attainment/Unclassifiable
Washakie County	Attainment/Unclassifiable
Weston County	Attainment/Unclassifiable
City of Casper	Attainment/Unclassifiable
City of Cheyenne	Attainment/Unclassifiable
City of Cody	Attainment/Unclassifiable
City of Evanston	Attainment/Unclassifiable
City of Gillette	Attainment/Unclassifiable
City of Jackson	Attainment/Unclassifiable

Region	Annual PM _{2.5} NAAQS Designation
City of Lander	Attainment/Unclassifiable
City of Laramie	Attainment/Unclassifiable
City of Riverton	Attainment/Unclassifiable
City of Rock Springs	Attainment/Unclassifiable
City of Sheridan	Attainment/Unclassifiable

Table 1. Wyoming's Initial Area Designations for the 2024 Revised PM_{2.5} NAAQS

ATTACHMENT II

PM_{2.5} Monitored Data Summary 2021-2023

The primary annual PM_{2.5} standard is met when the three-year average of the annual arithmetic mean concentration, as determined in accordance with 40 CFR Part 50, Appendix N, is less than or equal to 9 µg/m³. The secondary annual PM_{2.5} standard is met when the three-year average of the annual arithmetic mean concentration, as determined in accordance with 40 CFR Part 50, Appendix N, is less than or equal to 15 µg/m³. The following table presents data collected from 2021-2023 that have met the data collection requirements presented in Appendix N. All PM_{2.5} monitoring sites listed collected three full years of data. Wyoming presents its Annual Design Value calculations in two formats: one dataset that includes exceedances that occurred due to Exceptional Events, and another that excludes Exceptional Event-based exceedances.

AQS Site ID	Site Name	County	2021-2023 Annual Design Value with Exceedances (µg/m ³)	2021-2023 Annual Design Value without Exceedances (µg/m ³)
56-001-0012	Laramie SLAMS (continuous only) ¹	Albany	3.4	3.4
56-005-0012	Gillette SLAMS ²	Campbell	6.4	5.8
56-013-0099	South Pass	Fremont	2.0	2.0
56-013-1003	Lander SLAMS ³	Fremont	6.9	6.8
56-021-0100	Cheyenne NCore (continuous only)	Laramie	5.3	5.2
56-021-0100	Cheyenne NCore (filter-based only)	Laramie	3.9	3.9

¹ Filter-based monitoring at the old Laramie SLAMS location on Iverson was not included as it ended on February 24, 2021. Continuous monitoring at the new Laramie SLAMS commenced on August 4, 2021

² This station never had filter-based PM_{2.5} monitoring. Continuous monitoring at Gillette SLAMS commenced on June 22, 2021

³ Filter-based monitoring at Lander SLAMS ended on February 27, 2021. Continuous monitoring commenced on June 3, 2021

AQS Site ID	Site Name	County	2021-2023 Annual Design Value with Exceedances ($\mu\text{g}/\text{m}^3$)	2021-2023 Annual Design Value without Exceedances ($\mu\text{g}/\text{m}^3$)
56-025-0100	Casper Gaseous	Natrona	3.7	3.6
56-029-0001	Cody SLAMS ⁴	Park	4.5	4.5
56-033-0002	Sheridan Police Station SLAMS ⁵	Sheridan	6.7	6.5
56-035-0101	Pinedale Gaseous	Sublette	3.7	3.6
56-037-0007	Rock Springs SLAMS ⁶	Sweetwater	5.0	4.9
56-039-1006	Jackson SLAMS ⁷	Teton	3.1	2.9

Table 2. PM_{2.5} Annual Design Values from 2021-2023 at AQD Monitoring Stations

*Data presented in Table 1 have been fully validated by the AQD and certified by EPA Region 8 per 40 CFR Part 58.15.

⁴ Filter-based monitoring at Cody SLAMS ended on September 30, 2021. Continuous monitoring commenced on November 9, 2021

⁵ Filter-based monitoring at Sheridan Police Station SLAMS ended on September 29, 2021. Continuous monitoring commenced on October 20, 2021

⁶ Filter-based monitoring at Rock Springs SLAMS ended on July 29, 2020. Continuous monitoring at Rock Springs SLAMS commenced on June 2, 2021

⁷ Filter-based monitoring at Jackson SLAMS ended on February 21, 2021. Continuous monitoring commenced on February 25, 2021

ATTACHMENT III

Exceptional Events Demonstrations 2021-2023

The State has submitted “Initial Notification of Potential Exceptional Events” and flagged the data in EPA’s Air Quality System (AQS), as per 40 CFR § 50.14(c)(2)(i), as a result of elevated PM_{2.5} concentrations monitored during the most recent three years (2021-2023) of data collection. The State flagged 37 exceptional events that occurred during the timeframe of 2021-2023. The Wyoming Department of Environmental Quality – Air Quality Division has compiled exceptional events demonstrations for all 37 of these events and is submitting the demonstrations to EPA Region 8 for review and approval. All 37 events and their respective exceedances occurred as a result of wildfire impacts. The State of Wyoming did not flag any exceptional events for the calendar year of 2022. The following tables (Tables 3 and 4) provide an overview of the exceptional events demonstrations submitted by the State of Wyoming, including the Date of Event, the Type of Event, the EPA Air Quality System (AQS) Flag used, the AQS identification and Parameter Occurrence Code (POC) associated with the Monitor that recorded the exceedance, the Monitor Name, the Exceedance Concentration, and other relevant information.

Date of Event	Type of Event (high wind, volcano, wildfires /prescribed fire, other)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (µg/m ³)	Notes (e.g. event name, links to other events)
7/26/2021	Wildfire	IT	56-005-1002 POC-3	Gillette SLAMS	35.6	Wildfire Exceptional Event Demonstration July-September 2021
7/26/2021	Wildfire	IT	56-035-0101 POC-1	Pinedale Gaseous	37.7	Wildfire Exceptional Event Demonstration July-September 2021
7/31/2021	Wildfire	IT	56-005-1002 POC-3	Gillette SLAMS	45.0	Wildfire Exceptional Event Demonstration

Date of Event	Type of Event (high wind, volcano, wildfires /prescribed fire, other)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration ($\mu\text{g}/\text{m}^3$)	Notes (e.g. event name, links to other events)
						July-September 2021
8/1/2021	Wildfire	IT	56-025-0100 POC-3	Casper Gaseous	35.9	Wildfire Exceptional Event Demonstration July-September 2021
8/6/2021	Wildfire	IT	56-023-0004 POC-3	Kemmerer Mobile	36.4	Wildfire Exceptional Event Demonstration July-September 2021
8/6/2021	Wildfire	IT	56-039-1006 POC-3	Jackson SLAMS	35.8	Wildfire Exceptional Event Demonstration July-September 2021
8/7/2021	Wildfire	IT	56-001-0011 POC-3	Laramie I-80 Mobile	42.3	Wildfire Exceptional Event Demonstration July-September 2021
8/7/2021	Wildfire	IT	56-021-0100 POC-3	Cheyenne NCore	38.2	Wildfire Exceptional Event Demonstration July-September 2021
8/7/2021	Wildfire	IT	56-023-0004 POC-3	Kemmerer Mobile	38.7	Wildfire Exceptional Event Demonstration

Date of Event	Type of Event (high wind, volcano, wildfires /prescribed fire, other)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration ($\mu\text{g}/\text{m}^3$)	Notes (e.g. event name, links to other events)
						July-September 2021
8/7/2021	Wildfire	IT	56-037-0007 POC-3	Rock Springs SLAMS	40.0	Wildfire Exceptional Event Demonstration July-September 2021
8/7/2021	Wildfire	IT	56-039-1006 POC-3	Jackson SLAMS	39.9	Wildfire Exceptional Event Demonstration July-September 2021
8/15/2021	Wildfire	IT	56-005-1002 POC-3	Gillette SLAMS	37.6	Wildfire Exceptional Event Demonstration July-September 2021
8/16/2021	Wildfire	IT	56-005-1002 POC-3	Gillette SLAMS	52.5	Wildfire Exceptional Event Demonstration July-September 2021
8/16/2021	Wildfire	IT	56-039-1006 POC-3	Jackson SLAMS	42.6	Wildfire Exceptional Event Demonstration July-September 2021
8/17/2021	Wildfire	IT	56-005-1002 POC-3	Gillette SLAMS	37.2	Wildfire Exceptional Event Demonstration

Date of Event	Type of Event (high wind, volcano, wildfires /prescribed fire, other)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (µg/m ³)	Notes (e.g. event name, links to other events)
						July-September 2021
8/31/2021	Wildfire	IT	56-013-0004 POC-3	Riverton Mobile	49.7	Wildfire Exceptional Event Demonstration July-September 2021
8/31/2021	Wildfire	IT	56-013-0099 POC-1	South Pass	35.7	Wildfire Exceptional Event Demonstration July-September 2021
8/31/2021	Wildfire	IT	56-013-1003 POC-3	Lander SLAMS	51.8	Wildfire Exceptional Event Demonstration July-September 2021
8/31/2021	Wildfire	IT	56-025-0100 POC-3	Casper Gaseous	45.4	Wildfire Exceptional Event Demonstration July-September 2021
8/31/2021	Wildfire	IT	56-035-0101 POC-1	Pinedale Gaseous	47.3	Wildfire Exceptional Event Demonstration July-September 2021
8/31/2021	Wildfire	IT	56-039-1006 POC-3	Jackson SLAMS	38.3	Wildfire Exceptional Event Demonstration

Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration ($\mu\text{g}/\text{m}^3$)	Notes (e.g. event name, links to other events)
						July-September 2021
9/7/2021	Wildfire	IT	56-035-0101 POC-1	Pinedale Gaseous	39.1	Wildfire Exceptional Event Demonstration July-September 2021
9/7/2021	Wildfire	IT	56-039-0101 POC-3	Jackson SLAMS	38.3	Wildfire Exceptional Event Demonstration July-September 2021

Table 3. CY 2021 PM_{2.5} 24-Hour Exceedances Submitted to EPA Region 8 for Initial Notification

NOTE: For CY 2022, the AQD did not submit any Initial Notification forms to EPA Region 8.

Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration ($\mu\text{g}/\text{m}^3$)	Notes (e.g. event name, links to other events)
5/18/2023	Wildfire	IF	56-005-1002 POC-3	Gillette SLAMS	53.8	Wildfire Exceptional Event Demonstration 2023 Wildfires
5/18/2023	Wildfire	IF	56-033-0002 POC-3	Sheridan Police	38.0	Wildfire Exceptional Event

Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (ug/m ³)	Notes (e.g. event name, links to other events)
				Station SLAMS		Demonstration 2023 Wildfires
5/19/2023	Wildfire	IF	56-025-0100 POC-3	Casper Gaseous	35.9	Wildfire Exceptional Event Demonstration 2023 Wildfires
5/19/2023	Wildfire	IF	56-021-0100 POC-3	Cheyenne NCore (BAM)	62.3	Wildfire Exceptional Event Demonstration 2023 Wildfires
5/19/2023	Wildfire	IF	56-001-0012 POC-3	Laramie SLAMS	48.0	Wildfire Exceptional Event Demonstration 2023 Wildfires
5/21/2023	Wildfire	IF	56-005-1002 POC-3	Gillette SLAMS	51.2	Wildfire Exceptional Event Demonstration 2023 Wildfires
5/21/2023	Wildfire	IF	56-033-0002 POC-3	Sheridan Police Station SLAMS	42.4	Wildfire Exceptional Event Demonstration 2023 Wildfires
5/22/2023	Wildfire	IF	56-005-1002 POC-3	Gillette SLAMS	40.3	Wildfire Exceptional Event Demonstration 2023 Wildfires

Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (ug/m ³)	Notes (e.g. event name, links to other events)
7/15/2023	Wildfire	IF	56-005-1002 POC-3	Gillette SLAMS	36.4	Wildfire Exceptional Event Demonstration 2023 Wildfires
7/17/2023	Wildfire	IF	56-005-1002 POC-3	Gillette SLAMS	42.0	Wildfire Exceptional Event Demonstration 2023 Wildfires
9/5/2023	Wildfire	IF	56-005-1002 POC-3	Gillette SLAMS	91.9	Wildfire Exceptional Event Demonstration 2023 Wildfires
9/5/2023	Wildfire	IF	56-029-0001 POC-3	Cody SLAMS	44.1	Wildfire Exceptional Event Demonstration 2023 Wildfires
9/5/2023	Wildfire	IF	56-033-0002 POC-3	Sheridan Police Station SLAMS	89.4	Wildfire Exceptional Event Demonstration 2023 Wildfires
9/6/2023	Wildfire	IF	56-005-1002 POC-3	Gillette SLAMS	41.3	Wildfire Exceptional Event Demonstration 2023 Wildfires

Table 4. CY 2023 PM_{2.5} 24-Hour Exceedances Submitted to EPA Region 8 for Initial Notification