

What is Ecology doing in this draft letter?

Ecology is making a designation recommendation for air pollution from fine particulate matter (PM_{2.5}) when compared to the newly revised standard set by the Environmental Protection Agency (EPA).

EPA continually reviews the levels of air pollution from six pollutants and sets different levels deemed to be acceptable for public health. One of those pollutants is fine particulate matter, which are particles that are smaller than 2.5 micrometers that easily get into the lungs and cause health problems.

When EPA changes the level of pollution deemed to be acceptable, they also look at every area of the country to determine if it meets the new standard. If an area's air pollution from that pollutant (in this case PM_{2.5}) is below the new level, that area is considered to be attaining the standard, or in attainment. If the area's pollution is higher than the new level, it is considered to be in nonattainment, or not meeting the standard.

Before EPA designates an area as attainment or nonattainment, it provides states the opportunity to recommend whether areas of the state are meeting the standard or not. The following draft letter from Ecology to EPA reviews air quality data and provides a recommendation to EPA for Washington. The finalized letter will be submitted to EPA in February of 2025.

What is an exceptional event?

An exceptional event is defined by EPA's Exceptional Events Rule as an unusual or naturally occurring event that can affect air quality but is not reasonably controllable by tribal, state, or local air agencies. Exceptional events can be caused by wildfires, dust storms, or human activity that is unlikely to reoccur. The purpose of the rule is to make sure that regulatory decisions are not biased by monitor data impacted by these events.

States or tribes may submit Exceptional Events Demonstrations to request EPA exclude data influenced by exceptional events from an attainment area designation or other regulatory decision. To do this the state or tribe must demonstrate that the event:

Affected air quality in such a way that there exists a clear causal relationship between the specific event and the monitored exceedance or violation (as supported by a comparison of the of the claimed event- influenced concentration(s) to concentrations at the same monitoring site at other times),

Was not reasonably controllable and the event was not reasonably preventable;

And that the event was a human activity that is unlikely to recur at a particular location or was a natural event.

In this designation recommendation Ecology is requesting that EPA concur that some monitor days at the Colville E 1st St monitor in Colville, Washington were impacted by a wildfire exceptional event. In addition we recognize in our recommendation that EPA region 10 is preparing exceptional events demonstrations in coordination with the Confederated Tribes of the Colville Reservation and the Confederated Tribes and Bands of the Yakama Nation.





STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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DATE

Casey Sixkiller, Regional Administrator
U.S. Environmental Protection Agency, Region 10
1200 Sixth Ave
Seattle, WA 98101

RE: Area designations for the 2024 PM_{2.5} National Ambient Air Quality Standard

Dear Regional Administrator Sixkiller:

On behalf of the Governor, I am submitting the State of Washington's recommendations for air quality area designations for the revised fine particulate matter (PM_{2.5}) national ambient air quality standard. The U.S. Environmental Protection Agency (EPA) strengthened the primary annual PM_{2.5} standard to protect public health on February 7, 2024. The revision of the standard from 12 µg/m³ to 9 µg/m³ triggered a designation process outlined in EPA's [*Initial Area Designations for the 2024 Revised Primary Annual Fine Particle National Ambient Air Quality Standard*](#)¹ memorandum. The designation process laid out in section 107(d) of the [*Clean Air Act*](#)² provides states with the opportunity to make recommendations to EPA on designations within one year after the revision of the standard.

The Washington State Department of Ecology (Ecology) developed these recommendations from the most recent certified air quality monitoring data (2021-2023) available from PM_{2.5} Federal Reference Method (FRM) and Federal Equivalent Method (FEM) monitors. Ecology also considered preliminary 2024 data because EPA expects to make final designation decisions based on the 2022-2024 monitor data. A summary "Recommended Designations for the annual PM_{2.5} Standard" is enclosed.

Ecology recommends all counties in the state be designated as attainment/unclassifiable for the PM_{2.5} standard with the exception of Omak, Washington which we tentatively recommend be designated as attainment based on preliminary analysis of 2024 monitor data. Ecology recommendations do not apply to tribal lands which follow a separate designation process with EPA. Several monitors located on tribal lands are close enough to non-tribal lands that we have included recommendations for these tribal land adjacent areas. In the case of Omak,

¹ https://www.epa.gov/system/files/documents/2024-02/pm-naaqs-designations-memo_2.7.2024_-jg-signed.pdf

² <https://www.govinfo.gov/content/pkg/USCODE-2013-title42/html/USCODE-2013-title42-chap85-subchapl-partA-sec7407.htm>



Washington a tribal monitor is representing both tribal and non-tribal lands in the same city. Further information on Omak is included below.

RECOMMENDED DESIGNATIONS

Attainment

Monitors in Clark, King, Kitsap, Kittitas, Pierce, Skagit, Snohomish, Spokane, Stevens, Whatcom, and Yakima counties meet the PM_{2.5} standard. We are recommending these areas be designated Attainment.

Ecology's recommendation of Attainment for Stevens and Yakima counties is based on our assessment of exceptional events for 2021 and 2023. Ecology submitted initial notification to EPA for 2023 exceptional events days on July 30, 2024, for the wildfire influenced days from September 17 – 21 of 2023 at the Colville-E 1st St monitor. While Ecology believes that the 2021 exceedance days in August and September at the Yakima 4th Ave and the Toppenish Ward Rd monitors³ and in July, August, and September at the Colville E 1st St monitor were likely influenced by wildfire smoke to a degree that might otherwise trigger regulatory significance, Ecology has not submitted formal exceptional events demonstrations for such events because Ecology does not anticipate that events in 2021 will have regulatory significance as indicated in the EPA's memorandum, [*Initial Area Designations for the 2024 Revised Primary Annual Fine Particle National Ambient Air Quality Standard*](#)⁴, issued on February 7, 2024. In the unlikely circumstance that events in 2021 are determined to have regulatory significance for final designations decisions for the 2024 revised primary annual PM_{2.5} NAAQS, Ecology will work with EPA to provide additional information consistent with the requirements of the EPA's [*Exceptional Events Rule*](#)⁵.

Further information on 2021 events can be found in the attached document "2021 Days Flagged for Wildfire Smoke Impacts."

The other counties in Washington State (Asotin, Benton, Chelan, Clallam, Columbia, Cowlitz, Douglas, Ferry, Franklin, Garfield, Grant, Grays Harbor, Island, Jefferson, Klickitat, Lewis, Lincoln, Mason, Pacific, Pend Oreille, San Juan, Skamania, Stevens, Thurston, Wahkiakum, Walla Walla, and Whitman) do not have regulatory PM_{2.5} monitors. PM_{2.5} is monitored in these areas by non-regulatory monitors due to consistently low values. Ecology recommends a designation of Attainment/Unclassifiable for these areas.

Tentative Attainment

The Omak monitor, located in Okanogan County and operated by the Confederated Tribes of the Colville Reservation Office of Environmental Trust with support from EPA and Ecology,

³ The Toppenish Ward Rd monitor is operated by the Yakama Nation, Ecology includes this information because it is representative of nearby non-tribal areas

⁴ https://www.epa.gov/system/files/documents/2024-02/pm-naaqs-designations-memo_2.7.2024--jg-signed.pdf

⁵ <https://www.epa.gov/air-quality-analysis/federal-register-notice-final-revisions-exceptional-events-rule>



represents a community that is split between tribal and non-tribal lands. Because this monitor is a tribal monitor EPA Region 10 is preparing Exceptional Events Demonstrations to exclude wildfire impacted data for this monitor from the designation decision.

Ecology recognizes that if EPA were to exclude wildfire influenced data from the 2021-2023 data set the Design Value for this monitor will still be very slightly above the new PM_{2.5} standard. However, preliminary data analysis indicates it is likely that this monitor will be in attainment of the new standard for the 2022-2024 data set that EPA intends to use for the final regulatory decision as indicated in EPA's initial area designations memo listed above.

There are no major permitted sources of PM_{2.5} in the Omak area. Significant non-regulatory work has been done in the region by the Okanogan River Airshed Partnership and others to reduce PM_{2.5} emissions. This work has included woodstove changeout programs, green waste collection, and wood chipping. These programs address the most significant human-caused sources of PM_{2.5} emissions in the county per the [2020 Emissions inventory](#)⁶ for Okanogan County.

Due to the low preliminary monitor values available for 2024, as well as the strong history of non-regulatory work addressing local PM_{2.5} sources, Ecology believes this area is likely to meet the new PM_{2.5} standard when EPA considers the 2022-2024 data set for its final designation decision. Ecology encourages EPA to make its final decision based on the most recent monitor data.

If the Omak monitor does not meet the new standard once all 2024 data is available in early 2025 Ecology intends to submit a boundary designation recommendation.

Thank you for your consideration of our recommendations. Please contact Kathy Taylor or her staff at (360) 584-5104 or Kathy.Taylor@ecy.wa.gov if you have questions.

Yours Truly,

Laura Watson

Director

Enclosure

cc: Kathy Taylor, Ecology

⁶ <https://www.epa.gov/air-emissions-inventories/2020-national-emissions-inventory-nei-data>



Recommended Designations for the 2024 annual PM_{2.5} Standard

The United States Environmental Protection Agency (EPA) revised the annual federal health-based standard for fine particulate matter (PM_{2.5}) in the ambient air to 9 micrograms per cubic meter (µg/m³) in February 2024 to improve protection of public health. PM_{2.5} refers to particulates with an aerometric diameter of 2.5 microns or less. Compliance with the PM_{2.5} standard is evaluated over a three-year period by taking the mean or average of each year's mean monitored values. A design value of 9.05 µg/m³ or higher is a violation of the annual PM_{2.5} standard.

Site Site Number	County	2021 Mean (µg/m ³)	2022 Mean (µg/m ³)	2023 Mean (µg/m ³)	2021-2023 Design Value (µg/m ³)	Designation Recommendation
Vancouver – NE 84 th Ave	Clark	5.65	7.70	6.39	6.6	Attainment
Seattle- 10 th & Weller	King	6.53	10.53	7.85	8.3	Attainment
Seattle – Duwamish	King	6.64	8.78	7.74	7.7	Attainment
Seattle – Beacon Hill	King	4.35	7.01	6.02	5.8	Attainment
Bremerton – Spruce Ave	Kitsap	5.20	6.36	4.90	5.5	Attainment
Ellensburg – Ruby St	Kittitas	6.27	7.06	6.48	6.6	Attainment
Omak – 8 th Ave (Confederated Tribes of the Colville Nation)	Okanogan	14.88	10.28	11.79	12.3	*** See narrative below
Tacoma – S 36 th St	Pierce	6.64	8.34	6.43	7.1	Attainment
Tacoma – L St	Pierce	6.10	8.70	7.17	7.3	Attainment
Anacortes – 202 O Ave	Skagit	4.77*	5.63	5.27	5.2*	Attainment
Darrington – Fir St	Snohomish	5.56	12.16	4.22	7.3	Attainment
Marysville – 7 th Ave	Snohomish	7.01	9.11	8.45	8.2	Attainment
Spokane Valley – E Broadway Ave	Spokane	8.99	7.73	7.71	8.1	Attainment
Colville – E 1 st St	Stevens	8.99**	8.92	9.03**	9.0**	Attainment
Bellingham – Pacific St	Whatcom	4.02	6.09*	4.96	5.0*	Attainment
Yakima – 4 th Ave	Yakima	8.96**	9.13	8.79	9.0**	Attainment
Toppenish – Ward Rd (Yakama Nation)	Yakima	9.02**	9.37**	8.51**	9.0**	Attainment

* Sites with one asterisk do not meet the minimum data completeness requirement of 50 percent data capture per calendar quarter for determination of a valid design value with the substitution tests described in 40 C.F.R. Part 50 Appendix N 4.1 (c).

**Exceptional events due to wildfires were excluded from calculations. In 2021, days flagged in AQS with wildfire-related informational flags ("IT" or "IF") were excluded in descending order until the resulting 2021 annual mean was below 9.05 ug/m3, as shown on each site's corresponding table. In 2022 and 2023, days for which Ecology or EPA Region 10 submitted exceptional events demonstrations were excluded from calculations.

***Exceptional events due to wildfires can only be excluded from design value calculations when they have regulatory significance or impact a regulatory decision. Because the 2023 design value for the Omak monitor would still be very slightly above the 2024 PM_{2.5} standard even with exceptional events excluded, these events can't be excluded from the 2023 design value. Ecology anticipates that these events will have regulatory significance for the 2024 design value EPA will use to make its final designation decision

The following monitors are excluded from this list because they were either established or discontinued during the 2021-2023 period and therefore have no creditable samples in at least one calendar quarter from 2021-2023. All sites listed below are located in counties where at least one other monitor recorded a valid 2021-2023 design value that Ecology used to determine the designation recommendation for that county. All network modifications listed below were made with approval of the EPA Regional Administrator following the requirements described in 40 C.F.R. Part 58.14, "System modification."

Site Site Number	County	Monitor History
Tukwila Allentown 530330069	King	Site established in April 2021.
Kent-James & Central 530332004	King	Site discontinued in June 2023.
Tacoma-Alexander Ave 530530031	Pierce	Site established in January 2022.
Spokane-Augusta Ave 530630021	Spokane	Site discontinued in March 2021.
Sunnyside-S 16th St 530770005	Yakima	Site established in April 2023.