



EXECUTIVE CHAMBERS
KE KE'ENA O KE KIA'ĀINA

JOSH GREEN, M.D.
GOVERNOR
KE KIA'ĀINA

January 27, 2025

Ms. Cheree Peterson
Acting Regional Administrator
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105

Aloha Ms. Peterson:

On behalf of the State of Hawai'i, I am submitting our recommended designation for the newly promulgated National Ambient Air Quality Standards (NAAQS) for fine particulate matter (PM_{2.5}), issued on February 7, 2024. Our recommendations are based on a review of the most recent air quality monitoring data from our ambient air quality monitoring stations.

Pursuant to Section 107(d)(1) of the Clean Air Act, we recommend the following designations for areas within the State of Hawai'i:

Attainment Areas:

- Hawai'i County – Big Island of Hawai'i
- Honolulu County – Island of O'ahu
- Maui County – Covers the islands of Maui, Moloka'i, Lāna'i, and Kaho'olawe

Unclassifiable Areas:

- Kauai County – Includes the islands of Kaua'i and Ni'ihau

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Our analysis is based on data collected during calendar years 2021 through 2023, performed in accordance with EPA's guidance for area designations. Attached to this letter is a summary of monitored data supporting our designation recommendation.

We appreciate EPA, Region IX's collaboration in this process and look forward to working together to finalize designations. Should you have any questions or require additional information, please contact Ms. Kathleen Ho, Deputy Director for Environmental Health Administration at (808) 586-4424.

Mahalo,

A handwritten signature in black ink that reads "Josh Green M.D." in a cursive style.

Josh Green, M.D.
Governor, State of Hawai'i

Attachment

c: Dena Vallano, Ph.D., U.S. EPA, Region 9, Manager, Monitoring and Analysis
Section (AIR-2-3)
Julia Carlstad, Ph.D., U.S. EPA, Region 9, Monitoring and Analysis Section (AIR-2-3)
Marianne Rossio, P.E., Manager, Clean Air Branch
Lisa Young, Supervisor, Clean Air Branch

ATTACHMENT I

State of Hawaii Designation Recommendation for the Annual PM_{2.5} National Ambient Air Quality Standard (NAAQS)

I. Recommendation

The U.S. Environmental Protection Agency (EPA) revised the primary health based Fine Particulate Matter (PM_{2.5}) annual National Ambient Air Quality Standard (NAAQS) on February 7, 2024. Pursuant to the Federal Clean Air Act Section 107(d)(1), states are required to make attainment, nonattainment, or unclassifiable recommendations one year after promulgation of a new or revised standard.

As detailed in this document, it is recommended that Hawaii County, Maui County and the City and County of Honolulu all be initially designated as in attainment and Kauai County be designated as unclassifiable for the new annual PM_{2.5} NAAQS.

II. Basis for the Recommendation

The annual PM_{2.5} standard is attained when the three-year average at each monitor does not exceed 9 micrograms per cubic meter (µg/m³). The annual averages used to determine compliance with the revised standard are 2021, 2022 and 2023, collectively called the 2023 annual design value (DV).

The State of Hawaii Department of Health (DOH) currently operates fourteen (14) air monitoring stations that monitor PM_{2.5}. Three (3) are State and Local Air Monitoring Stations (SLAMS) and eleven (11) are Special Purpose Monitoring Stations (SPMS).

All of the SLAMS (Honolulu, Kapolei/NCore, and Sand Island) are in the City and County of Honolulu, which is the largest Metropolitan Statistical Area (MSA) in the state and where the majority of anthropogenic sources are located. The 2023 DV show that all three (3) SLAMS have complete data and are in attainment of the annual standard. A fourth SLAM, previously operated by DOH (the Pearl City station) was discontinued on April 6, 2022, and does not have enough data to be used for the attainment designation.

Maui County (the second and smallest MSA) has two (2) SPMS located in Kihei and Kahului. The 2023 DV for the Kahului station shows the SPMS in attainment of the annual standard. The Kihei station had previously been a SLAMS but was discontinued on March 30, 2022, and was later started up again on August 22, 2023, as a SPMS due to windblown dust and brush fire events. As a result, the DOH does not have enough data to make a designation determination for this station. Both stations are primarily to monitor the effects of agricultural activities and wildfires.

Nine (9) PM_{2.5} SPMS are located in Hawaii County and monitor the impact of emissions from the Kilauea volcano. The 2023 DVs for Kona, Pahala, Ocean View, Mountain View, and Kailua-Kona stations are in attainment of the annual standard.

The PM_{2.5} monitor at the Hilo station had data completeness of <50% in the 1st quarter of 2021, and therefore a data substitution test per Appendix N to 40 CFR 50 was not allowed. The initial DV for the Hilo station is therefore invalid; the available data is included in Table 1. The PM_{2.5} monitor at the Waikoloa station only operated during the fourth quarter of 2021 and the PM_{2.5} monitor at the Naalehu station only began operating in December of 2022. The Keaau station was only established at its current location in June 2022. These four stations, along with the discontinued Honaunau station, do not have enough data to be used for attainment designation.

The remaining SPMS is in Kauai County and was established to monitor cruise ship emissions. The Niumalu station began operating in April 2011 and PM_{2.5} sampling was discontinued there on March 31, 2022. This station has an incomplete 2023 DV and is therefore unclassifiable because there is not enough data to make a designation determination.

All PM_{2.5} monitoring stations listed in this document show that the annual averages are in attainment and are well below the new standard of 9 µg/m³. Note that even the stations with incomplete 2023 DVs that are not listed on Table 1 (including Pearl City, Niumalu, Kihei, Waikoloa, Honaunau, Naalehu temporary and Naalehu current) all had annual averages no higher than 3.4 µg/m³ per AQS AMP 480 design value report.

III. Annual PM_{2.5} NAAQS Data

Counties in Attainment for the Annual PM_{2.5} NAAQS (9 µg/m³)

1. The 2023 DVs for the stations in the City and County of Honolulu, Maui County, and Hawaii County are shown in *Table 1*.

Table 1. 2023 DVs for the City and County of Honolulu, Maui County and Hawaii County

Station	2021 Annual Mean (µg/m ³)	2022 Annual Mean (µg/m ³)	2023 Annual Mean (µg/m ³)	3-year average (2023 DV) (µg/m ³)
City & County of Honolulu				
Honolulu (150031001)	2.9	3.3	4.1	3.4
Kapolei (150030010)	2.9	3.8	4.5	3.7
Sand Island (150031004)	3.3	3.7	3.9	3.6
Maui County				
Kahului (150090025)	3.9	4.0	4.0	4.0
Hawaii County				
Hilo (150011006)	3.7*	3.4	2.9	3.3*
Kona (150011012)	3.6	4.7	3.2	3.9
Pahala (150012016)	2.5	3.6	3.6	3.2
Ocean View (150012020)	3.5	4.6	2.6	3.6
Mt. View (150012023)	1.7	2.4	2.1	2.1
Kailua-Kona (150013034)	4.7	5.3	3.4	4.4

* Annual mean did not meet completeness criteria, substitution test not allowed due to <50% data completeness in 1st quarter. DV not valid for only Hilo.

Counties Unclassifiable for the Annual PM_{2.5} NAAQS

PM_{2.5} monitoring at the Niumalu station was discontinued on March 31, 2022, and does not have enough data for designation determination and therefore is currently unclassifiable. The available data is presented in *Table 3*.

Table 3. 2023 DV for Kauai County

Station	2021 Annual Mean (µg/m ³)	2022 Annual Mean (µg/m ³)	2023 Annual Mean (µg/m ³)	3-year average (2023 DV) (µg/m ³)
Kauai County Niumalu (150070007)	3.2	2.3*	None	2.7*

*PM_{2.5} monitoring at the Niumalu station was discontinued on March 31, 2022.

User ID: XGSWU

DESIGN VALUE REPORT

Report Request ID: 2246036 Report Code: AMP480 Dec. 13, 2024

GEOGRAPHIC SELECTIONS												
Tribal	State	County	Site	Parameter	POC	City	AQCR	UAR	CBSA	CSA	EPA	
Code											Region	

15

PROTOCOL SELECTIONS			
Parameter	Parameter	Method	Duration
Classification			

DESIGN VALUE 88101

SELECTED OPTIONS	
Option Type	Option Value

SINGLE EVENT PROCESSING	EXCLUDE REGIONALLY CONCURRED EVENTS
MERGE PDF FILES	YES
AGENCY ROLE	PQAO
USER SITE METADATA	STREET ADDRESS
QUARTERLY DATA IN WORKFILE	NO
WORKFILE DELIMITER	,
USE LINKED SITES	YES

DATE CRITERIA	
Start Date	End Date

2023 2023

APPLICABLE STANDARDS
Standard Description

PM25 24-hour 2024
PM25 Annual 2024

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
PRELIMINARY DESIGN VALUE REPORT

Report Date: Dec. 13, 2024

- Notes:**
1. Computed design values are a snapshot of the data at the time the report was run (may not be all data for year).
 2. Some PM2.5 24-hour DVs for incomplete data that are marked invalid here may be marked valid in the Official report due to additional analysis.
 3. Annual Values not meeting completeness criteria are marked with an asterisk ('*').

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
PRELIMINARY DESIGN VALUE REPORT

Report Date: Dec. 13, 2024

Pollutant: Site-LevelPM2.5 - Local Conditions(88101)
Standard Units: Micrograms/cubic meter (LC)(105)
NAAQS Standard: PM25 24-hour 2024 / PM25 Annual 2024
Statistic: Annual Weighted Mean **Level:** 9
Statistic: Annual 98th Percentile **Level:** 35

Design Value Year: 2023
REPORT EXCLUDES MEASUREMENTS WITH REGIONALLY CONCURRED EVENT FLAGS.

		2023					2022					2021					24-Hour		Annual	
Site_ID / STREET ADDRESS		Cred.	Comp.	98th	Wtd.	Cert& Eval	Cred.	Comp.	98th	Wtd.	Cert& Eval	Cred.	Comp.	98th	Wtd.	Cert& Eval	Design Valid		Design Valid	
		Days	Qrtrs	Perctil	Mean		Days	Qrtrs	Perctil	Mean		Days	Qrtrs	Perctil	Mean		Value	Ind.	Value	Ind.
15-001-1006		343	4	6.2	2.9	Y	324	4	7.0	3.4	Y	238	1	6.5*	3.7*	Y	7	N	3.3	N
1099 WAIANUENUE AVE, HILO																				
15-001-1012		365	4	11.5	3.2	Y	350	4	9.1	4.7	Y	364	4	10.0	3.6	Y	10	Y	3.9	Y
81-1043 KONAWAENA SCHOOL RD																				
15-001-2016		359	4	7.0	3.6	Y	357	4	7.0	3.6	Y	351	4	6.7	2.5	Y	7	Y	3.2	Y
96-3150 PIKAKE ST																				
15-001-2020		360	4	10.2	2.6	Y	346	4	9.3	4.6	Y	342	4	9.6	3.5	Y	10	Y	3.6	Y
ORCHID PARKWAY, HAWAIIAN OCEAN VIEW ESTATES																				
15-001-2021		357	4	9.9	2.8	Y	347	4	6.4	2.3	Y	92	1	8.4*	1.8*	Y	8	N	2.3	N
UNNAMED ROAD, 1.5 MILES FROM QUEEN KAAHUNAMU HWY																				
15-001-2023		359	4	5.3	2.1	Y	347	4	6.8	2.4	Y	336	4	4.6	1.7	Y	6	Y	2.1	Y
18-1235 VOLCANO ROAD																				
15-001-3027		355	4	5.3	2.5	Y	346	4	6.6	2.7	Y	328	4	5.6	2.7	Y	6	Y	2.6	Y
16-714 Volcano Road, Keaau, HI 96749																				
15-001-3028		0			*		30	0	9.1*	2.7 *	Y	341	4	5.3	2.4	Y	7	N	2.5	N
95-5545 Mamalahoa Hwy Naalehu, HI 96772																				
15-001-3032		0			*		4	0	2.2*	1.1 *	Y	332	4	9.5	1.8	Y	6	N	1.5	N
Hoonaunau																				
15-001-3033		364	4	6.7	3.0	Y	27	0	5.7*	3.3 *	Y	0			*		6	N	3.2	N
95-5545 Mamalahoa Hwy Naalehu, HI 96772																				
15-001-3034		360	4	11.2	3.4	Y	337	4	10.2	5.3	Y	345	4	11.2	4.7	Y	11	Y	4.4	Y
Kailua-Kona																				

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Statistic: Annual Weighted Mean **Level:** 9
Statistic: Annual 98th Percentile **Level:** 35

Design Value Year: 2023
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Site_ID / STREET ADDRESS	2023					2022					2021					24-Hour		Annual	
	Cred.	Comp.	98th	Wtd.	Cert&	Cred.	Comp.	98th	Wtd.	Cert&	Cred.	Comp.	98th	Wtd.	Cert&	Design Valid		Design Valid	
	Days	Qrtrs	Perctil	Mean	Eval	Days	Qrtrs	Perctil	Mean	Eval	Days	Qrtrs	Perctil	Mean	Eval	Value	Ind.	Value	Ind.
15-003-0010 2052 LAUWILIWILI ST	336	3	10.0	4.5*	Y	344	4	8.1	3.8	Y	336	3	6.7	2.9*	Y	8	Y	3.7	Y
15-003-0099 2052 LAUWILIWILI ST	170	2	8.5*	3.9*	Y	301	3	7.6*	3.6 *	Y		0		*		8	N	3.8	N
15-003-1001 1250 PUNCHBOWL ST, HONOLULU	365	4	8.3	4.1	Y	354	4	7.2	3.3	Y	349	4	5.9	2.9	Y	7	Y	3.4	Y
15-003-1004 1039 SAND ISLAND PARKWAY	356	4	10.0	3.9	Y	350	4	8.2	3.7	Y	357	4	6.2	3.3	Y	8	Y	3.6	Y
15-003-2004 860 4TH ST, PEARL CITY		0		*		86	1	6.3*	3.4 *	Y	340	4	6.1	3.2	Y	6	N	3.3	N
15-007-0007 2342 HULEMALU ROAD, KAUAI		0		*		90	1	5.2*	2.3 *	Y	342	4	7.2	3.2	Y	6	N	2.7	N
15-009-0006 KAIHOI ST AND KAILOHIA ST		0		*		86	1	6.9*	2.3 *	Y	355	4	5.7	2.5	Y	6	N	2.4	N
15-009-0025 TMK 9-8-013:029	341	4	8.3	4.0	Y	358	4	7.7	4.0	Y	338	4	7.3	3.9	Y	8	Y	4.0	Y

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CERTIFICATION EVALUATION AND CONCURRENCE FLAG MEANINGS

FLAG	MEANING
M	The monitoring organization has revised data from this monitor since the most recent certification letter received from the state.
N	The certifying agency has submitted the certification letter and required summary reports, but the certifying agency and/or EPA has determined that issues regarding the quality of the ambient concentration data cannot be resolved due to data completeness, the lack of performed quality assurance checks or the results of uncertainty statistics shown in the AMP255 report or the certification and quality assurance report.
S	The certifying agency has submitted the certification letter and required summary reports. A value of "S" conveys no Regional assessment regarding data quality per se. This flag will remain until the Region provides an "N" or "Y" concurrence flag.
U	Uncertified. The certifying agency did not submit a required certification letter and summary reports for this monitor even though the due date has passed, or the state's certification letter specifically did not apply the certification to this monitor.
X	Certification is not required by 40 CFR 58.15 and no conditions apply to be the basis for assigning another flag value
Y	The certifying agency has submitted a certification letter, and EPA has no unresolved reservations about data quality (after reviewing the letter, the attached summary reports, the amount of quality assurance data submitted to AQS, the quality statistics, and the highest reported concentrations).

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