

Department of Environmental Conservation's Air Monitoring Program Community-Based Air Monitoring Project

2024 Summer Season Air Quality Report for NPS – Talkeetna Ranger Station

The QuantAQ MODULAIR sensor in Talkeetna (22241 B Street, Talkeetna AK 99676) was installed on 07/01/2024.

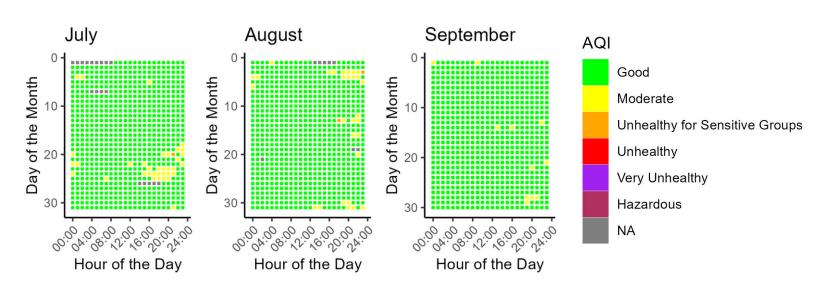
The sensor measures for carbon monoxide (CO), ozone (O₃), nitrogen oxide (NO), nitrogen dioxide (NO₂), particulate matter (PM_{2.5} and PM₁₀), temperature (°C), and relative humidity (RH).

Data is collected every minute and is then processed into hourly averages. The sensor in Talkeetna has run well since its installation in July of 2024; there have been no physical issues with the sensor.

This data report covers the date range of July 1, 2024, to September 30, 2024.



Daily PM_{2.5} Air Quality Index (AQI) for July 1, 2024 - September 30, 2024

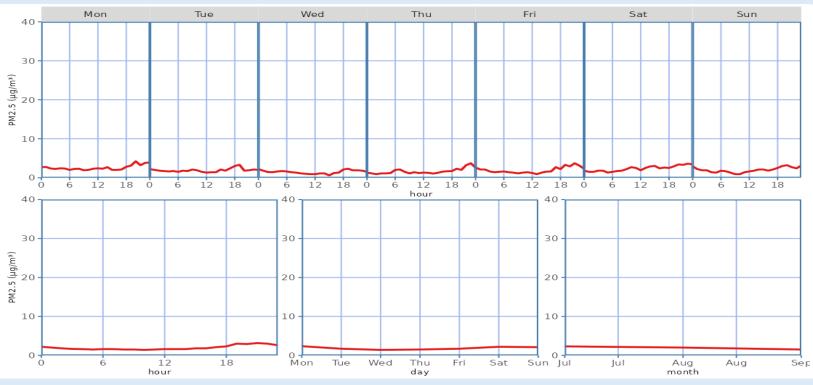




Prepared on 12/20/2024 Page 1

2024 Summer Season Air Quality Report for Talkeetna Ranger Station

Median PM_{2.5} Concentrations for July 1, 2024 - September 30, 2024



Descriptive Statistics of Air Pollutants*

Parameter	1-hr PM _{2.5} (µg/m³)	24-hr PM _{2.5} (μg/m³)	1-hr PM ₁₀ (µg/m³)	24-hr PM ₁₀ (μg/m³)	1-hr O ₃ (ppb)	1-hr NO ₂ (ppb)	1-hr NO (ppb)	1-hr CO (ppb)
Min								
	0.10	0.30	1.00	0.30	0.50	2.71	1.45	346.25
Mean								
	2.79	2.80	30.19 **	29.73 **	16.69	13.44	2.39	430.19
1 st Max								
	47.40	10.80	1434 **	98 **	56.40	30.06	15.81	1943.48
2 nd Max								
	37.90	8.70	564 **	94 **	49.80	28.17	12.38	1474.95

Data Discussion

The Talkeetna Ranger Station's $PM_{2.5}$ ambient air quality for the summer 2024 season fell mostly in the "good" range of the Air Quality Index (AQI; more information about AQI is provided on page 3), with several very brief periods of "moderate" AQI levels each month. July and August also experienced several hour-long periods of "unhealthy for sensitive groups" AQI levels. Diurnal patterns show little variability of $PM_{2.5}$ concentrations across different times of day, days of the week, or different months.

* These statistics are based on preliminary data readings and are intended to provide a brief overview of sensor activity. Finalized data may be obtained upon request and through our annual statistical reports. Data from the community sensor network is non-regulatory and not comparable to the EPA's National Ambient Air Quality Standards (NAAQS; more information about the EPA NAAQS is provided on page 3).

Prepared on 12/20/2024 Page 2

^{**} PM10 particle sensors are influenced by weather events such as fog and snow due to hygroscopic effects, creating false maximum values that do not pose health risks.

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Resources



Alaska Department of Environmental Conservation





EPA NAAQS Information





Air Quality Index (AQI) Basics





Real-Time AQI Data



Data Access

To access historical data for your community's sensor, please email a request to: AMQA-Data-Request@alaska.gov . Data will be provided in Excel or .csv format.

Questions or Comments?

Please contact us!

Isaac Van Flein (Fairbanks): 907-451-2253 / isaac.vanflein@alaska.gov

Ayla Crosby (Anchorage): 907-269-7750 / ayla.crosby@alaska.gov

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Prepared on 12/20/2024 Page 3