

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

# 2024-25 Winter Season Air Quality Report for NPS -**Talkeetna Ranger Station**

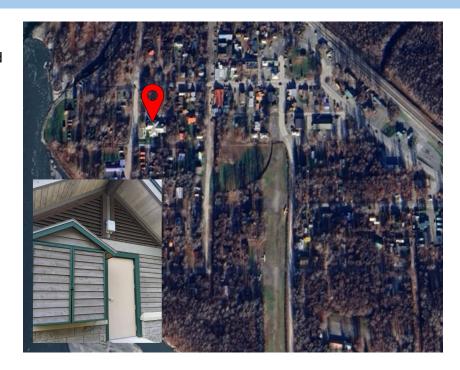
The QuantAQ MODULAIR<sup>TM</sup> sensor in Talkeetna (22241 B Street, Talkeetna AK 99676) was installed on 07/01/2024.

The sensor measures for carbon monoxide (CO), ozone (O<sub>3</sub>), nitrogen oxide (NO), nitrogen dioxide (NO<sub>2</sub>), particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>),temperature (°C), and relative humidity (RH). Data is collected every minute and is then processed into hourly averages.

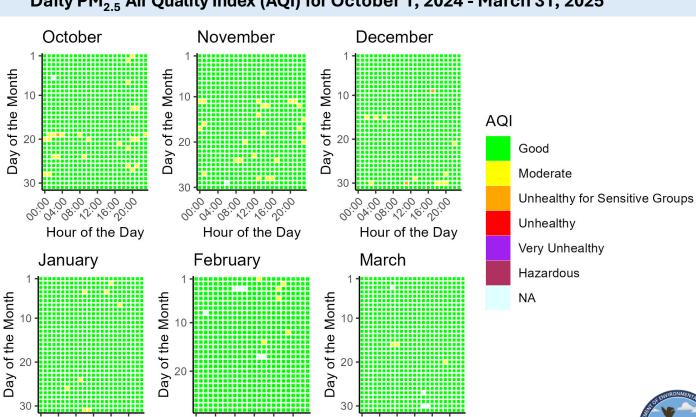
The sensor in Talkeetna has run well since its installation in July of 2024; there have been no physical issues with the sensor.

This data report covers the date range of October 1, 2024, to March 31, 2025.

Hour of the Day



## Daily PM<sub>2.5</sub> Air Quality Index (AQI) for October 1, 2024 - March 31, 2025



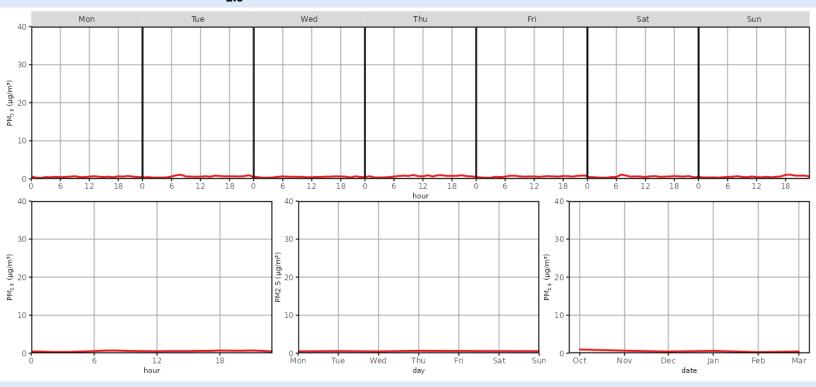
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Hour of the Day

Hour of the Day

# 2024-25 Winter Season Air Quality Report for Talkeetna Ranger Station

### Median PM<sub>2.5</sub> Concentrations for October 1, 2024 - March 31, 2025



### **Descriptive Statistics of Air Pollutants\***

Parameter	1-hr PM <sub>2.5</sub> (µg/m³)	24-hr PM <sub>2.5</sub> (μg/m³)	1-hr PM <sub>10</sub> (µg/m³)**	24-hr PM <sub>10</sub> (μg/m³)**	1-hr O <sub>3</sub> (ppb)	1-hr NO <sub>2</sub> (ppb)	1-hr NO (ppb)	1-hr CO (ppb)
Min								
	0.02	0.10	0.00	0.00	1.50	6.45	0.96	0.25
Mean								
	1.35	1.37	5.18	5.34	25.13	21.15	3.38	0.40
1 <sup>st</sup> Max								
	42.44	8.28	611.00	125.08	42.20	38.66	47.16	4.79
2 <sup>nd</sup> Max								
	41.85	7.11	447.00	105.29	41.70	35.91	47.06	4.37

#### **Data Discussion**

The Talkeetna Ranger Station's  $PM_{2.5}$  ambient air quality for the winter 2024-25 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. October and December each experienced one hour in the "hazardous for sensitive groups" AQI range. Diurnal patterns show little variability of  $PM_{2.5}$  concentrations across different times of day, days of the week, or different months.

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<sup>\*</sup> 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).

<sup>\*\*</sup> PM<sub>10</sub> 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.

# 2024-25 Winter Season Air Quality Report for Talkeetna Ranger Station

### **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!

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