

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

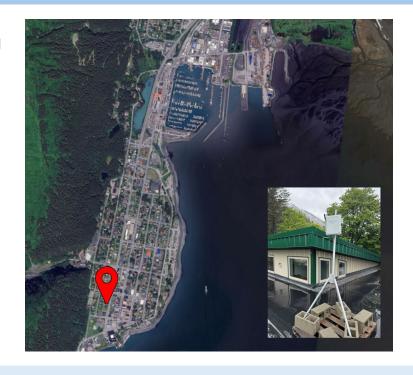
# 2024-25 Winter Season Air Quality Report for **Qutekcak Native Tribe, Seward, Alaska**

The QuantAQ MODULAIR™ sensor in Seward (221 3rd Ave, Seward, AK 99664) was installed on 06/05/2024.

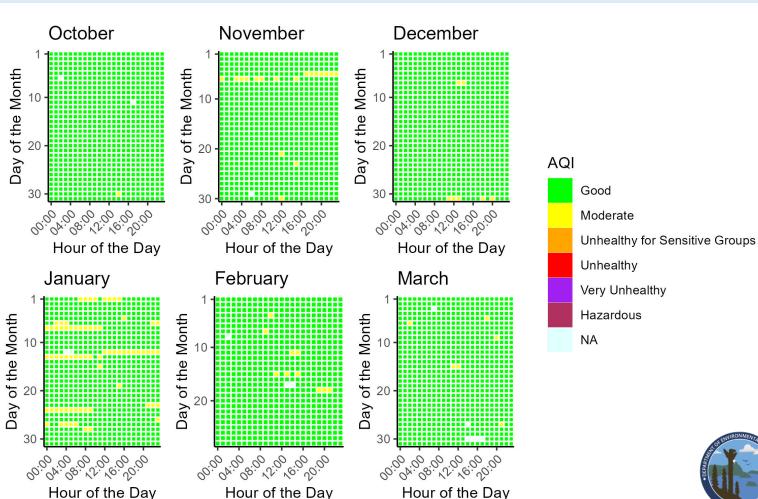
The sensor measures for carbon monoxide (CO), ozone (O<sub>3</sub>), nitrogen oxide (NO), nitrogen dioxide  $(NO_2)$ , particulate matter  $(PM_{2.5}$  and  $PM_{10})$ , temperature (°C), and relative humidity (RH). Data is collected every minute and is then processed into hourly averages.

The sensor in Seward has run well since its installation in June 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.



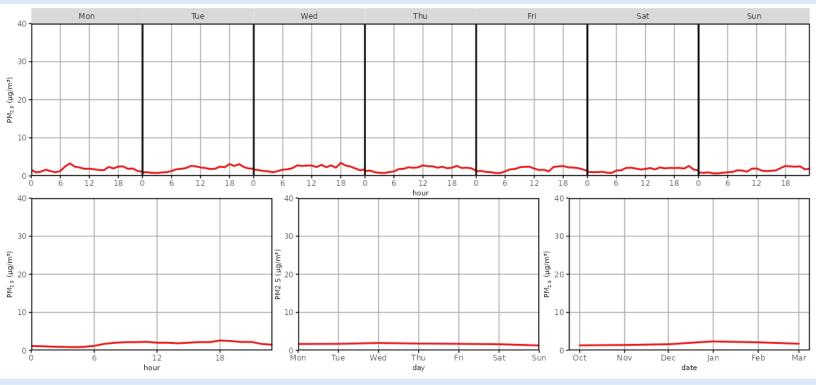
## Daily PM<sub>2.5</sub> Air Quality Index (AQI) for October 1, 2024 - March 31, 2025



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## 2024-25 Winter Season Air Quality Report for Qutekcak Native Tribe

### 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								
	0.01	0.39	0.00	1.46	0.00	5.00	0.00	0.23
Mean								
	2.44	2.40	15.77	15.40	29.12	20.30	2.70	0.28
1 <sup>st</sup> Max								
	29.57	12.24	348.00	108.21	48.20	33.55	35.41	0.64
2 <sup>nd</sup> Max								
	28.53	9.29	309.00	74.79	48.20	32.83	20.07	0.57

#### **Data Discussion**

Seward'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 days in January reporting "moderate" AQI levels. Daily patterns show slightly increased  $PM_{2.5}$  concentrations in the late afternoon/early evenings. Diurnal patterns show little variability of  $PM_{2.5}$  concentrations across different days of the week. From October to March, January showed the highest concentrations of  $PM_{2.5}$ .

- \* 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).
- \*\* 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.

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# 2024-25 Winter Season Air Quality Report for Qutekcak Native Tribe

### 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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