

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

# 2024 Summer Season Air Quality Report for Louden Tribe Galena, Alaska

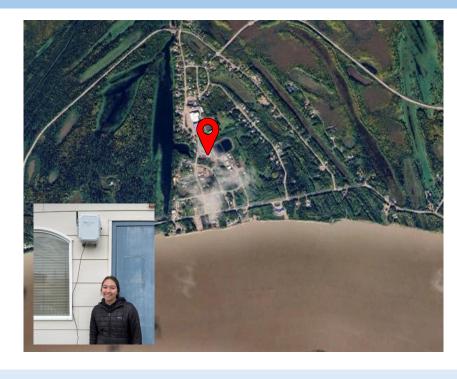
The QuantAQ MODULAIR sensor in Galena (64.7443° N, 156.8764° W) was installed on 9/27/2023.

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).

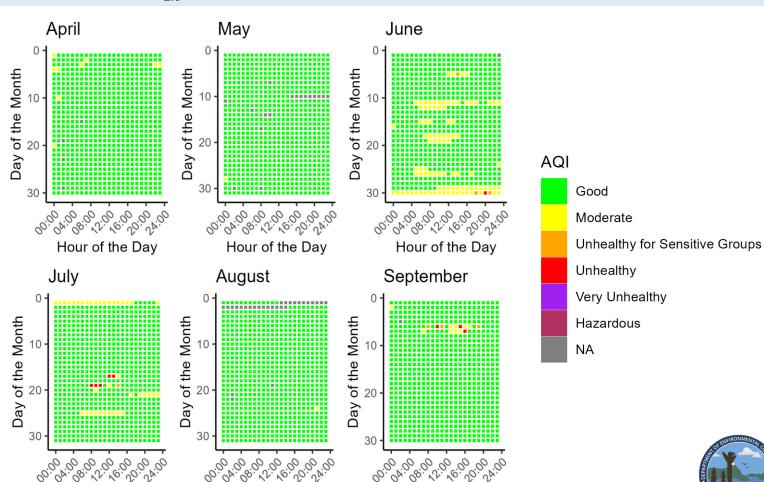
Data is collected every minute and is then processed into hourly averages. The sensor in Galena has run well since its installation in September of 2023; there have been no physical issues with the sensor.

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

Hour of the Day



### Daily PM<sub>2.5</sub> Air Quality Index (AQI) for April 1, 2024 - September 30, 2024



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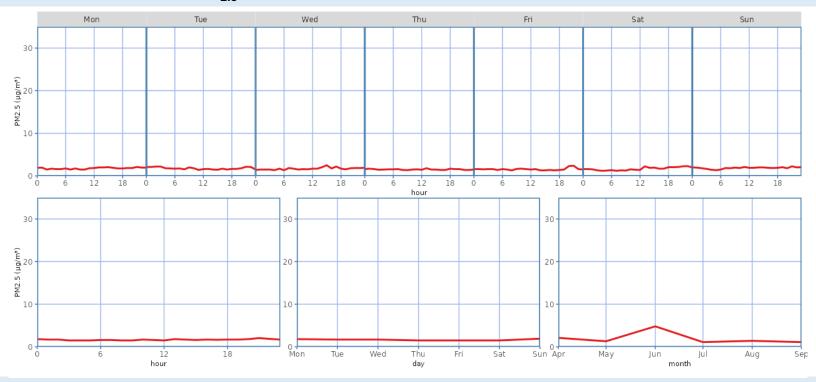
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Hour of the Day

Hour of the Day

## 2024 Summer Season Air Quality Report for Louden Tribe - Galena

### Median PM<sub>2.5</sub> Concentrations for April 1, 2024 - September 30, 2024



## **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								
	0.00	0.30	0.10	0.30	11.06	1.77	1.36	3.14
Mean								
	2.85	2.83	14.22 **	11.16 **	33.05	11.90	2.49	231.19
1 <sup>st</sup> Max								
	97.50	28.80	2876.6 **	100.9 **	55.66	33.77	239.34	3394.90
2 <sup>nd</sup> Max								
	97.50	17.90	2754.3 **	58.4 **	55.18	30.77	89.54	2248.42

#### **Data Discussion**

Galena'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 periods each month reporting "moderate". Several brief periods of AQI ratings in "unhealthy for sensitive groups" and "unhealthy" ranges occurred due to smoke from wildfires across Interior Alaska. Diurnal patterns show little variability of  $PM_{2.5}$  concentrations across different days of the week. From April to September, June showed the most significant spike of  $PM_{2.5}$  due to wildfires.

- \* 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).
- \*\* 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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