Air Quality Forecast and Dispersion Outlook of Allegheny County, Pennsylvania for 05/26/2021

Air Quality Forecast: This is the daily forecasted Air Quality Index (AQI) for each area provided by the PA Department of Environmental Protection. The AQI is based on PM2.5 or Ozone, whichever is forecasted to be higher.

Forecast Period	Pittsburgh Area	Liberty-Clairton Area	
Today Wednesday 5/26/21	Ozone Good 50 AQI	PM2.5 Moderate 52 AQI	
Tomorrow Thursday 5/27/21	Ozone Good 40 AQI	PM2.5 Good 43 AQI	

Today's Forecast: Increasing cloud cover and the development of showers and thunderstorms today in the Pittsburgh area will act to trim ozone concentrations to only the top end of the good range. PM2.5 in the Liberty-Clairton area will start off today on a moderately high note, but strong southwest winds and increasing mixing heights in the afternoon will all act to keep overall daily averages down in the lower moderate range.

See Page 2 for the Air Quality Index guide

Data provided by the PA Department of Environmental Protection

ACHD Air Dispersion 36-Hour Forecast: This is the dispersion forecast for Allegheny County starting from this morning through tomorrow afternoon. The atmospheric dispersion index is a rating of the atmosphere's ability to transport pollution away from its source and is based on emissions and weather. Better atmospheric dispersion can improve air quality.

Forecast Period		Atmospheric Dispersion Index	Surface Inversion Strength	Wind (dir, mph)	
Today	->-	Morning	Generally Good - 50	None	SW 10 to 15 Gusts 30
Today		Afternoon	Very Good - 113		SW 10 to 15 Gusts 30
Tonight	•	Evening	Fair - 35		W 10 to 15
	Over	Overnight	Very Poor - 4		W 10 to 15
Townson	->-	Morning	Fair - 27	None	NW 5 to 10
Tomorrow		Afternoon	Fair - 38		NW 5 to 10

See page 2 for the Atmospheric Dispersion Index guide and the daily Surface Temperature Inversion Report.

ACHD Remarks: There is a chance of rain today and tonight with gusts today up to 30 mph.

Data provided by the National Weather Service (NWS) Fire Weather Planning Forecast and PIT NWS Products

Prepared by: CG Date: 5/26/2021 Time: 8:20 am 1

Guide to the Air Quality Index (AQI)				
Color	Description Meaning		AQI	
Red	Unhealthy	Everyone should limit exertion outdoors.	151 - 200	
Orange	Unhealthy for Sensitive Groups	e Groups Sensitive people should limit exertion outdoors.		
Yellow	Moderate	Extremely sensitive people may wish to limit outdoor exertion.	51 - 100	
Green	Good	No health impacts are expected in this range.	0 - 50	

Guide to the Atmospheric Dispersion Index						
Very Poor	Poor	Generally Poor	Fair	Generally Good	Good	Very Good
1 - 6	7 - 12	13 - 20	21 - 40	41 - 60	61 - 100	> 100

ACHD Surface Temperature Inversion Report:

This is the 7 AM surface-based temperature inversion report for Allegheny County.

This morning's surface inversion of <u>—</u> with a depth of <u>—</u> is estimated to break at <u>—</u>. This surface inversion can be characterized as: <u>None</u> / Slight / Weak / Moderate / Strong.

No upper inversions at or above $\sim\!1000$ meters were reported.

What does the Surface Temperature Inversion Report mean?

A surface temperature inversion is a weather pattern that stops mixing of the air near the ground, and pollution released into the air tends to remain at higher concentrations.

Surface temperature inversion conditions include how strong the surface inversion is (in °C), how high the inversion is above the surface (in meters), and when the inversion is expected to break (in Eastern Standard Time). Also included is whether an upper-level inversion or inversions exist, starting at about 1,000 meters.

<u>Surface Temperature Inversion Characterization</u>

0-9 C°: Slight 1-2.9 C°: Weak 3-4.9 C°: Moderate ≥5 C°: Strong



