Air Quality Forecast and Dispersion Outlook of Allegheny County, Pennsylvania for 9/7/22

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 9/7/22	Ozone Good 41 AQI	PM2.5 Good 35 AQI		
Tomorrow Thursday 9/8/22	Ozone Good 45 AQI	PM2.5 Good 39 AQI		

Today's Forecast:

A slight chance for a few scattered to isolated showers will occur on Wednesday. Temperatures will return to the mid-70s under a mix of sun and clouds. Concentrations of both ozone and PM2.5 will remain inside the good range with a northerly breeze.

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	Poor – 12	None	N 5
loday	Afternoon	Fair — 27		N 6
Tonight	Evening	Very Poor – 5		N 3
Tolligitt J	Overnight	Very Poor – 2		N 2
Tomorrow	Morning	Generally Poor – 20	Weak	NE 3
Iomorrow	Afternoon	Fair — 39		NE 5

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

ACHD Remarks:

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

Prepared by: AE Date: 9/7/22 Time: 08:50 am 1

Guide to the Air Quality Index (AQI)					
Color	Description	Description Meaning			
Red	Unhealthy	Everyone should limit exertion outdoors.	151 - 200		
Orange	Unhealthy for Sensitive Groups	Sensitive people should limit exertion outdoors.	101 - 150		
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.

There is no surface inversion reported.

There is a **slight** upper level inversion 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>

0-0.9 C°: Slight 1-2.9 C°: Weak 3-4.9 C°: Moderate ≥5 C°: Strong



