Air Quality Forecast and Dispersion Outlook of Allegheny County, Pennsylvania for 5/06/2022

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 Friday	Ozone Good 32 AQ	PM2.5 Good 32 AQI		
Tomorrow Saturday	PM2.5 Good 30 AQI	PM2.5 Good 32 AQI		

See Page 2 for the Air Quality Index guide

Today's Forecast: Periods of rain with perhaps a thunderstorm Friday as low pressure moves towards Pennsylvania. An east wind along with the rainfall will cause PM2.5 to stay in the good range. *** Extended forecast: Low pressure will remain close enough to us Saturday to make for mostly cloudy skies and also the likelihood of showers and some drizzle. As high pressure slowly tries to build back in Sunday into Monday, skies will clear, and temperatures will gradually warm. A northerly breeze will keep air quality good over the weekend into Monday.

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 – 7	None	ESE 5
Today	Afternoon	Poor – 12		ENE 9
Toulekt	Evening	Generally Poor – 20		ENE 10 Gusts 22
Tonight	Overnight	Generally Poor – 19		ENE 9 Gusts 21
Tamanua	Morning	Fair — 24	None	ENE 12 Gusts 22
Tomorrow -	Afternoon	Generally Good – 55		NE 13 Gusts 24

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

ACHD Remarks: Bring an umbrella.

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

Prepared by: DG Date: 5/06/2022 Time: 08:15 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.

This morning's surface inversion of - °C with a depth of - m is estimated to break at -.

This surface inversion can be characterized as: None/Slight / Weak / Moderate / Strong.

No inversion above ~ 1000 meters is 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



