Air Quality Forecast and Dispersion Outlook of Allegheny County, Pennsylvania for 6/14/2022

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 Tuesday 6/14/22	Ozone **Moderate** 66 AQI	PM2.5 **Moderate** 54 AQI
Tomorrow Wednesday 6/15/22	Ozone **Moderate** 95 AQI	PM2.5 **Moderate** 89 AQI

Today's Forecast: What is left of a convective system that will bring heavy thunderstorms to the Great Lakes region Monday night will approach the east coast Tuesday morning. That system will bring cloud cover and scattered early morning showers. Clearing skies during the afternoon will allow temperatures to quickly climb into the upper 80s. Ozone formation will be limited early, but concentrations will rise along with the temperature in the afternoon to approach the moderate range. The morning showers will help limit concentrations of fine particulate matter (PM-2.5) as well, but light westerly flow for the remainder of the day will allow concentrations to approach the moderate range as well.

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 –9	None	S 6 to NW 3
	Afternoon	Generally Poor – 15	--	NW 3-5 to SE 2
Tonight	Evening	Very Poor – 2	--	SE 2
	Overnight	Very Poor – 2	--	SE 2 to ESE 1-2
Tomorrow	Morning	Poor – 11	Weak to Moderate	ESE 1 to SSE 3
	Afternoon	Fair – 27	--	SSE 3 to S 5

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

ACHD Remarks: Chance of rain tomorrow continuing overnight.

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

Prepared by: WM Date: 6/14/2022 Time: 8:25

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	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.

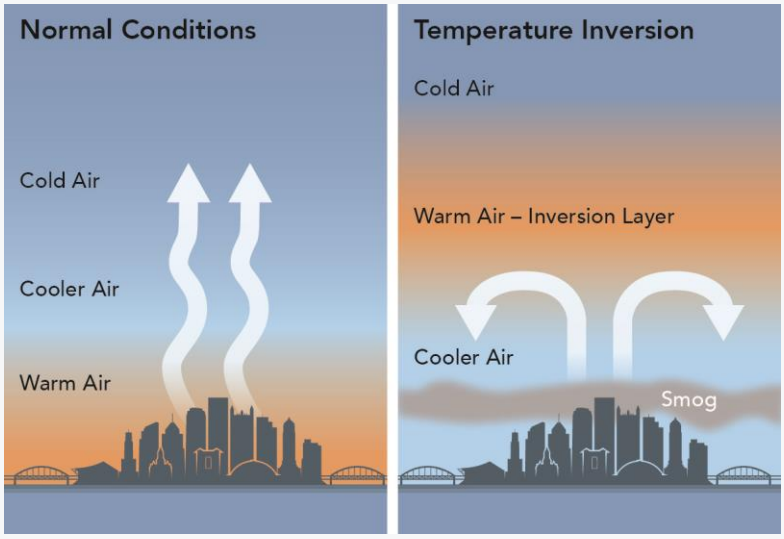
This morning's surface inversion of **--°C** with a depth of **-- m** is estimated to break at **--**. This surface inversion can be characterized as: **None**/ Slight / Weak / Moderate / Strong.

Yes, an upper inversion starting below ~1000 m 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.



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