

Clean Air Council's EPA Air Monitoring Program

June 24, 2025



Agenda

1. Welcome & Introductions
2. Background on EPA Air Monitoring Program
3. Reading the Map + Air Quality Safety
4. Troubleshooting Air Monitor Issues
5. Q&A
6. Discussion

Background

Clean Air Council is a member supported environmental organization serving Pennsylvania and the surrounding regions.

OUR MISSION: To protect everyone's right to a healthy environment

OUR VISION: To secure a future where all people in Pennsylvania and surrounding regions have clean air, water, and land that support healthy communities.

The Council's work includes a variety of initiatives, including public education, community action, government oversight, and enforcement of environmental laws.



Meet the Air Monitoring Team



Eve Miari
Director of Programs
Delaware County



Echo Alford
Delaware County
Advocacy
Coordinator



Russell Zerbo
Advocate
Philadelphia



Jendaiya Hill
Community Organizer
Philadelphia

**Introductions:
Meeting our wonderful
air monitor hosts!**

EPA Air Monitoring Program

EXISTING INDUSTRIAL IMPACTS

Within the study area, there are over **42,729** industrial facilities and brownfields sites regulated by federal and state programs for the use, manufacturing, processing, presence or storage of toxic and hazardous chemicals. While providing jobs and other economic and material benefits, these sites impact the surrounding communities directly through exposure to toxic air emissions, water and soil contamination.

INDUSTRIAL FACILITIES

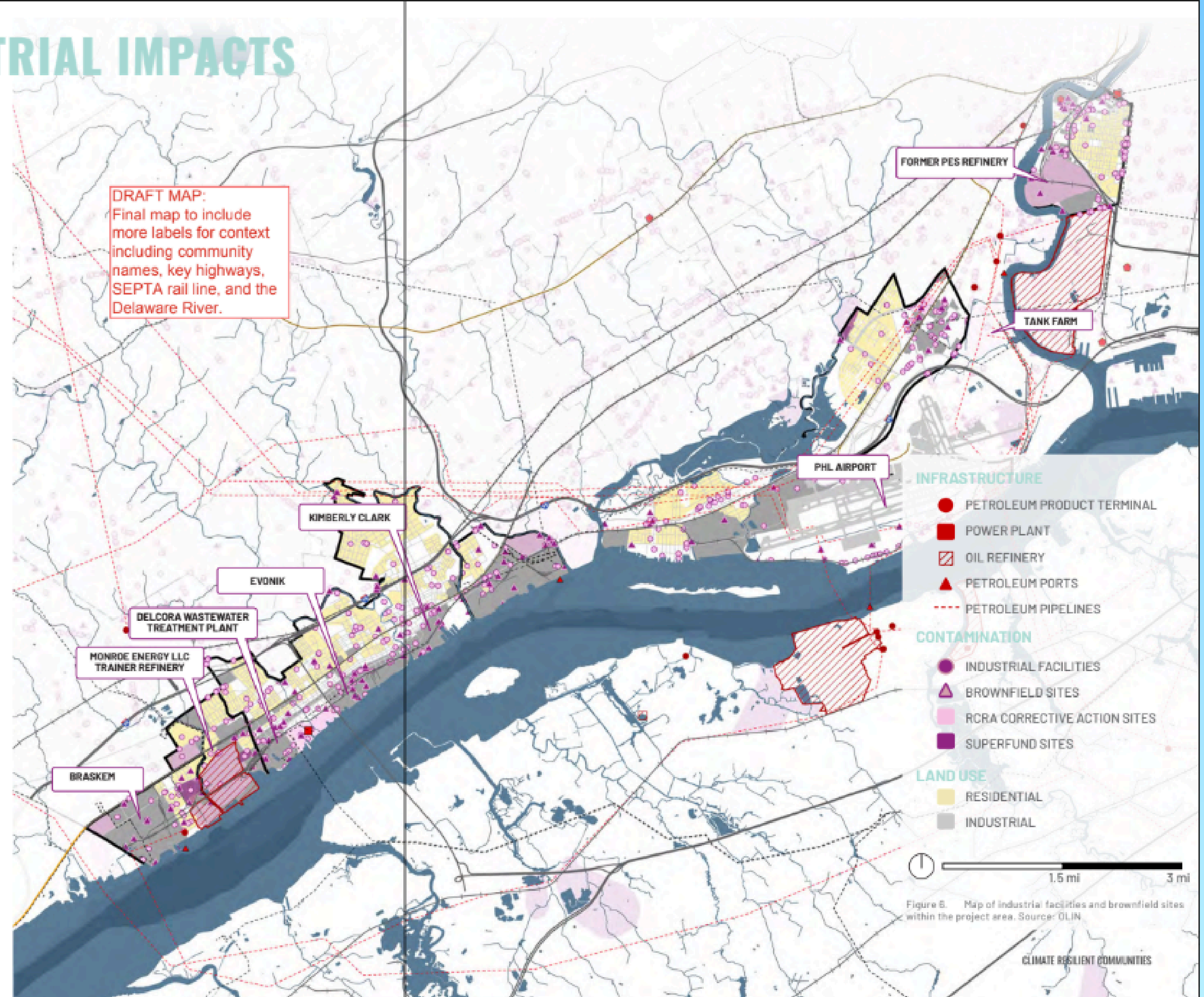
For this study, industrial sites were categorized as facilities that are actively operating and under the oversight of various federal or state programs. These include but are not limited to: Risk Management Program (RMP), National Pollutant Discharge Elimination System (NPDES), Toxic Release Inventory (TRI), Captive Hazardous Waste Facilities, Air Emission Plants, and Water Pollution Control Facilities.

BROWNFIELD SITES

Brownfield sites are classified as sites that were previously active industrial facilities and have a high likelihood of past or continued pollution to the environment. These include the ACRES Brownfield and National Priorities List (NPL) Superfund program, but also sites within the Resource Conservation and Recovery Act (RCRA) program and underground and aboveground storage tanks.

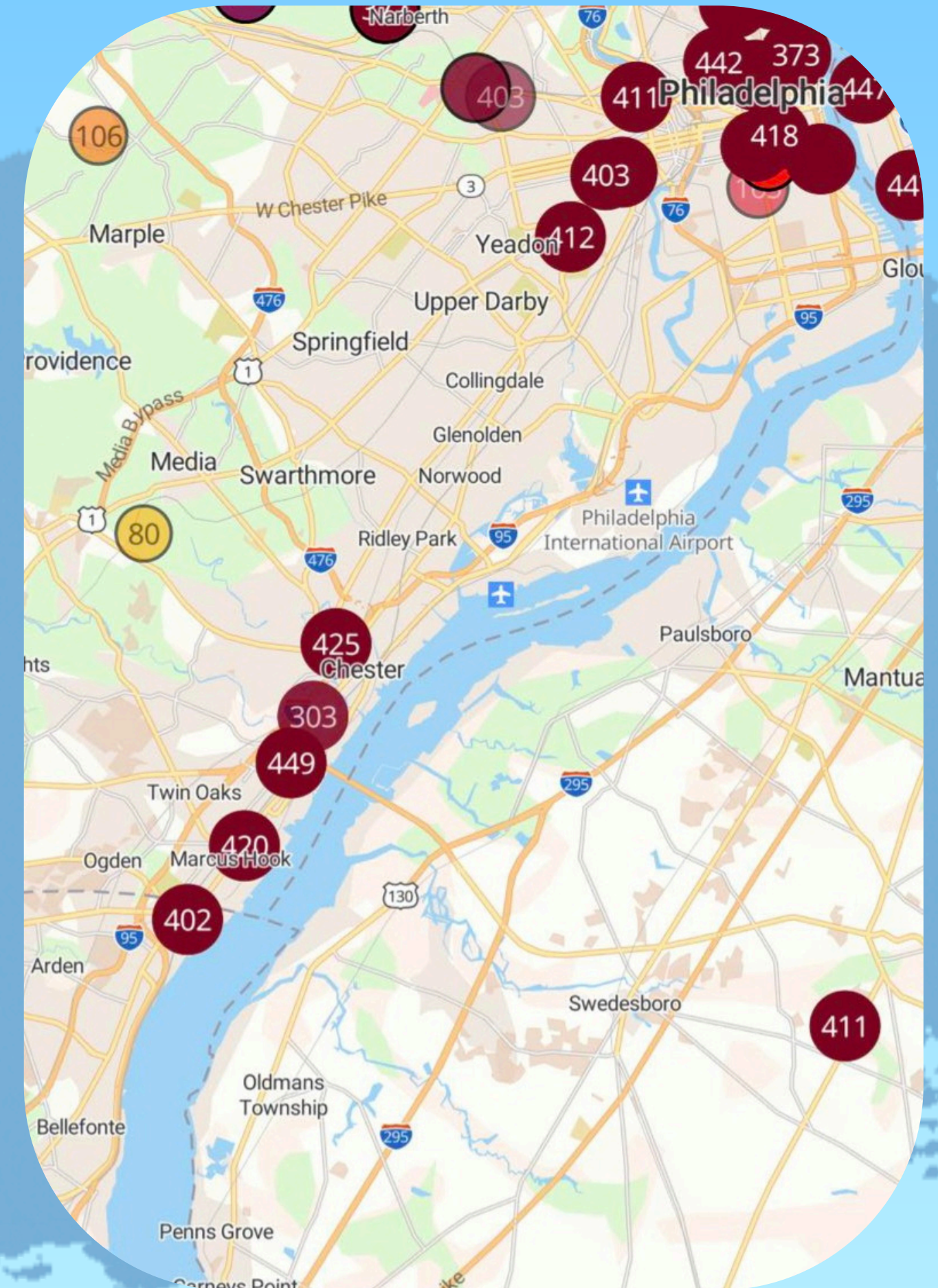
See data glossary table on page 28 for more information on each program and dataset.

See Chapter 7 (focus community profiles) for a more detailed description of industrial and brownfield sites in each focus community and those that are most vulnerable to flooding.



Background

- 2 year EPA funded program to install outdoor air quality monitors at homes, businesses, and organizations in Delaware County and South and Southwest Philadelphia
- 60 Purple Air monitors will measure for PM and VOCs
- Data is visible 24/7 via purple air app or website
- 5-10 high quality VOC sensors will also be installed.



Progress to Date

- Purple Air data collection began January 2nd!
- 60 monitors installed to date in Philly & Delco!
- Seeking hosts for the first 5 VOC monitors



Purple Air Monitor



VOC Monitor

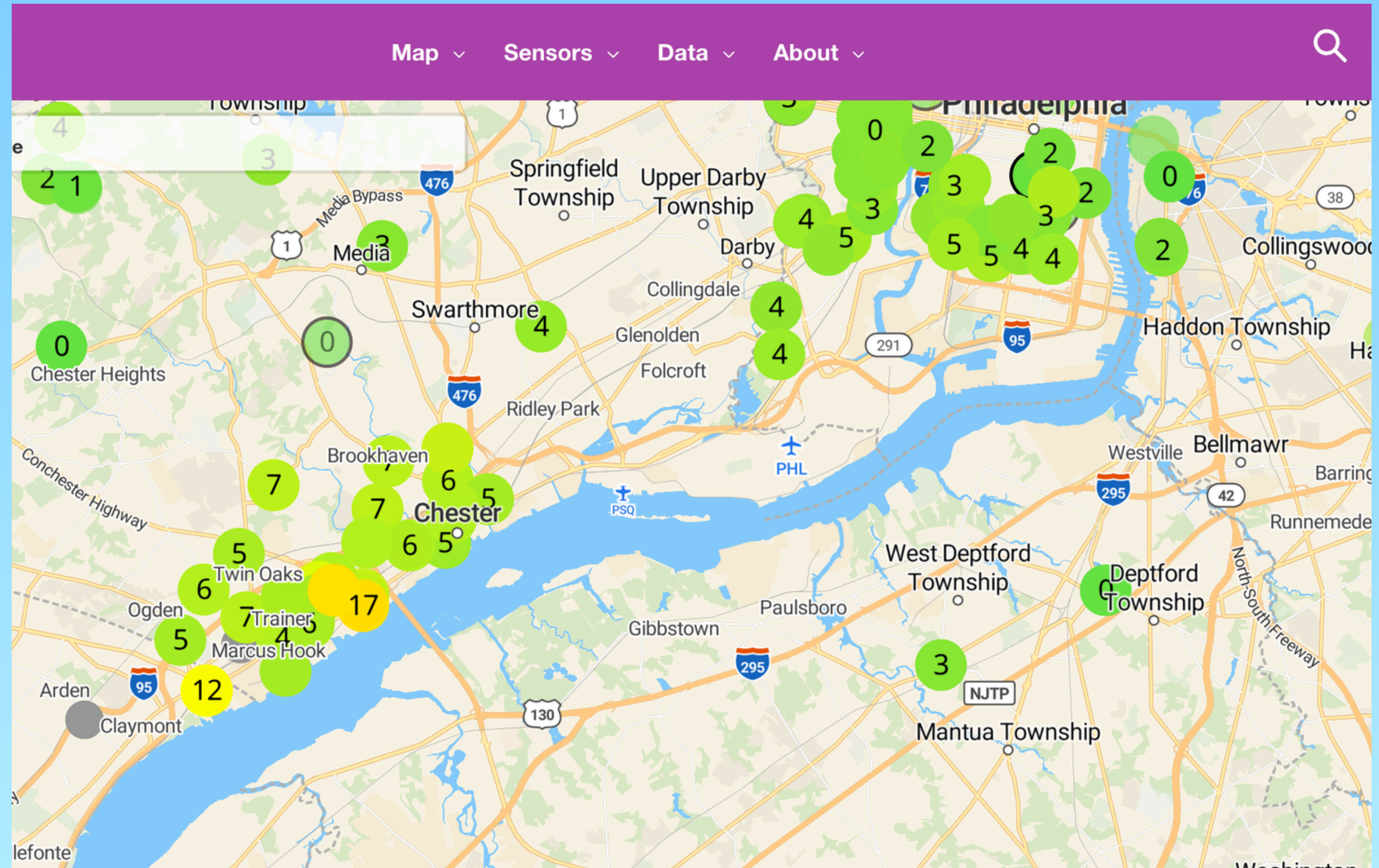
Purple Air Map Demo

To view live air quality data visit

map.purpleair.com

- All monitors installed by Clean Air Council are labelled: CAC, the neighborhood name, I95 and the monitor number

Example: CAC Grays Ferry I95 005



How can the data be used?

- Data from the air monitors is visible to all community members 24/7 at purpleair.com
- Residents can use the data to make daily decisions about when to go outside or close windows and stay in.
- Long term, data can be used to advocate for less pollution, cleaner air, and a healthier community.

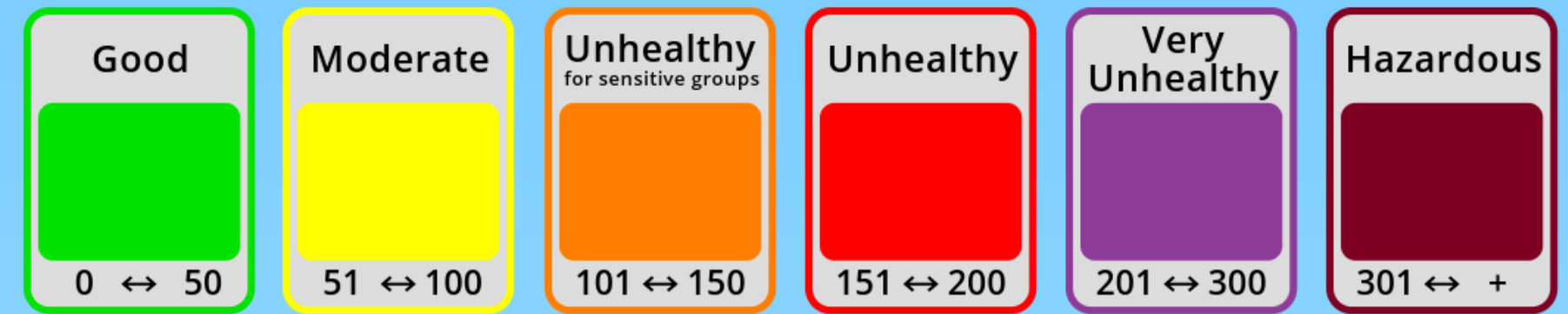
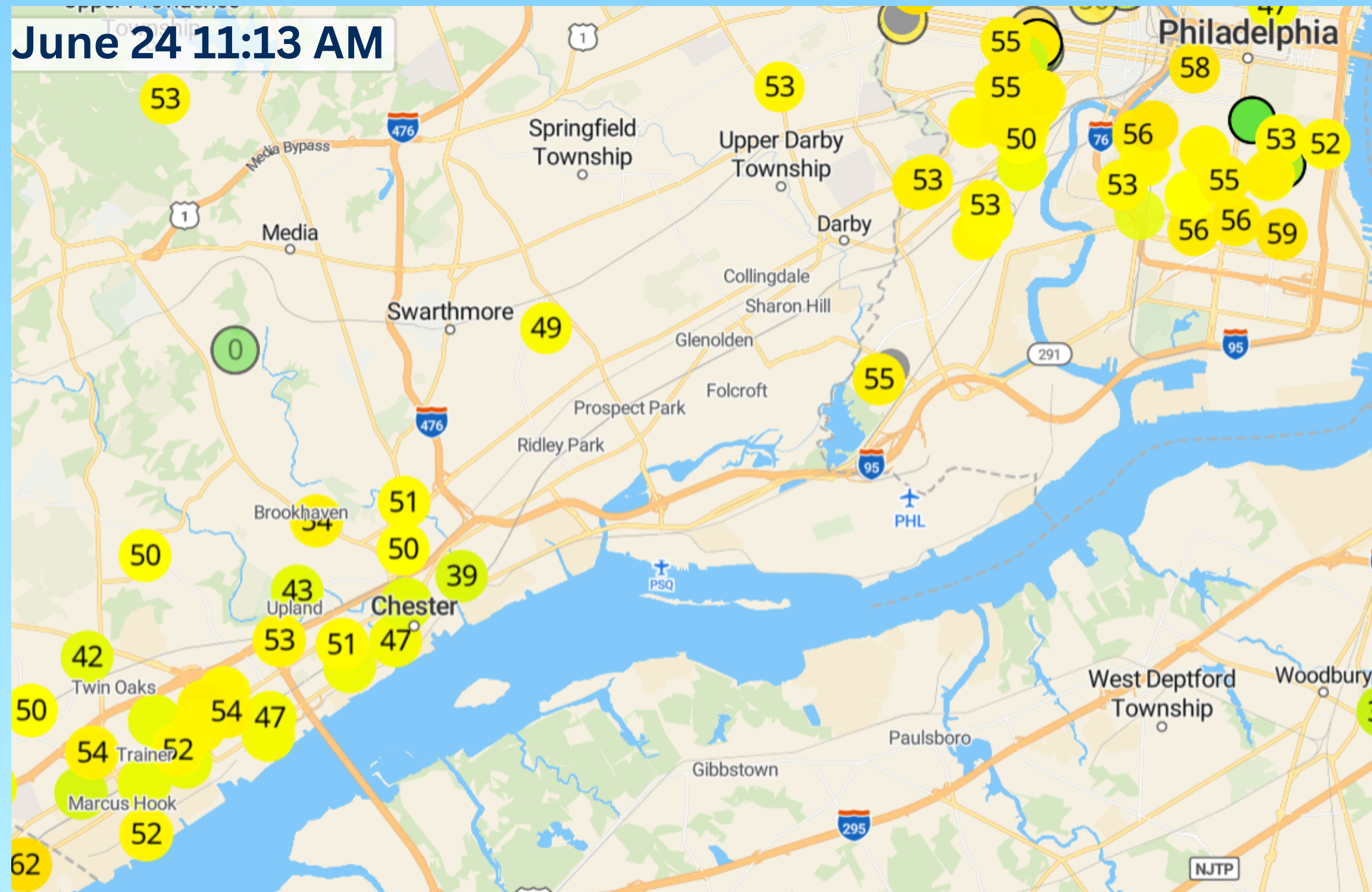


Air Quality Issues

What we are seeing so far

- Higher air quality readings in warmer months
- Most days are in the moderate/yellow zone across the region
- The most significant poor air quality readings have been caused by wildfires
- The air quality can change significantly day to day

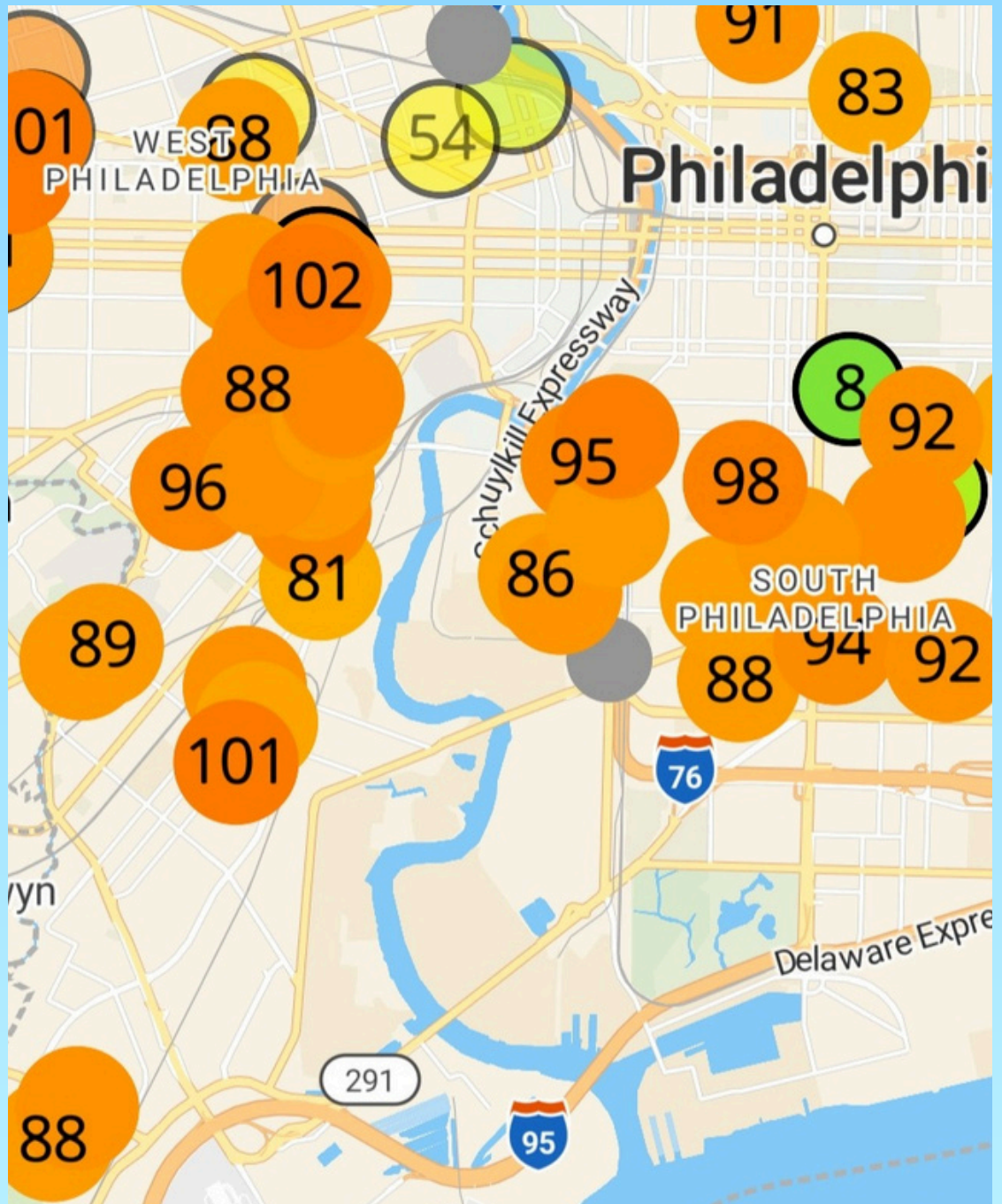
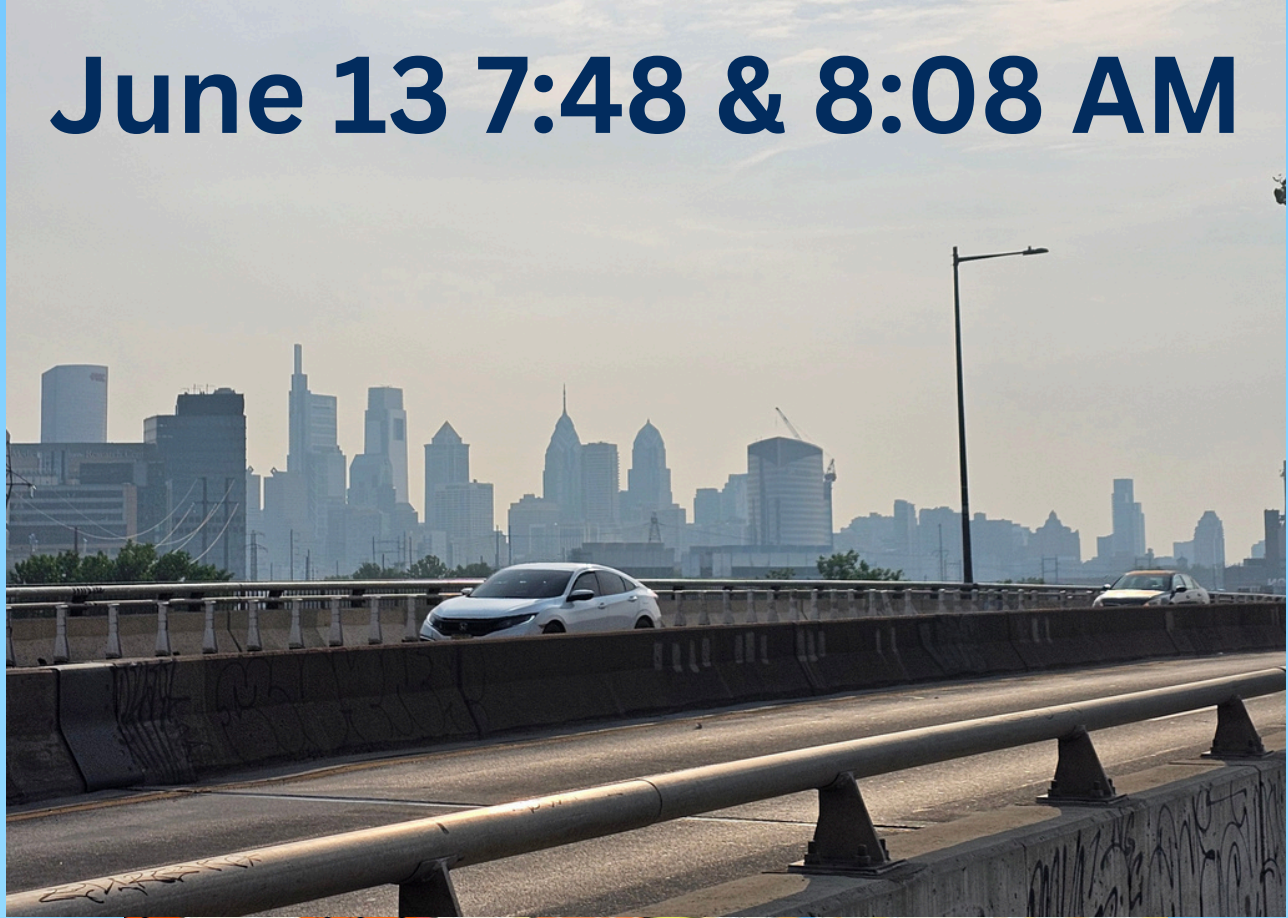
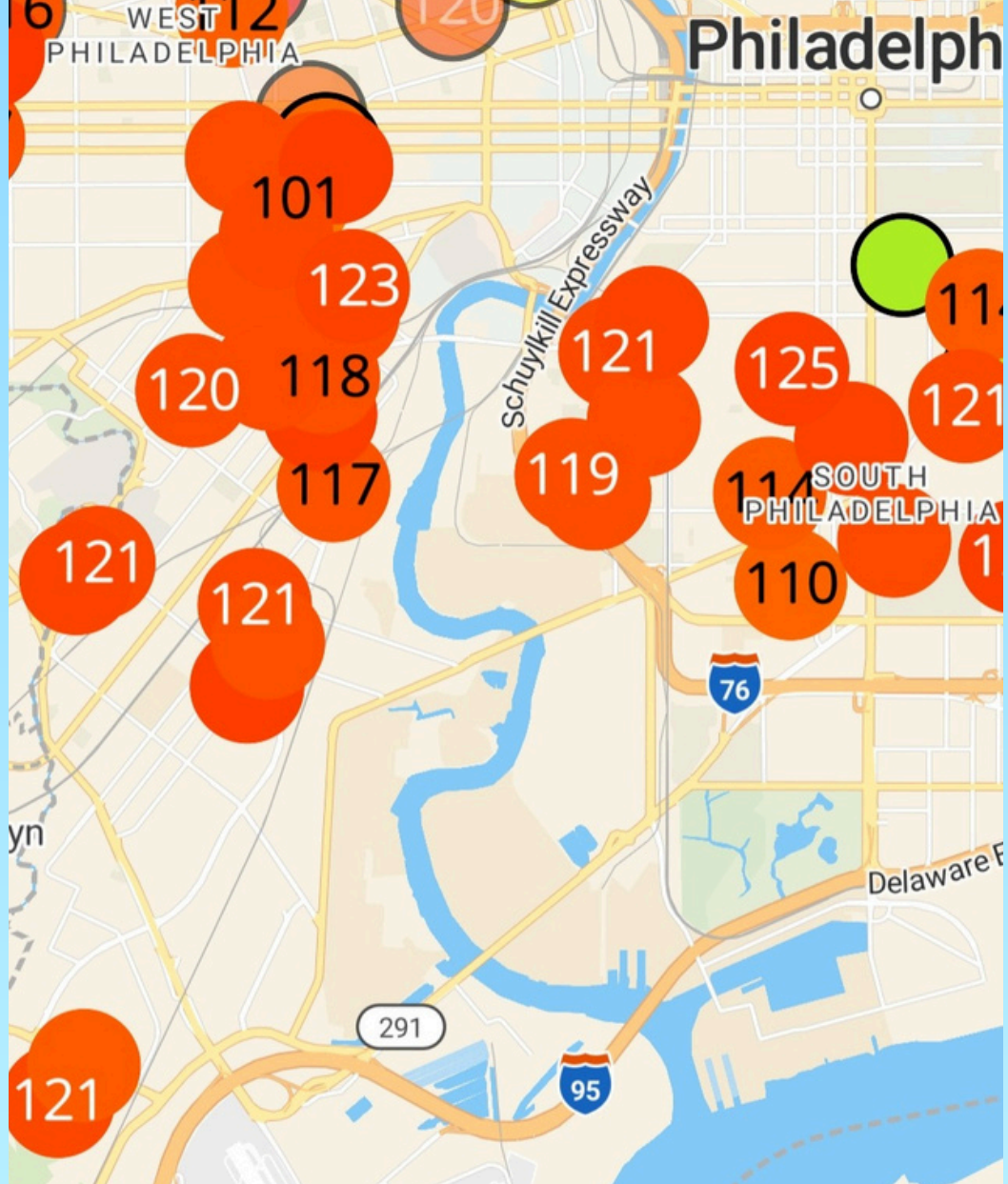
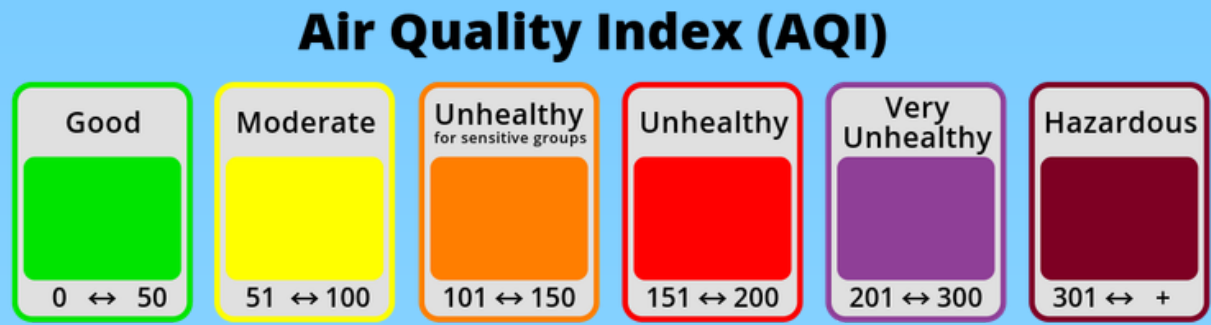
Air Quality Index (AQI)



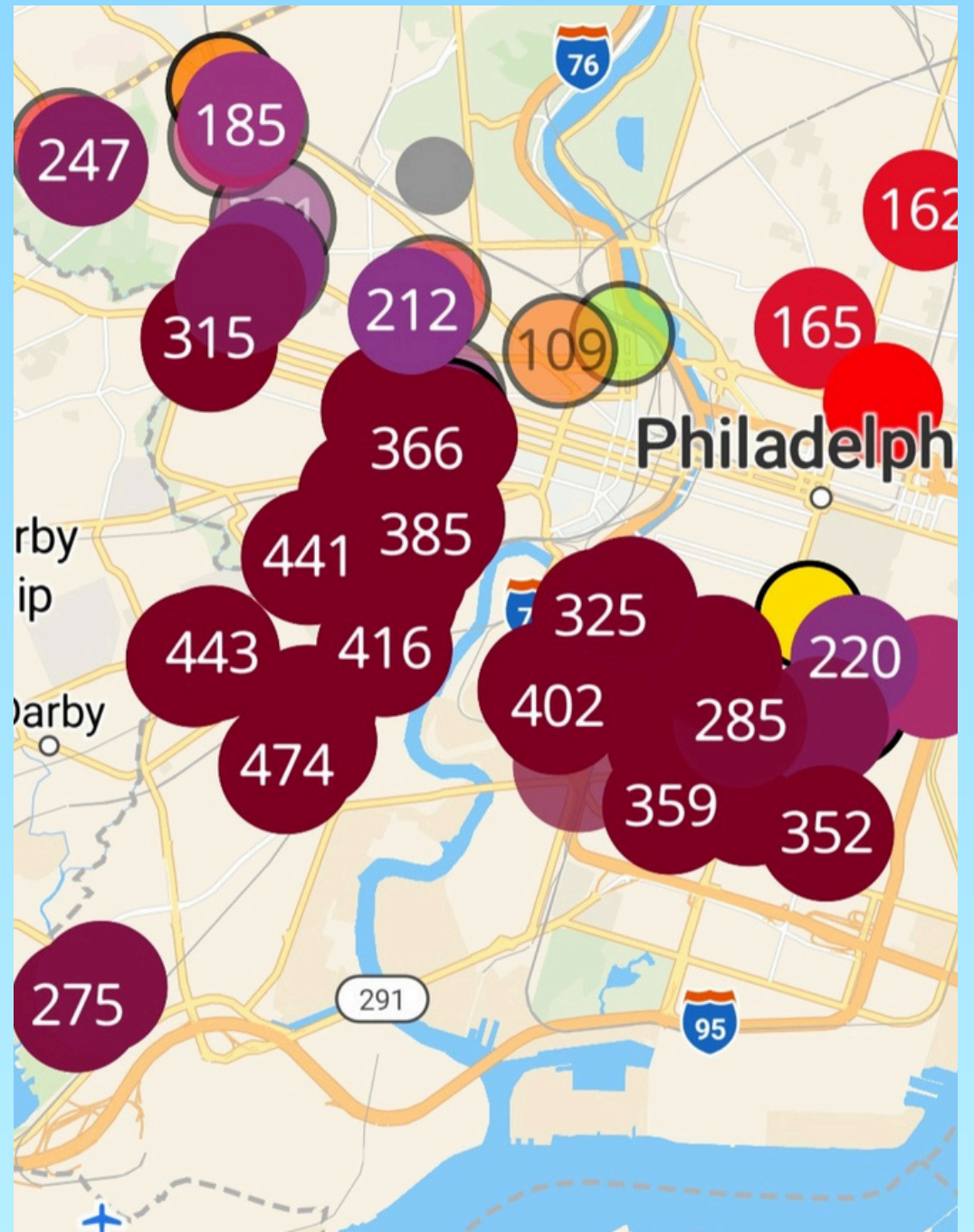
Air Quality Shifts

June 12-14 2025

June 12 6:16 PM



June 14 1:55 AM

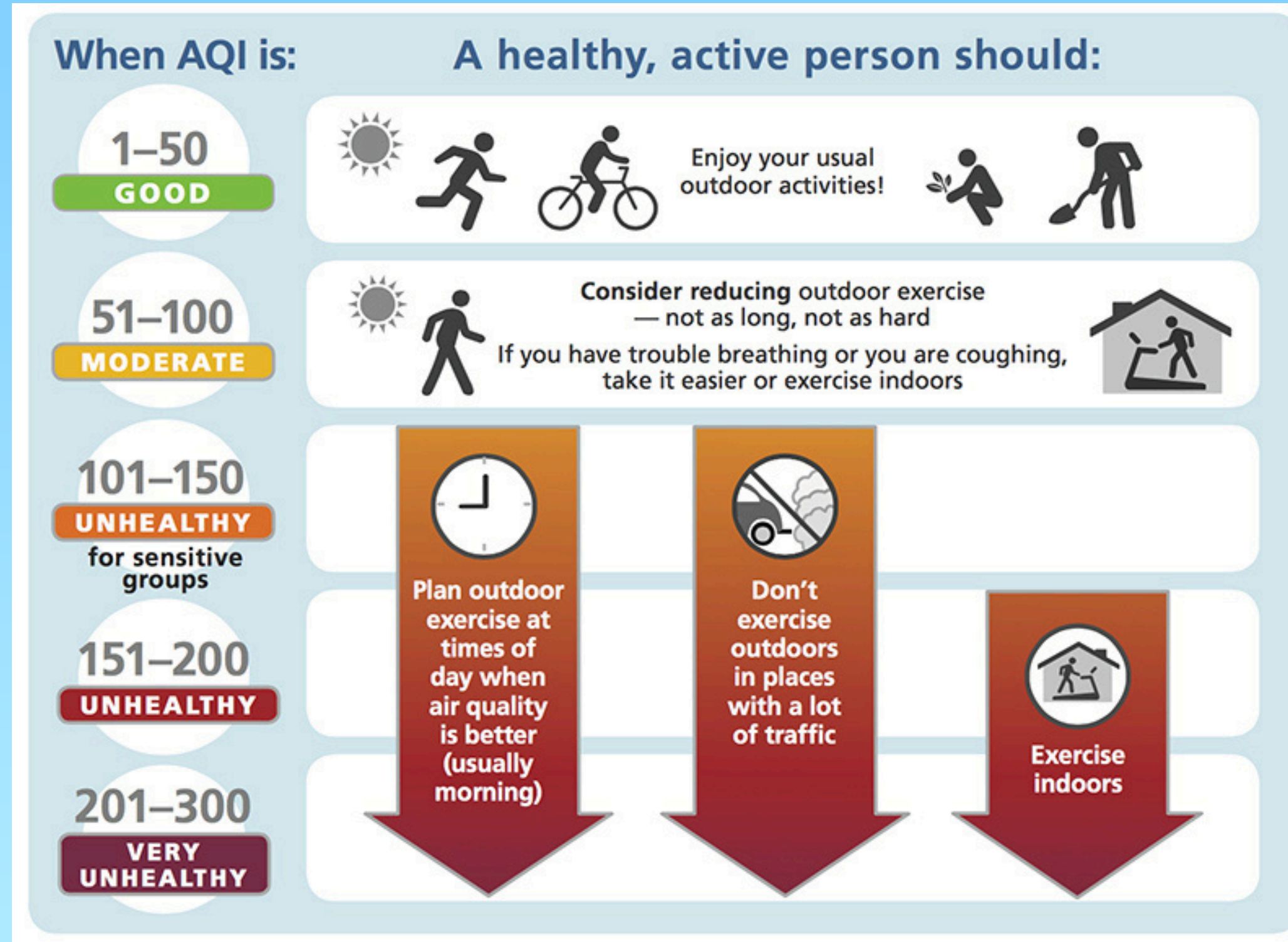


Poor Air Quality Symptoms + Best Practices

Children, elders, pregnant people, outdoor workers, and people with underlying health conditions are especially at risk

Symptoms during poor air quality events include:

- Eye irritation, itching, swelling & watering
- Irritation of the nose and throat
- Trouble breathing and chest tightness
- Coughing and wheezing
- Headaches and dizziness
- Fatigue



Staying Safe in Extreme Heat & Poor Air Quality

- Higher heat days are typically also higher pollution days!
- Heat can trap pollution closer to the ground
- Extra energy use on high heat days can also lead to more air pollution.

To stay safe and cool down you can:

- Check the weather AND the air quality data to stay informed
- Avoid the outdoors in the hottest part of the day, and if the air quality is poor
- If you use an inhaler, don't leave home without it!
- Stay well hydrated & find air conditioned places to rest
- Use indoor air filters on high pollution days
- Close car windows and set AC to recirculate
- Learn the signs of heat exhaustion and heat stroke!
- Seek medical care if needed.
- Check on neighbors, elders, and friends

AIR QUALITY ACTION DAY



ORANGE: *On air quality action days, young children, the elderly, and those with respiratory problems, such as asthma, emphysema, and bronchitis, are especially vulnerable to the effects of air pollution and should limit outdoor activities.*



Troubleshooting Monitor Issues

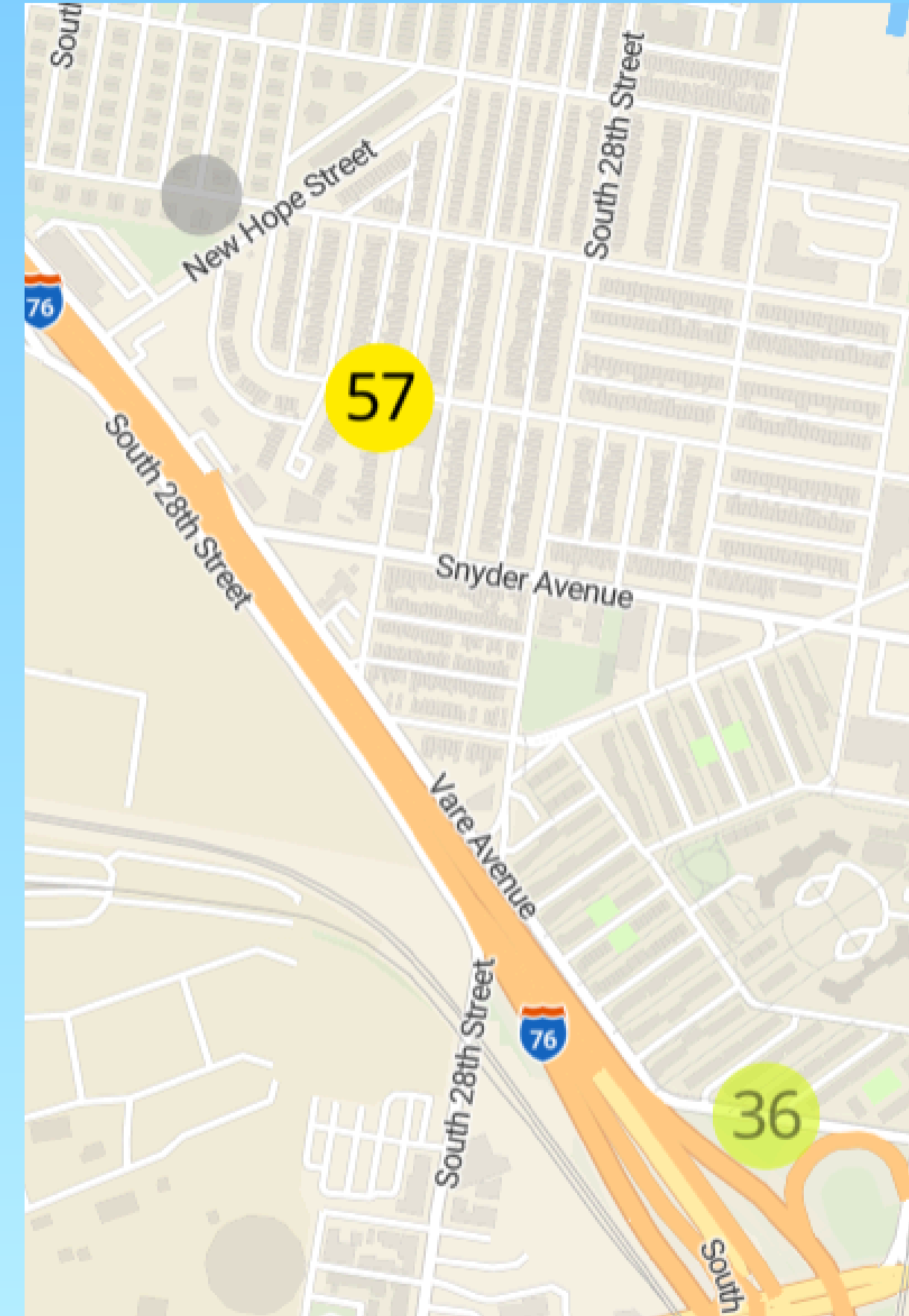
Common Air Monitor Issues

Gray Dot: Air monitor is offline due to...

- Accidentally becoming unplugged during strong winds or storms
- Pet or child unplugs the monitor
- Monitor being unplugged to use appliances or for work being done on the home
- Cord isn't staying plugged in securely and needs to be stabilized with electrical tape
- Wifi is not on or functioning properly

Transparent Dot: Sensor issues

- Air monitor is online but the sensors inside the monitor are gathering different readings
- Data is less reliable



Air Monitor Offline: What should I do?

1. Check that the cord is plugged firmly into the wall **and** into the port inside of the monitor. *You may need to unplug and re-plug the cord.
2. Check that your wi-fi is on and working
3. If the monitor is on, you should see lights on inside the monitor
4. It may take a few minutes for your monitor to show back up on the map
5. If you are still not seeing your monitor is on and back on the map, please coordinate with us to schedule a site visit to assist you.



Sensor Issue: What should I do?

1. Visually inspect the inside of the monitor
 - a. Check if there are any bugs or debris caught in the monitor
2. Contact us and we will walk you through the next steps
3. If the sensor issue is not able to be resolved remotely, we will need to schedule a site visit
4. We may need to remove your monitor to repair it
 - a. Once the issue is resolved we will need to coordinate a time to reinstall the monitor



Staying in Touch/When to contact us

Contact Us:

**jhill@
cleanair.org**

**rzerbo@
cleanair.org**

215-567-4004

In order to collect accurate air quality information for your community, it is important that we are able to address any issues with the monitors promptly.

- We will contact you if we notice your monitor is offline or having a sensor issue
- If a monitor is down for 7 days, it is automatically removed from the map

Please contact us if:

- You have questions or concerns about air quality issues
- You are planning to do something that would require the monitor to be unplugged for more than a day
- You are moving or shutting off your wi-fi
- You notice any damage to the air monitor
- You notice your monitor is offline and you are not able to get it back up
- You notice that your monitor is having a sensor issue

Q & A

Have you noticed any concerning air
quality or environmental issues
recently?

What questions do you have about
your monitor?

Anything else??



**Thank
You**