Ambient Air Monitoring Program Update

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Mecklenburg County Land Use and Environmental Services Agency
Mecklenburg County currently complies with all NAAQS...
MCAQ Ambient Air Monitoring Network

- University Meadows
- Garinger
- Remount
- Ramblewood
- Friendship Park

= MCAQ Ambient Air Monitoring Station
What does the data show?
Good days have doubled since 2005

Number of Days by Air Quality Index Color
Mecklenburg County, NC

MECKLENBURG COUNTY
AIR QUALITY
Downward trend in particulate matter concentrations
Nitrogen Dioxide, Sulfur Dioxide, and Carbon Monoxide Trends
Downward trend in ozone concentrations
Year-to-Date Ozone Season Data

- Compliance Values
  - 2020: 67 ppb
  - 2021: 66 ppb (currently)
Other Ambient Air Monitoring Efforts
Photochemical Assessment Monitoring Station (PAMS)
Not that PAM...
So, what is PAMS?

- Located at Garinger HS station
- Ozone precursor monitoring
- Meteorological parameters
- Data use: model development and track trends
New PAMS Equipment at Garinger
2\textsuperscript{nd} Near-Road NO\textsubscript{2} Ambient Air Monitoring
Proposed Site: Equipment Drive
Colonial Pipeline Spill - Huntersville, NC
Ambient Air Monitoring for Air Toxics

Oehler station – est. April 4, 2021

Collaborative monitoring effort

Sampling for volatile air pollutants (air toxics)

MCAQ staff → operator

NCDEQ → lab analysis
Oehler Air Monitoring Station
New Indy-Related Odor Complaints
MCAQ Ambient Air Monitoring Response
Ambient Air Monitoring for Hydrogen Sulfide (H₂S)
H₂S Monitoring Data

H₂S Monitoring Data April 26 - Oct 5, 2021

15 min H₂S concentration (ppb)

4/27/21 6:00 PM
5/27/21 6:00 PM
6/27/21 6:00 PM
7/27/21 6:00 PM
8/27/21 6:00 PM
9/27/21 6:00 PM
10/5/21 6:00 PM

ATSIR Acute MRL = 70 ppb (1)

Geometric Mean Odor Threshold = 8 ppb (2)

(1) The National Center for Development and Prevention's Agency for Toxic Substances and Disease Registry (ATSDR) has established an acute Minimal Risk Level (MRL) for H₂S. A MRL is an estimate of the daily human exposure to a hazardous substance that is likely to be without appreciable risk of adverse health effects over a specified duration of exposure.

The H₂S Acute MRL for continuous exposure from 1 day to 14 days is 70 parts per billion (ppb).

Thank you for your time.
See you in a breakout room!