



MISSISSIPPI DEPARTMENT OF
ENVIRONMENTAL QUALITY

Cherokee Air Quality Monitoring Informational Meeting

March 21, 2024

Contact Information

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Meeting Objectives

- **Meet MDEQ**

- *Air Division* – Jaricus Whitlock; Laura James
- *Office of Community Engagement* – Taaka Bailey

- **Share Information**

- Provide more insight into the air quality monitoring
- Discuss the “*Who*”, “*What*”, “*Where*”, “*Why*”, “*When*” and “*How*” aspects of the overall project.
- Introduce Draft Community Engagement Plan



“Why” is MDEQ Doing this Project?

- To address the on-going community concerns regarding air quality for the area



“What” is the Overall Project?

- Determine the ambient concentration of certain air pollutants within the Cherokee community.

To be achieved through the following measures:

- Conduct ambient air monitoring for a period of one (1) year
- Data collection and evaluation
- Report results and consistently engage the public



“What” are the Goals for this Project?

- Determine the air quality for the area and any potential issues with published risk screening values and/or NAAQS.
- Obtain baseline data for each monitored pollutant.



“What” are the Pollutants of Concern?

- Particulate Matter less than 10 micrometers (μm) in diameter (PM_{10})
- Particulate Matter less than 2.5 μm in diameter ($\text{PM}_{2.5}$)
- PM_{10} Metals
- Volatile Organic Compounds (VOCs)
- Total Reduced Sulfur (TRS) and Reduced Sulfur Compounds
- These pollutants were selected based on several factors:
 - Communication with EPA and the Agency for Toxic Substances & Disease Registry (ATSDR)
 - A historical review of citizen complaints in the area
 - A review of the emissions inventory for facilities within the nearby industrial complex



“Who” is Involved with this Project?

- **Partners**

- MDEQ
 - EPA – Region 4
- Jackson County
- City of Pascagoula

- **Cherokee Community**



“How” is MDEQ Conducting this Project?

- MDEQ is adhering to nearly all requirements outlined for the operation of an ambient air monitoring station for measurement of a NAAQS purposes.
- Required Materials:
 - Quality Assurance Project Plan (QAPP)
 - Standard Operating Procedures (SOPs)
 - General Quality Assurance / Quality Control Documents (calibrations, span checks, etc.)
 - Siting Criteria (optimizes location and minimizes risk)



“How” is MDEQ Conducting this Project?

- Air Monitoring Station Example



“How” is MDEQ Conducting this Project?

▪ Monitoring Protocol

- PM₁₀ and PM_{2.5}: Equipment: Teledyne APT T640x
Frequency: Continuous
- PM10 Metals: Equipment - ThermoFisher Scientific 2025 PM instrument with filter Analysis
Frequency - Once every 6 days, plus 25 additional random/response
- VOCs: Equipment - Summa Canisters (24 hr sample)
Frequency - Once every 6 days, plus 25 additional random/response
- TRS and RS Compounds: Equipment – Teledyne API T102 (TRS); Summa Canisters
Frequency – Continuous; 25 random/response samples



“Where” Will the Air Monitoring Station be Located?

- Siting Criteria



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- Siting Criteria



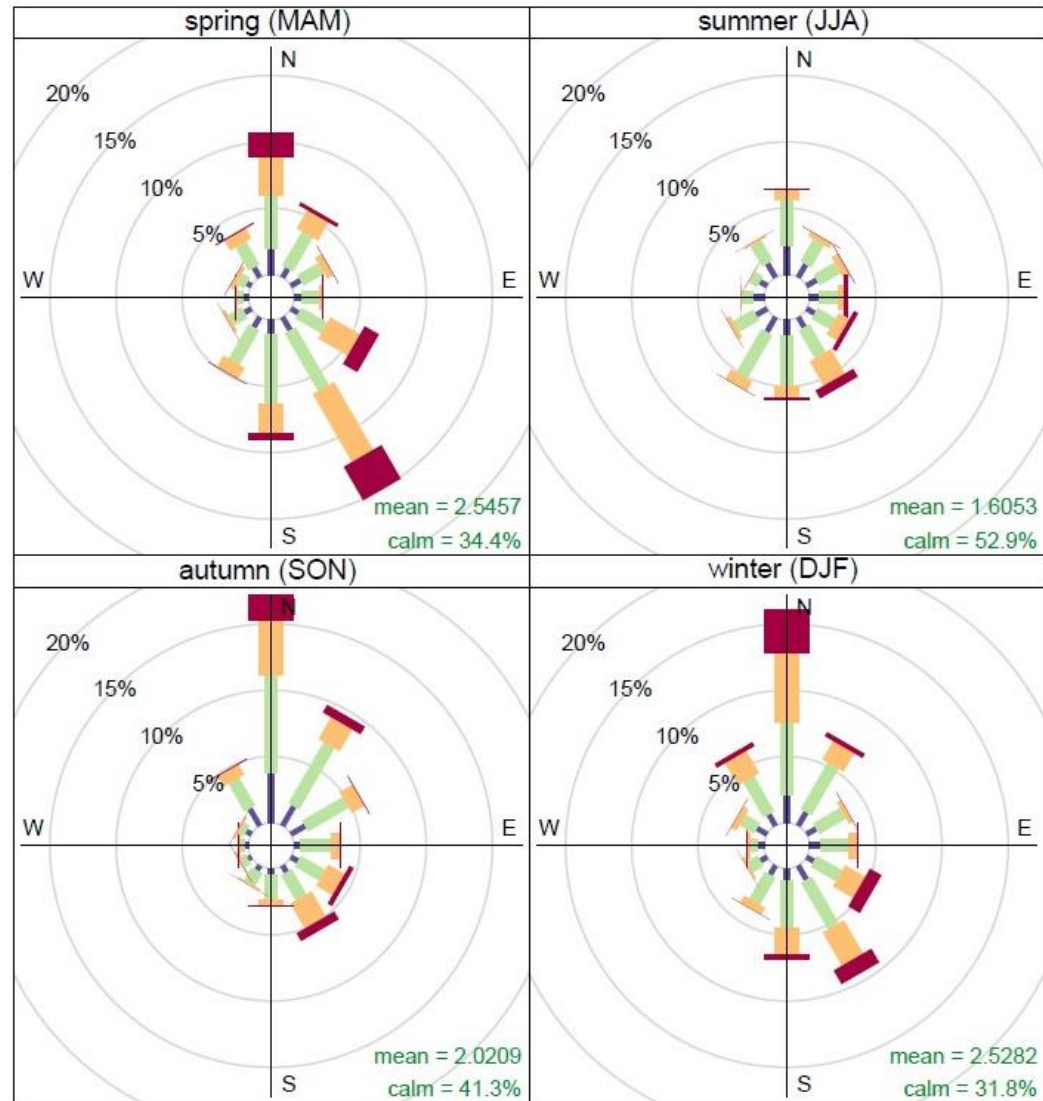
5303 Ladner Avenue



“Where” Will the Air Monitoring Station be Located?

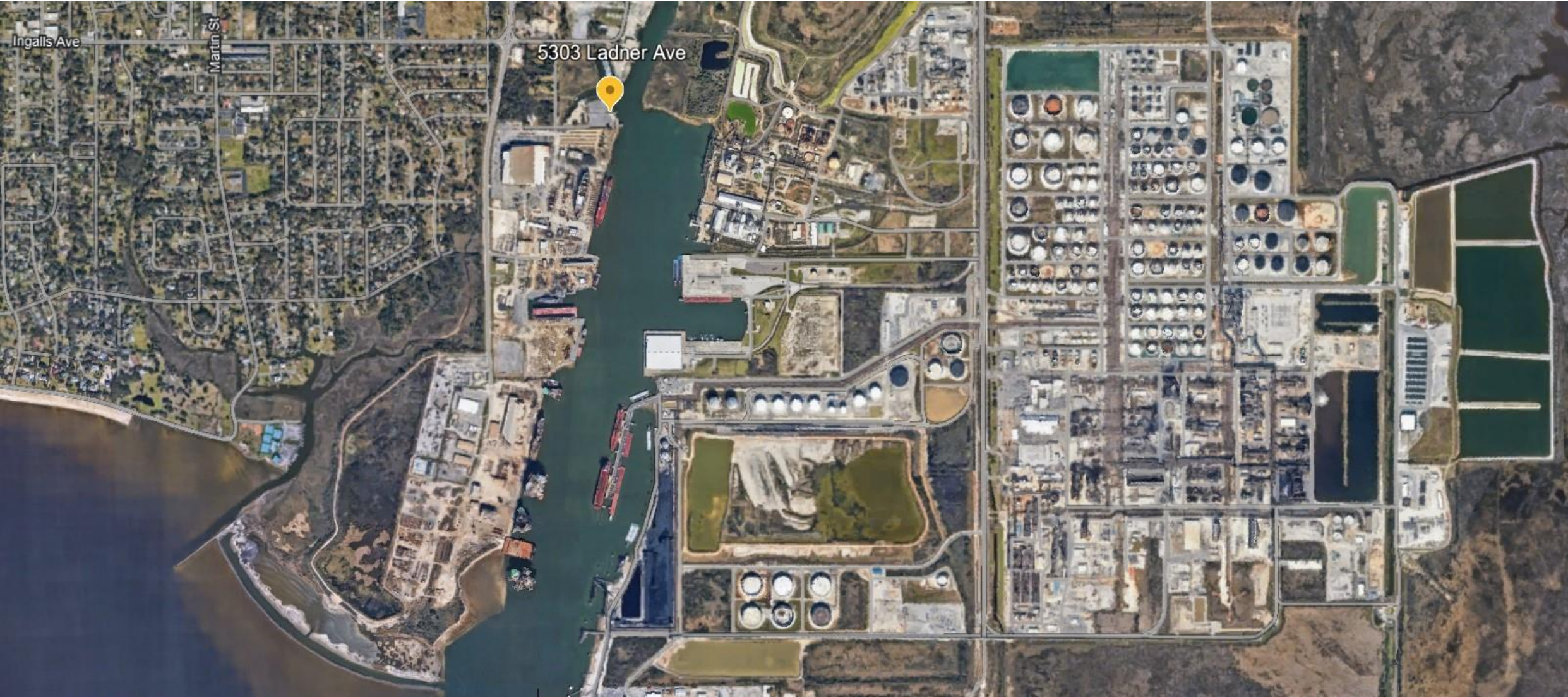
- Siting Criteria

Seasonal Windroses at Pascagoula 2019–2023



Data Taken From:
Trent Lott Airport (KPQL)
Pascagoula, MS





QUESTIONS?



Draft Community Engagement Plan

- MDEQ's plan to engage and provide community with information.
 - Public meetings
 - Availability of results
 - Posted to MDEQ's OCE page
 - Emails
 - Flyers
 - Final report
- Hardcopies available of plan and will be posted on MDEQ's OCE's page.
- MDEQ wants the community's input on the engagement plan.
- Comments submitted by end of day Friday, April 5th.
 - Paper forms available
 - Electronic submittal to ljames@mdeq.ms.gov or jwhitlock@mdeq.ms.gov



QUESTIONS?

