East Side Coastal Resiliency
www.nyc.gov/escr

Air Quality Monitoring

Community health and safety is extremely important to the City of New York. The East Side Coastal Resiliency (ESCR) project team is ensuring there is very limited impact on nearby air quality as we construct flood protection for New Yorkers on Manhattan's East Side.

1. We are constantly monitoring the air quality around our construction activities.

WHAT ARE WE MEASURING?

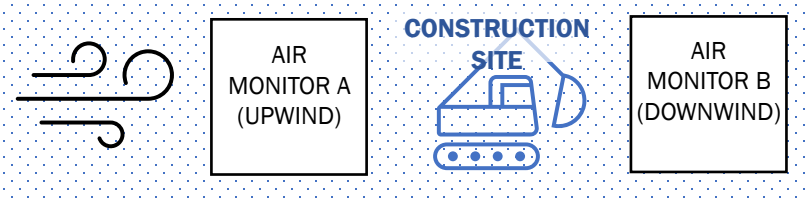
Particulate Matter (PM), or particle pollution, is a term for the solid particles and liquid droplets found in the air.

MEASURED SIZES:

PM 2.5: smaller particles typically from vehicle emission

PM 10: larger particles typically from dust

Monitoring machines are placed strategically along the edge of active construction activities.



Existing air flows → **Monitor A** measures existing particles → Air flows through site → **Monitor B** measures existing particles and any potential increase from construction or other activities

MONITOR B
− MONITOR A

NET PARTICULATE MATTER

reflects the potential increase in particle pollution directly related to construction activities

NET PARTICULATE MATTER is the standard metric for monitoring and assessment of construction impacts on air quality, as well as compliance with federal limits.

2. We are taking steps to control dust and limit emissions during construction.

Steps to reduce construction vehicle pollution and emissions:

- Use barging for large deliveries
- Restrict truck idling time
- Use Ultra-Low Sulfur Diesel fuel
- Minimize use of diesel engines
- Use the best available technology for non-road diesel engines

DID YOU KNOW? One barge has the capacity to divert up to 57 trucks from local roads.

Steps to reduce and control dust:

- Cover and secure loads for all trucks hauling loose material including sand and dirt
- Use water spray for roads, trucks, truck wheels, excavation areas, and stockpiles
- Cover stockpiles with anchored tarps
- Use extra care, including more frequent application of these measures, during dry and high wind periods

These steps are implemented during daily construction activities and are increased if monitoring machines indicate additional action is needed. Visit the ESCR website to view weekly Construction Bulletins and Advisories.

3. We are guided by federal air quality standards.

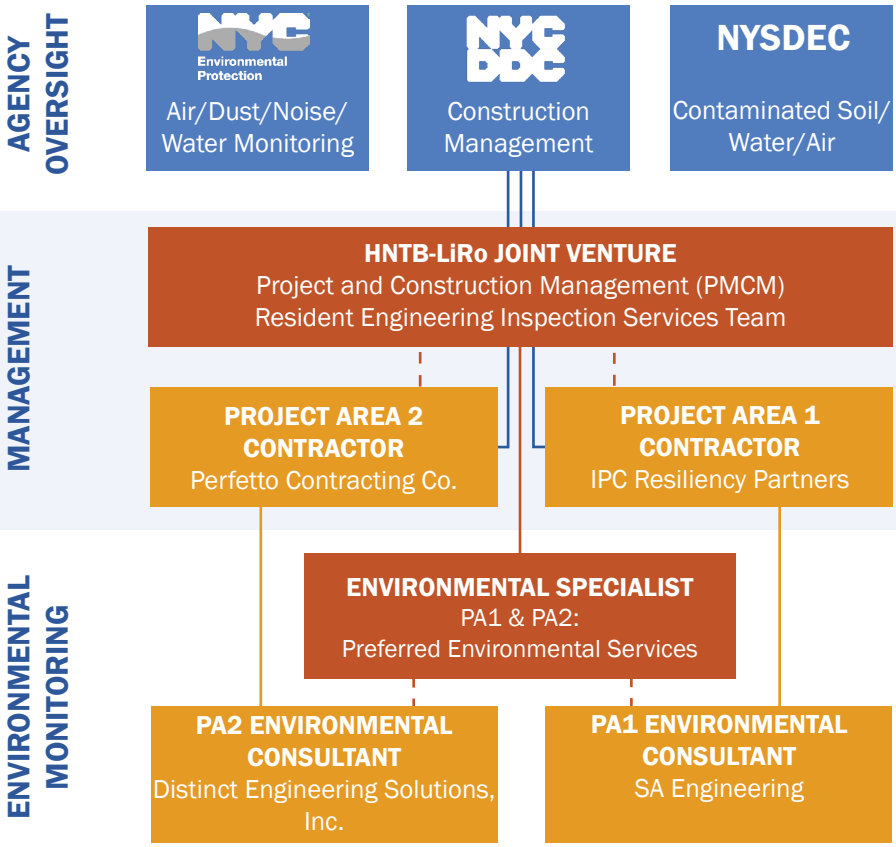
Through careful monitoring with real-time alerts, our team knows when we need to take additional measures during construction to protect air quality for residents.

- The Environmental Protection Agency (EPA) sets National Ambient Air Quality Standards which define regulatory limits to protect public health called **Permissible Exposure Levels (PEL)**.
- The **ESCR Team and Environmental Specialists** receive **real-time alerts** when Particulate Matter (PM) numbers approach an **Action Level**, which is set below the permissible exposure level.
- If it is determined that the construction is not meeting the standards set by oversight agencies, work will be halted and further assessed to assure protection to residents and park users.

The EPA has set a 24-hour time weighted average (TWA) as standard for evaluating the particle pollution levels, meaning that they average potential exposure to particulate matter over a 24-hour period.

The ESCR project evaluates air quality at 15-min TWA intervals, meaning we average exposures over 15-minute periods. This more conservative approach will help the ESCR team to monitor the project's effect on air quality more closely.

4. Environmental oversight is multi-tiered with checks & balances.



- **Agencies** provide regulatory guidance and approve the Contractors' environmental plans at the start of the contract.
- They make regular inspections to ensure compliance throughout construction.

- The **PMCM team** can stop the Contractors' work or withold payment if they determine that the contractors are not taking appropriate measures to limit particle pollution.
- The **Contractors** are responsible for the safety of their workers and the community surrounding the project site.

- The **PMCM's environmental specialist** is responsible for monitoring work in designated Areas of Concern from historic Manufactured Gas Plants (MGP).
- The **Contractors' environmental consultants** are responsible for monitoring particle pollution and alerting the project team (City, PMCM and Contractor) if particulate matter reaches the Action Level.

5. Air quality updates for the community.

The ESCR Team provides Air Quality Monitoring updates at **Community Advisory Group (CAG)** meetings and through the **ESCR Quarterly Air Quality Monitoring Reports** both found on the ESCR website.

Questions?

www.nyc.gov/escr
submit an inquiry:
www.nyc.gov/escr/contact

While the ESCR Team has been tasked to monitor Air Quality around our construction activities, be advised there are many other impacts effecting air quality in the City. Residents should follow all **Notify NYC** Advisories: **https://a858-nycnotify.nyc.gov/**