



MATRIX **NEW**WORLD

Engineering Progress

AIR QUALITY SERVICES

Matrix breathes compliance.

At Matrix New World Engineering (Matrix), we combine sampling and analysis, professional consulting, and engineering services to prevent and resolve concerns related to Air Quality Issues and the associated regulatory requirements. As these requirements increase in number and stringency, Matrix works with customers to strategize and implement compliance solutions using innovative approaches and advanced technology. Our air quality experience encompasses a broad base of services, including permitting at local, state, and federal levels (PSD, Title V, and NSR), strategy development, emissions sampling and analysis, dispersion model simulations, and control technology assessments.

Being at the forefront of a global response to climate change, Matrix partners with both public and private sector customers to ensure our solutions balance business and technical needs, and sustainability issues.

Key Project Experience

- Air Quality Dispersion Modeling
- Construction Monitoring
- Odor Dispersion Studies
- Vapor Intrusion Barriers
- Full-service Global Air Quality Practice
- Strategic Support to Trade Associations & Research Institutions
- Full Life-cycle Solutions for Any Project
- Air Permit Applications & Compliance Solutions

Services provided

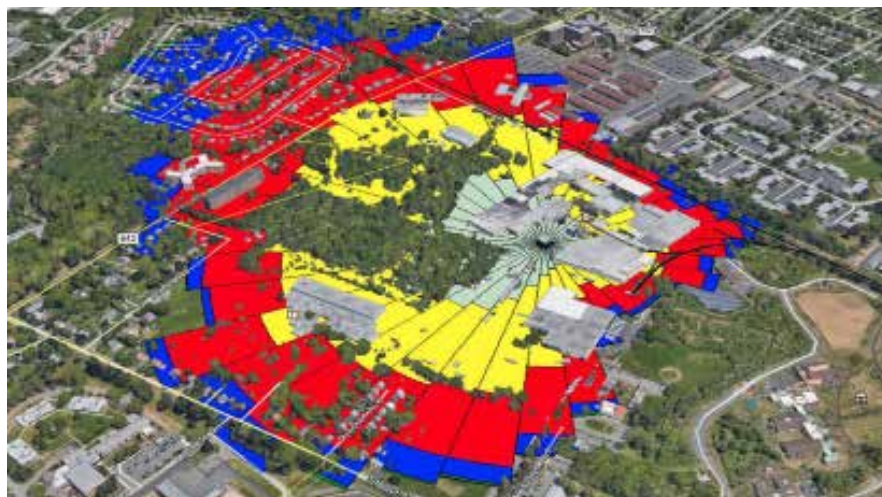
- Regulatory Strategy & Compliance Management
- Ambient & Perimeter Monitoring
- Emissions Testing & Compliance
- Air Quality Permitting
- Air Quality Compliance (Planning, Auditing, & Record-keeping Tools)
- Air Dispersion Modeling
- Odor Dispersion Studies, Modeling, & Control
- Risk Management Planning & Offsite Consequence Analysis
- Vapor Intrusion Modeling & Design of Mitigation Systems
- Vapor Intrusion Sampling
- Certification of Vapor Barrier Installations
- Health Risk Assessments
- Occupational Health & Safety, & Indoor Air Quality Management
- Operational Compliance & Risk Management
- Environmental Planning (air quality impact analysis)
- Pre & Post-Construction Assessment and Monitoring

Contact

Matrix New World Engineering

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matrixnewworld.com

Certified WBE/DBE



Full-Service Global Air Quality Practice

With decades of global experience, in air quality projects, Title V Compliance, and environmental permitting. Matrix air quality specialists are well-versed in:

- Ambient and perimeter air quality monitoring
- Air dispersion and consequence modeling
- Odor studies
- Soil vapor dispersion modeling
- Vapor intrusion barrier installation
- Noise vibration and bi-axial tilt monitoring
- Crack gauge installation and monitoring

Our scientists assist in the development and validation of air quality, models and our engineers design and implement cutting-edge emissions control strategies.

Strategic Support for Full Life-Cycle Solutions

Matrix works with clients from design phase, including permitting strategy advice, throughout the life of the operation to provide industry-leading, science-based technical solutions.

Air Permit Applications and Compliance Solutions

Matrix successfully negotiates permit applications to provide maximum operation flexibility and delivers compliance solutions that produce reasonable and cost-effective solutions, satisfying federal New Source Review (NSR) regulations, Title V regulations, and agency-specific programs. Using innovative software, our veteran engineers, scientists, and modelers provide the most thorough analysis possible.

Air Quality Dispersion Modeling

Our Matrix modeling staff has completed numerous Gaussian and Dense Gas dispersion modeling analyses for both criteria pollutants and toxic air contaminants using the EPA's guideline models (i.e. AERMOD, AERSCREEN, SCREEN, CALPUFF). Predicting the concentration level of each contaminant from emissions data, then determining the impact of that concentration, our experts work with you to select the most effective



strategies to reduce any predicted concentrations greater than applicable standards.

Construction Monitoring

Constructing buildings, roads and other infrastructure can substantially impact local air quality. Matrix monitors these activities to ensure that mitigation measures are effective in controlling dust emissions and noise levels, and to ensure minimal impacts on the surrounding environment of a project. Matrix provides:

- Pre and post-construction surveys – including vibration and bi-axial tilt monitoring with 3D Total Station scans.
- Vibration monitoring
- Crack monitoring

Odor Dispersion Studies

By sampling emissions and using dispersion models to quantify the impact in and around client projects, Matrix determines the required dilution ratio, and if required assists in the selection and/or design of odor control devices.

Vapor Intrusion Barriers

Matrix professionals are certified Geo-Seal® and Liquid Boot® Vapor Intrusion Barrier installation inspectors, preventing and resolving vapor intrusion issues either in pre and post-building construction.

Projects

- Camden and Greenville ship yard – Air emission inventory, facility-wide air permit for operations, air permit for mobile construction barge with a concrete mixing unit
- Ambrose Channel Dredging project for USACE – emission calculations and certification for NOx Monitoring
- Global Terminal Dredging and Pier Extension project for USACE – emission calculations and certification for NOx Monitoring
- Greenville ship yard SPCC (Spill Prevention Control and Countermeasure plan).
- 3600 Jerome Ave City Environmental Quality Review (CEQR)
- NYC Department of Homeless Service (DHS)-On-Call AE Design Services and Air Quality Assessment
- MTAPD District 9 Police Facility – Air Quality Assessment
- Cedar Bluff Plant (Sierra Frac Sand)
- Hood Plant (Southern Aggregates Plant 7)



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