

# Air Quality Services



## Experts with the right knowledge to facilitate educated decisions

GES provides professional consulting, engineering, and technical field services to resolve air quality issues and Clean Air Act (CAA) regulatory requirements. As these requirements increase in number and stringency, GES' air quality experts work with clients to strategize and implement solutions using innovative and strategic approaches.

GES offers a broad base of services, including permitting at local, state, and federal levels, Prevention of Significant Deterioration (PSD), Title V, and New Source Review (NSR). **We provide the knowledge and expertise needed to assist your asset management and project teams in determining the best path to obtain timely permits and approvals; prepare your staff for compliance audits; and represent your interests at agency meetings.**

Air quality project experience includes:

- Air permit applications and compliance solutions
- Air quality dispersion modeling
- Construction monitoring
- Emissions testing coordination
- Full life-cycle solutions for any project
- Odor dispersion studies
- Strategic support to trade associations and research institutions
- Vapor intrusion barrier design and certification

### Regulatory Advocacy and Sustainability.

For over 36 years, GES has built solid working relationships with state, county, local, and other regulatory bodies throughout the country, enabling us to advocate for our clients. Our air quality team remains at the forefront of climate change and sustainability. We have incorporated green remediation, waste reduction and minimization, and sustainability principles into our operations for over 20 years, and continue to develop project-specific solutions that balance our clients' business and technical objectives with environmental, social, and governance principles.

## Service Capabilities

- Ambient and perimeter monitoring
- Engineering support for Best Available Control Technology (BACT) and BACT for toxics (TBACT)
- Carbon accountability
- Compliance auditing and management
- Consequence analysis
- Construction monitoring
- Environmental justice impact evaluations
- Expert testimony
- Facility emissions inventory/annual emissions statement submittal
- Federal regulatory expertise
- Greenhouse gas/toxic release inventory monitoring & reporting
- Indoor air quality management
- Odor mitigation
- PFAS air emission assessment
- Regulatory strategy
- Risk management planning & off-site Section 114 responses
- Source testing/air monitoring
- Strategic permitting oversight
- Third-party compliance review
- Vapor barrier installation certification
- Vapor intrusion modeling & design of mitigation systems
- Vapor intrusion sampling
- Visual emission evaluator (VEE)





## National Full-Service Air Quality Practice

With decades of experience in air quality projects, Title V compliance, and environmental permitting, GES 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
- Visible emissions testing

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 Life-Cycle Solutions

GES works with clients from the conceptual 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

GES successfully negotiates permit applications to provide maximum operation flexibility and delivers compliance solutions that produce reasonable and cost-effective solutions that satisfy federal NSR and Title V regulations, and agency-specific programs. Using our years of experience, knowledge of regulations, software, and analytical tools, we view the problem from multiple angles to achieve the best outcome for our clients.

## Air Quality Dispersion Modeling

Our 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 the community, site workers, and nearby infrastructure. We combine air, odor, dust, noise, and vibration monitoring and mitigation to provide a holistic service to our clients to manage construction projects. GES also provides:

- Pre- and post-construction survey/monitoring services
- Noise vibration and bi-axial tilt monitoring
- Crack gauge installation and monitoring

## Emissions Testing

GES experts are certified Visible Emissions Evaluators (EPA Method 9). Method 9 focuses on opacity reading of plumes at 15-second intervals. Plume opacity emission standards and requirements are the mainstay of federal, state, and local enforcement efforts.

## Odor Dispersion Studies

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

## Vapor Intrusion Barriers

GES professionals are certified Liquid Boot® vapor intrusion barrier installation inspectors, preventing and resolving vapor intrusion issues occurring pre- or post-building construction.

### Contact Information:

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