

Air Quality Studies

GAI Consultants provides a broad range of environmental services related to air quality compliance, permitting, and studies. We play a crucial role for our clients in compliance with state and local air quality regulations and the federal Clean Air Act/Amendments (42 USC Chapter 85).

Federal, state, and local requirements are constantly evolving. GAI's experience working with a diverse base of industries—power generation, natural gas, manufacturing, chemical, and more—and our familiarity with environmental regulations, amendments, and permitting helps clients navigate the intricacies of the ever-changing regulatory environment.

Customized air quality consulting services means our clients get practical solutions for each and every project.

Regulatory Applicability Analysis

GAI provides the regulatory applicability and analysis services essential for the preparation of many permit types. Typically, a Potential to Emit (PTE) analysis is performed to determine what regulatory requirement(s) are applicable for a given facility, including:

- New Source Performance Standards (NSPS)
- National Emission Standards for Hazardous Air Pollutants (NESHAP)

- Prevention of Significant Deterioration (PSD)
- New Source Review (NSR)
- Maximum Achievable Control Technology (MACT)
- Reasonably Achievable Control Technology (RACT)
- Facility Aggregation Analysis

Air Permit Preparation, Guidance, Modification, Submission, and Negotiation

GAI works with clients to obtain the permits that meet their current air quality needs, future performance considerations, and required operational flexibility, including:

- General Permits (GPs)
- Title V (Major Source) Permits
- Minor and Major Modifications
- Federally Enforceable State Operating Permits (FESOP)
- State and Local Minor Source Air Permits
- Minor Source Operating Permit (MSOP)
- Request for Determinations (RFDs)
- Permit by Rule (PBR)
- Synthetic Minor Permits
- Administrative Amendments
- Renewals
- Minor and Major Modifications



gai consultants®

Service Profile

Emissions Inventories

GAI completes and prepares emission inventories for clients, as required, for submittal to local, state, and federal agencies. Emission inventories are integral to the compliance process, and often essential in validating that a client's facility is operating within its permitted parameters and air emission limits. Third-party review of the information is often critical to validate data prior to submittal to the applicable agencies. These reports can be prepared and submitted based on the frequency of a client's needs and permit requirements (annual, semi-annual, quarterly, or other as necessary).

Regulatory Review and Compliance Audits

GAI assists clients with review of compliance status with applicable regulations, whether on a voluntary "housekeeping" basis or in response to an agency request or notice of violation (NOV).

Our cost-effective approach involves examining the overall impact of regulations on a site or facility and determining what programs apply. We prepare comprehensive reports that include recommendations for obtaining and maintaining compliance.

Compliance Management

GAI assists clients with tracking when permits must be renewed, when performance and stack testing are required, with completing and submitting annual reports, and in making sure these tasks are completed in a timely manner. We work with each client to develop a customized program to meet their permit requirements and compliance goals.

**Contaminant Emissions and Dispersion Modeling**

Contaminant emission and dispersion modeling is used to predict the effects of exposure to sudden or long-term release scenarios. GAI identifies the need for emission-stack and mobile-source testing through our database of U.S. EPA air analysis reference methods and our Quality Management program for sampling and analysis.

Additional Specialized Services

- Greenhouse Gas Reporting Program (GHGRP)
- Greenhouse Gas (GHG) Risk Analysis
- GHG emissions inventory preparation, management, reduction planning, and reporting
- Continuous Emission Monitoring System (CEMS) assistance and agency coordination
- Facility Reactivation Assistance
- Facility emissions audit and air screening analyses
- Stack sampling and performance emissions testing management
- FERC Resource Report 9 Filings for Air Quality
- MOVES (Motor Vehicle Emissions Simulator) modeling

GAI Services Summary

- Airport Planning and Design
- Bridge and Structure Inspection and Design
- Coal Combustion Residuals Management
- Construction Inspection and Management
- Cultural Resources Management
- Economic Analyses and Strategies
- Electric Transmission Design and Siting
- Environmental Engineering
- Environmental Studies, Species Studies, Permitting
- Gas Pipeline Surveying and Mapping
- Geographic Information Systems (GIS)
- Geotechnical Engineering and Geology
- Impoundment and Landfill Permitting and Design
- Land Development Engineering
- Landscape Architecture and Design
- Master Planning and Urban Design
- Mechanical, Electrical, Structural Engineering
- Natural Gas FERC Certification and Permitting
- Nuclear Energy Engineering Support
- Right of Way and Appraisal Support
- Land Surveying and Mapping
- Transportation Planning and Design
- Utility Management Consulting
- Water, Stormwater, Wastewater Management

The scope of professional services that are provided by or offered out of each GAI office including, but not limited to, engineering and surveying services, is governed by the professional and business licensing requirements of each individual State or jurisdiction in which the GAI office is located and whether GAI has the requisite professional and business licenses for that State or jurisdiction. Nothing on GAI's Web Site or marketing materials is intended to be interpreted or construed as offering to perform professional licensed services where prohibited unless the licensing requirements have been met. Engineering services are not offered out of GAI's Northern Kentucky (Florence) office location. Surveying services are not offered out of GAI's Illinois location or by our New York subsidiary.

