Whether constructing a new industrial facility, expanding an existing facility, or modifying operations, owners and operators may be required to obtain an air quality permit. Industrial sources must be designed, constructed, and operated to comply with all applicable air quality regulations. Air quality regulations exist within a range of permitting programs, including state and local codes, and federal programs such as NewSource Review and the Title V operating permit program. Each permitting program has associated technical requirements such as emissions quantification, control technology evaluations, air quality analyses (including regulatory dispersion modeling), ambient air quality and meteorological monitoring, and compliance assurance.

Trinity Consultants can assist with all phases of the air permitting process. We have completed more than 5,000 permitting projects in the last 10 years. Our experience translates into accurate, timely permit applications that are strategically crafted for maximum flexibility, and expert negotiations with regulatory agencies that streamline the process.

**New Source Review**

The federal New Source Review (NSR) program requires that new and modified major sources undergo rigorous air quality analyses and receive a permit prior to beginning construction on physical changes or changes in the method of operation. The analyses must demonstrate the application of appropriate pollution control technology and maintenance of air quality standards. NSR is a constantly evolving program, at both the state and federal levels. To determine NSR applicability, Trinity identifies and characterizes emissions from the equipment that comprise the regulated source. Using this information, along with U.S. EPA attainment designations, Trinity performs a thorough regulatory review to determine applicability and requirements of Nonattainment New Source Review (NNSR), Prevention of Significant Deterioration (PSD) regulations, and state construction permitting requirements. Trinity then works with our client to develop a permitting strategy that will enable the project to proceed in a timely manner, while optimizing operational flexibility and minimizing costs.

**Nonattainment NSR (NNSR) Requirements**

New or modified major sources in areas designated as nonattainment with National Ambient Air Quality Standards (NAAQS) may be subject to NNSR. If potential emissions from a modification exceed threshold quantities and the facility is a major source of emissions, Trinity’s technical staff will conduct an emissions netting analysis. Emissions netting considers previous emissions changes (within a defined period) at an existing major source to determine if the proposed modification can avoid classification as a major modification. If NNSR is triggered, then the facility will be required to install Lowest Achievable Emission Rate (LAER) technology. LAER is defined as the most stringent emission limitation contained in any State Implementation Plan (SIP) or the most stringent limitation achieved in practice, whichever is lower. Under certain limited circumstances, however, the Best Available Control Technology (BACT), which is less stringent, may meet the requirements for LAER.

Other NNSR requirements include locating and purchasing emissions offsets from other permitted sources that have certified emissions reduction credits, as well as demonstrating that the project cannot reasonably be completed in another area of the country. In addition to assisting with permitting requirements, Trinity also assists our clients with identifying and negotiating the purchase of offsets.

Prevention of Significant Deterioration (PSD) new or modified major sources located in areas designated as attainment for NAAQS are subject to PSD review if net emissions exceed certain threshold quantities.
Like NNSR, PSD regulations allow major sources to "net" out of PSD review. PSD review involves extensive air dispersion modeling that addresses issues such as complex terrain, direction-specific building downwash, and visibility impairment and regional haze impacts in Class I areas.

Obtaining a PSD permit in a timely, cost-efficient manner requires a thorough understanding of the entire PSD program. Trinity reviews each project for PSD applicability and consults with our client to develop viable options for avoiding PSD review. If PSD review cannot be avoided, our extensive experience with the PSD program can help save thousands of dollars in permitting costs and opportunity costs due to delays in the start of construction for new or modified facilities.

**Operating Permits**

Title V of the 1990 Clean Air Act Amendments required states to develop a federally enforceable operating permit program for significant sources of air emissions, as defined by certain annual threshold levels. Subject sources are required to submit permit renewal applications once every five years to update regulatory applicability and incorporate changes at the facility. In addition to renewal applications, facilities may be required to submit Title V permit modification applications if they undertake new construction, make changes in source operations, or become subject to new or existing regulations (e.g., NESHAP).

The Title V program shifted the burden of demonstrating compliance from the regulatory agency to the facility. Compliance demonstration and certification may be a significant undertaking depending on company processes, regulatory requirements, and the efficiency of record-keeping and reporting methodologies. Trinity Consultants has prepared more than 850 initial Title V operating permit applications, permit renewal applications, and permit modification applications in all ten EPA regions. Trinity assists clients in developing Title V permit applications that increase operational flexibility while reducing monitoring, recordkeeping, and reporting requirements. Our experience in preparing permit modification applications across the country allows Trinity to bring unique state-specific insight to each project and develop the most beneficial strategies based on client needs.

**Client Services to Streamline Air Permitting**

- Regulatory applicability analyses
- Permit strategy development
- Emissions quantification
- Emissions netting analyses
- Air dispersion modeling analyses
- Permit application development
- Compliance management tools
- Compliance certification assistance
- Control technology evaluations
- Emissions trading assistance

Trinity and its environmental information management team, T3, apply combined expertise in environmental regulatory analysis, industrial processes, and information technology to develop innovative approaches to managing environmental data. Our goal is to enable our clients to increase their level of compliance assurance through the development, assignment, and tracking of discrete tasks, implementation of management systems, and creation of automated reporting.

Trinity built its reputation for excellence on air quality expertise. Air permitting remains the cornerstone of our business, and our staff of air quality experts is one of the largest in the country. Our focus on air quality and commitment to ISO 9000 has resulted in a process that is fine-tuned to complete projects on time, accurately, and within budget.

Call us today to learn how Trinity can assist with your air permitting requirements.