## Adam P. DiAntonio

Principal Consultant, Engineering

Adam is a Principal Consultant at ERM based in Malvern, Pennsylvania. His experience includes a wide range of air compliance, permitting, and climate change projects, particularly with facilities located in Pennsylvania. Adam has experience with NSPS, NESHAP, PSD, NSR, and NANSR Regulations including applicability determinations. His experience includes Title V and state-only air quality permitting including GHG and criteria pollutant BACT analyses, LAER analysis, RACT analysis, and emission source test planning and results evaluation. Adam has provided air emission analysis, including GHG Scopes 1, 2, & 3, to determine applicability and conducted compliance audits for a wide range of industrial facilities and sources. Additionally, he has conducted design evaluations of multiple control devices including condensers, cryogenic condensers, thermal oxidizers, scrubbers, baghouses, and cartridge filters.



**Experience**: 10 years' experience in Air Quality Compliance

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#### LinkedIn: www.linkedin.com/in/adam-diantonio

#### Education

 B.S. Chemical Engineering, Pennsylvania State University, May 2012

#### **Professional Affiliations and Registrations**

- American Institute of Chemical Engineers
- Air and Waste Management Association

#### Languages

English, native speaker

#### **Fields of Competence**

- Pennsylvania Air Quality Permitting and Compliance
- Air Quality Permitting
- Clean Air Act (PSD and NANSR) Permitting
- RACT, BACT and LAER analyses
- Title V Permitting
- Regulatory Analysis
- Litigation Support
- Air Program Compliance Auditing
- Leak Detection and Repair (LDAR) Monitoring/Auditing
- Greenhouse Gas Emissions Estimating and Reporting
- Climate Change Advisory
- Engineering Design Evaluations
- Process Emissions Analysis
- Compliance Program Development

#### **Key Industry Sectors**

- Manufacturing
- Oil & Gas
- Chemical
- Pharmaceutical
- Power



## **Key Projects**

# GHG BACT Analysis- Pennsylvania and Other States

Developed GHG BACT analysis for major power, downstream oil and gas, and chemical facility projects.

## **GHG Program Development**

Developed corporate GHG reporting operating procedures, documentation, Scope 1 and 2 emissions estimates, and GHG emissions database and estimation tools.

## **GHG Goal Setting and Planning**

Developed baseline GHG estimates to support corporate climate goal setting and reduction commitments. Lead the development of an evaluation of potential mitigation projects to assess the feasibility of potential reduction goals. Evaluation included technical and financial considerations.

## **Emissions Calculations**

Compiled emissions calculations and submittal under 40 CFR 98, Subpart W, and Subpart C for natural gas producers.

# Emissions Reporting- Pennsylvania and Other States

Managed emissions calculations and submittal under multiple state emissions inventory systems and EPA's EGGRT system for multiple source categories and industries including chemical and manufacturing facilities, downstream O&G, Marcellus Shale unconventional gas operations in the upstream and midstream sectors.

## **Emission Reduction Projects**

Aided in the development of a comprehensive marginal abatement cost curve and break-even carbon pricing tool for comparison of the costs and benefits of emission reduction projects for a major global financial institution.

## Legal Support

Provided litigation support for oil & gas, chemical, power, and pharmaceutical production sites.

# NSR PSD Applicability- Pennsylvania and Other States

Managed and conducted NSR/PSD applicability determinations for several facilities in a variety of sectors, with effort including netting analyses, BACT/LAER determinations and all facets of air quality permitting.

## **Petrochemical Production Facility**

Developed top-down BACT/LAER analysis and determinations for a major petrochemical production facility. Project included detailed analysis of RBLC database, recent determinations for multiple similar facilities, and technology reviews for both criteria pollutants and GHGs.

#### **New Owner Audits**

Supported air-focused compliance audits for multiple oil & gas, chemical, and power facilities as part of the ownership transition due-diligence and/or new owner evaluations.

#### Compliance

Assisted multiple pharmaceutical production sites with 40 CFR 63 Subpart GGG, Pharmaceutical MACT compliance including Initial Notification, Precompliance report, Notice of Compliance Status Report (NOCSR), and associated test protocols and evaluations.

# Air Permit Applications- Pennsylvania and Other States

Managed and aided the development multiple air permit applications for refineries, power plants, manufacturing, midstream, upstream, and petrochemical facilities. Project permitting involves working closely with process, planning, and design engineers. Successfully obtained PSD and Nonattainment NSR permits.

#### **MACT Applicability**

Conducted an air-focused compliance audit, which identified NESHAPS issues at a chemical manufacturing site. Aided in the development of compliance program for chemical manufacturing area source (CMAS) rule.

#### **Pipeline Air Permit Project**

Aided in the development of multiple air permit applications for pipeline projects spanning the east coast of the US. Applications included top-down BACT/LAER analysis and determinations.

#### Power Programmatic Air Compliance-Pennsylvania and Other States

Managed a comprehensive air compliance program for fleet of electric generating stations across the Mid-Atlantic region. Tasks completed included compliance reports, emission statements, permit applications and renewals, regulatory evaluations, permit modifications, and day to day compliance support.

# Design Evaluations- Pennsylvania and Other States

Conducted design evaluations of multiple control devices including condensers, cryogenic condensers, thermal oxidizers, scrubbers, baghouses, and cartridge filters.

#### **Title V Operating Permit- Pennsylvania**

Developed and successfully obtained a Title V operating for a chemical manufacturing area source subject to MACT standards.

#### PADEP Regulator Interaction

Frequent interaction with PADEP regulators including Title V permit development and term negotiations, PSD/NSR and MACT program applicability assessments, NOx RACT analyses, and SOOP/Title V permit compliance and deviation reporting.

# Air Quality Monitoring- Pennsylvania and Other States

Conducted ambient air quality monitoring projects including SO<sub>2</sub>, PM10, PM2.5, NH<sub>3</sub>, passive benzene, & SUMMA canister sampling.

# Air Quality Permitting- Pennsylvania and Other States

Plan approvals, Title V permitting, General Operating permits, regulatory analysis for multiple sites/industries.

#### **RACT Applications- Pennsylvania**

Managed the preparation of RACT update applications for downstream oil and gas (refinery), steel manufacturing, and power generation facilities.

#### **Air Emissions Models**

Developed detailed air emissions models for multiple chemical production, storage, and control processes, including both batch and continuous processes, using Emission Master® software.

#### PADEP RFD Certifications- Pennsylvania

Prepared PADEP RFD certifications for various facilities including R&D activities, chemical processes, storage operations, pipeline operations, manufacturing processes, mixing operations, unloading operations, and electric generator projects.

#### LDAR Program Audits

Participated and served as project manager for thirdparty LDAR program audits at more than a dozen refineries, pharmaceutical, and chemical plants. Evaluated field tagging issues, conducted comparative monitoring using EPA Method 21, observed facilities' technicians for proper EPA Method 21 compliance, reviewed recordkeeping, data management, and leaking component repair completion issues.