MATTHEW J. CROWLEY, E.I.

Staff Engineer- Raleigh, NC

Mr. Crowley has experience with air monitoring, sampling, and field testing. He also has experience in NMOC reporting, Title V annual reporting, Title V permitting, and greenhouse gas monitoring and reporting.

Academic Credentials:

B.S. Materials Science & Engineering, 2017
Virginia Tech, Blacksburg, VA

M.E. Engineering, 2020
North Carolina State University, Raleigh, NC

Professional Credentials and Certifications:

OSHA 30 Hour General Industry Certification
ACI Level 1 Certified Concrete Technician

Employment Record:

2019 - Present - Smith Gardner, Inc.
2017 - 2019 - Engineered Tower Solutions

Areas of Expertise:

Air Quality Sampling and Data Collection
Environmental Data Analysis
Title V NSPS Annual Reporting
Anaerobic Digestion of Organic Waste
Manure-to-Biogas Feasibility

Mr. Crowley majored in Material Science and minored in Green Engineering while attending Virginia Tech. His areas of focus were composite material performance and corrosion properties of metals. In 2015 he interned for the Navy where he conducted corrosion resistance tests on a variety of potential coatings to be used on the Naval FA-18 fleet.

At Virginia Tech while in the Green Engineering Program he studied Life Cycle Analysis of material production - cradle to grave impacts; compared the LCA of modern army helmets UHMWPE outer shell with a kevlar/carbon fiber form to older models; and studied the basics of different types of renewable energy generation.

While at Engineered Tower Solutions, Mr Crowley would be dispatched to various sites to verify the structural adequacy of tower modifications via hands on inspection. Other functions included creating engineering drawings of antenna mount loading for clients considering upgrades, and performing concrete/rebar inspections for new towers before erection.

Mr. Crowley is received his Master's degree in Engineering from North Carolina State University. While studying energy systems analysis, he covered emissions of various forms of energy production, impacts of policy/regulations, energy generation, impacts on air quality, the relationship between primary energy and the climate, and determining the consequences of China's waste ban as it pertains to plastic recycling in the U.S.

Mr. Crowley is experienced in environmental data monitoring, collection, and analysis, field testing and sampling, and compliance reporting. He is well versed in North Carolina air quality monitoring parameters and collection protocols.

Mr. Crowley's current work revolves around environmental monitoring and compliance of air quality at open and closed landfill facilities. In addition to environmental fieldwork, Mr. Crowley assists in analyzing data and preparing reports for a variety of different projects and the preparation and submittal of Title V permit renewal applications.