

SARAH RAVER PROJECT ENGINEER

CREDENTIALS	B.S. Chemical Engineering with Spanish Minor, The Pennsylvania State University, 2022
PROFESSIONAL EXPERIENCE	 July 2023 – Present: Project Engineer, ALL4 June 2022 – July 2023: Staff Engineer, ALL4 May 2021 – August 2021: Pilot Plant Intern, Avery Dennison August 2020 – February 2021: Undergraduate Research Assistant, Penn State Dept. of Nuclear Engineering June 2020 – August 2020: Westinghouse Research Fellow, Penn State Dept. of Nuclear Engineering

TECHNICAL EXPERTISE

- Emissions Inventory Calculations
- ✓ Air Emissions Statements
- and Compliance
- ✓ Emission Master Air Emissions Modeling
- ✓ TRI Reporting
- ✓ Tier II Reporting
- ✓ Pennsylvania Title V and State-Only Permitting ✓ Pennsylvania Annual and Biennial Residual and Hazardous Waste Reporting
 - ✓ Scope 1-3 GHG Emissions Inventories

PROFESSIONAL OVERVIEW

Sarah Raver began her career as a Staff Engineer with ALL4 after obtaining a B.S. in Chemical Engineering from Penn State University in May 2022. Sarah was promoted to Project Engineer in July 2023.

Sarah has supported many projects at ALL4 in various environmental media and industries. She has worked with clients to develop emissions inventories, tracking tools, permit applications, TRI and Tier II inventories, and periodic reporting for state and federal requirements. Some of the industries Sarah has supported include:

- Hospital, Medical, and Infectious Waste Incinerators
- Municipal Solid Waste Landfills
- Secondary Aluminum Processing
- Food and Beverage Manufacturing
- Battery Manufacturing
- Chemical Manufacturing (e.g., Pharmaceuticals, Refineries, etc.)
- Oil and Gas Production

Sarah's professional background began in 2020, when she participated in the Westinghouse Fellowship Program. Through this program, she conducted research with Penn State Nuclear Engineering faculty and graduate students. Sarah studied material properties and structure for use in medical radioisotope production. Sarah continued to work under the same Principal Investigator for six months following the fellowship. During this time, she studied extraction methods for medical radioisotopes and created a prototype microfluidics device for separation processes. In 2021, Sarah served as the Pilot Plant Intern at Avery Dennison's manufacturing and research and development facility in Mill Hall, PA. Through this role, Sarah developed standard operating procedures for a new pilot reactor and investigated several safety and industrial hygiene improvements, including hazardous waste storage and process monitoring equipment.