

# **DANIEL BRESE**CONSULTING SCIENTIST

#### **CREDENTIALS**

- M.S., Biology (Ecology concentration), University of New Mexico, 2010
- B.S. Biology, Bennington College, 2005
- ♦ AERMOD Training (2016)
- ◆ GLP (Good Laboratory Practices) Training, 2018
- ♦ OSHA HAZWOPER 40-Hour Certification (2020)

## **PROFESSIONAL** EXPERIENCE

- October 2021-Present: ALL4 Inc., Kimberton, PA Consulting Scientist
- April 2018-October 2020: Stone Environmental, Inc. Staff Scientist III
- May 2015-April 2018: RSG, Inc. Analyst
- February 2011-May 2015: State of Vermont Air Quality Technician

### **TECHNICAL** EXPERTISE

- ✓ New/modified source air permitting;
- Ambient pollutant and meteorological monitoring design, system installations, equipment calibrations, data quality assurance, and maintenance;
- ✓ Geographic Information System (GIS) software used to support air quality modeling studies;
- ✓ Federal and state air quality regulations including NSR, PSD, MACT, NSPS, NESHAP, and RMP;
- ✓ State level air toxics evaluations including New Hampshire Env-A 1400, Vermont HMSER; and New York Part 212;
- ✓ Vermont Act 250 Permitting.
- ✓ R, Python, VBA, and CRBasic programming languages for data analysis and managment;
- ✓ Database design and management;

- Air quality dispersion modeling studies to support PSD, air toxics, and other air quality related permitting programs which include the use of the AERMOD and CALPUFF modeling systems;
- Mobile source emissions estimation with MOVES and dispersion modeling with AERMOD;
- ✓ Ambient pollutant and meteorological quality assurance project plan (QAPP) development;
- ✓ Pollution Control Technology Assessments including BACT/LAER and Vermont HMSER;
- ✓ Accidental release modeling using ALOHA;
- Agrochemical fate and exposure monitoring in air, water, soils, and off-target plants.

### **PROFESSIONAL** OVERVIEW

Mr. Daniel Brese possesses over 10 years of experience focusing on air emissions permitting, air dispersion modeling, air pollution control technology assessments, and ambient air monitoring. Mr. Brese has worked with a variety of clients in the biotech, agrochemical, institutional (education, public health, and hospitality), renewable energy, forest products, manufacturing, and transportation sectors across the United States.

Mr. Brese has conducted the design, installation, calibration, and data quality assurance of ambient pollutant and meteorological monitoring systems. He has designed remote data acquisitions systems using both radio telemetry and wireless cellular networks and created custom software applications for the automation of data analysis and management. In addition, he has assisted with the installation and operation of State and Local Monitoring Systems (SLAMS) to assess the National Ambient Air Quality Standards (NAAQS).