# MARK A. CARLYLE

### Education

A.A.S. Refrigeration & Appliance Service – Dunwoody Institute (1981)

A.A.S. HVAC Design – Dunwoody Institute (1986)

B.A.S. Applied Engineering, Bemidji State University...re-started in Fall of 2022

#### Specialty Education/Certifications

EPA Section 608 Technician Certification – Universal (1996)

University of Minnesota – HVACR Licensure Classes (1996)

- a. Introduction to Vocational Technical Training
- b. Course Development
- c. Student Trainee Evaluation
- d. Instructional Methods
- e. Philosophy for Practical Vocational Education
- f. Human Relations Workshop

University of Wisconsin – Madison, WI (2003-2004)

- a. Intermediate Ammonia Refrigeration Systems
- b. Ammonia Refrigeration System Design
- c. Design of Ammonia Refrigeration for Performance & Efficiency
- d. Process Hazard Analysis (emphasis on ammonia refrigeration systems)
- e. Principle & Practices of Project Management for Engineers

Refrigerating Engineers and Technicians Association (RETA) Train the Trainer Course (2016)

Ammonia Safety Training Institute (ASTI) 32-Hour Ammonia Safety Responder Training (2018)

FEMA ICS-100 Incident Command System Certification (2021)

Refrigerating Engineers and Technicians Association (RETA) Authorized Instructor (RAI) (2022)

#### **Professional Affiliations**

Refrigerating Engineers and Technicians (RETA) – 2006-present

International Institute of Ammonia Refrigeration (IIAR) – 2006-present

IIAR National Education Committee – 2016 -present

RETA National Education Committee – 2014-present

## **Professional Experience**

Mr. Carlyle is a Project Manager within the Risk Management group at SCS Tracer Environmental. His primary responsibility is to assist ammonia facilities that request the factory-authorized Cool Air Incorporated detector and/or other manufacturer's (i.e. ATI, CTI, Honeywell/Manning) calibration &/or service, manages our on-going training initiatives (Industrial Refrigeration 1,2, & 3, PSM/RMP training; customer requested custom/refresher training either on-site or online, & 8-Hr./24-Hr. HAZWOPER classes), assists with the SCS Tracer marketing, and assists other SCS Tracer staff with PSM/RMP compliance items, as needed. Also, as a RETA Authorized Instructor (RAI), Mr. Carlyle assists with the development/instruction for our Industrial Refrigeration classes. He has also been instrumental with development/instruction of our HAZWOPER classes, using the ASTI materials and PowerPoints, and obtained his FEMA ICS-100 certification for credentials.

Prior to joining the SCS Tracer Environmental team, Mr. Carlyle, was employed as the Sales Engineer for Cool Air Incorporated from 2006-2016. He began his career while attending Dunwoody Institute both as a refrigeration/electrical assembler for a local heat pump manufacturer & as a teacher's assistance at Dunwoody. After successfully graduating from Dunwoody, Mr. Carlyle spent the next 4years working for a refrigeration contractor, Louie's Refrigeration, in central Wisconsin. The work for the contractor included, but was not limited to, installation and service mechanic on a wide variety of residential, commercial, and industrial refrigeration equipment and/or systems. In 1985, Mr. Carlyle returned to Dunwoody to pursue his HVACR design diploma. Again, after successfully graduating from Dunwoody, he spent the next 10-years working for an equipment OEM (Mammoth) as a refrigeration/electrical assembler, service engineer, and R&D engineer. In 1995. Mr. Carlyle again returned to Dunwoody, this time as the 2<sup>nd</sup> year commercial/industrial HVACR instructor. In 2000, Mr. Carlyle decided to broaden his experience by working for a controls OEM (Johnson Controls) as a facility manager, service project manager, service supervisor, and installation project manager. In 2003, Mr. Carlyle was employed to perform ammonia sales for a large, commercial/industrial HVACR mechanical contractor (Cool Air Mechanical) in the Minneapolis/St. Paul and surrounding areas. The last 10-years working for this contractor, Mr. Carlyle oversaw all aspects of their ammonia detector company, Cool Air Incorporated. All in all, Mr. Carlyle has 43-years of heating, ventilating, airconditioning, & refrigeration experience, including 30-years of ammonia experience, as an installer, service mechanic, instructor, project manager, and sales engineer. Within the last 17-years, he has been actively involved with the RETA & IIAR conventions, RETA & ASTI safety days across the country, and only the first 5-years or so with IARW. For the past 7-years, he has served on the National Education Committee for IIAR and 9-years on the National Education Committee for RETA. In 2022, Mr. Carlyle assisted with the review/editing of the RETA Industrial Refrigeration 3 book and became a RETA Authorized Instructor (RAI).

## **Publications and Presentations**

Carlyle, Mark, "NH3 Leak Detectors & PSM", published in the RETA Breeze, January/February 2017.

Carlyle, Mark, "Do I (We) Have Enough of the Right Training", Presented at the 2017 RETA National Conference in Hershey, PA and published in the RETA Breeze, March/April 2018.