

# COCCIARDI and Associates, Inc.

Risk & Safety Management • Environmental Health  
Emergency Preparedness • Safety Engineering  
Consulting and Training

## PROFESSIONAL PROFILE

### **GREGORY CAMERON PROJECT MANAGER – ENGINEERING**

#### **EDUCATION:**

Bachelor of Science in Engineering (2012)  
Chemical and Biomolecular Engineering  
University of Pennsylvania, Philadelphia, Pennsylvania

#### **PROFESSIONAL PROFILE:**

Mr. Cameron provides technical services in the area of occupational and environmental safety and health, air quality, and toxic materials control. His duties include screening and implementing requirements of local, state, and federal safety, health, and environmental regulations, including the Pennsylvania Department of Environmental Protection, New Jersey Department of Environmental Protection, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Department of Transportation, and U.S. Department of Labor, Occupational Safety and Health Administration. Mr. Cameron has consulted in Process Safety Management (PSM) for Highly Hazardous Chemicals/Risk Management Plan (RMP) compliance activities at petrochemical facilities throughout the country. He previously worked as a research assistant where he experimented with computer aided molecular structure design utilizing group contribution methods and performed process economic analyses.

#### **CERTIFICATIONS:**

- Certified Hazardous Waste Operations and Emergency Response
- Process Safety Management Program – 29 CFR Part 1910.119(g); Risk Management Plan – 40 CFR Part 68 Process Hazard Analysis – 29 CFR Part 1910.119(e)/40 CFR Part 68.67
- Process Safety Management Program and Risk Management Plan Compliance Auditing

#### **PUBLICATIONS AND ARTICLES:**

- Cameron, Gregory; *Commercial-Scale Biodiesel Production from Algae*, published in Industrial & Engineering Chemistry Research Vol. 53, April 2014.

#### **SELECT PROJECT EXPERIENCE:**

Project: Process Safety Management (PSM)/Risk Management Plan (RMP) Compliance

Description: Completed various compliance activities at petroleum distribution and chemical facilities throughout the U.S., in accordance with OSHA's PSM for Highly Hazardous Chemicals and the EPA's RMP regulations. His responsibilities include facilitating and documenting Process Hazard Analysis (PHA) studies, creating and evaluating Process Safety Management programs, and conducting required three-year compliance audits.

**SELECT PROJECT EXPERIENCE CONTINUED:**

- Project: Emission and Incident Modelling for Chemical Facilities
- Description: Modelled the effects of potential toxic chemical releases, fires and explosions from chemical processes. Predicted radiation, overpressure and toxicity using the BLEVE model, Baker-Strehlow model, SLAB and AFTOX for regulation and permitting purposes at multiple sites throughout the United States.
- Project: Fire Safety Analyses for Petrochemical Facilities
- Description: Completed Fire Safety Analyses (FSA) for multiple LP-Gas facilities throughout the country. Prepared FSAs in accordance with the Fire Safety Analysis Manual for LP-Gas Storage Facilities and NFPA 58. Conducted interviews with local Fire Departments and associated water departments to obtain data required for the analysis. Visited sites to collect site specific data for analyses.
- Project: Evaluation of Engineering Drawings for Petrochemical Facility
- Description: Evaluated and proof-read revised piping and instrumentation drawings for refinery processes for changes that had been made relative to the original, issued for review drawings. Prepared red-lined drawings and Management of Change Logs detailing the specific changes. Interviewed engineering and site personnel to obtain clarification.
- Project: Fire Action Plan for Petrochemical Facility
- Description: Developed Fire Action Plan for LP-gas and petroleum storage facility. Modeled various fire and non-ignited release scenarios to assess impact on onsite and offsite receptors. Calculated cooling water and foam requirements in compliance with National Fire Protection Association Code No. 11 - Standard for Low, Medium, and High Expansion Foam. Gathered data onsite and conducted interviews with key personnel. Assisted in the creation and coordination of shared fire protection assets coalition between petroleum sites and fire departments.
- Project: Facility Siting with Quantitative Risk Analysis for Petrochemical Facility
- Description: Conducted Facility Siting Study with Quantitative Risk Analysis to numerically evaluate and overall risk posed to a petrochemical storage and distribution facility by the activation of a liquefied petroleum gas handling process. Modeled various loss of containment events to determine the potential impacts to on-site receptors and occupancies in terms of radiation and overpressure. Evaluated overall hazardous event probabilities by applying methods described in the CCPS Guidelines for Chemical Process Quantitative Risk Analysis including Event Tree Analysis and incorporating accumulated industry failure data and local weather patterns.

Project: Process Safety Management (PSM)/Risk Management (RMP) Compliance Audits

Description: Conducted compliance audits for petroleum distribution and chemical facilities throughout the U.S. in accordance with OSHA's Process Safety Management Program for Highly Hazardous Chemicals and the EPA's Risk Management Plan regulations. Specific expertise in the additional requirements of New Jersey Department of Environmental Protection Toxic Catastrophe Protection Act. Audits included an evaluation of the 14 elements of the PSM/RMP program in terms of implementation, effectiveness, and completeness. Techniques employed included thorough documentation review and analysis via statistical sampling methods, field walk-downs/inspections, and operator and program implementer interviews.