

Stephanie M. Smith, PE

PROFESSIONAL HISTORY:

Risk Management Professionals, Inc., Irvine, California, Project Engineer, 2013-Present.

AMEC Environment and Infrastructure, Inc., Irvine, California, Staff Engineer, 2008-2013.

Geomatrix Consultants, Inc., Newport Beach, California, Staff Engineer, 2006-2008.

Risk Management Professionals, Inc., Mission Viejo, California, Engineering Technical Specialist, 1995-2006.

EDUCATION:

Environmental Engineering, Master of Science, University of Southern California, Los Angeles, California.

Environmental Engineering, Bachelor of Science, California Polytechnic State University, San Luis Obispo, California.

CERTIFICATIONS:

California Professional Engineer – Civil.

ANSI/IIAR 2-2014 Certificate.

TRAINING:

HAZWOPER; 2017.

Refinery Safety Overview Training, 2016.

First Aid, CPR, and AED; 2017.

ASSOCIATIONS:

International Institute of Ammonia Refrigeration (IIAR), individual member.

Refrigerating Engineers and Technicians Association (RETA), corporate member.

Ms. Stephanie Smith, PE graduated from California Polytechnic State University with a Bachelor of Science



degree in Environmental Engineering and the University of Southern California with a Master of Science degree in Environmental Engineering. Ms. Smith specializes in process safety engineering and civil/environmental engineering. She is currently licensed in the State of California as a Civil Engineer.

Her process safety experience includes performing updates and providing guidance on the California Accidental Release Prevention (CalARP) and the United States Environmental Protection Agency's (USEPA's) Risk Management Plan (RMP) Programs; performing updates and providing guidance on the Occupational Safety and Health Administration's (OSHA's) Process Safety Management (PSM) Program; knowledge and providing services in other safety programs (i.e., confined space, fall protection, and Hazardous Waste Operations and Emergency Response [HAZWOPER]); providing training on CalARP, RMP, and/or PSM Programs; conducting Triennial Compliance Audits; and conducting Process Hazard Analyses (PHAs)/Hazard Reviews (HRs).

Her civil and environmental engineering experience includes Spill Prevention, Control and Countermeasure (SPCC) Plans, Urban Water Management Plans (UWMPs), soil vapor extraction (SVE) system design and testing, and management of operations and maintenance (O&M) activities, underground storage tank site investigations, various methods of well

COMMITTEE INVOLVEMENT:

RETA Los Angeles Chapter Board Member; 2015-2017.

IIAR National Marketing Committee Member; 2017.

TECHNICAL PAPERS AND PRESENTATIONS:

“Common Deficiencies of CalARP/RMP/PSM Programs and Agency Enforcement Actions” presented at the RETA National Conference, October 2016.

Ongoing webinars for Risk Management Professionals’ education series.

construction and destruction, inclinometer monitoring for slide stabilization projects, management of a groundwater dewatering system, and Phase I Assessment involvement.

Ms. Smith is an active member of the Refrigerating Engineers and Technicians Association (RETA) through Risk Management Professionals’ corporate membership and an active, individual member of the International Institute of Ammonia Refrigeration (IIAR). She has also served on the RETA Los Angeles Chapter Board since 2015 and is currently involved in the IIAR National Marketing Committee.

In addition to her involvement in the local RETA Chapter, she presented a paper at the RETA National Conference in October 2016 on the common deficiencies found in the CalARP/RMP/PSM Programs.

PROJECT EXPERIENCE

CalARP/RMP/PSM Programs

Ms. Smith’s efforts in CalARP/RMP/PSM Programs extend to a broad range of industries, including ammonia refrigeration, produce/agriculture, pharmaceuticals, dairy production, cogeneration/energy facilities, metals finishing and public agencies. Her CalARP/RMP/PSM program experience extends from Hazard Assessments/Off-Site Consequence Analyses (OCAs) conducted at all program levels to complete program developments and managing of projects. A selection of more recent and/or more robust projects are detailed below.

- *Cogeneration Facilities, Various Locations, CA* – Provided supervisory services for the development of CalARP/RMP/PSM Programs for multiple facilities. Scope of work included engineering supervision of entire program development, review of developed documentation, project management, and facilitation of the Hazard Reviews required for newly-developed facilities.
- *Metals Finishing/Electroplating Facilities, Various Locations, CA* – Provided services related to the CalARP/RMP/PSM Programs, including Hazard Assessments/OCAs and regulatory submittals, to various facilities in California. Scope of work included dispersion

modeling, development of documentation, review of documentation, and project management.

- *Planning Commission, City of Fontana, CA* – Developed a Hazard Assessment for the Planning Commission to approve the construction of warehouse buildings for use as a precious metals refining/recycling facility utilizing nitric acid, sulfuric acid, hydrofluoric acid, and sodium cyanide. Scope of work included determining the relevant quantities of chemicals on-site, dispersion modeling, and overall management of the project.
- *Dairy Production Facility, City of Industry, CA* – Responsible for managing project tasks for the development of a new ammonia refrigeration CalARP/RMP/PSM Program Level 2 Compliance Workbook for the facility while under construction.
- *Pharmaceutical Company, Torrance, CA* – Responsible for managing project tasks for the development of a new CalARP/RMP/PSM Program Level 2 Compliance Workbook for the facility, which utilizes piperidene and hydrofluoric acid.
- *Produce Packaging/Storage Companies, Various Locations, CA* – Responsible for managing project tasks for the development and revisions to CalARP/RMP/PSM Program Level 2 and Level 3 Compliance Workbooks. Providing general consulting services for the general safety and compliance needs for the facilities.
- *Sanitation Districts, Whittier, CA* – Responsible for managing the five-year CalARP/RMP/PSM update for the two facilities (Program 2 and Program 3 processes) owned by the sanitary districts that utilize chlorine, sulfur dioxide, and aqueous ammonia. Efforts included coordinating and managing entire project, dispersion modeling and OCA for reporting, and general updates to the entire program.
- *Generating Station, Hermiston, OR* – Responsible for completing the five-year CalARP/RMP/PSM update for a Program 2 facility utilizing aqueous ammonia. Efforts included dispersion modeling for the OCA, submission of documentation to the USEPA, and management of any efforts related to the project.
- *Ice Cream Manufacturing Plants, Various Locations, CA* – Responsible for assessing client's process safety needs and providing guidance; conducting 5-Year Updates and CalARP/RMP/PSM Program developments, including:
 - submittals, for CalARP/RMP documentation;
 - updating and developing CalARP/RMP/PSM documentation per regulations;
 - assisting with Triennial Compliance Audits;
 - providing training on CalARP/RMP/PSM programs as pertinent to the facility; and
 - providing support for high pressure receiver replacement.

- *Fertilizer Company, Various Locations, CA* – Responsible for updating documentation for several Program 1 and Program 3 facilities throughout California and Washington (including Hazard Assessment updates, CalARP/RMP submittals, and various program support). The chemicals utilized at the facilities included anhydrous and aqueous ammonia.

Process Hazard Analyses (PHAs)/Hazard Reviews (HRs)

The following is a list of selected projects that Ms. Smith has facilitated or scribed in PHAs or HRs.

- *Ice Cream Manufacturing Plant, Oxnard, CA* – Facilitated HR for new ice cream production facility utilizing anhydrous ammonia for refrigeration. HR study utilized Hazard and Operability (HAZOP) and What-If/Checklist methodologies.
- *Agriculture Company, Various Locations, WA & ND* – Facilitated PHA for new ammonia storage/transfer facility. PHA utilized a What-If/Checklist methodology provided by the Fertilizer Institute in cooperation with the US EPA.
- *Produce Production/Food Packaging Facility, Santa Ana, CA* – Scribed a HR with a facilitator according to CalARP regulations utilizing HAZOP and What-If/Checklist methodologies. The chemical of concern was anhydrous ammonia used for ammonia refrigeration.
- *Cogeneration Facility, Wilmington, CA* – Conducted a PHA according to CalARP and RMP regulations utilizing HAZOP study and What-If/Checklist methodology. The facility utilizes anhydrous ammonia for cogeneration.

Compliance Audits/Gap Analyses/Applicability Assessments

Ms. Smith has conducted many Compliance Audits, Gap Analyses, and Applicability Assessments for several different industries in various locations throughout the US, including agriculture, higher education facilities, public agencies, biofuels processing, pharmaceuticals, chemical manufacturing/blending, beverage manufacturing and bottling, and cogeneration facilities since 2013. The duration of the projects have ranged from a few hours for a simpler facility to several days for more complex facilities and/or facilities with multiple processes.

Responsibilities have included performing Triennial Compliance Audits according to regulatory guidance, producing final reports and findings on the audits conducted, and managing project task teams and reviewing final reports. Gap Analyses and Applicability Assessments were conducted in the same manner and with the same regulatory requirements as a Triennial Compliance Audit, but tailored to find the needs of the individual facility.

Recognized and Generally Accepted Good Engineering Practices (RAGAGEP)

She has supervised and developed documentation to meet the Recognized and Generally Accepted Good Engineering Practices (RAGAGEP) requirements in the CalARP/RMP regulations for various facilities and to various degrees. Scope of work varies from basic documentation to prove RAGAGEP is followed and standards are met at the facility, to in-depth analysis on further compliance for the regulations.

Urban Water Management Plans (UWMPs)

Ms. Smith has assisted with UWMPs for public agencies, water districts and cities within Southern California for the 2015 updates. Her primary responsibilities included general assistance and review with the programs and developing the Demand Management Measures (DMM) sections for the plans. The next updates are scheduled for 2020.

Spill Prevention, Control, and Countermeasures (SPCC) Plan

Ms. Smith has updated several SPCC Plans for facilities within Southern California. Support included general updates and revising the plans to meet current regulations, and conducting five-year review and updates.

General Safety Services

General safety services are provided for clients, as needed. The following is a list of projects in which Ms. Smith conducted and/or managed general services for the facility or client. A summary of the services is included below for pertinent projects. In general, Ms. Smith provides general environmental, health, and safety (EHS) services, regulatory compliance guidance, and general facility support to a wide range of industries and clients.

- *Water Treatment Plant, Benicia, CA* – Provided guidance and expertise in updating a Respiratory Protection Program utilizing self-contained breathing apparatus (SCBA) for protection against chlorine gas during routine maintenance.
- *Water and Wastewater Treatment Plants, Calexico, CA* – Provided services for updating the California Environmental Reporting System (CERS) records and addressing concerns from the local regulatory agency.
- *Lumber Retailer, Torrance, CA* – Assisted in the permit effort to construct a lumber retail facility in the vicinity of a refinery. Effort included a Flare Proximity Study for the safety of the new retailer and their operations. An emergency procedure was also developed for a safety mechanism for the property in the event of a flare event.

- *Water Agency, Castaic Lake, CA* – Provided on-call services for safety programs in the agency, including the general assessment of compliance, confined space program review and revisions, fall protection program support, and a training matrix.

Training

Ms. Smith has provided various levels of training to several facilities in different industries, including ammonia refrigeration, agriculture, public agencies, biofuels processing, chemical manufacturing/blending, cogeneration, and pharmaceuticals. Training ranges from a basic understanding of the facility's CalARP/RMP/PSM program to more details understanding of procedures regarding the different program elements. Ms. Smith has provided trainings successfully both in-person and over a web-based software platform.

Emergency Response Plan (ERP) / Emergency Operations Plan (EOP) / Hazard Mitigation Plan (HMP) / Debris Management Plan (DMP) Services

Ms. Smith has managed teams in updating EOPs, HMPs, and DMPs for local agencies in Southern California. The scope of work included updating documentation and implementation to meet new standards, managing team efforts in updating the plans, and providing status updates and project management services to the agency.

Injury and Illness Prevention Programs (IIPPs)

Ms. Smith is cognizant in the requirements and regulations regarding Injury and Illness Prevention Programs (IIPPs) from her background in environmental engineering, certification in Hazardous Waste Operations and Emergency Response (HAZWOPER), and development of various IIPPs for clients. She also serves as the Safety Officer for Risk Management Professionals, managing technical training for all individuals, arranging First-Aid / CPR training bi-annually, is responsible for injury reporting (if necessary), and general maintenance of the company's IIPP (including safety inspections and updates).

Environmental Engineering Activities

Environmental Operations and Maintenance (O&M) activities have been provided for a number of facilities. The scope of work for various projects included managing monitoring and site activities, conducting and organizing sampling events (soil, water, and vapor/air), and equipment repairs and replacement. Ms. Smith has extensive experience in monitoring and plotting inclinometer data and results and developing reports and data in alignment with the National Pollutant Discharge Elimination System (NPDES) requirements.



Her experience also extends into Soil Vapor Extraction (SVE) system design and monitoring, groundwater treatment, and in-situ chemical oxidation. Ms. Smith has also participated on projects, and overseen, SVE system design, well construction and destruction on remediation site. Her well destruction experience extends into site closure through regulatory agencies. Field investigation tasks include completing both a work plan and a health and safety plan (HASP), coordinating office staff and subcontractors for soil boring activities, and conducting groundwater and soil sampling during field work.

Ms. Smith's O&M experience includes regulatory reporting in relation to the project mentioned above. Most reports align with NPDES requirements and regulations, and include sampling plans, laboratory data review, and report development/review.

CLIENT LIST

The following is a partial list of clients that Ms. Smith has managed and/or provided engineering support.

Municipalities and Water Treatment

- Agua Mansa Power Plant
- Camarillo Sanitary Districts
- Castaic Lake Water Agency
- City of Benicia
- City of Calexico
- City of Cerritos
- City of Compton
- City of Downey
- City of El Segundo
- City of Fontana
- City of Garden Grove
- City of La Habra
- City of Paramount
- City of Redlands
- City of Tustin
- County Sanitation Districts of Los Angeles County
- Eastern Municipal Water District
- Las Virgenes Municipal Water District
- Liberty Utilities
- Metropolitan Water District
- Rainbow Municipal Water District
- Ventura Regional Water District
- Zone 7 Water Agency

Manufacturing/Chemical Supply

- Agri-Chemical and Supply
- All Metals Processing
- Arconic Fastening Systems / Alcoa Fastening Systems
- Boeing
- CALAMCO
- Electronic Precision Specialties
- Ganahl Lumber



- PCC Rollmet
- Quaker City Plating
- Rolls Royce High Temperature Composites, Inc.

- SABIC Innovative Plastics
- Supreme Plating

Ammonia Refrigeration Facilities

- Artesia Ice, LLC
- Aryzta
- Boskovich Farms, LLC (multiple facilities)
- Bubble Bee Foods
- Deardorff Family Farms
- DM Camp & Sons
- Dr Pepper Snapple Group (multiple facilities)
- Farmer John/Clougherty Packaging, LLC
- Fresh Grill Foods, LLC & Brown Bag
- Grimmway Farms (multiple facilities)
- Heritage Distributing Company
- Magarro Farms
- Manning Beef, LLC
- McConnell's Fine Ice Creams
- Milk Specialties Global
- NorCal Beverage
- Northgate Markets
- OK Produce
- Orchard Partners
- Pepsi Bottling Group (multiple facilities)
- Ruiz Food Products
- Rite Aid Corporation (Thrifty Ice Cream)
- Sun Maid
- Seaboard Produce
- Smithway Associates, Inc.
- Vie de France

Energy

- California Institute of Technology (CalTech)
- LINN Energy (multiple facilities)
- Nevada Energy (multiple facilities)
- NRG Energy, Inc. (multiple facilities)
- Perennial Power Holdings, Inc.
- Southwest Generation (multiple facilities)
- Wellhead Power (multiple facilities)
- Windsor Energy Group LLC

Agriculture

- Grimmway Farms
- Ventura Farms
- Wilbur Ellis Company (multiple facilities)

Pharmaceutical/Medical Companies

- Bachem Americas, Inc.
- CSL Behring
- Novartis Pharmaceuticals

Other Companies

- BlueScape Environmental
- Four Seasons Hotels Limited
- IDE Americas
- Los Angeles Times
- Rose Hills Cemetery
- Tippman Engineering

Oil and Gas

- Berry Petroleum (multiple facilities)
- Chevron
- Fluor
- North Star Biofuels, LLC

